

MEASUREMENT REPORT

FCC Part 27

Applicant Name:
Sony Mobile Communications Inc
4-12-3 Higashi-Shinagawa
Shinagawa-ku
Tokyo, 140-0002, Japan

Date of Testing:
7/9 – 9/30/2020
Test Site/Location:
PCTEST Lab. Columbia, MD, USA
Test Report Serial No.:
1M2007070106-15-R2.PY7

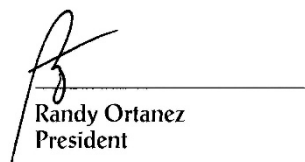
FCC ID:	PY7-57441Y
APPLICANT:	Sony Mobile Communications Inc

Application Type:	Certification
EUT Type:	Portable Handset
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
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.

This revised Test Report (S/N: 1M2007070106-15-R2.FCC Report SNs) 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 of it 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.



Randy Ortanez
President



FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset
Page 1 of 151		

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

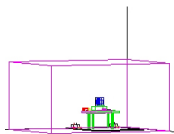
TABLE OF CONTENTS

1.0	INTRODUCTION	5
1.1	Scope	5
1.2	PCTEST 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	Test Configuration	6
2.4	EMI Suppression Device(s)/Modifications	6
3.0	DESCRIPTION OF TESTS	7
3.1	Evaluation Procedure	7
3.2	Radiated Power and Radiated Spurious Emissions	7
4.0	MEASUREMENT UNCERTAINTY	8
5.0	TEST EQUIPMENT CALIBRATION DATA	9
6.0	SAMPLE CALCULATIONS	10
7.0	TEST RESULTS	11
7.1	Summary	11
7.2	Conducted Power Output Data	12
7.3	Occupied Bandwidth	23
7.3	Band Edge Emissions at Antenna Terminal.....	51
7.4	Spurious and Harmonic Emissions at Antenna Terminal	89
7.5	Peak-Average Ratio	109
7.6	Radiated Power (EIRP).....	128
7.7	Radiated Spurious Emissions Measurements	134
7.8	Frequency Stability / Temperature Variation	146
8.0	CONCLUSION.....	151

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset
		Page 2 of 151

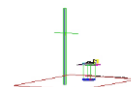
© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



MEASUREMENT REPORT

FCC Part 27



Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		ERP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	Max. Power [W]	Max. Power [dBm]	
LTE Band 12/17	10 MHz	QPSK	704.0 - 711.0	0.103	20.14	0.063	17.99	9M00G7D
		16QAM	704.0 - 711.0	0.085	19.27	0.052	17.12	9M02W7D
		64QAM	704.0 - 711.0	0.070	18.44	0.043	16.29	9M00W7D
	5 MHz	QPSK	701.5 - 713.5	0.104	20.18	0.064	18.03	4M56G7D
		16QAM	701.5 - 713.5	0.096	19.82	0.059	17.67	4M53W7D
		64QAM	701.5 - 713.5	0.076	18.80	0.046	16.65	4M53W7D
LTE Band 12	3 MHz	QPSK	700.5 - 714.5	0.102	20.08	0.062	17.93	2M71G7D
		16QAM	700.5 - 714.5	0.085	19.29	0.052	17.14	2M71W7D
		64QAM	700.5 - 714.5	0.070	18.43	0.042	16.28	2M71W7D
	1.4 MHz	QPSK	699.7 - 715.3	0.101	20.06	0.062	17.91	1M11G7D
		16QAM	699.7 - 715.3	0.085	19.28	0.052	17.13	1M11W7D
		64QAM	699.7 - 715.3	0.070	18.45	0.043	16.30	1M10W7D
LTE Band 13	10 MHz	QPSK	782.0	0.064	18.04	0.039	15.89	8M98G7D
		16QAM	782.0	0.054	17.35	0.033	15.20	9M01W7D
		64QAM	782.0	0.043	16.33	0.026	14.18	8M98W7D
	5 MHz	QPSK	779.5 - 784.5	0.068	18.33	0.042	16.18	4M55G7D
		16QAM	779.5 - 784.5	0.058	17.61	0.035	15.46	4M53W7D
		64QAM	779.5 - 784.5	0.044	16.48	0.027	14.33	4M53W7D

Overview Table (<1GHz Bands)

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT 		Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset	Page 3 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
WCDMA1700	N/A	Spread Spectrum	1712.4 - 1752.6	0.148	21.71	4M16F9W
LTE Band 66/4	20 MHz	QPSK	1720.0 - 1770.0	0.211	23.24	18M0G7D
		16QAM	1720.0 - 1770.0	0.173	22.37	18M0W7D
		64QAM	1720.0 - 1770.0	0.141	21.50	18M0W7D
	15 MHz	QPSK	1717.5 - 1772.5	0.222	23.46	13M6G7D
		16QAM	1717.5 - 1772.5	0.173	22.37	13M5W7D
		64QAM	1717.5 - 1772.5	0.143	21.54	13M5W7D
	10 MHz	QPSK	1715.0 - 1775.0	0.214	23.30	8M99G7D
		16QAM	1715.0 - 1775.0	0.172	22.36	9M00W7D
		64QAM	1715.0 - 1775.0	0.143	21.55	9M01W7D
	5 MHz	QPSK	1712.5 - 1777.5	0.216	23.35	4M54G7D
		16QAM	1712.5 - 1777.5	0.174	22.41	4M54W7D
		64QAM	1712.5 - 1777.5	0.140	21.46	4M53W7D
	3 MHz	QPSK	1711.5 - 1778.5	0.215	23.32	2M71G7D
		16QAM	1711.5 - 1778.5	0.174	22.39	2M71W7D
		64QAM	1711.5 - 1778.5	0.142	21.53	2M71W7D
	1.4 MHz	QPSK	1710.7 - 1779.3	0.216	23.34	1M10G7D
		16QAM	1710.7 - 1779.3	0.172	22.35	1M10W7D
		64QAM	1710.7 - 1779.3	0.142	21.52	1M09W7D
NR Band n66	20 MHz	$\pi/2$ BPSK	834.0 - 839.0	0.046	16.59	18M0G7D
		QPSK	834.0 - 839.0	0.046	16.62	19M0G7D
		16QAM	834.0 - 839.0	0.036	15.54	19M0W7D
		64QAM	834.0 - 839.0	0.028	14.50	19M1W7D
	15 MHz	$\pi/2$ BPSK	831.5 - 841.5	0.050	16.97	13M5G7D
		QPSK	831.5 - 841.5	0.047	16.71	14M2G7D
		16QAM	831.5 - 841.5	0.040	16.04	14M2W7D
		64QAM	831.5 - 841.5	0.033	15.24	14M2W7D
	10 MHz	$\pi/2$ BPSK	829.0 - 844.0	0.045	16.49	8M97G7D
		QPSK	829.0 - 844.0	0.044	16.48	9M35G7D
		16QAM	829.0 - 844.0	0.035	15.45	9M37W7D
		64QAM	829.0 - 844.0	0.028	14.52	9M39W7D
	5 MHz	$\pi/2$ BPSK	826.5 - 846.5	0.044	16.40	4M50G7D
		QPSK	826.5 - 846.5	0.044	16.44	4M50G7D
		16QAM	826.5 - 846.5	0.035	15.44	4M50W7D
		64QAM	826.5 - 846.5	0.029	14.55	4M50W7D

Overview Table (>1GHz Bands)

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT 		Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset	Page 4 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

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 Engineering Laboratory, Inc. facility located at 7185 Oakland Mills Road, Columbia, MD 21046. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014.

1.3 Test Facility / Accreditations

Measurements were performed at PCTEST Engineering Lab located in Columbia, MD 21046, U.S.A.

- PCTEST is an ISO 17025-2005 accredited test facility under the American Association for Laboratory Accreditation (A2LA) with Certificate number 2041.01 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 (2451B) test laboratory with the site description on file with ISED.

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT		Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset	Page 5 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the SONY **Portable Handset FCC ID: PY7-57441Y**. 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.: 81811, 64264, 83171

2.2 Device Capabilities

This device contains the following capabilities:

850/1900 GSM/GPRS/EDGE, 850/1700/1900, WCDMA/HSPA, Multi-band LTE, 5G NR (n5, n66, n2, n260, n261), 802.11b/g/n/ax WLAN, 802.11a/n/ac/ax UNII, Bluetooth (1x, EDR, LE), NFC

2.3 Test Configuration

The EUT was tested per the guidance of ANSI/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.

2.4 EMI Suppression Device(s)/Modifications

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

FCC ID: PY7-57441Y	 Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 6 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

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/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 Power and 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 wooden turntable 80cm above the ground plane and 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. Radiated power levels are also investigated with the receive antenna horizontally and vertically polarized. The maximized power level is recorded using the spectrum analyzer “Channel Power” function with the integration band set to the emissions’ occupied bandwidth, a RMS detector, RBW = 100kHz, VBW = 300kHz, and a 1 second sweep time over a minimum of 10 sweeps, per the guidelines of KDB 971168 D01 v03r01.

Per the guidance of ANSI/TIA-603-E-2016, a half-wave dipole is then substituted in place of the EUT. For emissions above 1GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator with the level of the signal generator being adjusted to obtain the same receive spectrum analyzer level previously recorded from the spurious emission from the EUT. The power of the emission is calculated using the following formula:

$$P_d \text{ [dBm]} = P_g \text{ [dBm]} - \text{cable loss [dB]} + \text{antenna gain [dBd/dBi]}$$

Where, P_d is the dipole equivalent power, P_g is the generator output into the substitution antenna, and the antenna gain is the gain of the substitute antenna used relative to either a half-wave dipole (dBd) or an isotropic source (dBi). The substitute level is equal to $P_g \text{ [dBm]} - \text{cable loss [dB]}$.

For fundamental radiated power measurements, the guidance of KDB 971168 D01 v03r01 is used to record the EUT power level that is subsequently matched via the aforementioned substitution method given in ANSI/TIA-603-E-2016.

All radiated measurements are performed in a chamber that meets the site requirements per ANSI C63.4-2014. Additionally, radiated emissions below 30MHz are also validated on an Open Area Test Site to assert correlation with the chamber measurements per the requirements of KDB 474788 D01.

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT 		Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset	Page 7 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

4.0 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014. All measurement uncertainty values are shown with a coverage factor of $k = 2$ to indicate a 95% level of confidence. The measurement 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	1.13
Radiated Disturbance (<1GHz)	4.98
Radiated Disturbance (>1GHz)	5.07
Radiated Disturbance (>18GHz)	5.09

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT 		Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset	Page 8 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

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
-	LTx2	Licensed Transmitter Cable Set	4/9/2020	Annual	4/9/2021	LTx2
-	LTx3	Licensed Transmitter Cable Set	10/30/2019	Annual	10/30/2020	LTx3
Anritsu	MT8821C	Radio Communication Analyzer	3/10/2020	Annual	3/10/2021	6200901190
Com-Power	AL-130	9kHz - 30MHz Loop Antenna	10/10/2019	Biennial	10/10/2021	121034
Emco	3115	Horn Antenna (1-18GHz)	6/18/2020	Biennial	6/18/2022	9704-5182
ETS Lindgren	3117	1-18 GHz DRG Horn (Medium)	2/14/2019	Biennial	2/14/2021	125518
ETS Lindgren	3164-08	Quad Ridge Horn Antenna	3/12/2020	Biennial	3/12/2022	128337
ETS-Lindgren	3115	Double Ridged Guide Horn 750MHz - 18GHz	3/12/2020	Biennial	3/12/2022	150693
Hewlett-Packard	8648D	(9kHz-4GHz) Signal Generator	6/23/2020	Annual	6/23/2021	3613A00315
Keysight Technologies	N9020A	MXA Signal Analyzer	8/14/2020	Annual	8/14/2021	US46470561
Keysight Technologies	N9030A	PXA Signal Analyzer (44GHz)	8/17/2020	Annual	8/17/2021	MY52350166
Mini Circuits	TVA-11-422	RF Power Amp	N/A			QA1317001
Mini-Circuits	SSG-4000HP	Synthesized Signal Generator	N/A			11208010032
Rohde & Schwarz	CMU200	Base Station Simulator	N/A			836536/0005
Rohde & Schwarz	TS-PR26	18-26.5 GHz Pre-Amplifier	11/1/2019	Annual	11/1/2020	100040
Rohde & Schwarz	ESU40	EMI Test Receiver (40GHz)	9/23/2019	Annual	9/23/2020	100348
Rohde & Schwarz	TC-TA18	Cross-Pol Antenna 400MHz-18GHz	7/8/2020	Biennial	7/8/2022	101058
Rohde & Schwarz	SFUNIT-Rx	Shielded Filter Unit	2/10/2020	Annual	2/10/2021	102134
Sunol	DRH-118	Horn Antenna (1-18GHz)	10/3/2019	Biennial	10/3/2021	A050307
Sunol Science	JB5	Bi-Log Antenna (30M - 5GHz)	7/27/2020	Biennial	7/27/2022	A051107

Table 5-1. Summary of Test Results

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.

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT 		Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset	Page 9 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

6.0 SAMPLE CALCULATIONS

Emission Designator

QPSK Modulation

Emission Designator = 8M62G7D

LTE BW = 8.62 MHz

G = Phase Modulation

7 = Quantized/Digital Info

D = Data transmission, telemetry, telecommand

QAM Modulation

Emission Designator = 8M45W7D

LTE BW = 8.45 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data transmission, telemetry, telecommand

Spurious Radiated Emission – LTE Band

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).

FCC ID: PY7-57441Y	 PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 10 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

7.0 TEST RESULTS

7.1 Summary

Company Name: Sony Mobile Communications Inc
 FCC ID: PY7-57441Y
 FCC Classification: PCS Licensed Transmitter Held to Ear (PCE)
 Mode(s): GSM/GPRS/EDGE/WCDMA/LTE/NR

Test Condition	Test Description	FCC Part Section(s)	RSS Section(s)	Test Limit	Test Result	Reference
CONDUCTED	Occupied Bandwidth	2.1049	RSS-139(2.3)	N/A	PASS	Section 7.2
	Conducted Band Edge / Spurious Emissions	2.1051, 27.53	RSS-139(6.6)	> 43 + 10log10(P[Watts]) at Band Edge and for all out-of-band emissions	PASS	Sections 7.3, 7.4
	Transmitter Conducted Output Power	2.1046	RSS-139(4.1)	N/A	PASS	See RF Exposure Report
	Frequency Stability	2.1055, 27.54	RSS-139(6.4)	Fundamental emissions stay within authorized frequency block	PASS	Section 7.8
RADIATED	Effective Radiated Power / Equivalent Isotropic Radiated Power (LTE Band 12/17)	27.50(b)(10)	RSS-130(4.4)	< 3 Watts max. ERP < 5 Watts max. EIRP	PASS	Section 7.6
	Effective Radiated Power / Equivalent Isotropic Radiated Power (LTE Band 13)	27.50(c)(10)	RSS-130(4.4)	< 3 Watts max. ERP < 5 Watts max. EIRP	PASS	Section 7.6
	Equivalent Isotropic Radiated Power (WCDMA)	27.50(d)(4)	RSS-139(6.5)	< 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 Spurious Emissions (LTE Band 13)	2.1053, 27.53(f)	RSS-139(6.6)	< -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	RSS-139(6.6)	> 43 + 10 log10 (P[Watts]) for all out-of-band emissions	PASS	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 shown in Section 7.0 were 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) For conducted spurious emissions, automated test software was used to measure emissions and capture the corresponding plots necessary to show compliance. The measurement software utilized is PCTEST 2G/3G Automation Version 4.2 / "LTE Automation," Version 5.3..

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2-PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset	Page 11 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

7.2 Conducted Power Output Data

Test Overview

The EUT is set up to transmit two contiguous LTE channels. The power level of both carriers is measured by means of a calibrated spectrum analyzer. All emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 6.0

Test Settings

1. Detector = RMS
2. Trace mode = trace average for continuous emissions, max hold for pulse emissions
3. Sweep time = auto couple
4. The trace was allowed to stabilize
5. 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.

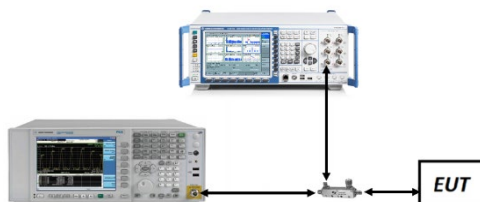


Figure 7-1. Test Instrument & Measurement Setup

Test Notes

1. Uplink carrier aggregation is only supported in this EUT while operating in Power Class 3.
2. Conducted power measurements were evaluated for the two contiguous channels using various combinations of RB size, RB offset, modulation, and channel bandwidth. Channel bandwidth data is shown in the tables below based only on the channel bandwidths that were supported in this device.
3. Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than 1 GHz.
4. All other conducted power measurements are contained in the RF exposure report for this filing.

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 12 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 12

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			23095 (707.5 MHz)		
			Conducted Power [dBm]		
QPSK	1	0	24.15	0	0
	1	25	24.18		0
	1	49	24.07		0
	25	0	23.45	0-1	1
	25	12	23.44		1
	25	25	23.42		1
	50	0	23.40		1
16QAM	1	0	23.72	0-1	1
	1	25	23.77		1
	1	49	23.66		1
	25	0	22.11	0-2	2
	25	12	22.10		2
	25	25	22.09		2
	50	0	22.11		2
64QAM	1	0	22.39	0-2	2
	1	25	22.51		2
	1	49	22.45		2
	25	0	21.17	0-3	3
	25	12	21.10		3
	25	25	21.09		3
	50	0	21.11		3

Table 7-2. LTE Band 12 Measured $P_{\max}$ for all DSI - 10 MHz Bandwidth

Note: LTE Band 12 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT 		Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset	Page 13 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 12 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			23035 (701.5 MHz)	23095 (707.5 MHz)	23155 (713.5 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	24.19	24.20	24.06	0	0
	1	12	24.17	24.03	23.93		0
	1	24	24.13	24.05	23.93		0
	12	0	23.66	23.50	23.48	0-1	1
	12	6	23.60	23.45	23.48		1
	12	13	23.56	23.48	23.39		1
	25	0	23.59	23.49	23.42		1
16QAM	1	0	23.75	23.40	23.25	0-1	1
	1	12	23.68	23.35	23.20		1
	1	24	23.58	23.34	23.14		1
	12	0	22.58	22.21	22.23	0-2	2
	12	6	22.51	22.18	22.22		2
	12	13	22.45	22.20	22.12		2
	25	0	22.31	22.20	22.16		2
64QAM	1	0	22.12	22.40	22.53	0-2	2
	1	12	22.75	22.35	22.51		2
	1	24	22.82	22.31	22.36		2
	12	0	20.87	21.16	21.30	0-3	3
	12	6	21.18	21.10	21.24		3
	12	13	21.31	21.07	21.19		3
	25	0	21.18	21.17	21.21		3

Table 7-3. LTE Band 12 Measured Pmax for all DSI - 5 MHz Bandwidth

LTE Band 12 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			23025 (700.5 MHz)	23095 (707.5 MHz)	23165 (714.5 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	24.12	24.01	23.93	0	0
	1	7	24.10	23.95	23.82		0
	1	14	23.98	23.98	23.78		0
	8	0	23.54	23.48	23.40	0-1	1
	8	4	23.60	23.54	23.42		1
	8	7	23.51	23.44	23.35		1
	15	0	23.60	23.43	23.41		1
16QAM	1	0	23.55	23.32	23.73	0-1	1
	1	7	23.48	23.25	23.57		1
	1	14	23.46	23.23	23.51		1
	8	0	22.41	22.21	22.27	0-2	2
	8	4	22.39	22.26	22.27		2
	8	7	22.34	22.25	22.21		2
	15	0	22.37	22.10	22.16		2
64QAM	1	0	21.81	22.17	22.29	0-2	2
	1	7	22.02	22.16	22.20		2
	1	14	22.29	22.14	22.14		2
	8	0	20.74	21.19	21.27	0-3	3
	8	4	20.89	21.25	21.26		3
	8	7	21.03	21.19	21.19		3
	15	0	20.89	21.29	21.13		3

Table 7-4. LTE Band 12 Measured Pmax for all DSI - 3 MHz Bandwidth

FCC ID: PY7-57441Y			PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset			Page 14 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 12 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			23017 (699.7 MHz)	23095 (707.5 MHz)	23173 (715.3 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	24.03	24.00	23.76	0	0
	1	2	24.07	24.14	23.74		0
	1	5	23.96	24.01	23.72		0
	3	0	24.05	23.92	23.82		0
	3	2	24.07	24.00	23.84		0
	3	3	24.02	23.96	23.76		0
	6	0	23.47	23.32	23.28	0-1	1
16QAM	1	0	23.27	23.26	23.20	0-1	1
	1	2	23.31	23.37	23.27		1
	1	5	23.25	23.34	23.18		1
	3	0	23.37	23.29	23.01		1
	3	2	23.36	23.38	23.02		1
	3	3	23.31	23.33	22.96		1
	6	0	22.17	22.16	21.96	0-2	2
64QAM	1	0	21.54	22.46	22.25	0-2	2
	1	2	21.68	22.59	22.27		2
	1	5	21.61	22.43	22.25		2
	3	0	21.73	22.40	22.16		2
	3	2	21.86	22.46	22.19		2
	3	3	21.82	22.39	22.16		2
	6	0	20.63	21.03	21.10	0-3	3

Table 7-5. LTE Band 12 Measured Pmax for all DSI - 1.4 MHz Bandwidth

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT 		Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset	Page 15 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 13

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			23230 (782.0 MHz)		
			Conducted Power [dBm]		
QPSK	1	0	24.46	0	0
	1	25	24.34		0
	1	49	24.32		0
	25	0	23.48	0-1	1
	25	12	23.45		1
	25	25	23.51		1
	50	0	23.49		1
16QAM	1	0	23.61	0-1	1
	1	25	23.66		1
	1	49	23.52		1
	25	0	22.20	0-2	2
	25	12	22.21		2
	25	25	22.20		2
	50	0	22.20		2
64QAM	1	0	22.36	0-2	2
	1	25	22.28		2
	1	49	22.27		2
	25	0	20.83	0-3	3
	25	12	21.28		3
	25	25	21.29		3
	50	0	21.25		3

Table 7-6. LTE Band 13 Measured Pmax for all DSI - 10 MHz Bandwidth

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT 		Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset	Page 16 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 13 5 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			23230 (782.0 MHz)		
			Conducted Power [dBm]		
QPSK	1	0	24.30	0	0
	1	12	24.27		0
	1	24	24.30		0
	12	0	23.49	0-1	1
	12	6	23.48		1
	12	13	23.54		1
	25	0	23.47		1
16QAM	1	0	23.25	0-1	1
	1	12	23.28		1
	1	24	23.26		1
	12	0	22.22	0-2	2
	12	6	22.17		2
	12	13	22.21		2
	25	0	22.23		2
64QAM	1	0	22.44	0-2	2
	1	12	22.53		2
	1	24	22.45		2
	12	0	21.30	0-3	3
	12	6	21.26		3
	12	13	21.28		3
	25	0	21.23		3

Table 7-7. LTE Band 13 Measured Pmax for all DSI - 5 MHz Bandwidth

Note: LTE Band 13 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT 		Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset	Page 17 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 66 (AWS)

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			132072 (1720.0 MHz)	132322 (1745.0 MHz)	132572 (1770.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	23.91	24.23	23.98	0	0
	1	50	23.88	24.18	23.96		0
	1	99	23.89	24.16	23.86		0
	50	0	23.13	23.16	23.18	0-1	1
	50	25	23.22	23.21	23.19		1
	50	50	23.18	23.23	23.22		1
16QAM	100	0	23.20	23.16	23.20	0-1	1
	1	0	23.32	23.28	23.55		1
	1	50	23.33	23.30	23.52		1
	1	99	23.29	23.22	23.42	0-2	1
	50	0	21.86	21.96	22.49		2
	50	25	21.99	21.98	22.40		2
64QAM	50	50	21.92	22.02	22.43	0-2	2
	100	0	21.93	21.88	22.40		2
	1	0	22.56	22.52	22.53	0-2	2
	1	50	22.56	22.58	22.55		2
	1	99	22.52	22.55	22.38		2
	64QAM	50	0	21.40	21.09	20.93	0-3
50		25	21.55	21.11	20.95	3	
50		50	21.50	21.15	20.93	3	
100		0	21.45	21.12	20.92	3	

Table 7-8. LTE Band 66 (AWS) Measured Pmax for DSI = 2 (Free Space State) - 20 MHz Bandwidth

LTE Band 66 (AWS) 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			132047 (1717.5 MHz)	132322 (1745.0 MHz)	132597 (1772.5 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	24.05	24.09	24.13	0	0
	1	36	24.13	24.20	24.21		0
	1	74	24.08	24.05	24.05		0
	36	0	23.52	23.59	23.65	0-1	1
	36	18	23.62	23.61	23.68		1
	36	37	23.56	23.64	23.69		1
	75	0	23.53	23.60	23.57		1
16QAM	1	0	23.58	23.33	23.92	0-1	1
	1	36	23.60	23.47	23.97		1
	1	74	23.51	23.37	23.81		1
	36	0	22.26	22.23	22.37	0-2	2
	36	18	22.39	22.27	22.40		2
	36	37	22.35	22.29	22.44		2
	75	0	22.27	22.34	22.37		2
64QAM	1	0	22.47	22.17	22.46	0-2	2
	1	36	22.60	22.29	22.55		2
	1	74	22.53	22.17	22.38		2
	36	0	21.25	21.37	21.46	0-3	3
	36	18	21.36	21.41	21.48		3
	36	37	21.27	21.42	21.50		3
	75	0	21.36	21.36	21.31		3

Table 7-9. LTE Band 66 (AWS) Measured Pmax for DSI = 2 (Free Space State) - 15 MHz Bandwidth

FCC ID: PY7-57441Y			PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset			Page 18 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 66 (AWS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			132022 (1715.0 MHz)	132322 (1745.0 MHz)	132622 (1775.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	23.96	24.11	24.19	0	0
	1	25	23.93	24.00	24.15		0
	1	49	23.92	24.11	24.11		0
	25	0	23.53	23.56	23.64	0-1	1
	25	12	23.56	23.64	23.65		1
	25	25	23.50	23.56	23.64		1
	50	0	23.56	23.60	23.63		1
16QAM	1	0	23.55	23.39	23.92	0-1	1
	1	25	23.47	23.32	23.89		1
	1	49	23.50	23.28	23.77		1
	25	0	22.35	22.32	22.43	0-2	2
	25	12	22.33	22.40	22.42		2
	25	25	22.32	22.35	22.42		2
	50	0	22.21	22.32	22.34		2
64QAM	1	0	22.41	22.12	22.41	0-2	2
	1	25	22.47	22.13	22.36		2
	1	49	22.37	22.14	22.32		2
	25	0	21.34	21.38	21.41	0-3	3
	25	12	21.38	21.46	21.43		3
	25	25	21.31	21.41	21.41		3
	50	0	21.35	21.36	21.43		3

Table 7-10. LTE Band 66 (AWS) Measured Pmax for DSI = 2 (Free Space State) - 10 MHz Bandwidth

LTE Band 66 (AWS) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			131997 (1712.5 MHz)	132322 (1745.0 MHz)	132647 (1777.5 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	24.05	24.09	24.11	0	0
	1	12	24.06	24.21	24.13		0
	1	24	24.07	24.16	24.09		0
	12	0	23.55	23.53	23.73	0-1	1
	12	6	23.57	23.61	23.73		1
	12	13	23.57	23.55	23.70		1
	25	0	23.52	23.59	23.72		1
16QAM	1	0	23.29	23.64	23.60	0-1	1
	1	12	23.29	23.68	23.62		1
	1	24	23.21	23.64	23.48		1
	12	0	22.24	22.43	22.43	0-2	2
	12	6	22.27	22.48	22.42		2
	12	13	22.22	22.49	22.40		2
	25	0	22.27	22.25	22.47		2
64QAM	1	0	22.59	22.85	22.59	0-2	2
	1	12	22.60	22.93	22.56		2
	1	24	22.57	22.87	22.55		2
	12	0	21.35	21.29	21.33	0-3	3
	12	6	21.37	21.42	21.36		3
	12	13	21.27	21.33	21.30		3
	25	0	21.25	21.40	21.39		3

Table 7-11. LTE Band 66 (AWS) Measured Pmax for DSI = 2 (Free Space State) - 5 MHz Bandwidth

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT 		Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset	Page 19 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 66 (AWS) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			131987 (1711.5 MHz)	132322 (1745.0 MHz)	132657 (1778.5 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	23.98	24.04	24.16	0	0
	1	7	24.01	24.07	24.15		0
	1	14	23.97	24.10	24.12		0
	8	0	23.53	23.53	23.68	0-1	1
	8	4	23.58	23.61	23.76		1
	8	7	23.52	23.54	23.64		1
16QAM	15	0	23.58	23.61	23.70	0-1	1
	1	0	23.54	23.36	23.96		1
	1	7	23.47	23.37	23.91		1
	1	14	23.48	23.36	23.89	0-2	1
	8	0	22.34	22.26	22.50		2
	8	4	22.34	22.40	22.56		2
64QAM	8	7	22.29	22.32	22.52	0-2	2
	15	0	22.35	22.26	22.46		2
	1	0	22.59	22.20	22.50		0-2
	1	7	22.51	22.23	22.49	2	
	1	14	22.46	22.31	22.45	2	
	8	0	21.34	21.25	21.49	0-3	3
8	4	21.37	21.34	21.56	3		
8	7	21.31	21.34	21.50	3		
64QAM	15	0	21.30	21.45	21.43		3

Table 7-12. LTE Band 66 (AWS) Measured Pmax for DSI = 2 (Free Space State) - 3 MHz Bandwidth

LTE Band 66 (AWS) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			131979 (1710.7 MHz)	132322 (1745.0 MHz)	132665 (1779.3 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	23.88	24.02	24.25	0	0
	1	2	23.96	24.04	24.29		0
	1	5	23.90	24.00	24.27		0
	3	0	24.00	24.03	24.17		0
	3	2	24.01	24.08	24.17		0
	3	3	23.99	24.04	24.13		0
	6	0	23.46	23.49	23.58	0-1	1
16QAM	1	0	23.41	23.30	23.49	0-1	1
	1	2	23.49	23.33	23.54		1
	1	5	23.47	23.32	23.52		1
	3	0	23.15	23.36	23.53		1
	3	2	23.21	23.40	23.56		1
	3	3	23.14	23.38	23.53	1	
64QAM	6	0	22.13	22.24	22.43	0-2	2
	1	0	22.38	22.21	22.63	0-2	2
	1	2	22.45	22.27	22.78		2
	1	5	22.45	22.17	22.63		2
	3	0	22.33	22.38	22.64		2
	3	2	22.40	22.48	22.67		2
	3	3	22.34	22.38	22.57		2
6	0	21.25	21.28	21.26	0-3	3	

Table 7-13. LTE Band 66 (AWS) Measured Pmax for DSI = 2 (Free Space State) - 1.4 MHz Bandwidth

FCC ID: PY7-57441Y	 PART 27 MEASUREMENT REPORT			Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2-PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 20 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

NR Band n66

NR Band n66 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM $\pi/2$ BPSK	1	1	24.12	24.13	24.11	0	0.0
	1	53	24.48	24.39	24.42		0.0
	1	104	24.08	23.97	24.08		0.0
	50	0	23.51	23.46	23.46	0-0.5	0.5
	50	28	24.08	24.01	23.99	0	0.0
	50	56	23.57	23.40	23.49	0-0.5	0.5
100	0	23.56	23.42	23.50	0.5		
DFT-s-OFDM QPSK	1	1	24.18	24.12	24.08	0	0.0
	1	53	24.13	24.01	24.06		0.0
	1	104	24.08	24.03	24.08		0.0
	50	0	23.11	22.96	22.97	0-1	1.0
	50	28	24.09	23.93	23.98	0	0.0
	50	56	23.03	22.98	22.95	0-1	1.0
100	0	23.04	23.00	22.99	1.0		
DFT-s-OFDM 16QAM CP-OFDM QPSK	1	1	23.42	23.37	23.26	0-1	1.0
	1	1	22.53	22.48	22.58	0-1.5	1.5

Table 7-14. NR Band n66 Measured Pmax for DSI = 2 (Free Space State) - 20 MHz Bandwidth

NR Band n66 15 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	343500 (1717.5 MHz)	349000 (1745 MHz)	354500 (1772.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM $\pi/2$ BPSK	1	1	24.06	24.01	23.89	0	0.0
	1	40	23.97	23.94	23.81		0.0
	1	77	24.10	24.02	23.87		0.0
	36	0	23.50	23.44	23.39	0-0.5	0.5
	36	22	23.95	23.91	23.79	0	0.0
	36	43	23.46	23.39	23.32	0-0.5	0.5
	75	0	23.52	23.48	23.33		
DFT-s-OFDM QPSK	1	1	24.00	24.02	23.88	0	0.0
	1	40	23.90	23.86	23.77		0.0
	1	77	24.09	23.98	23.88		0.0
	36	0	23.03	22.97	22.85	0-1	1.0
	36	22	23.94	23.84	23.81	0	0.0
	36	43	22.95	22.89	22.79	0-1	1.0
	75	0	22.97	22.98	22.84		1.0
DFT-s-OFDM 16QAM CP-OFDM QPSK	1	1	22.92	22.92	22.89	0-1	1.0
	1	1	22.36	22.33	22.16	0-1.5	1.5

Table 7-15. NR Band n66 Measured Pmax for DSI = 2 (Free Space State) - 15 MHz Bandwidth

FCC ID: PY7-57441Y	 PCTEST® Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset	Page 21 of 151	

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

NR Band n66 10 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	343000 (1715 MHz)	349000 (1745 MHz)	355000 (1775 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM $\pi/2$ BPSK	1	1	23.99	24.01	23.82	0	0.0
	1	26	23.94	23.99	23.87		0.0
	1	50	24.00	23.94	23.78		0.0
	25	0	23.42	23.45	23.35	0-0.5	0.5
	25	14	23.94	23.97	23.86	0	0.0
	25	27	23.35	23.46	23.31	0-0.5	0.5
	50	0	23.36	23.31	23.31		0.5
DFT-s-OFDM QPSK	1	1	23.90	23.90	23.85	0	0.0
	1	26	23.95	23.84	23.77		0.0
	1	50	23.92	24.00	23.79		0.0
	25	0	22.82	22.78	22.77	0-1	1.0
	25	14	23.89	23.75	23.82	0	0.0
	25	27	22.81	22.85	22.81	0-1	1.0
	50	0	22.87	22.83	22.79		1.0
DFT-s-OFDM 16QAM	1	1	22.83	22.86	22.76	0-1	1.0
CP-OFDM QPSK	1	1	22.26	22.17	22.19	0-1.5	1.5

Table 7-16. NR Band n66 Measured Pmax for DSI = 2 (Free Space State) - 10 MHz Bandwidth

NR Band n66 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	342500 (1712.5 MHz)	349000 (1745 MHz)	355500 (1777.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM $\pi/2$ BPSK	1	1	23.86	23.88	23.77	0	0.0
	1	13	23.84	23.84	23.81		0.0
	1	23	23.91	23.77	23.80		0.0
	12	0	23.36	23.30	23.28	0-0.5	0.5
	12	7	24.01	23.90	23.87	0	0.0
	12	13	23.33	23.25	23.27	0-0.5	0.5
	25	0	23.37	23.33	23.30		0.5
DFT-s-OFDM QPSK	1	1	23.91	23.84	23.78	0	0.0
	1	13	23.83	23.86	23.75		0.0
	1	23	23.90	23.82	23.71		0.0
	12	0	22.85	22.83	22.82	0-1	1.0
	12	7	23.96	23.88	23.83	0	0.0
	12	13	22.93	22.81	22.79	0-1	1.0
	25	0	22.79	22.82	22.76		1.0
DFT-s-OFDM 16QAM	1	1	22.82	22.74	22.73	0-1	1.0
CP-OFDM QPSK	1	1	22.24	22.11	22.04	0-1.5	1.5

Table 7-17. NR Band n66 Measured Pmax for DSI = 2 (Free Space State) - 5 MHz Bandwidth

FCC ID: PY7-57441Y	 PCTEST® Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 22 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

7.3 Occupied Bandwidth

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.

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 $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5% of the 99% occupied bandwidth observed in Step 7

Test Setup

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

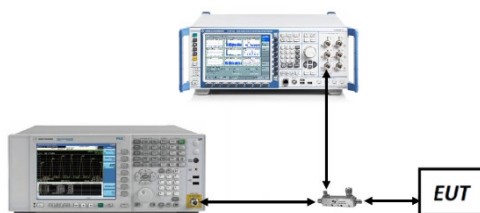


Figure 7-2. Test Instrument & Measurement Setup

Test Notes

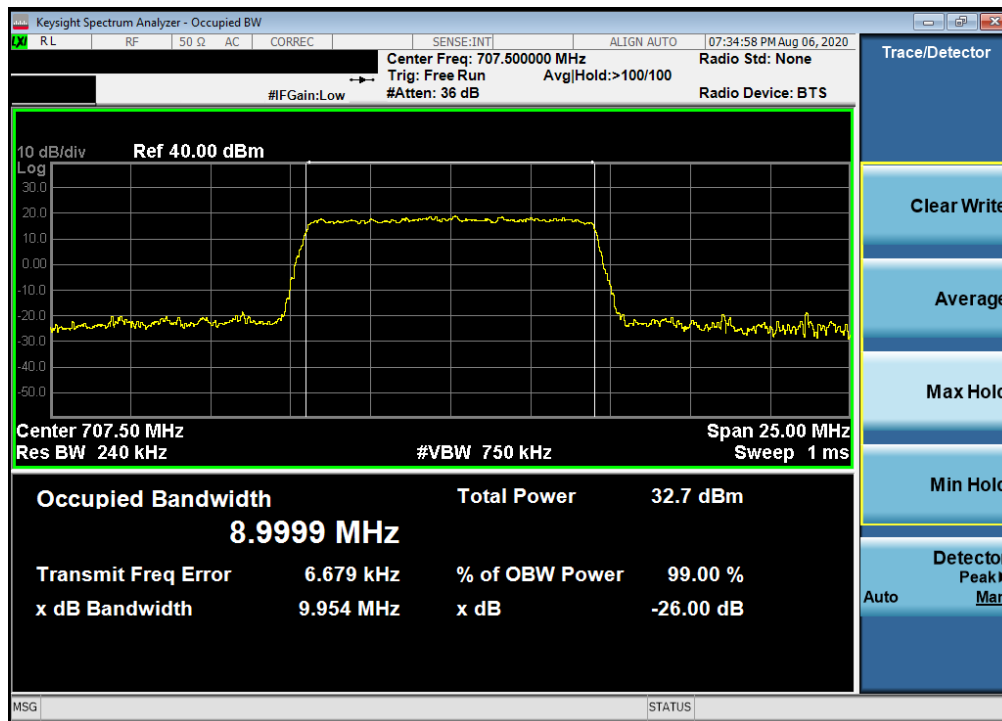
None.

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 23 of 151

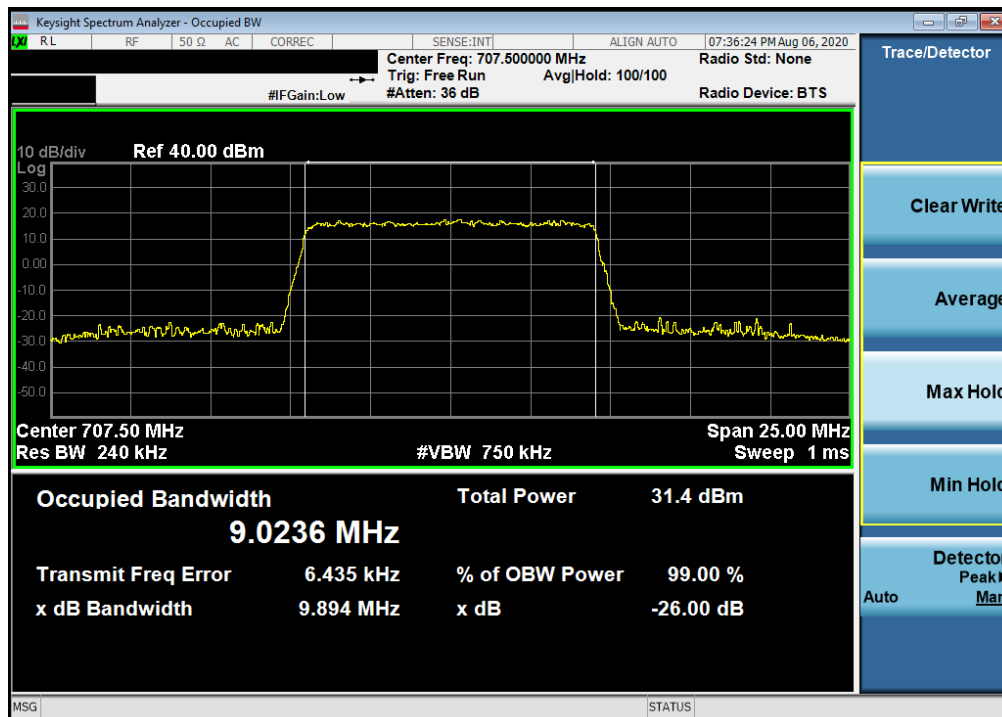
© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 12/17



Plot 7-1. Occupied Bandwidth Plot (LTE Band 12/17 - 10MHz QPSK - Full RB Configuration)

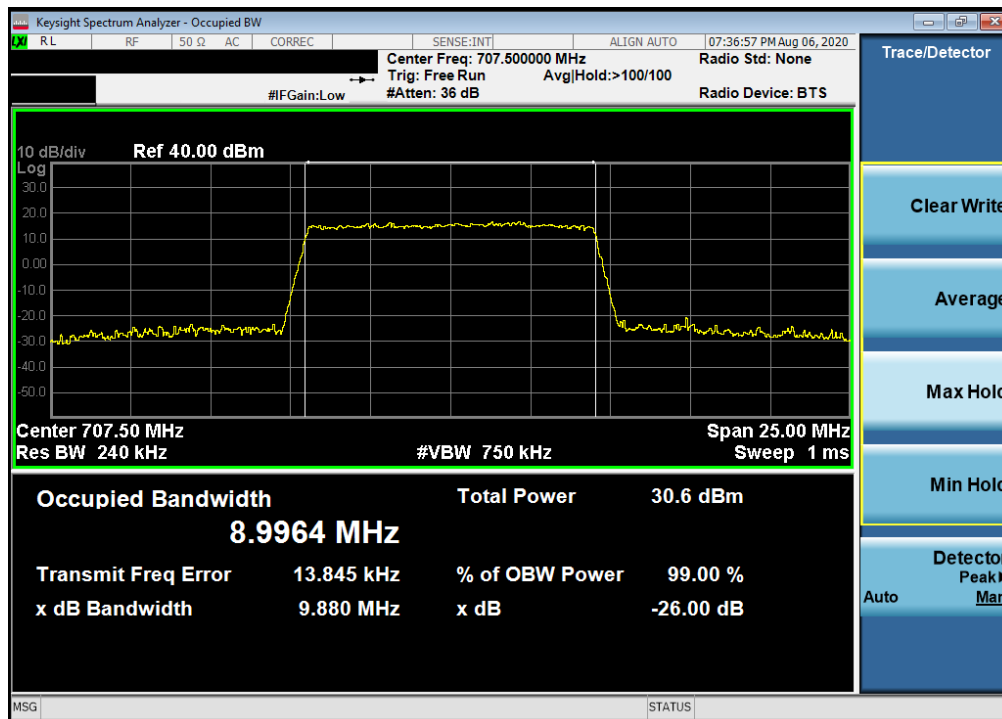


Plot 7-2. Occupied Bandwidth Plot (LTE Band 12/17 - 10MHz 16-QAM - Full RB Configuration)

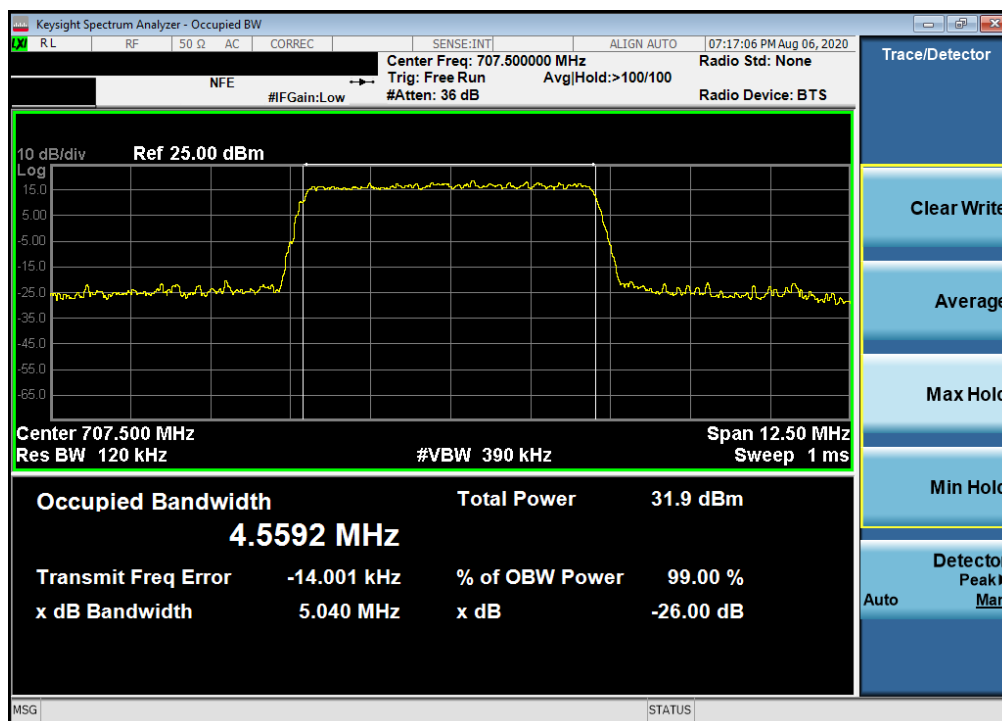
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 24 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-3. Occupied Bandwidth Plot (LTE Band 12/17 - 10MHz 64-QAM - Full RB Configuration)

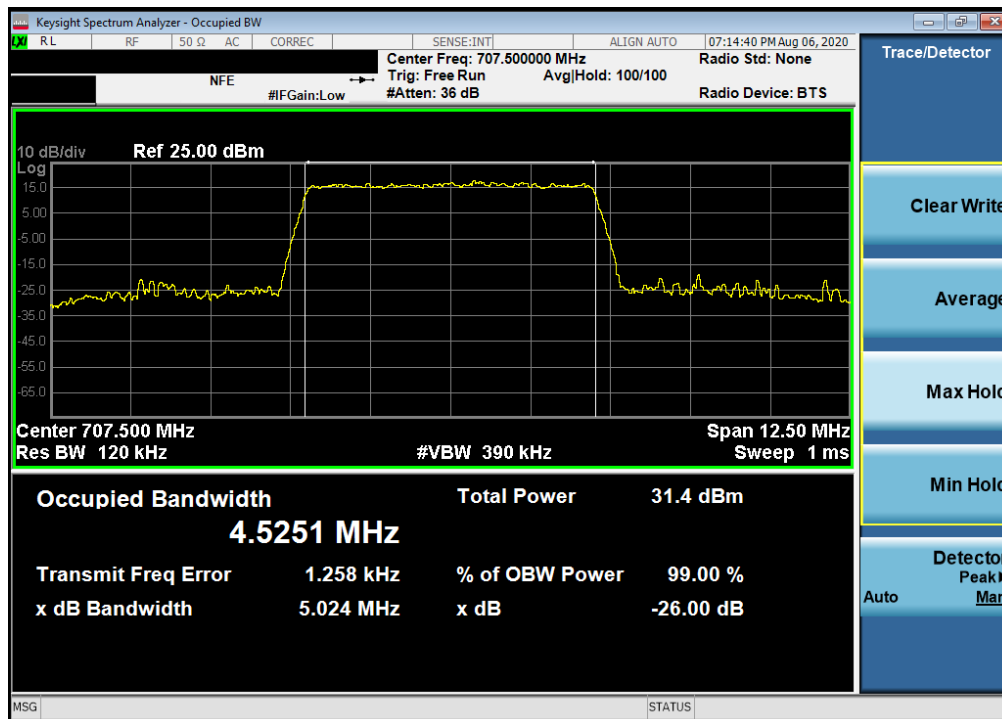


Plot 7-4. Occupied Bandwidth Plot (LTE Band 12/17 - 5MHz QPSK - Full RB Configuration)

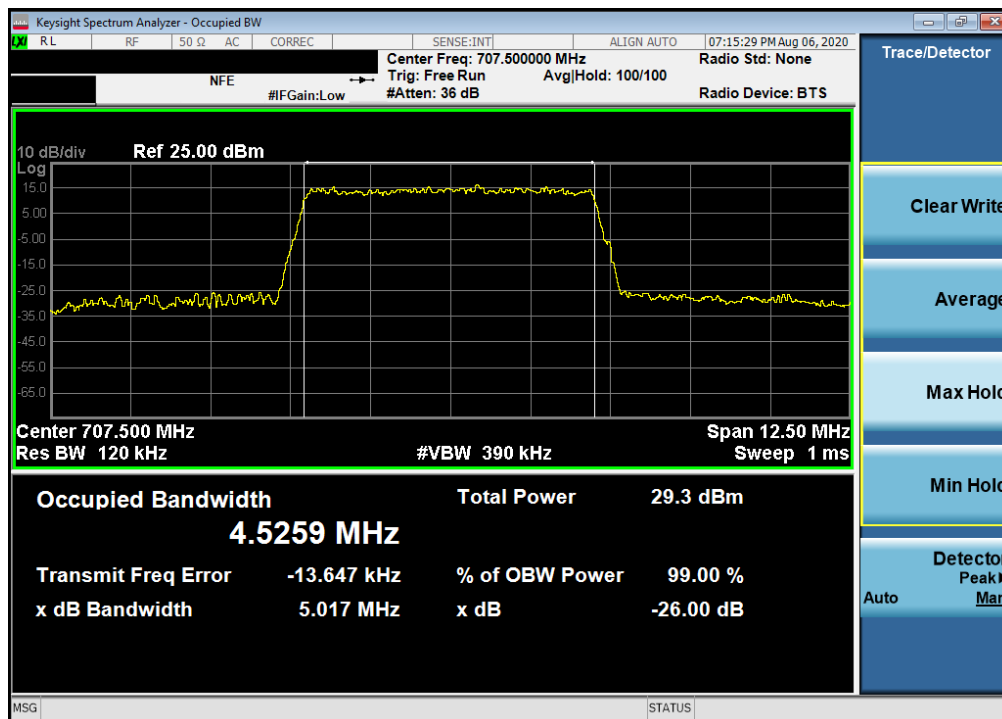
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 25 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



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

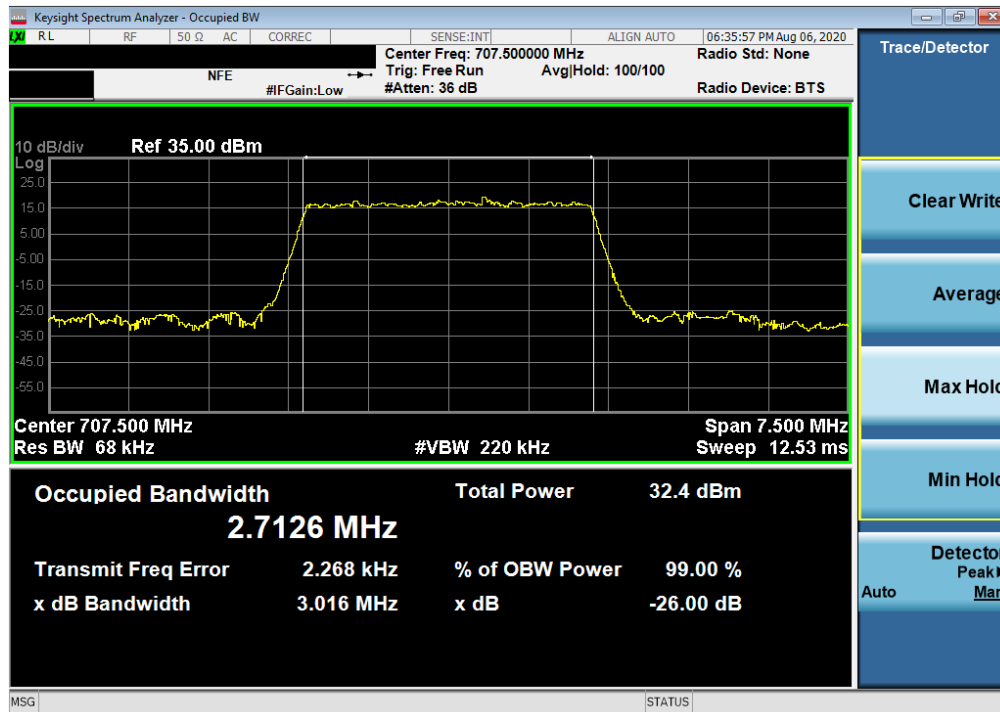


Plot 7-6. Occupied Bandwidth Plot (LTE Band 12/17 - 5MHz 64-QAM - Full RB Configuration)

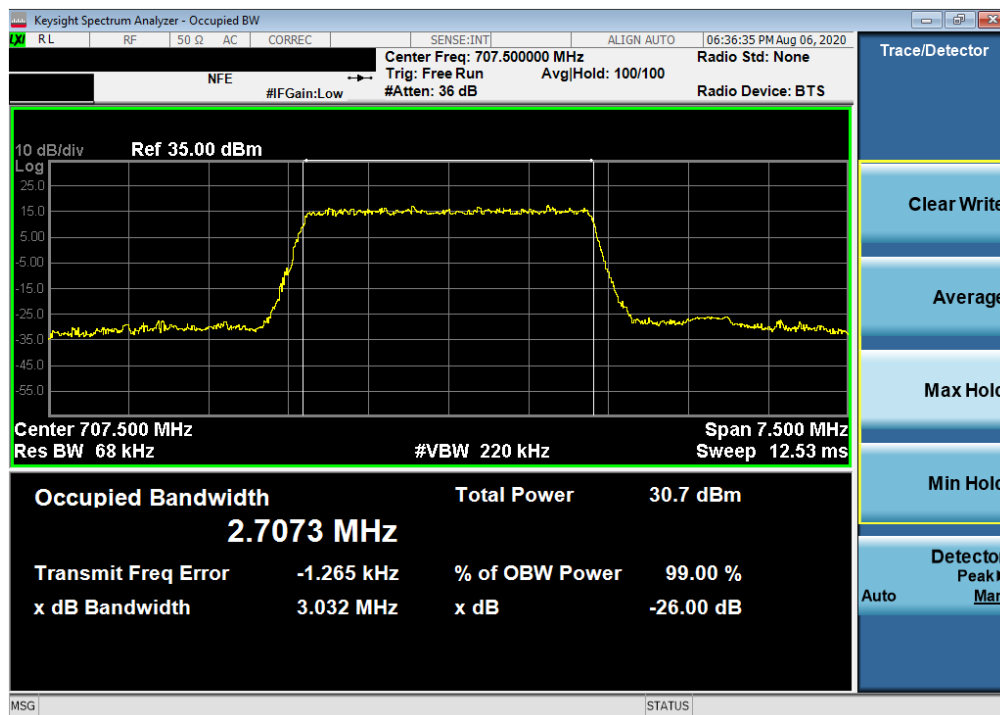
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 26 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



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

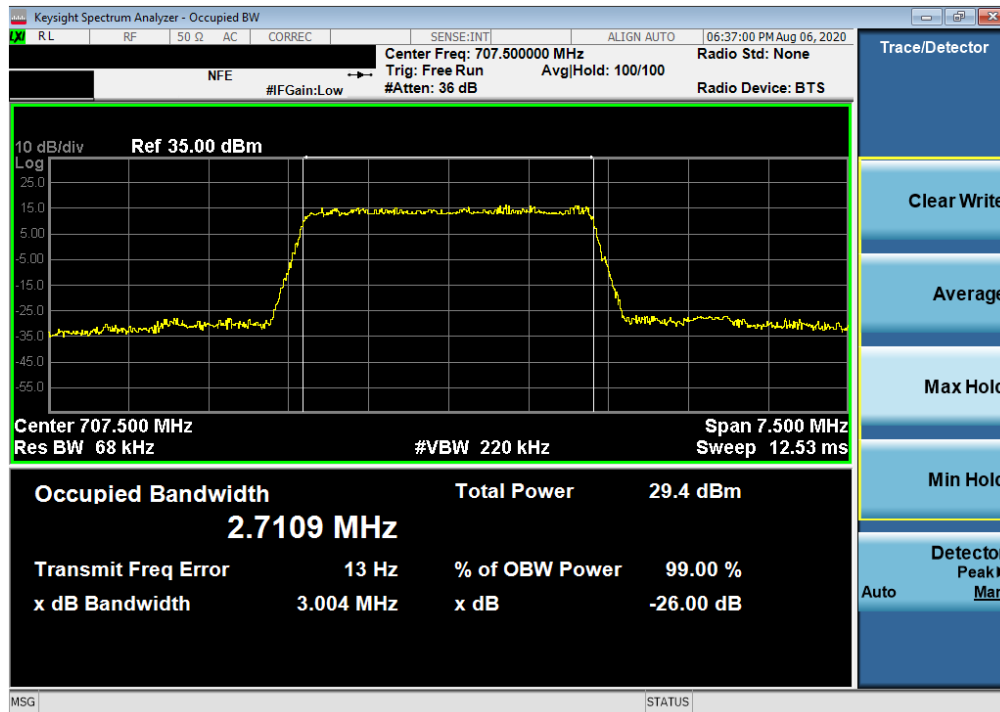


Plot 7-8. Occupied Bandwidth Plot (LTE Band 12 - 3MHz 16-QAM - Full RB Configuration)

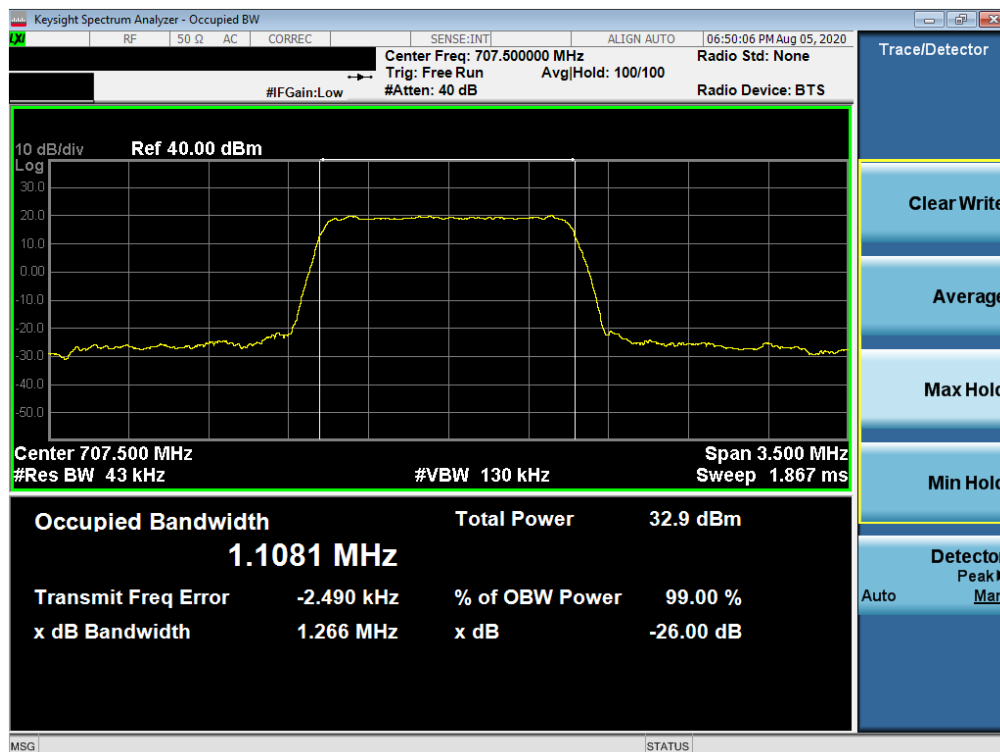
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 27 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-9. Occupied Bandwidth Plot (LTE Band 12 - 3MHz 64-QAM - Full RB Configuration)

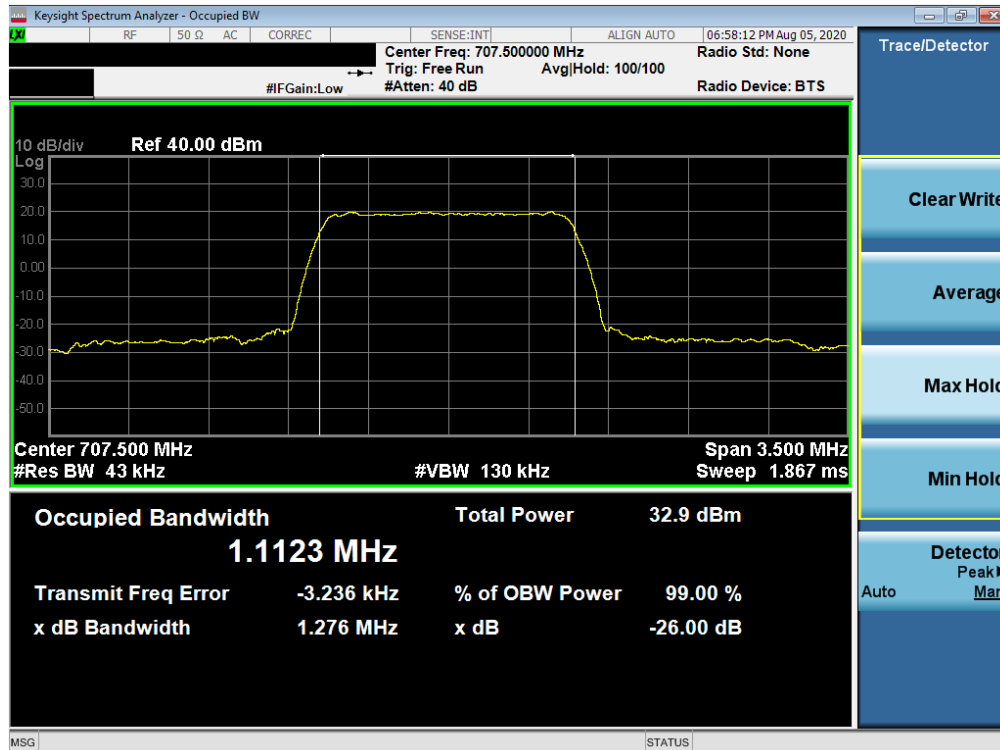


Plot 7-10. Occupied Bandwidth Plot (LTE Band 12 - 1.4MHz QPSK - Full RB Configuration)

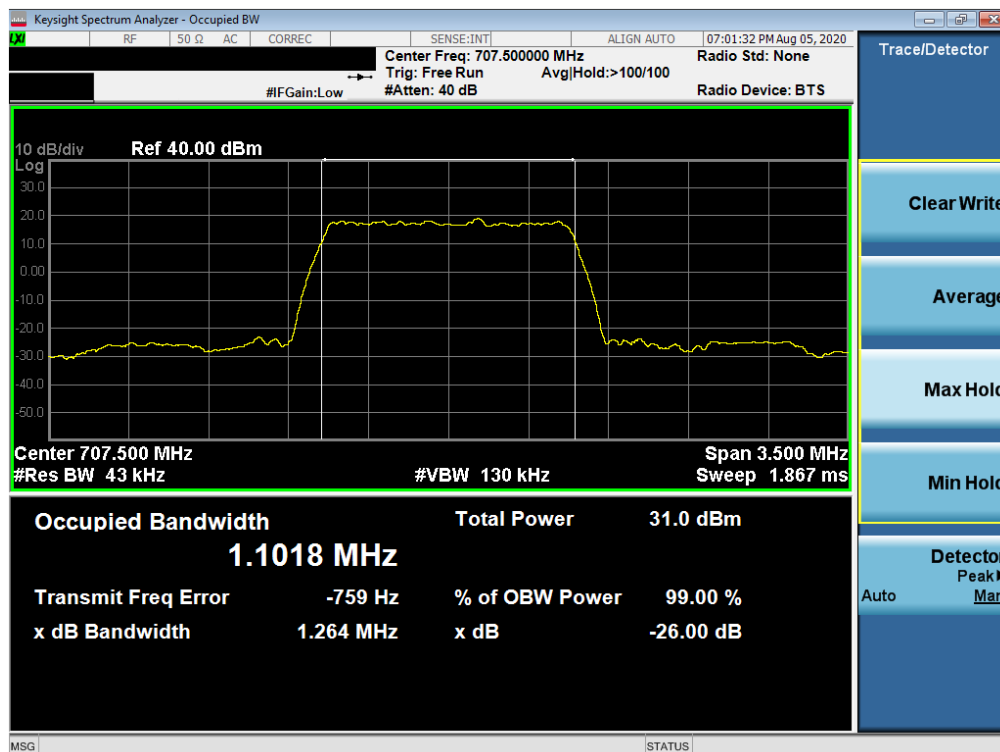
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 28 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-11. Occupied Bandwidth Plot (LTE Band 12 – 1.4MHz 16-QAM - Full RB Configuration)



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

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 29 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 13



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



Plot 7-14. Occupied Bandwidth Plot (LTE Band 13 - 10MHz 16-QAM - Full RB Configuration)

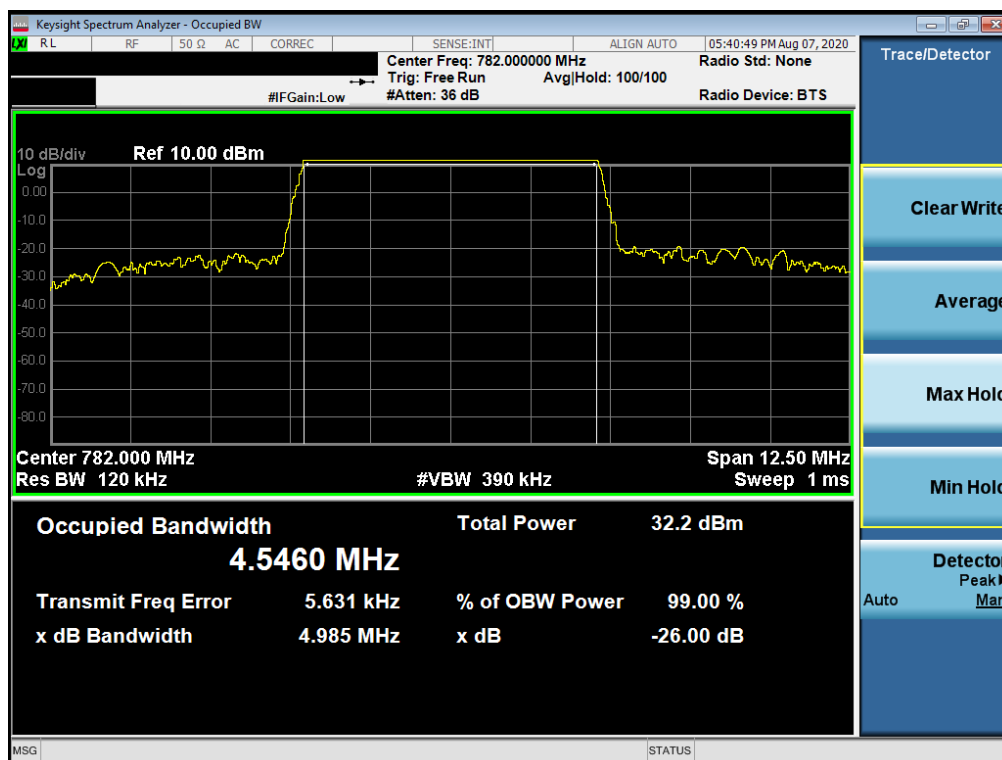
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 30 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-15. Occupied Bandwidth Plot (LTE Band 13 - 10MHz 64-QAM - Full RB Configuration)

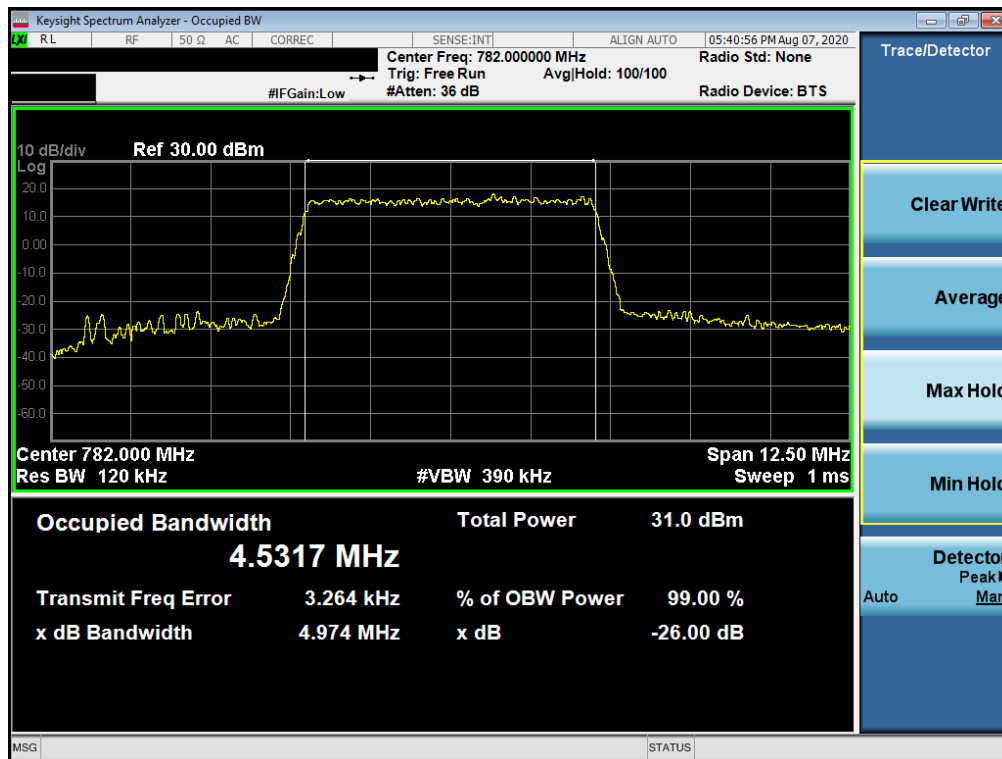


Plot 7-16. Occupied Bandwidth Plot (LTE Band 13 - 5MHz QPSK - Full RB Configuration)

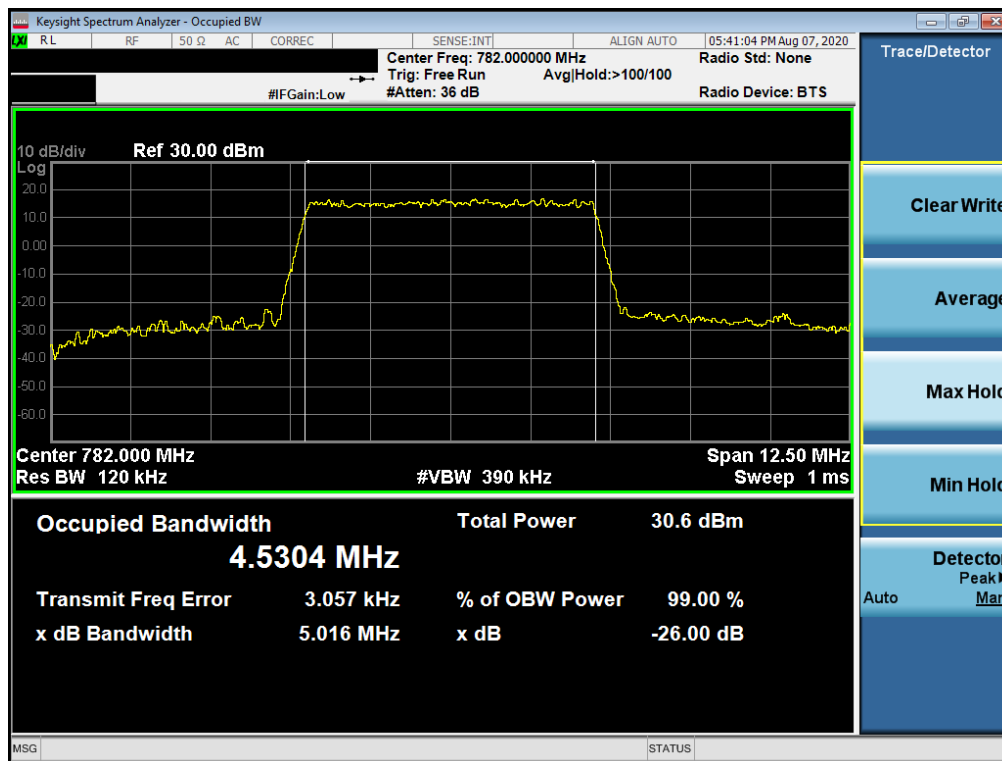
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 31 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-17. Occupied Bandwidth Plot (LTE Band 13 - 5MHz 16-QAM - Full RB Configuration)



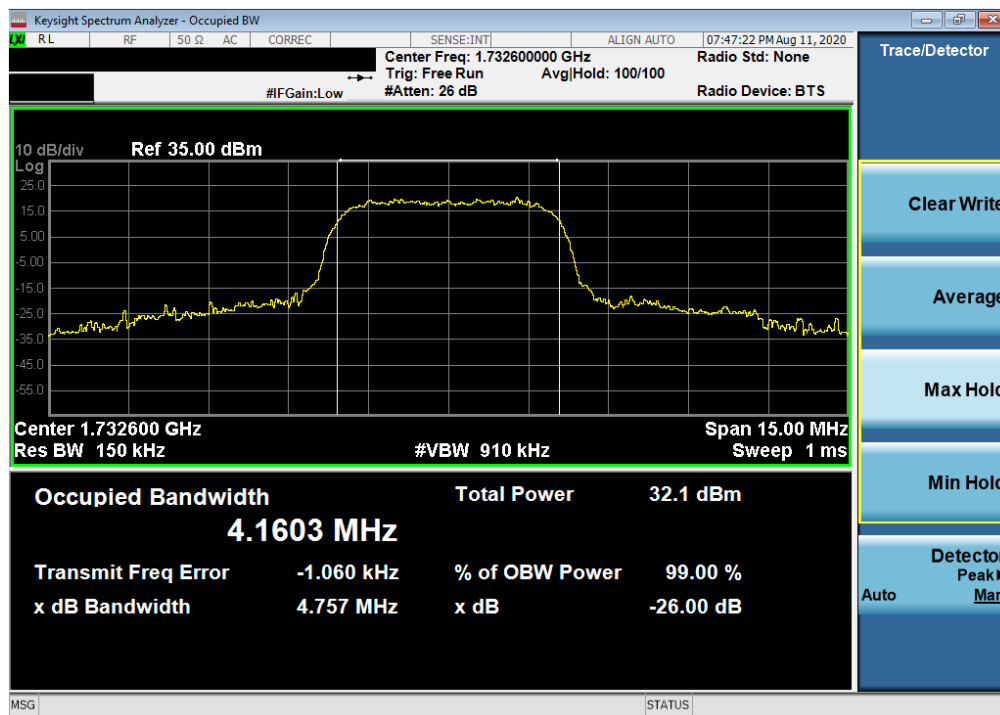
Plot 7-18. Occupied Bandwidth Plot (LTE Band 13 - 5MHz 64-QAM - Full RB Configuration)

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 32 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

WCDMA AWS



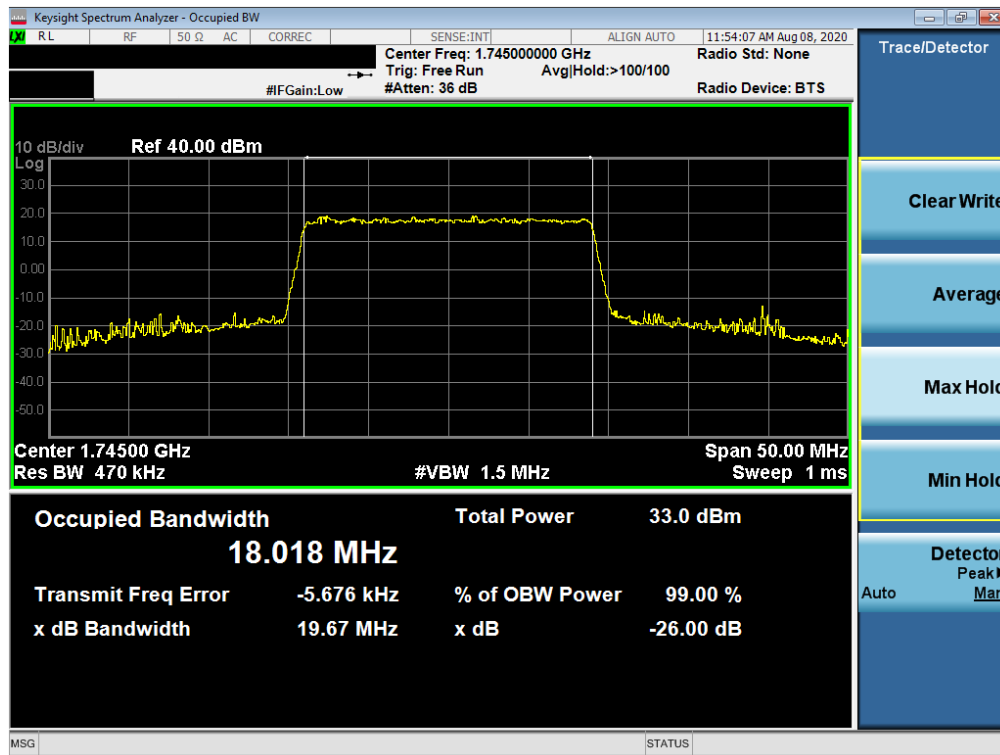
Plot 7-19. Occupied Bandwidth Plot (WCDMA, Ch. 1413)

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 33 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 66/4



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

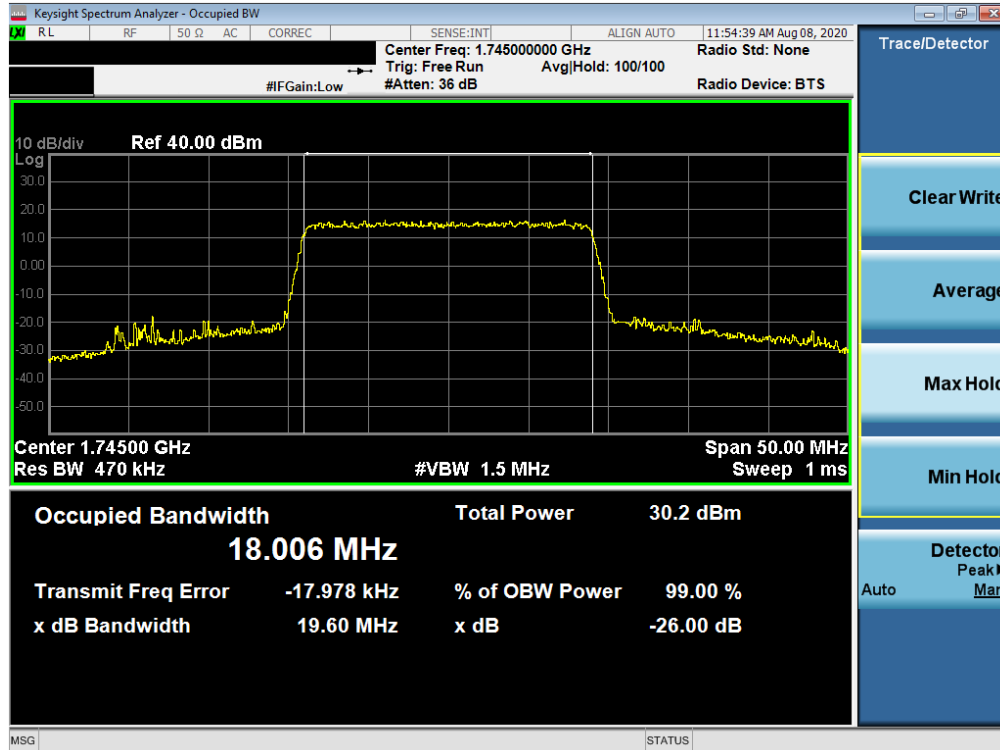


Plot 7-21. Occupied Bandwidth Plot (LTE Band 66/4 - 20MHz 16-QAM - Full RB Configuration)

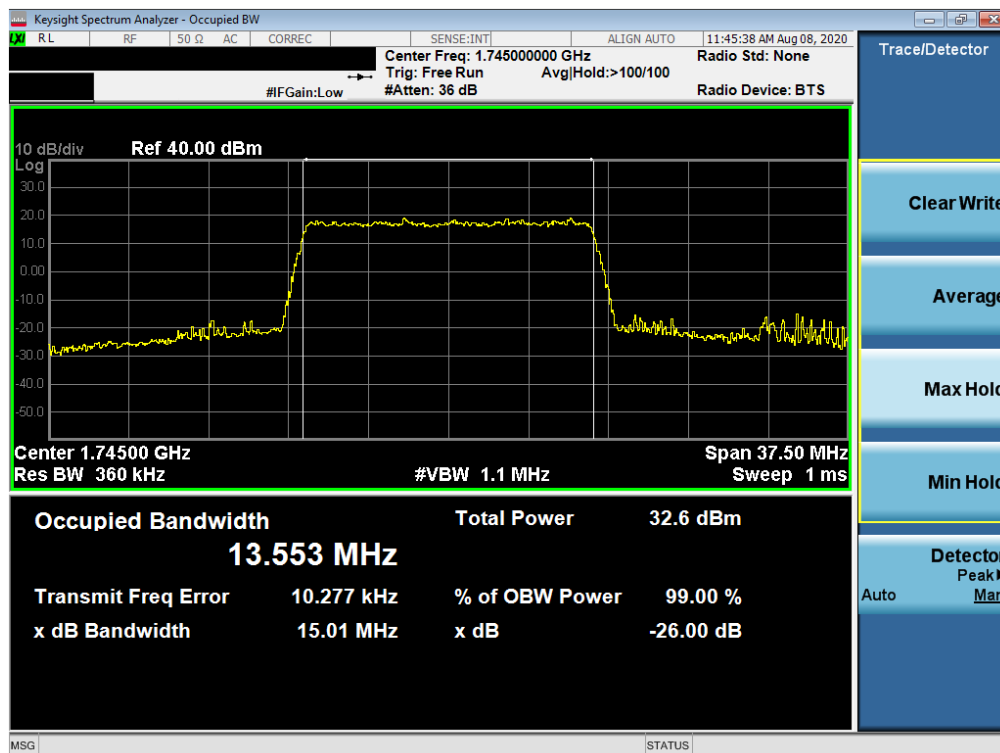
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 34 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-22. Occupied Bandwidth Plot (LTE Band 66/4 - 20MHz 64-QAM - Full RB Configuration)

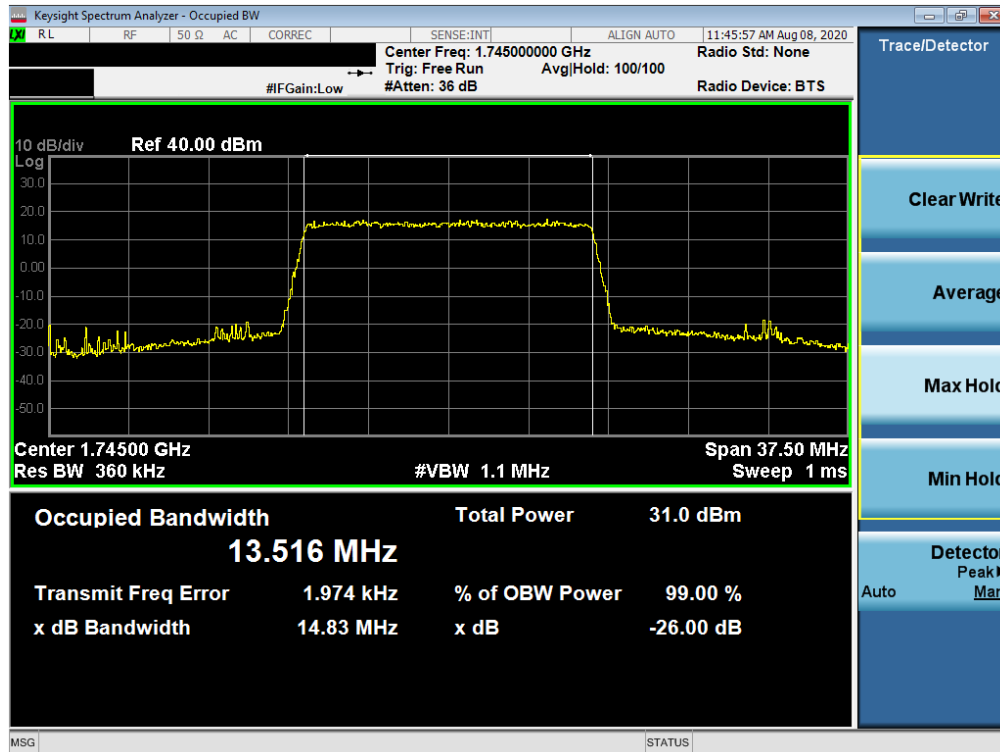


Plot 7-23. Occupied Bandwidth Plot (LTE Band 66/4 - 15MHz QPSK - Full RB Configuration)

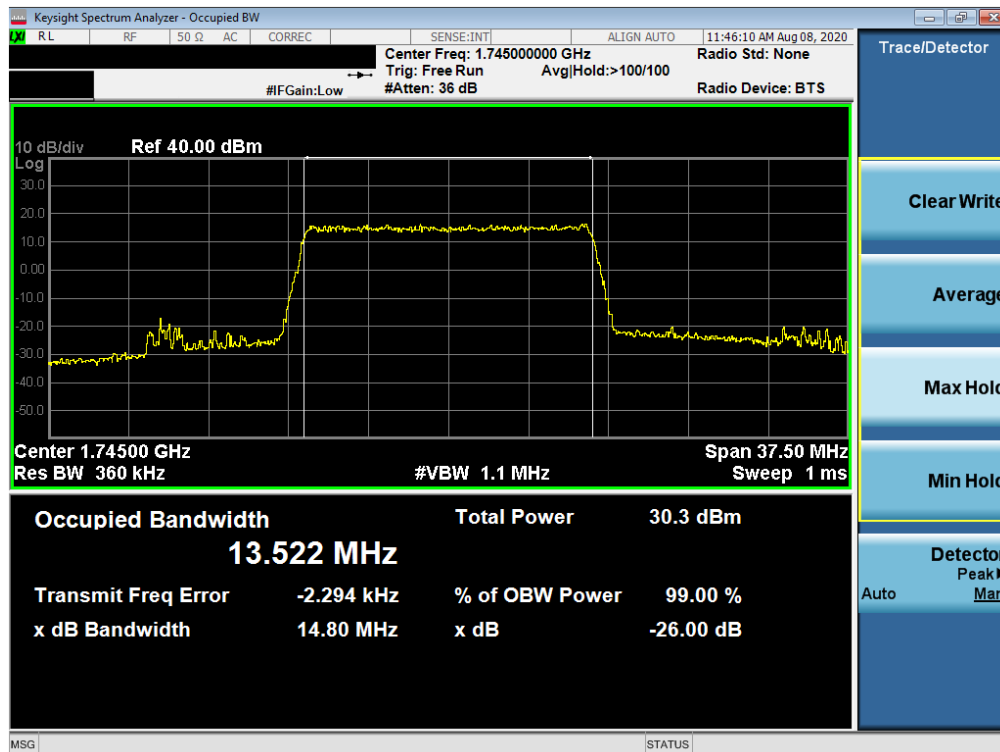
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 35 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-24. Occupied Bandwidth Plot (LTE Band 66/4 - 15MHz 16-QAM - Full RB Configuration)

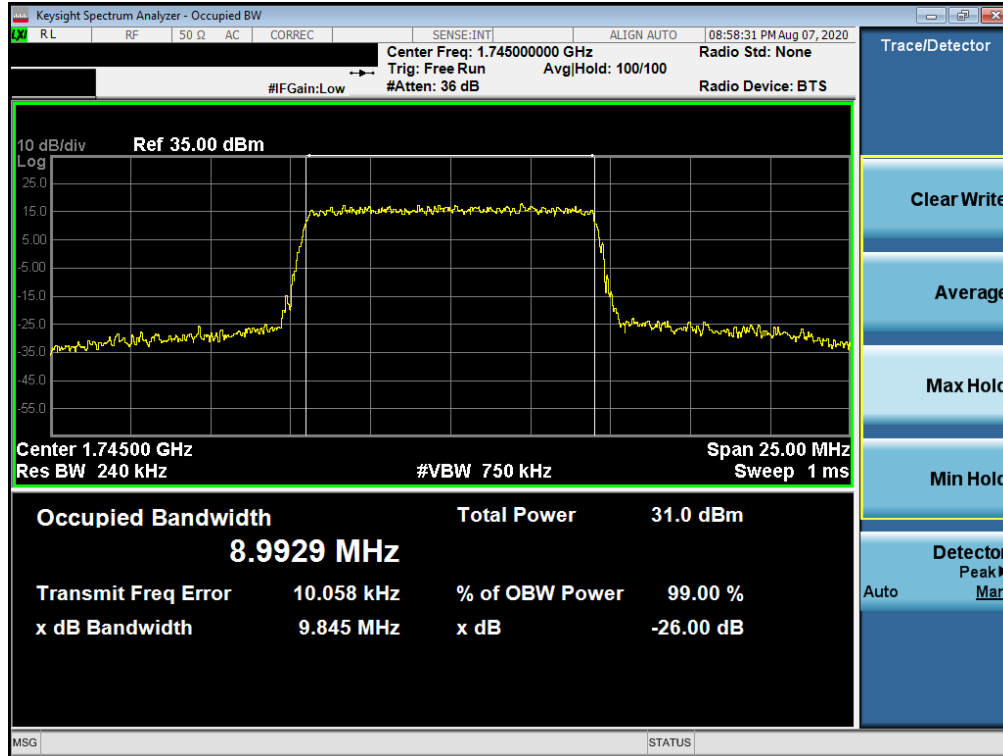


Plot 7-25. Occupied Bandwidth Plot (LTE Band 66/4 - 15MHz 64-QAM - Full RB Configuration)

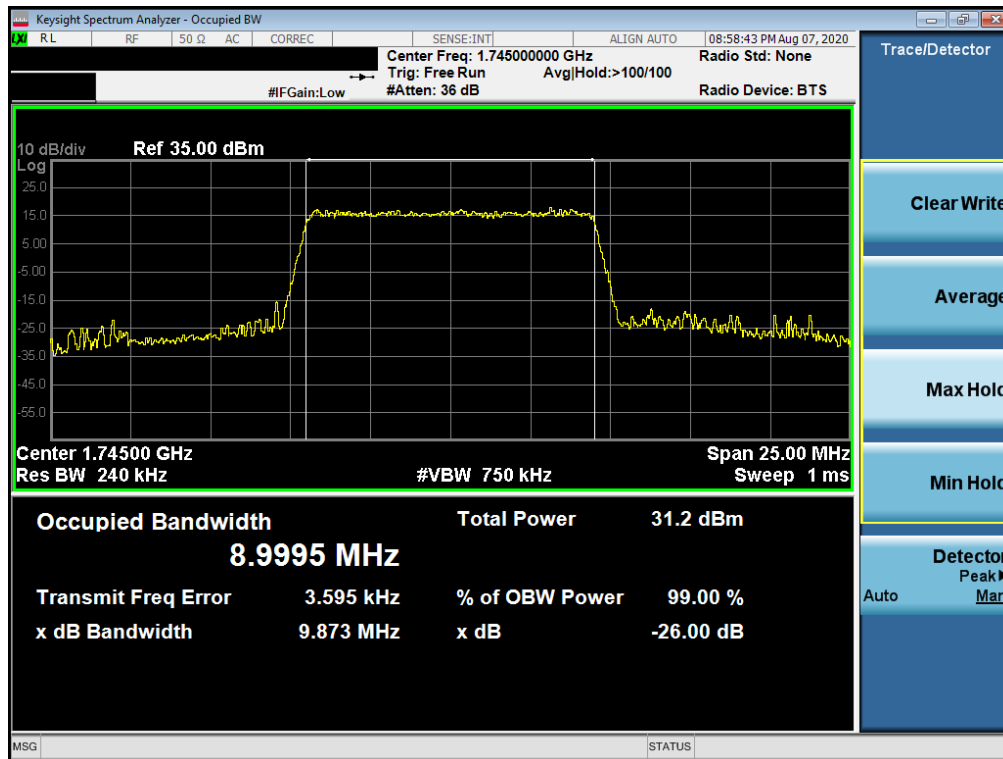
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 36 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-26. Occupied Bandwidth Plot (LTE Band 66/4 - 10MHz QPSK - Full RB Configuration)

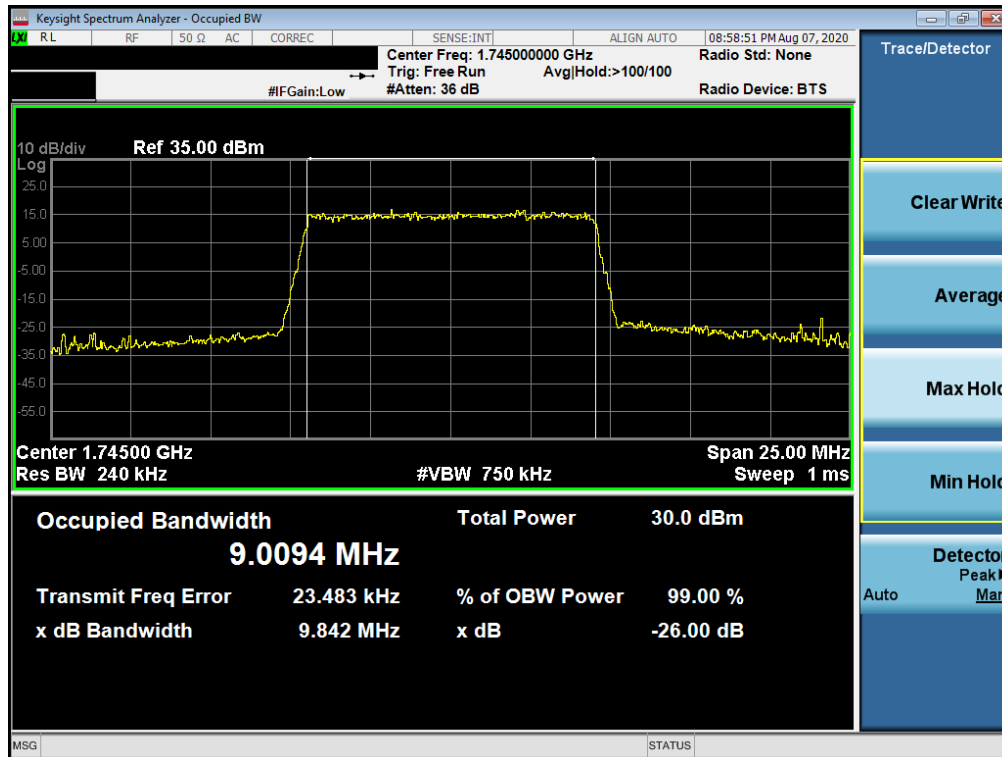


Plot 7-27. Occupied Bandwidth Plot (LTE Band 66/4 - 10MHz 16-QAM - Full RB Configuration)

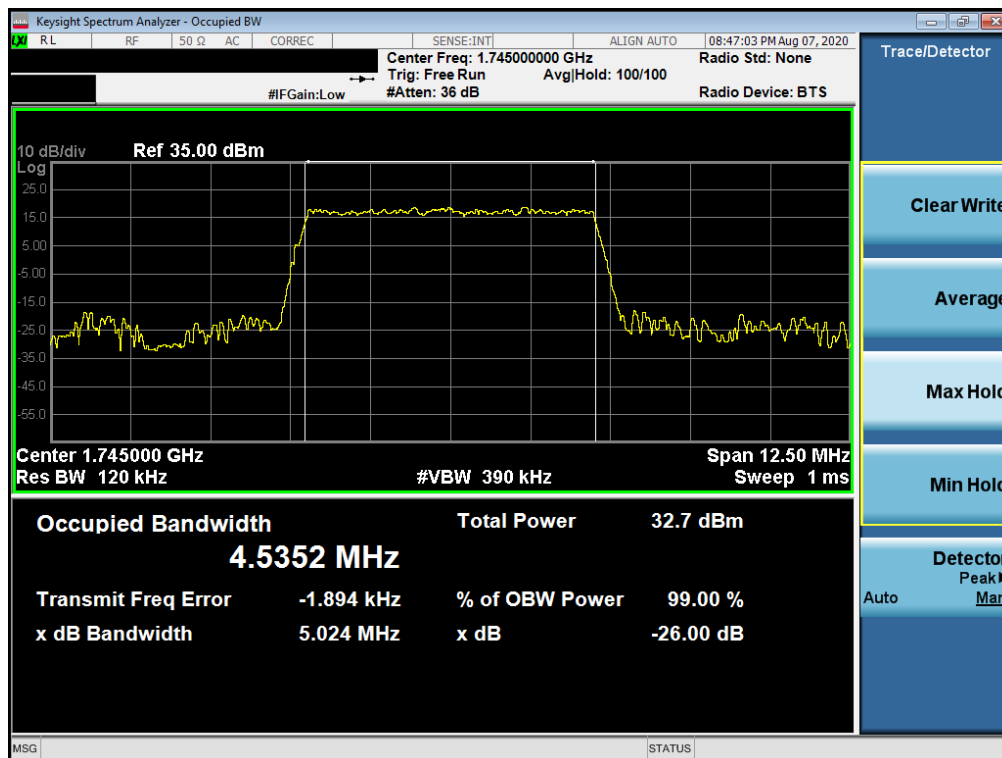
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 37 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-28. Occupied Bandwidth Plot (LTE Band 66/4 - 10MHz 64-QAM - Full RB Configuration)

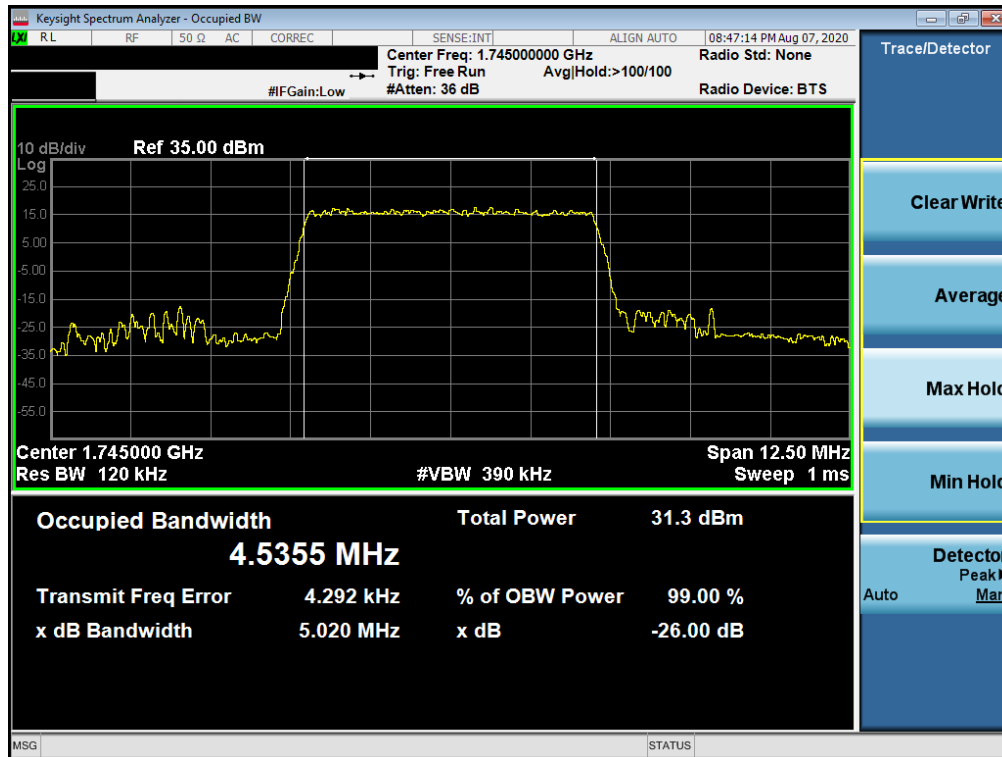


Plot 7-29. Occupied Bandwidth Plot (LTE Band 66/4 - 5MHz QPSK - Full RB Configuration)

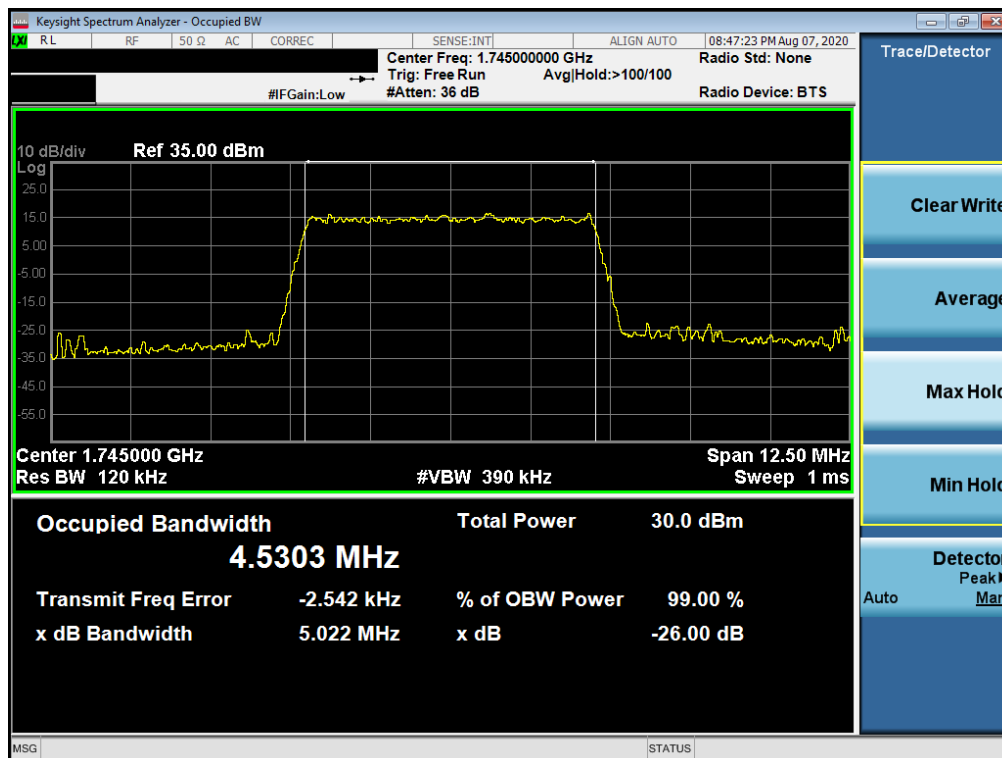
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 38 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-30. Occupied Bandwidth Plot (LTE Band 66/4 - 5MHz 16-QAM - Full RB Configuration)

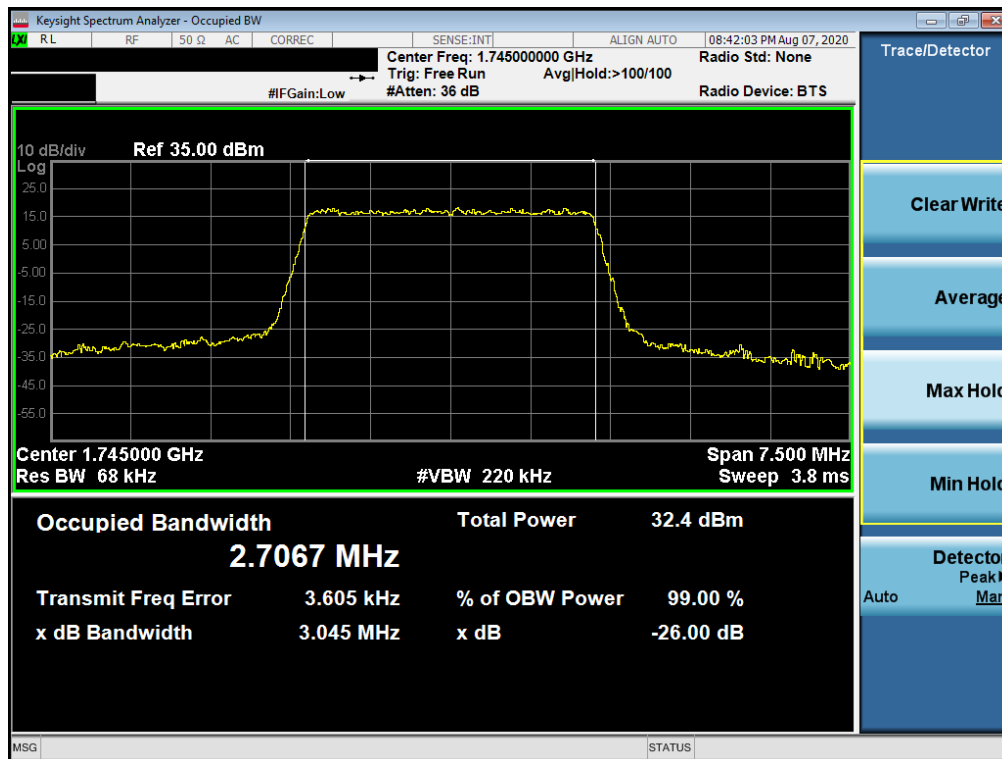


Plot 7-31. Occupied Bandwidth Plot (LTE Band 66/4 - 5MHz 64-QAM - Full RB Configuration)

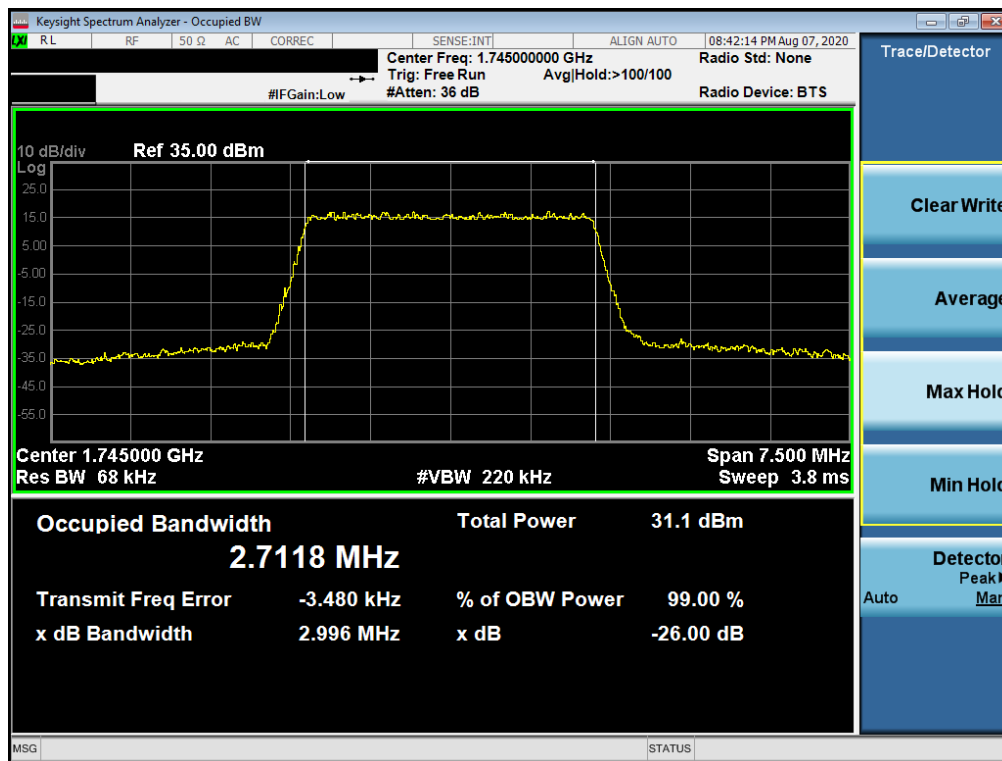
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 39 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-32. Occupied Bandwidth Plot (LTE Band 66/4 - 3MHz QPSK - Full RB Configuration)

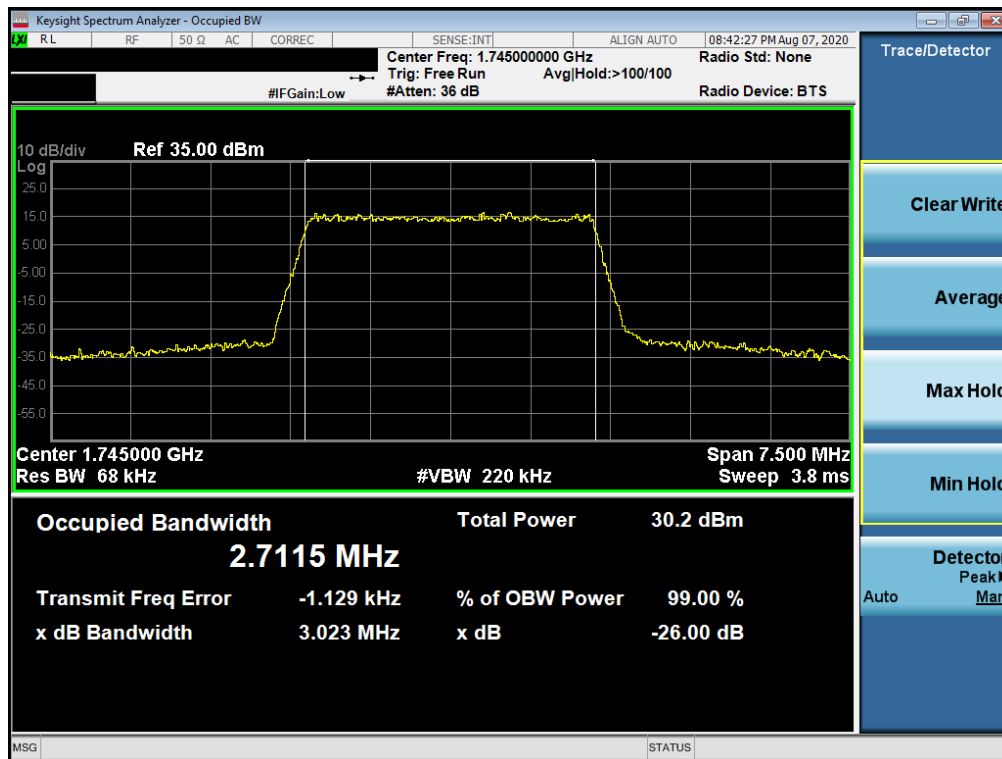


Plot 7-33. Occupied Bandwidth Plot (LTE Band 66/4 - 3MHz 16-QAM - Full RB Configuration)

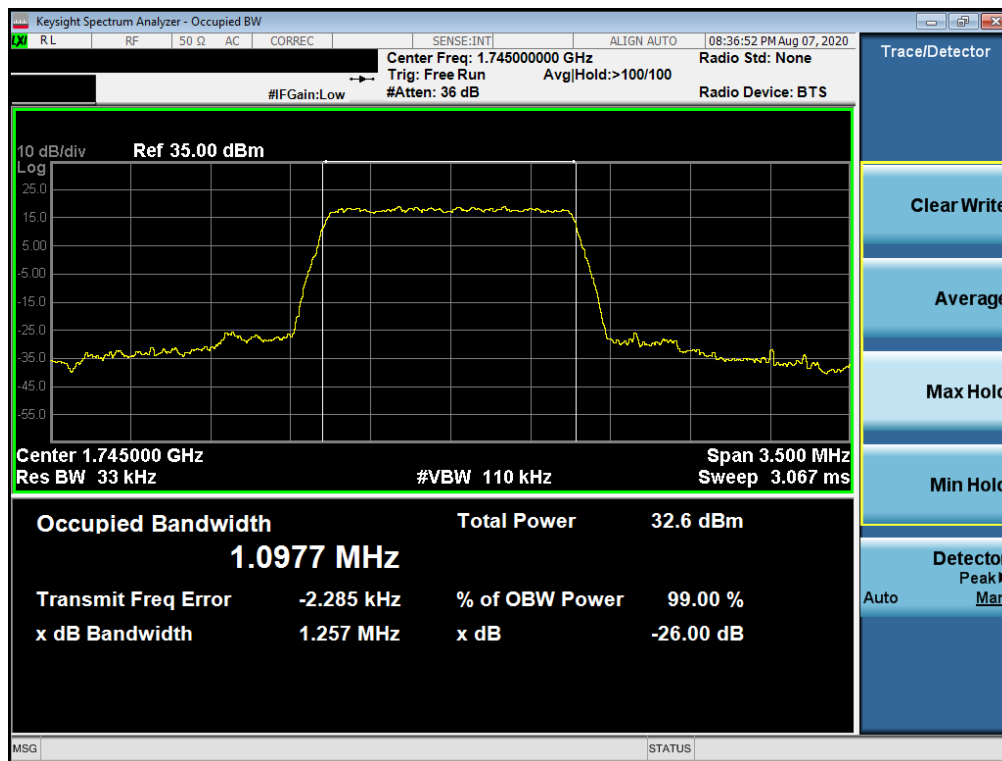
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 40 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-34. Occupied Bandwidth Plot (LTE Band 66/4 - 3MHz 64-QAM - Full RB Configuration)

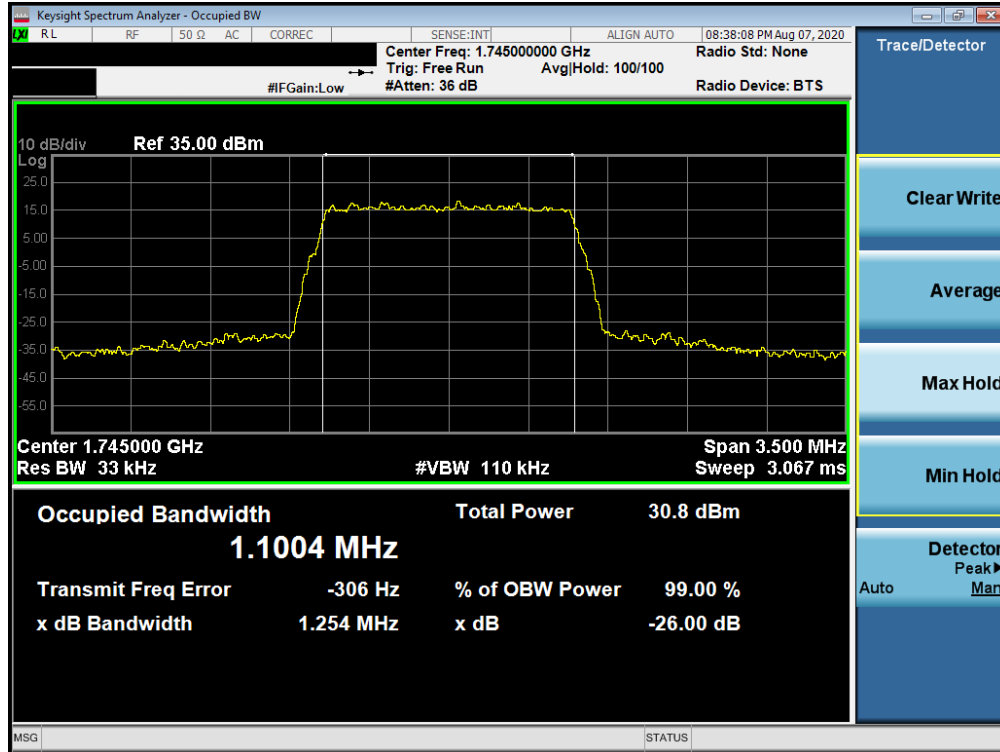


Plot 7-35. Occupied Bandwidth Plot (LTE Band 66/4 - 1.4MHz QPSK - Full RB Configuration)

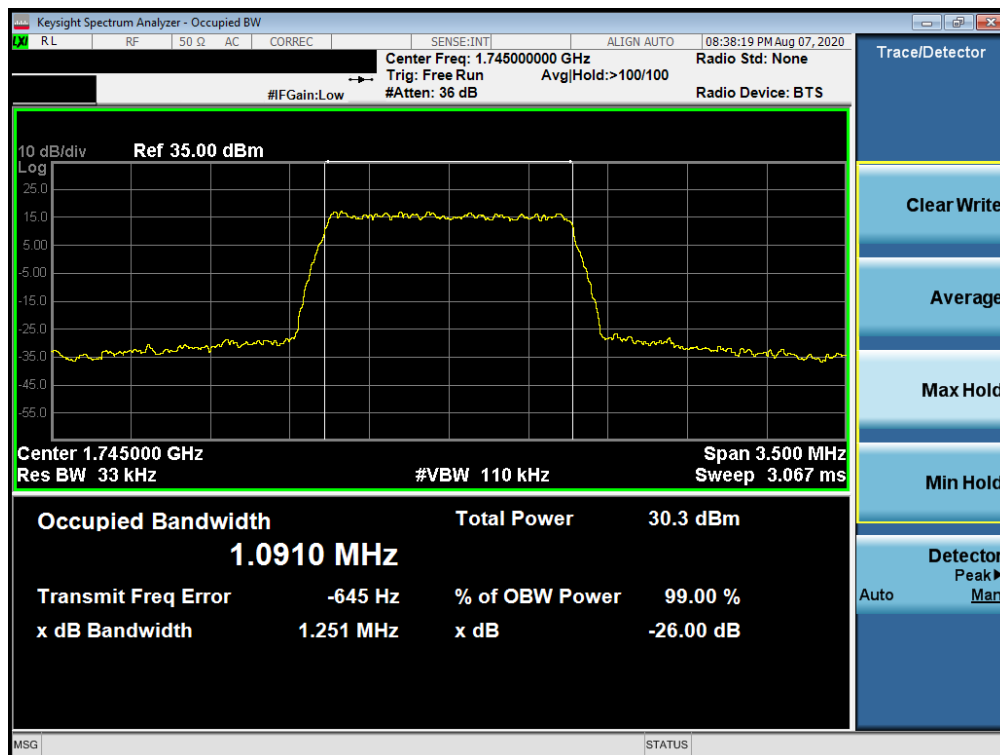
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 41 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-36. Occupied Bandwidth Plot (LTE Band 66/4 - 1.4MHz 16-QAM - Full RB Configuration)



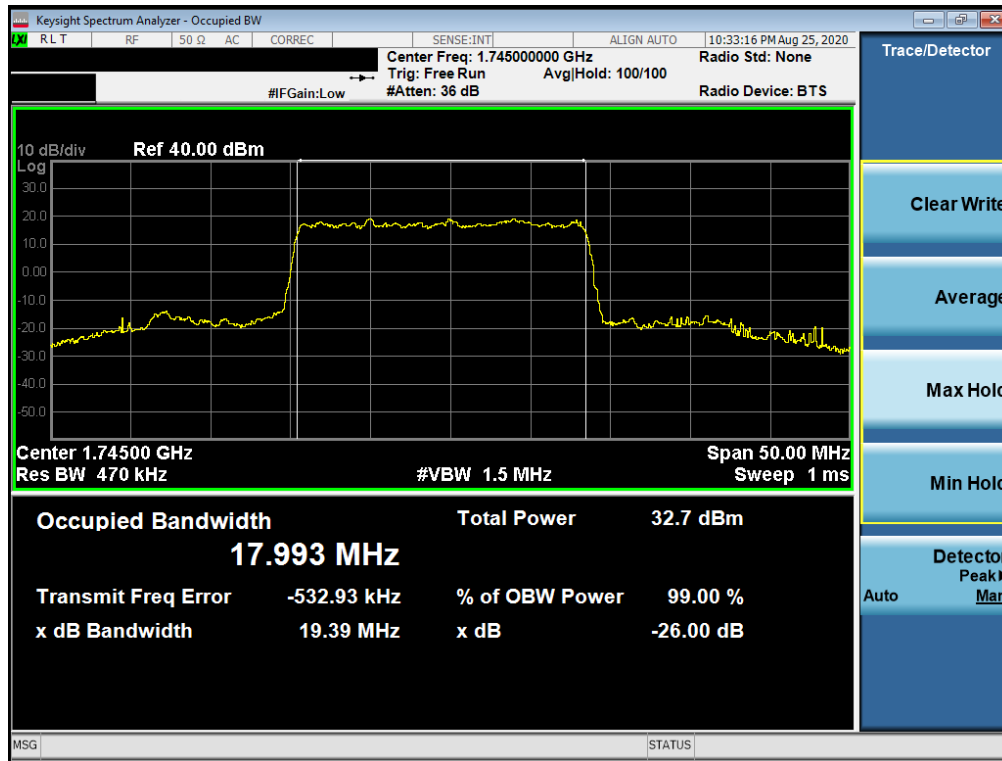
Plot 7-37. Occupied Bandwidth Plot (LTE Band 66/4 - 1.4MHz 64-QAM - Full RB Configuration)

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 42 of 151

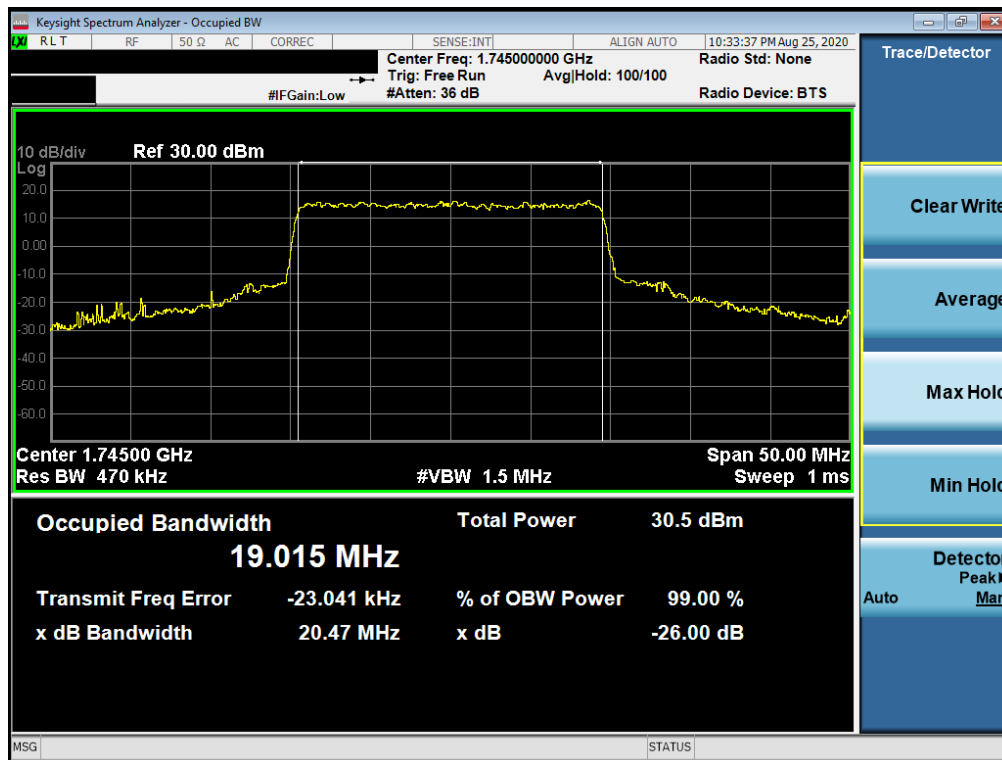
© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

NR Band n66



Plot 7-38. Occupied Bandwidth Plot (NR Band n66 - 20.0MHz DFT-s-OFDM BPSK - Full RB)



Plot 7-39. Occupied Bandwidth Plot (NR Band n66 - 20.0MHz CP-OFDM QPSK - Full RB)

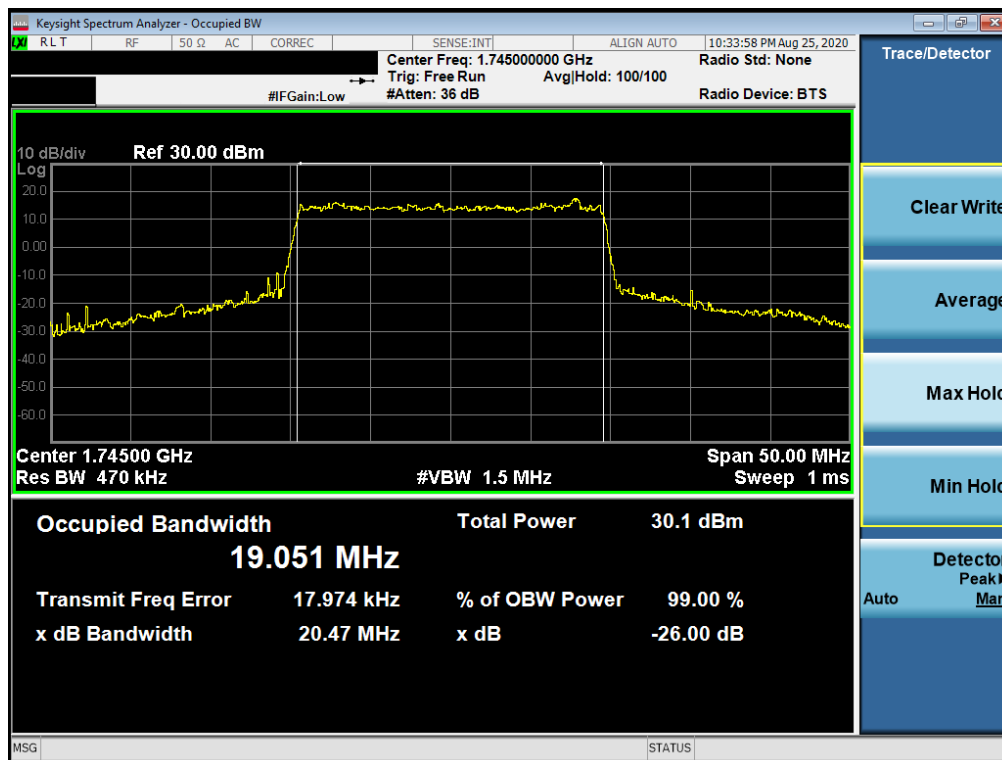
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 43 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-40. Occupied Bandwidth Plot (NR Band n66 - 20.0MHz CP-OFDM 16QAM - Full RB)

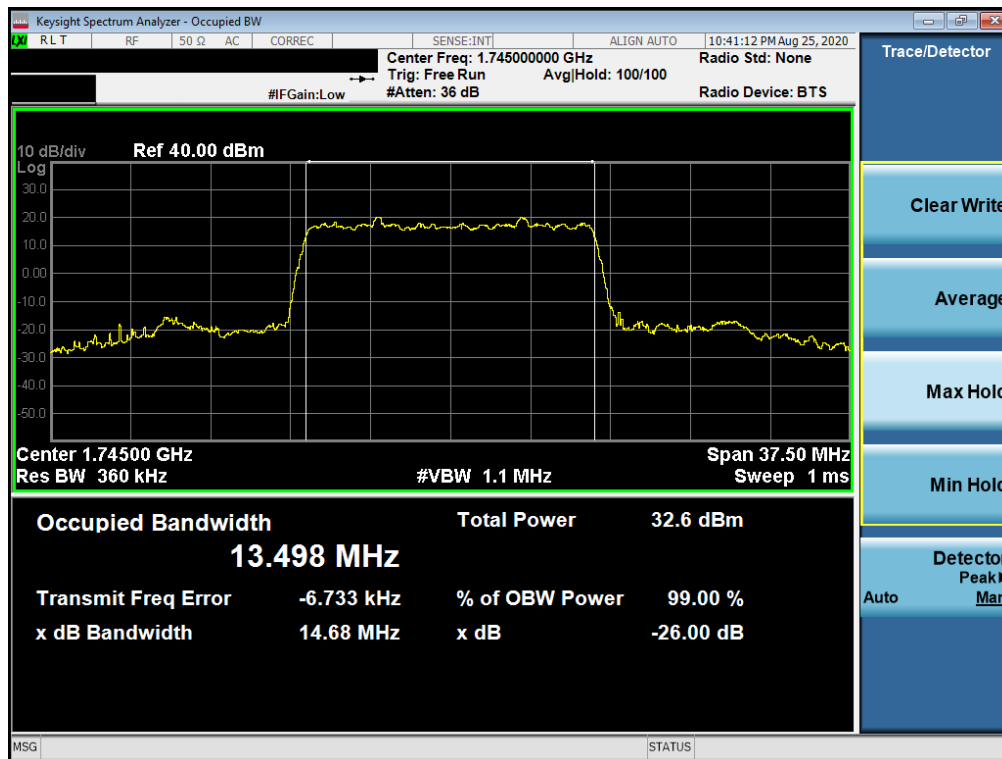


Plot 7-41. Occupied Bandwidth Plot (NR Band n66 - 20.0MHz CP-OFDM 64QAM - Full RB)

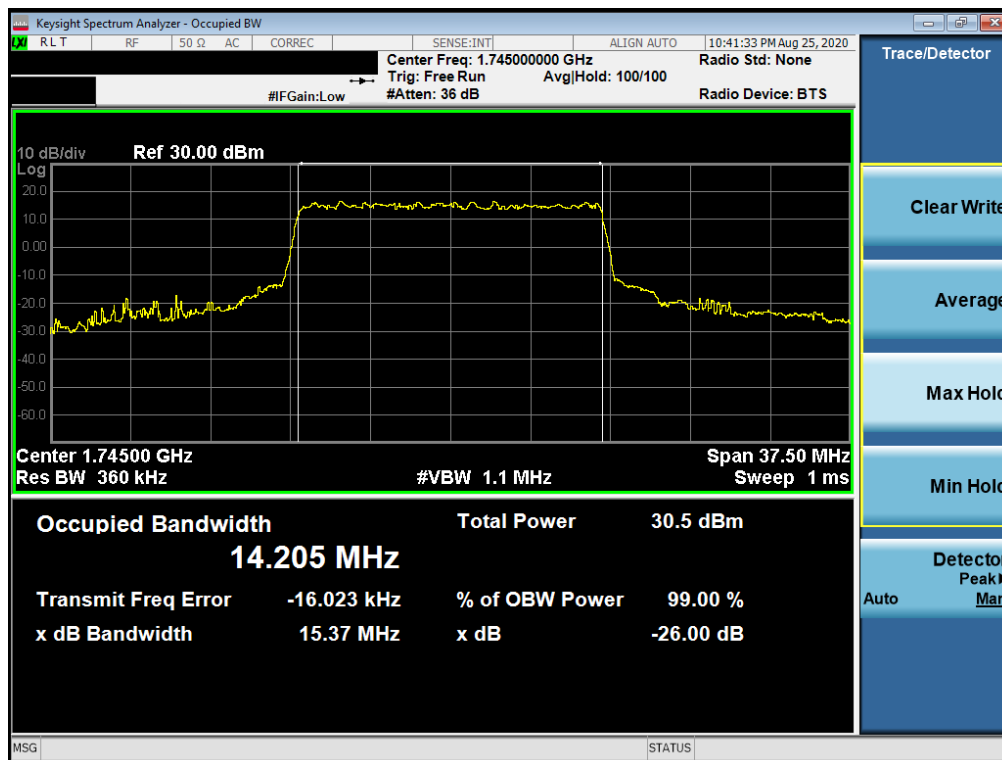
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 44 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-42. Occupied Bandwidth Plot (NR Band n66 - 15.0MHz DFT-s-OFDM BPSK - Full RB)

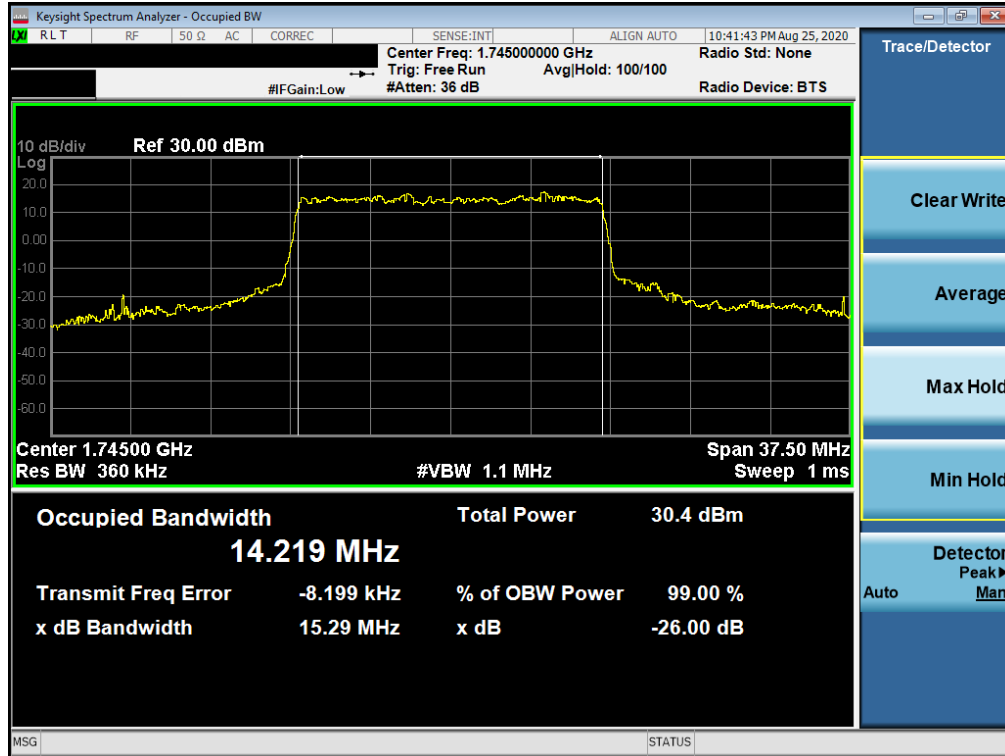


Plot 7-43. Occupied Bandwidth Plot (NR Band n66 - 15.0MHz CP-OFDM QPSK - Full RB)

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 45 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-44. Occupied Bandwidth Plot (NR Band n66 - 15.0MHz CP-OFDM 16QAM - Full RB)

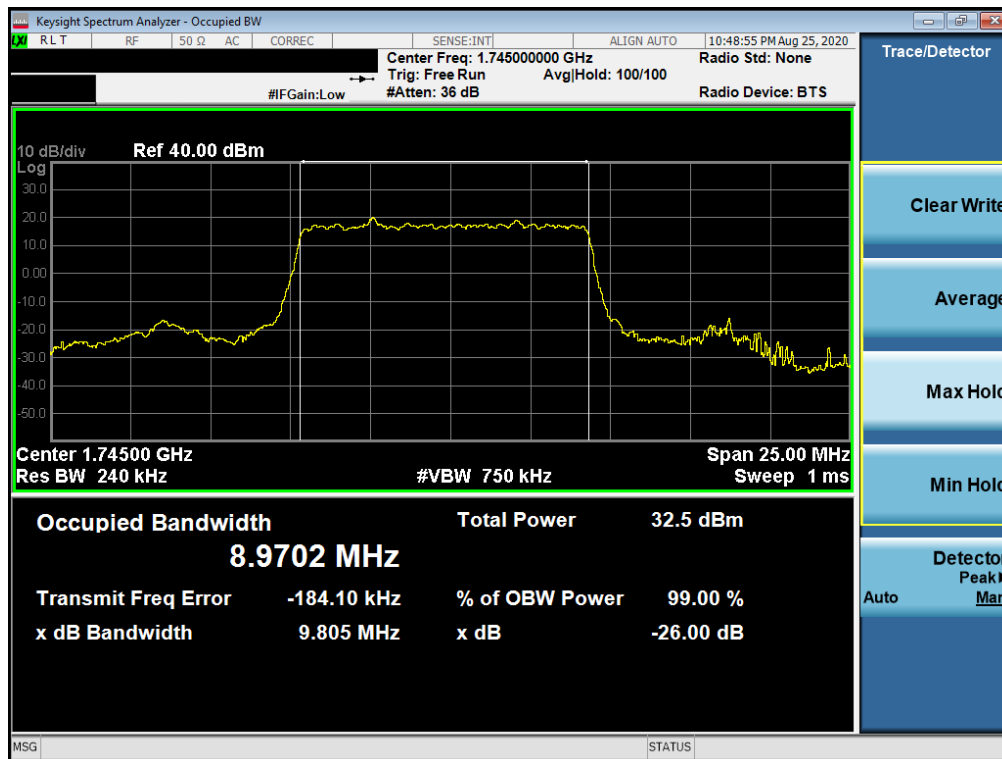


Plot 7-45. Occupied Bandwidth Plot (NR Band n66 - 15.0MHz CP-OFDM 64QAM - Full RB)

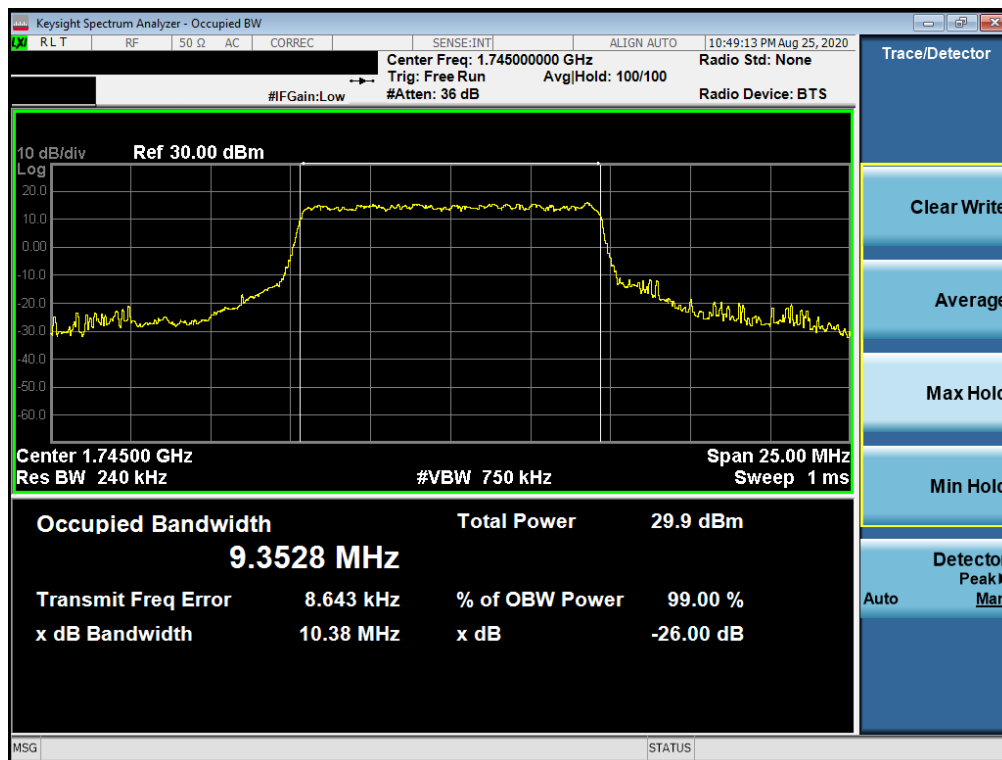
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 46 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-46. Occupied Bandwidth Plot (NR Band n66 - 10.0MHz DFT-s-OFDM BPSK - Full RB)

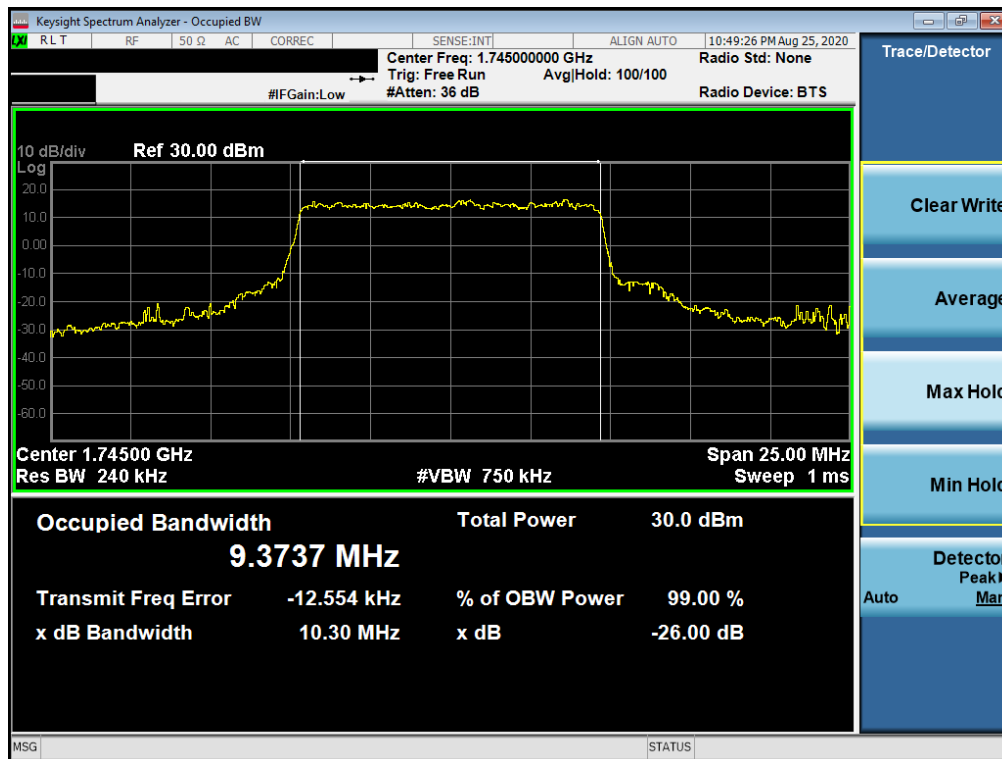


Plot 7-47. Occupied Bandwidth Plot (NR Band n66 - 10.0MHz CP-OFDM QPSK - Full RB)

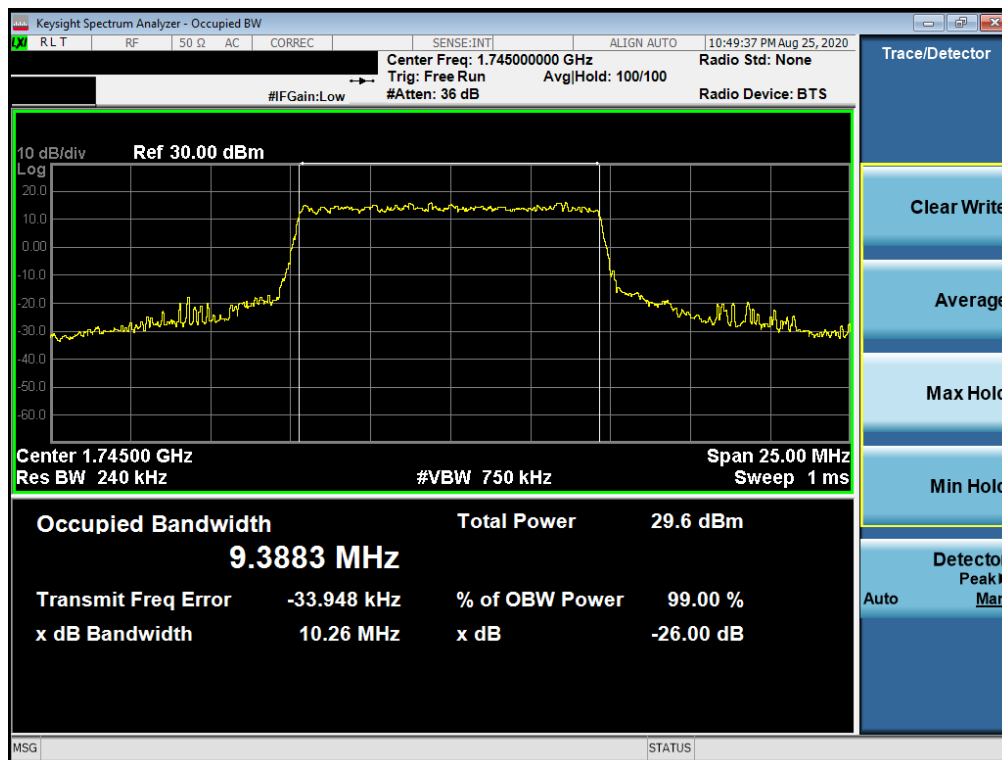
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 47 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-48. Occupied Bandwidth Plot (NR Band n66 - 10.0MHz CP-OFDM 16QAM - Full RB)

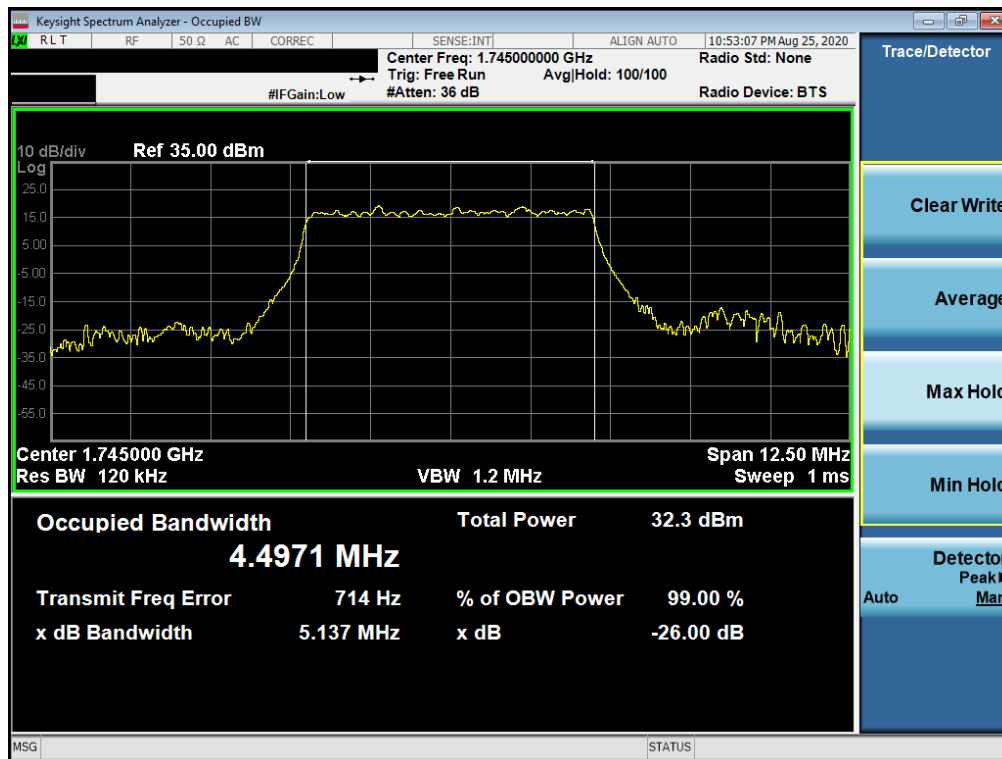


Plot 7-49. Occupied Bandwidth Plot (NR Band n66 - 10.0MHz CP-OFDM 64QAM - Full RB)

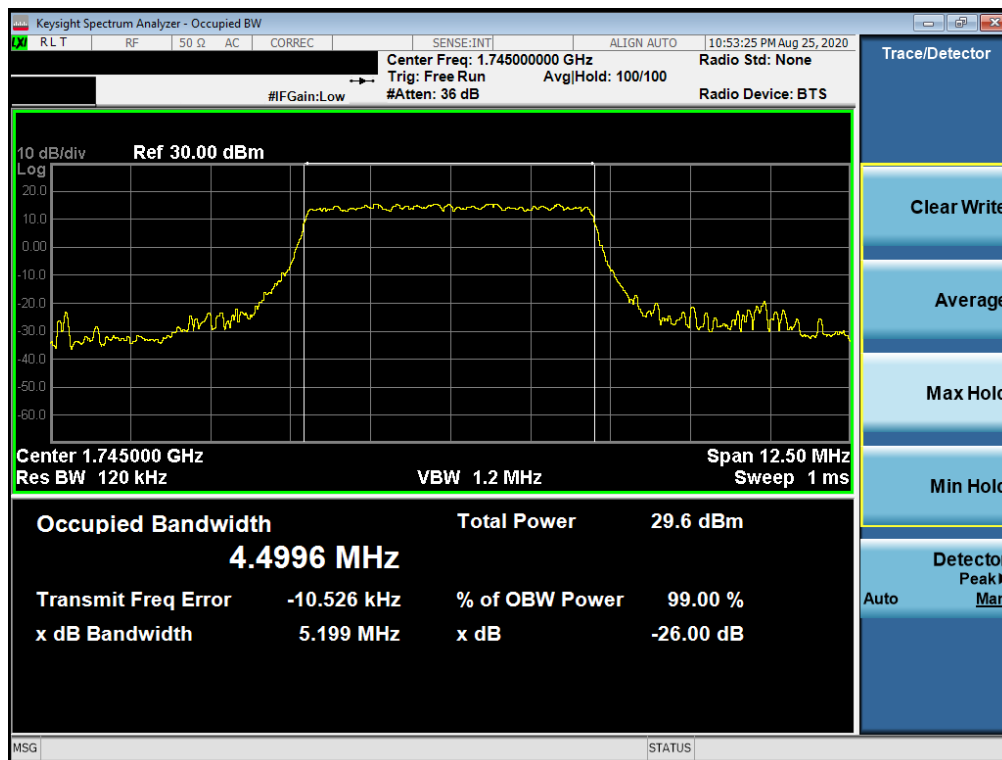
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 48 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-50. Occupied Bandwidth Plot (NR Band n66 - 5.0MHz DFT-s-OFDM BPSK - Full RB)

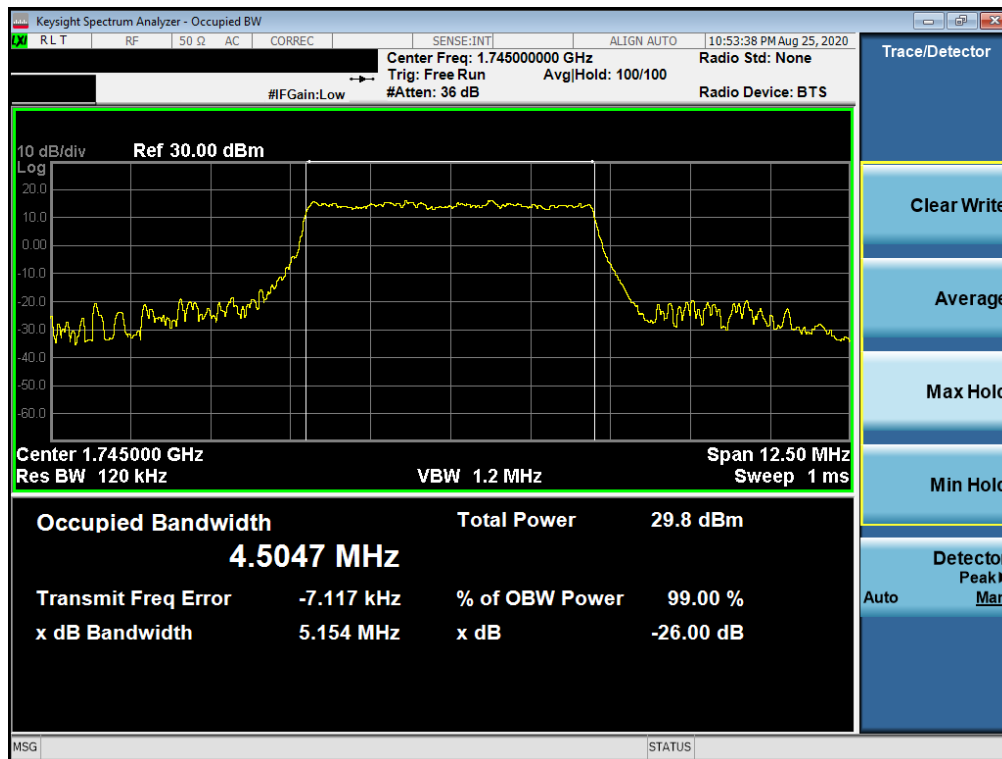


Plot 7-51. Occupied Bandwidth Plot (NR Band n66 - 5.0MHz CP-OFDM QPSK - Full RB)

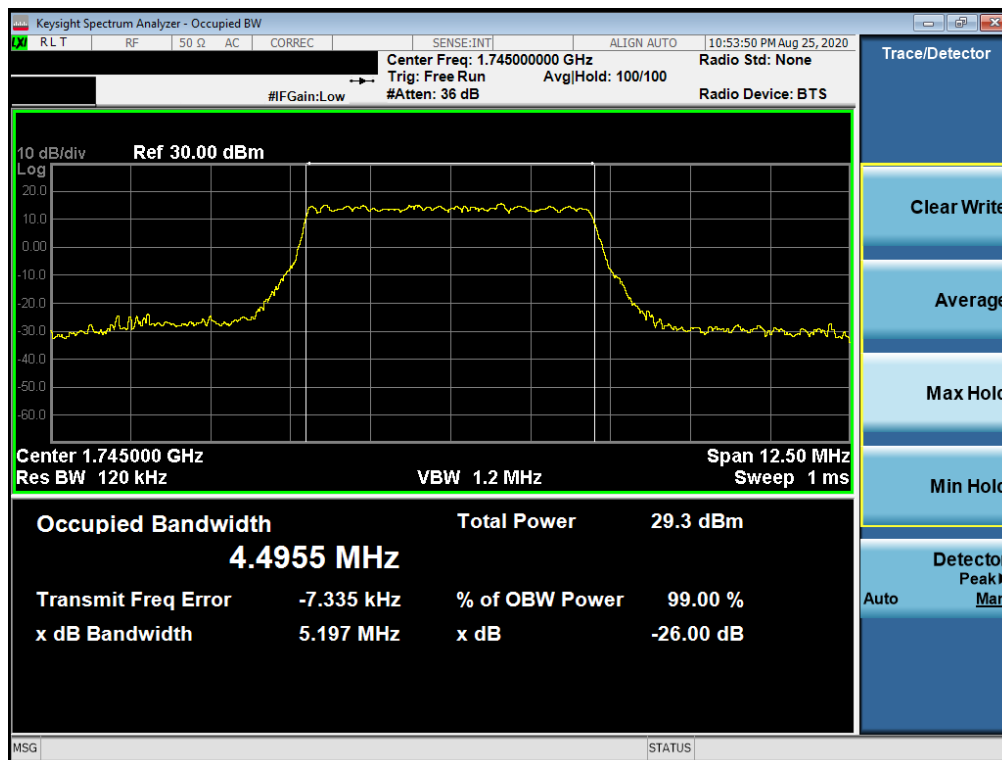
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 49 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-52. Occupied Bandwidth Plot (NR Band n66 - 5.0MHz CP-OFDM 16QAM - Full RB)



Plot 7-53. Occupied Bandwidth Plot (NR Band n66 - 5.0MHz CP-OFDM 64QAM - Full RB)

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 - 9/30/2020	EUT Type: Portable Handset		Page 50 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

7.3 Band Edge Emissions at Antenna Terminal

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

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 and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW $\geq 1\%$ of the emission bandwidth
4. VBW $\geq 3 \times$ RBW
5. Detector = RMS
6. Number of sweep points $\geq 2 \times$ Span/RBW
7. Trace mode = trace average
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Test Setup

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

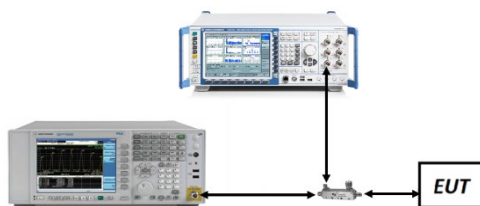


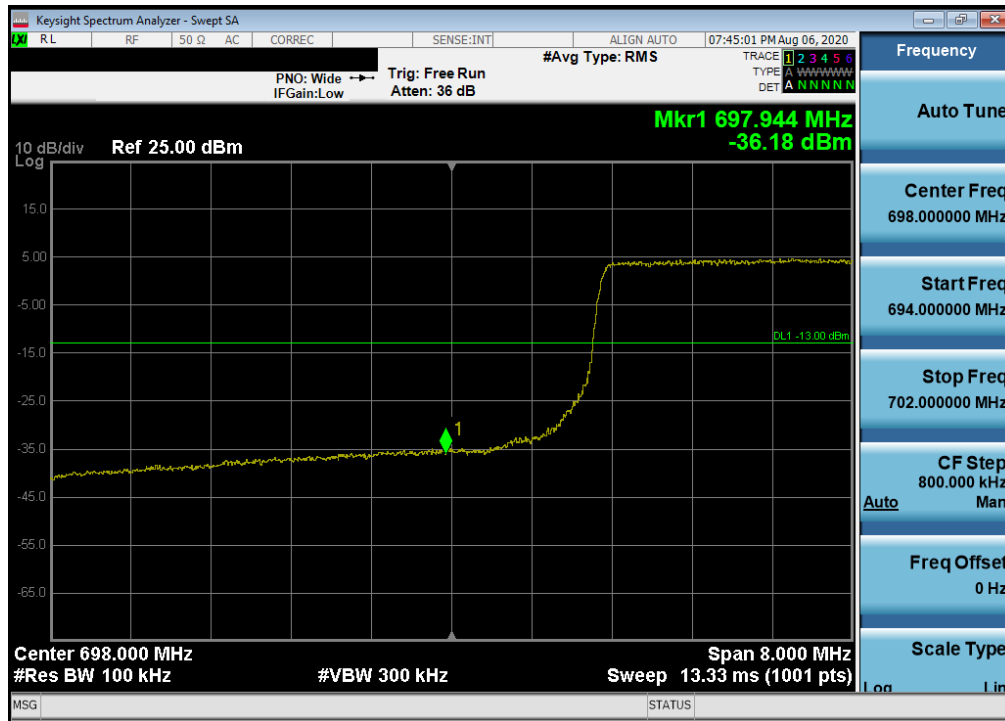
Figure 7-3. Test Instrument & Measurement Setup

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 51 of 151

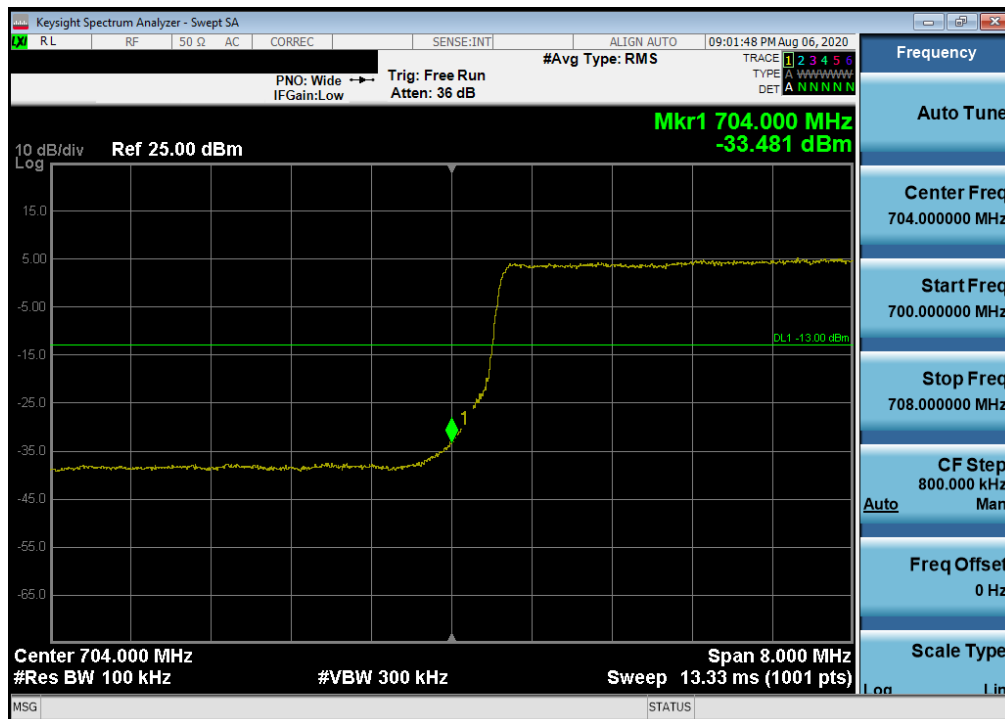
© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 12/17



Plot 7-54. Lower Band Edge Plot (LTE Band 12 - 10MHz QPSK – Full RB Configuration)

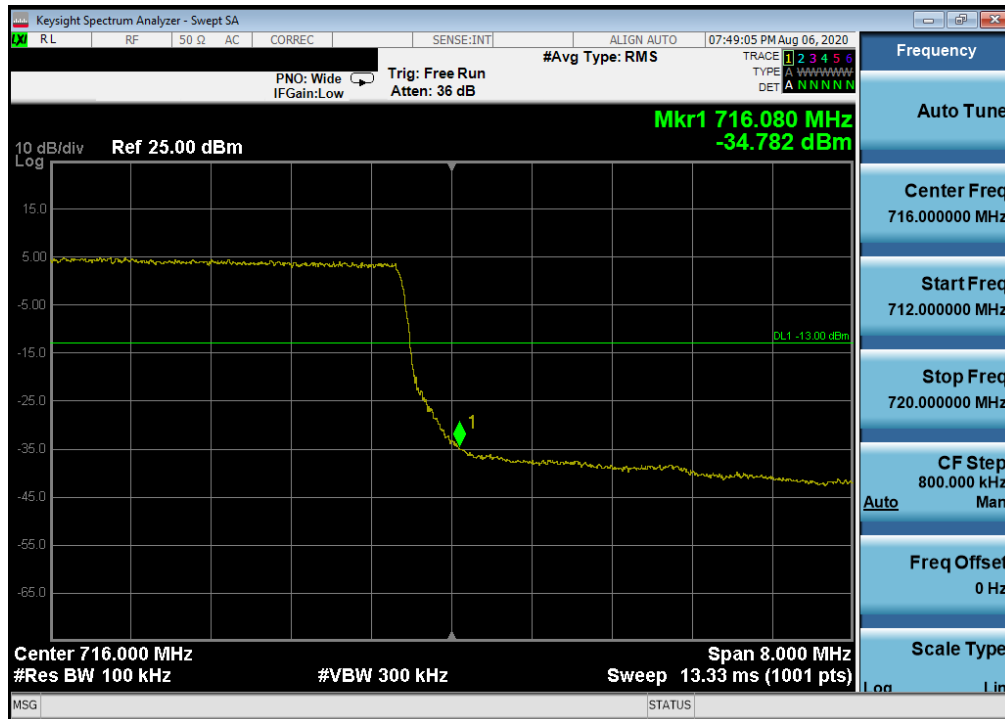


Plot 7-55. Lower Band Edge Plot (LTE Band 17 - 10MHz QPSK – Full RB Configuration)

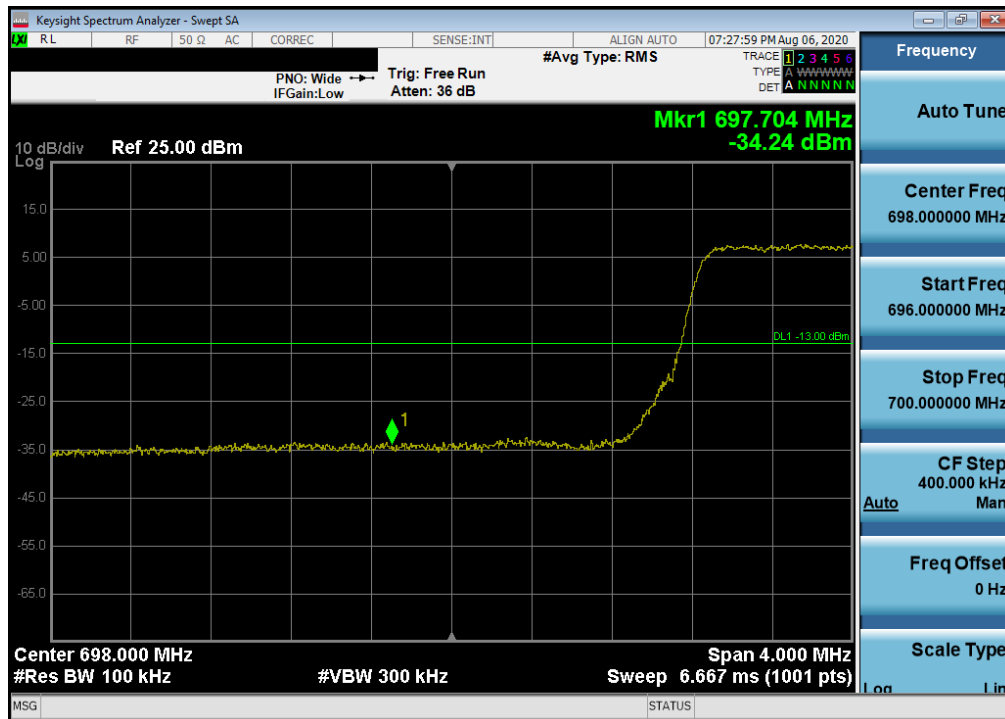
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 52 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-56. Upper Band Edge Plot (LTE Band 12/17 - 10MHz QPSK – Full RB Configuration)

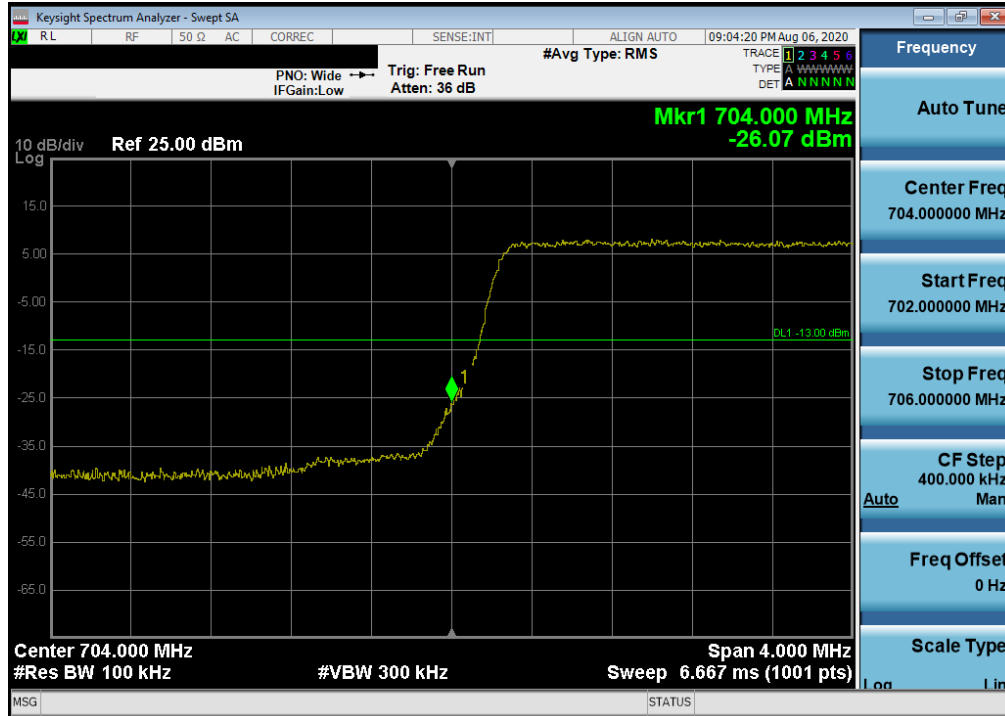


Plot 7-57. Lower Band Edge Plot (LTE Band 12 - 5MHz QPSK – Full RB Configuration)

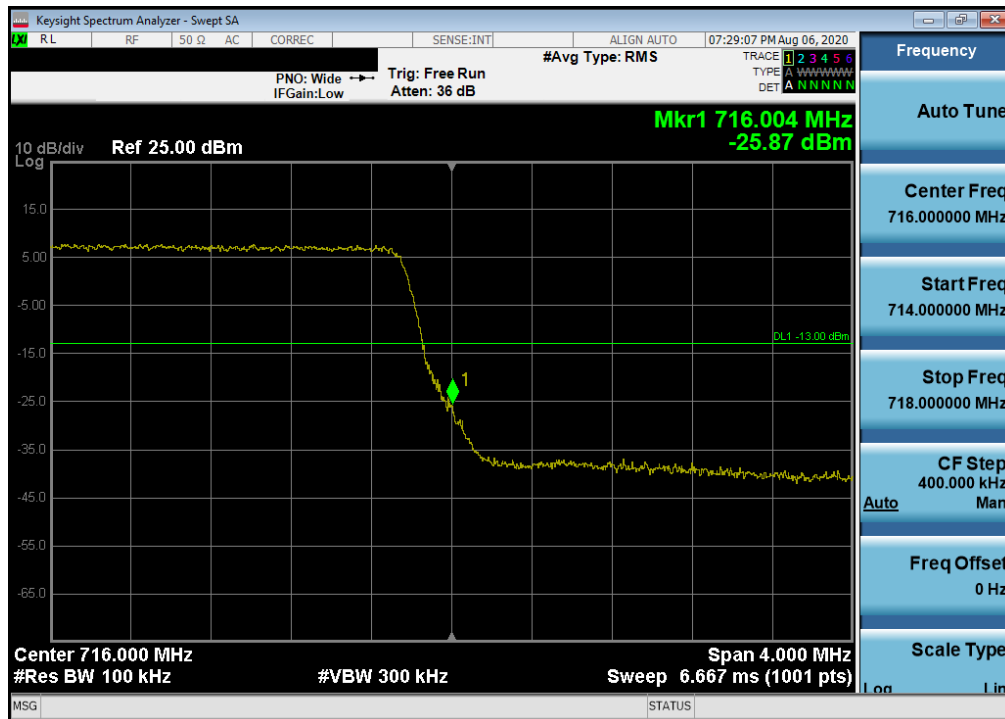
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 53 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-58. Lower Band Edge Plot (LTE Band 17 - 5MHz QPSK – Full RB Configuration)

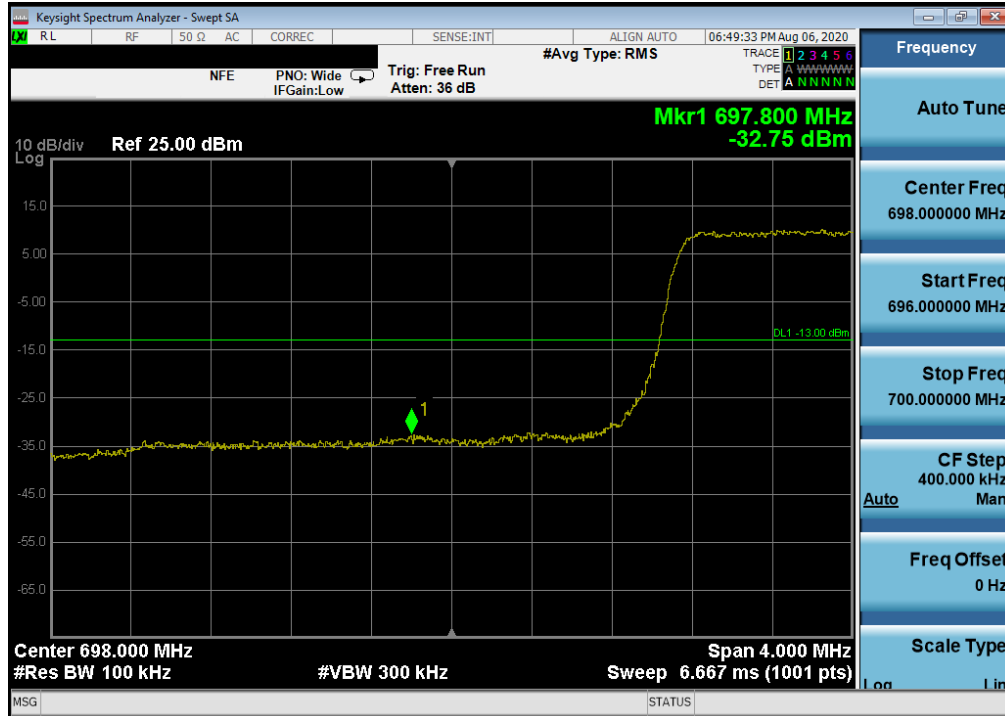


Plot 7-59. Upper Band Edge Plot (LTE Band 12/17 - 5MHz QPSK – Full RB Configuration)

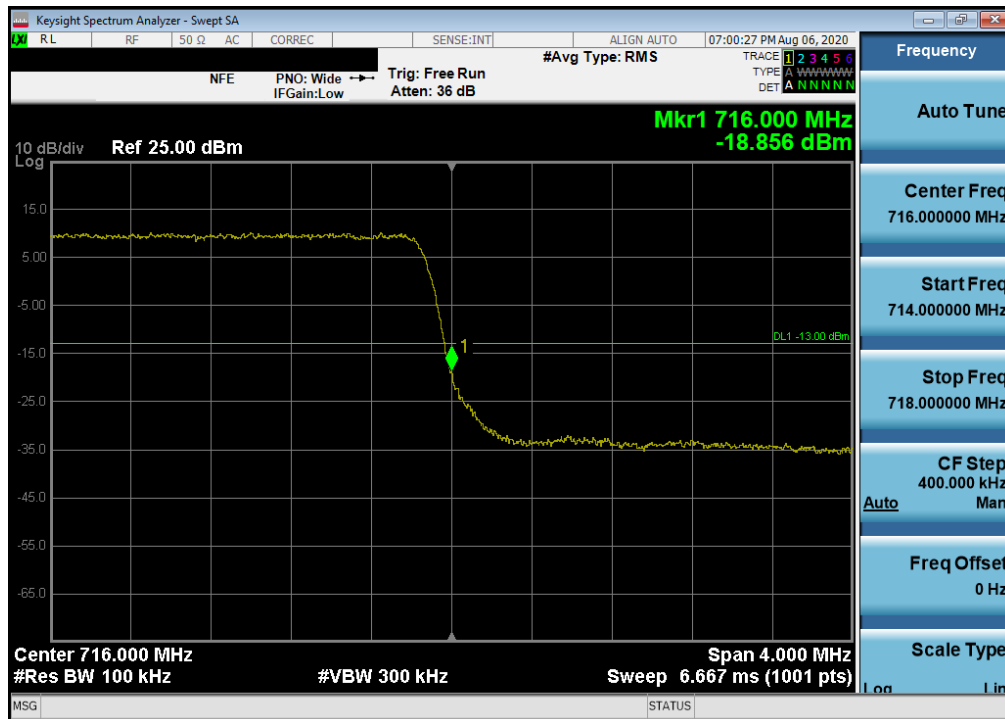
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 54 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-60. Lower Band Edge Plot (LTE Band 12 - 3MHz QPSK – Full RB Configuration)

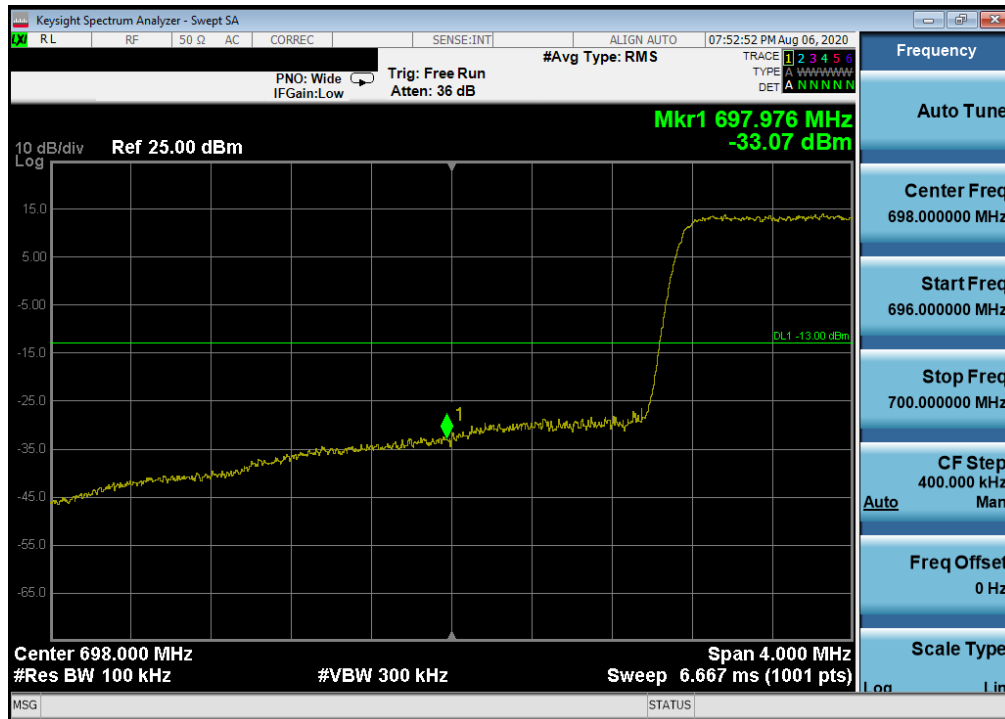


Plot 7-61. Upper Band Edge Plot (LTE Band 12 - 3MHz QPSK – Full RB Configuration)

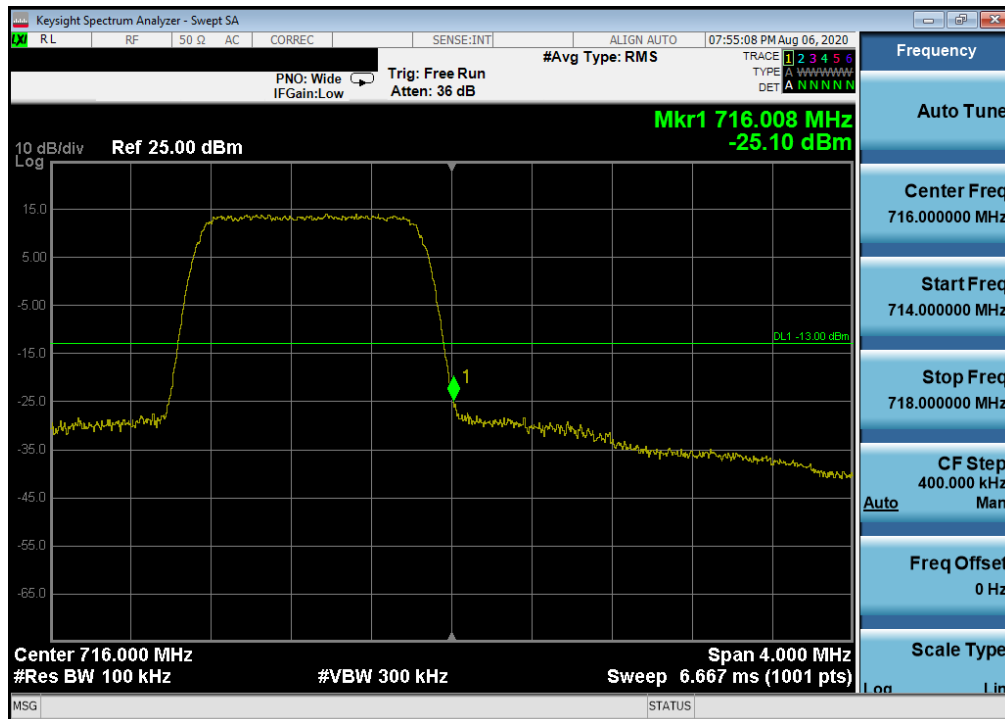
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 55 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-62. Lower Band Edge Plot (LTE Band 12 – 1.4MHz QPSK – Full RB Configuration)



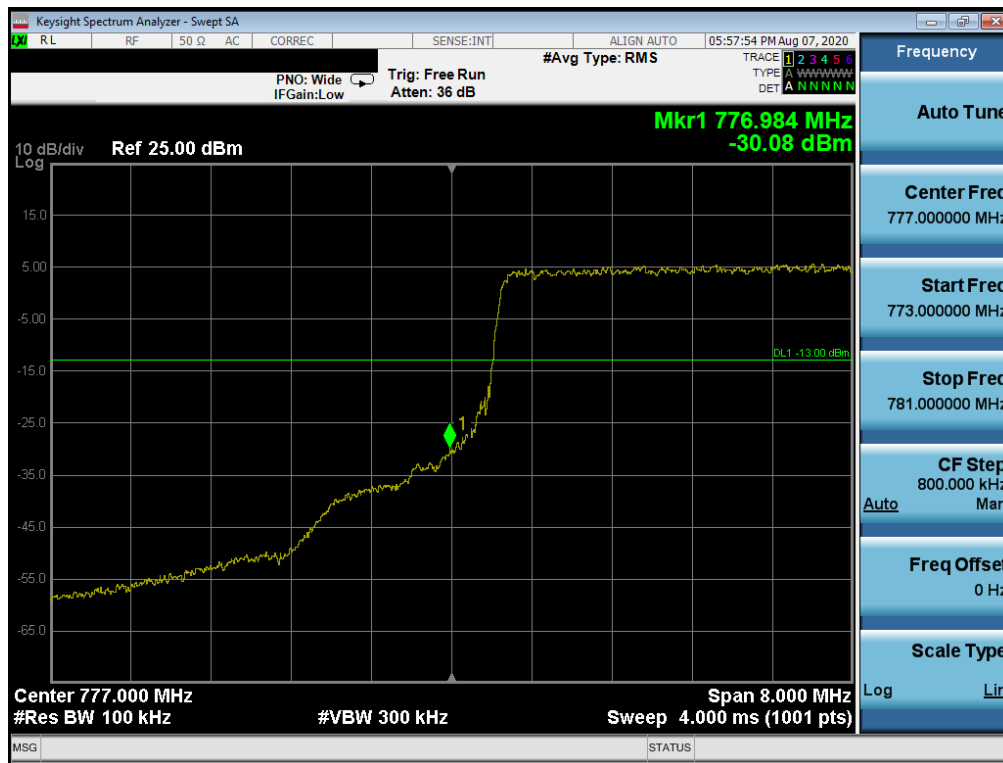
Plot 7-63. Upper Band Edge Plot (LTE Band 12 – 1.4MHz QPSK – Full RB Configuration)

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 56 of 151

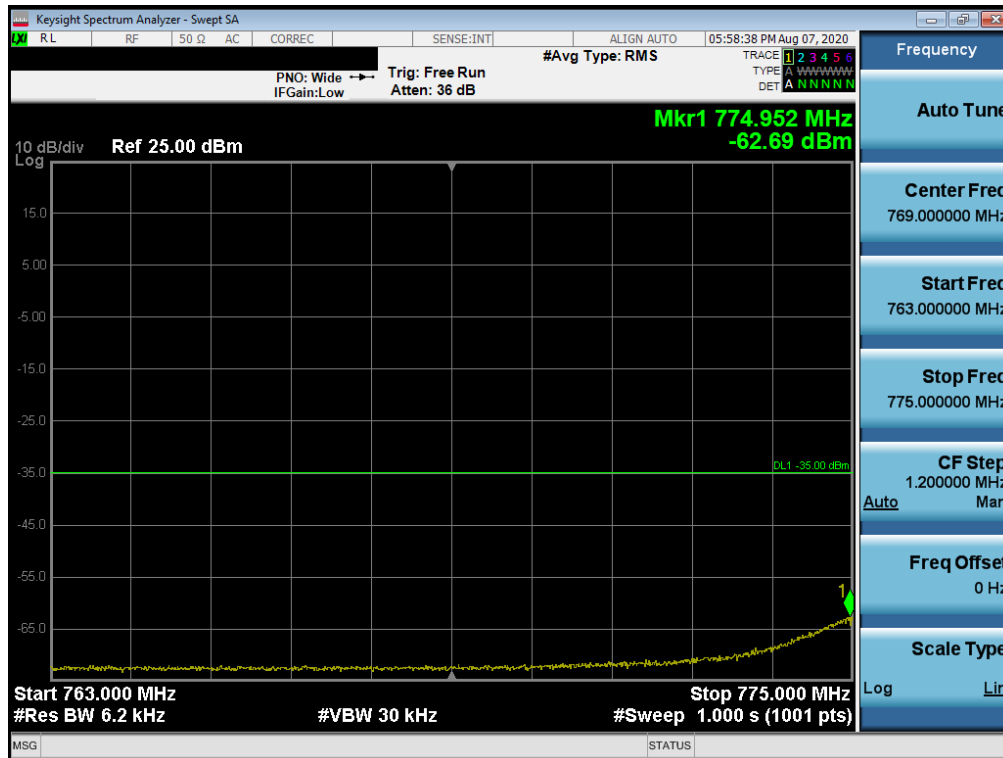
© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 13



Plot 7-64. Lower Band Edge Plot (LTE Band 13 - 10MHz QPSK – Full RB Configuration)



Plot 7-65. Lower Emission Mask Plot (LTE Band 13 - 10MHz QPSK – Full RB Configuration)

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 57 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-66. Upper Band Edge Plot (LTE Band 13 - 10MHz QPSK – Full RB Configuration)

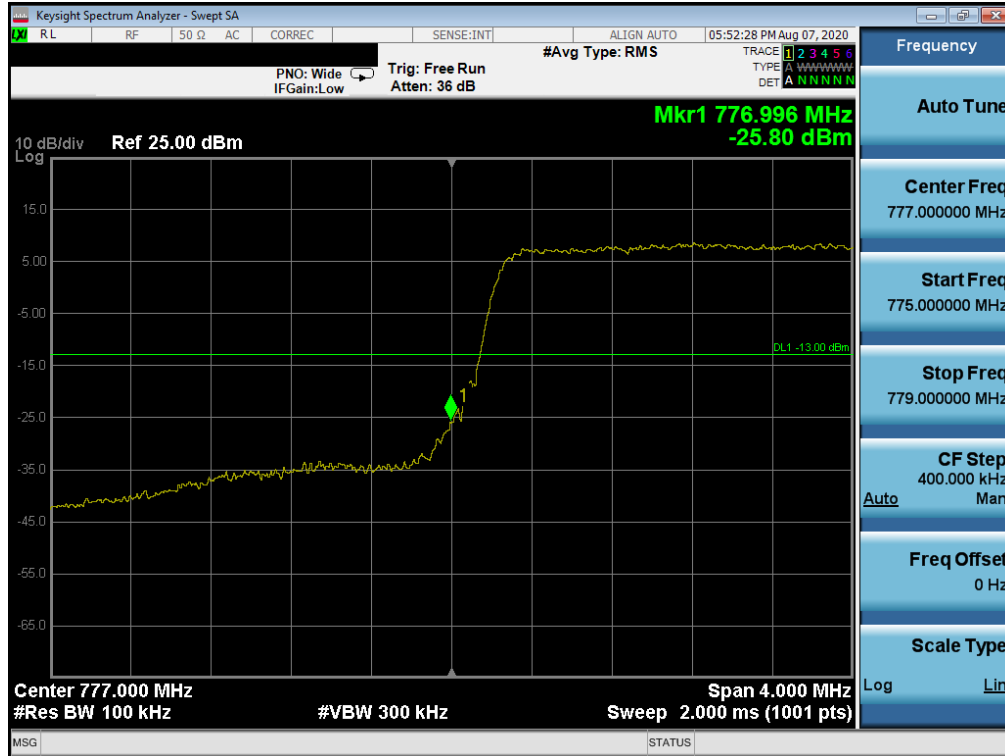


Plot 7-67. Upper Emission Mask Plot (LTE Band 13 - 10MHz QPSK – Full RB Configuration)

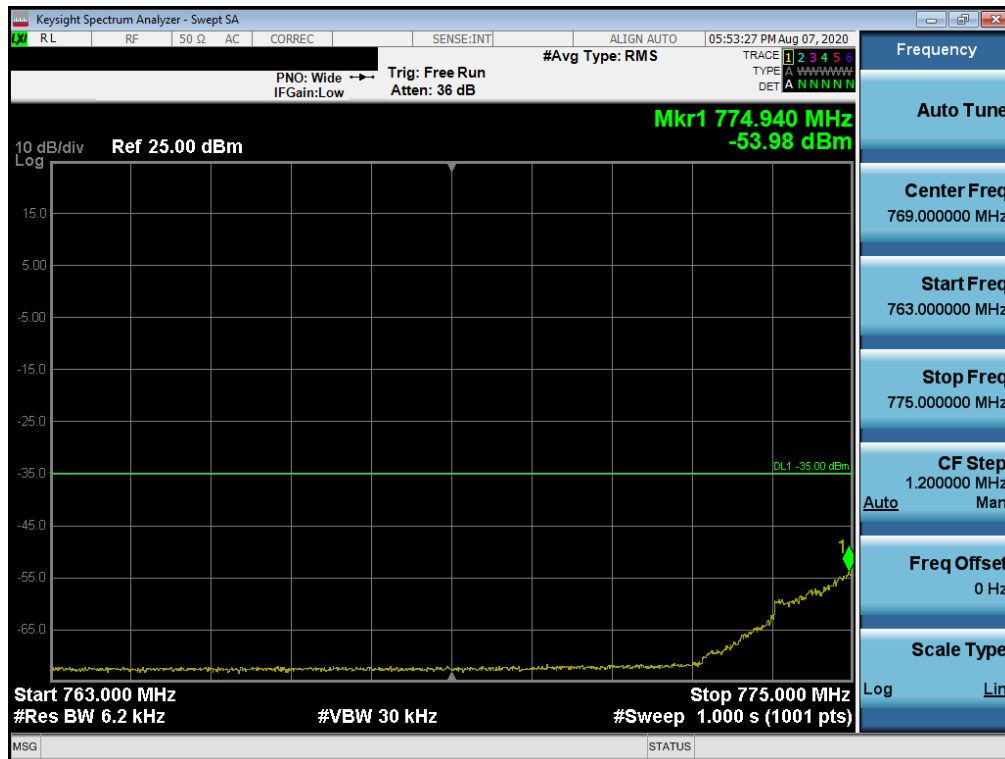
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 58 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-68. Lower Band Edge Plot (LTE Band 13 - 5MHz QPSK – Full RB Configuration)

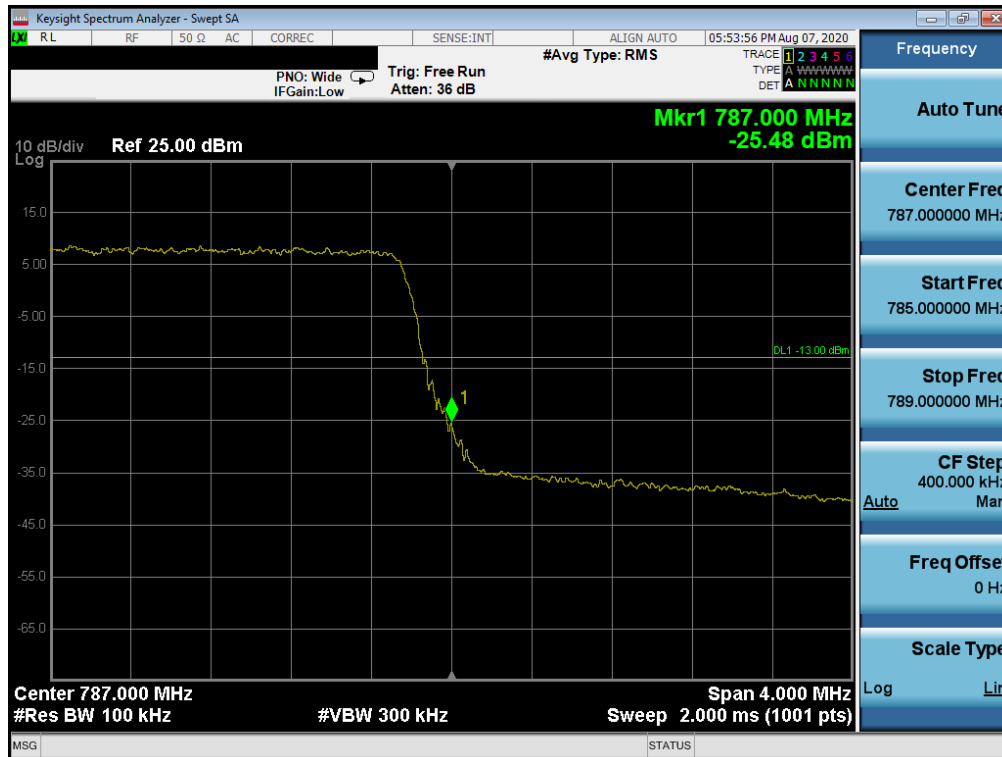


Plot 7-69. Lower Emission Mask Plot (LTE Band 13 - 5MHz QPSK – Full RB Configuration)

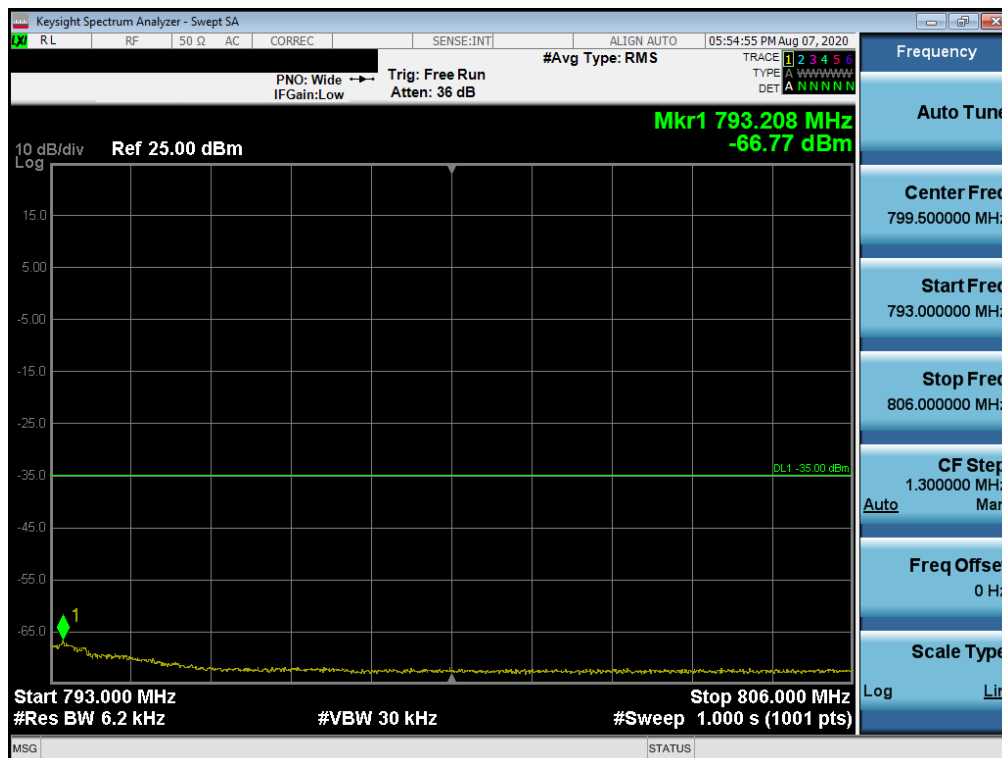
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 59 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-70. Upper Band Edge Plot (LTE Band 13 - 5MHz QPSK – Full RB Configuration)



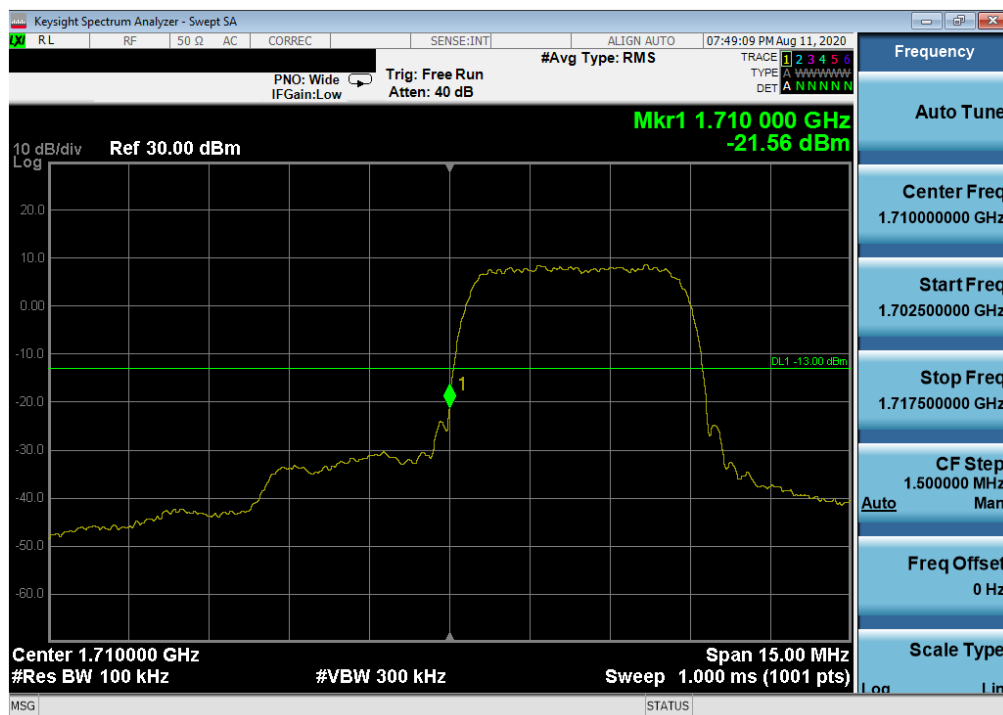
Plot 7-71. Upper Emission Mask Plot (LTE Band 13 - 5MHz QPSK – Full RB Configuration)

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 60 of 151

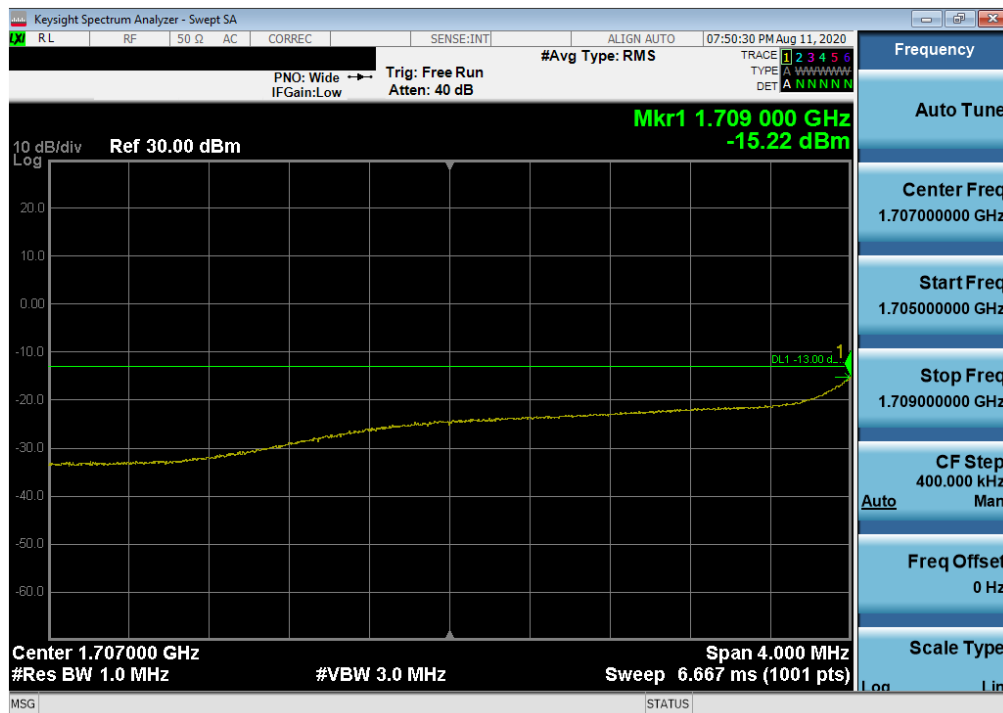
© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

WCDMA AWS



Plot 7-72. Lower Band Edge Plot (WCDMA AWS – Ch. 1312)

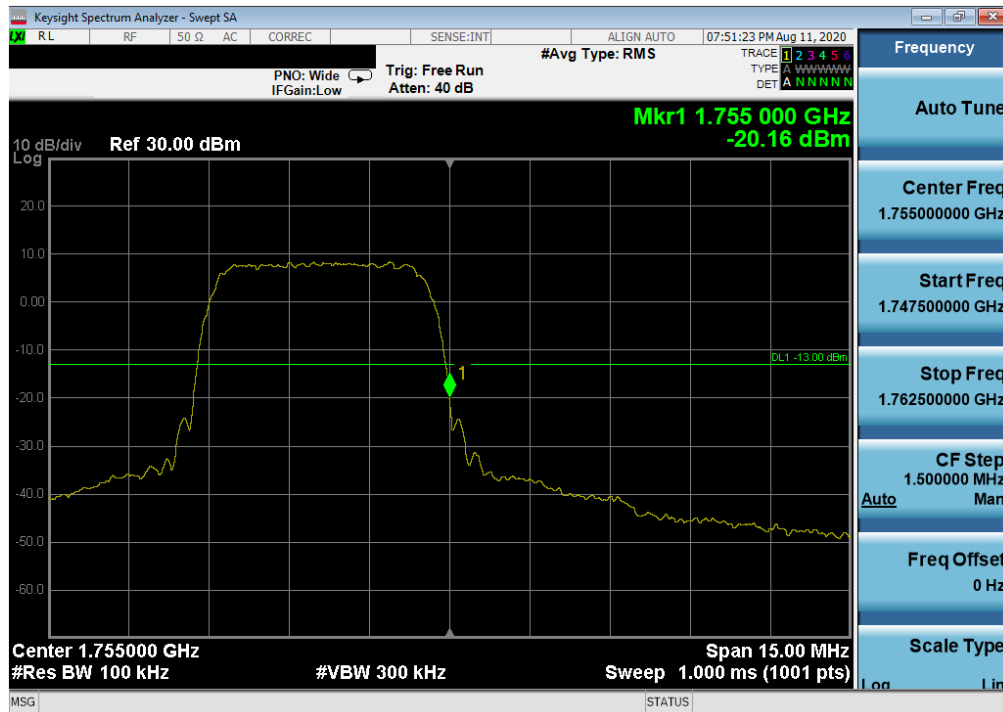


Plot 7-73. Lower Extended Band Edge Plot (WCDMA AWS – Ch. 1312)

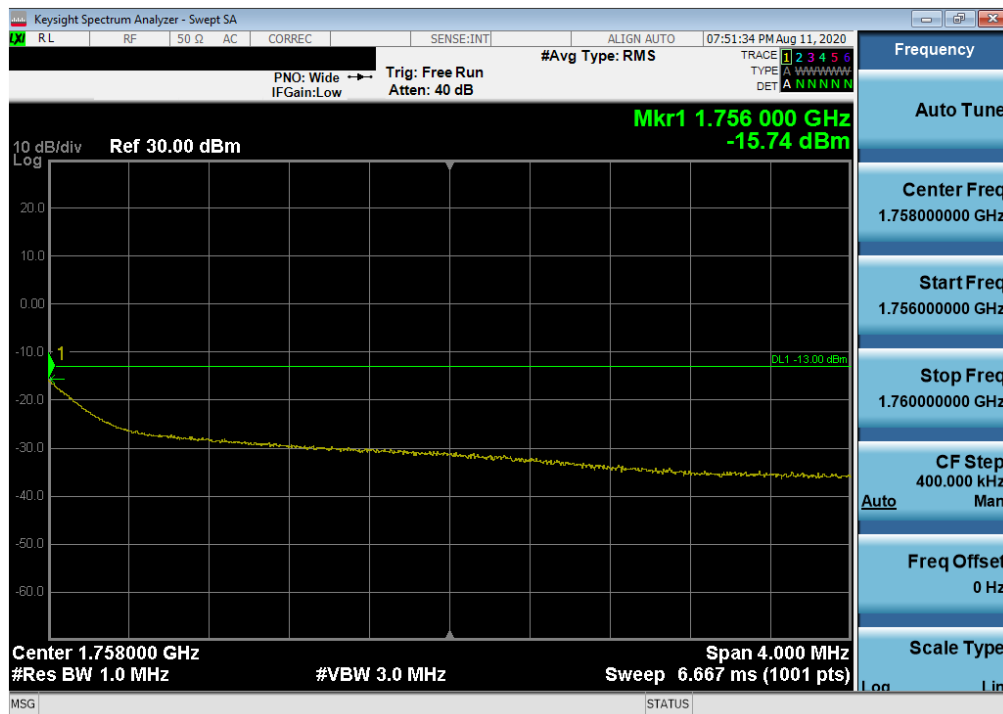
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 61 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-74. Upper Band Edge Plot (WCDMA AWS – Ch. 1513)



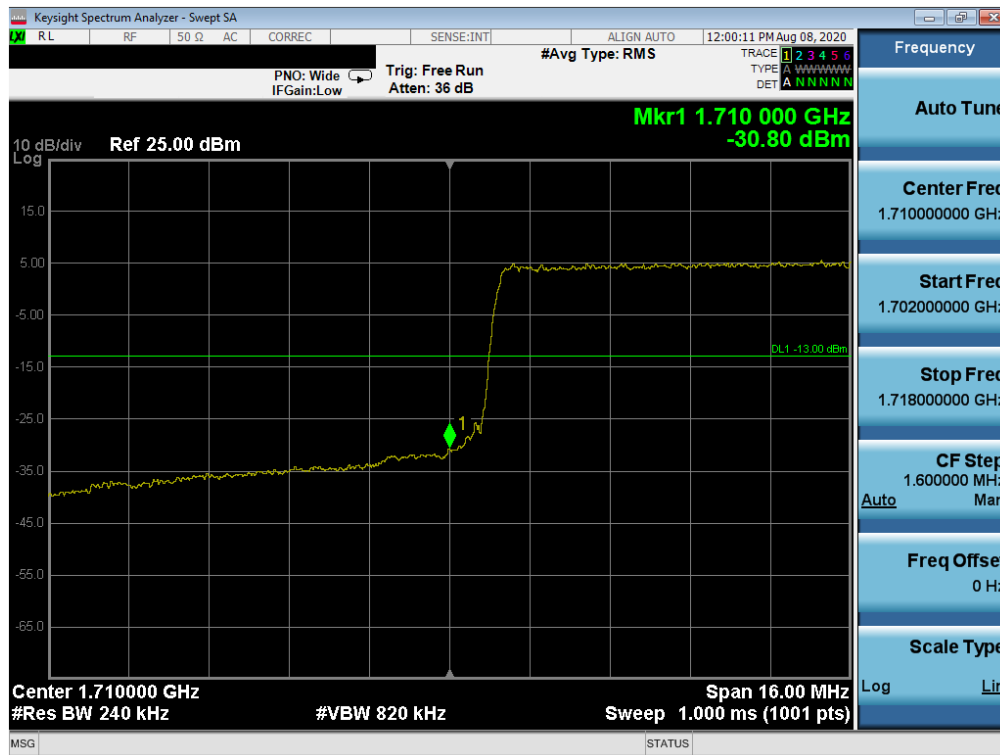
Plot 7-75. Upper Extended Band Edge Plot (WCDMA AWS – Ch. 1513)

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 62 of 151

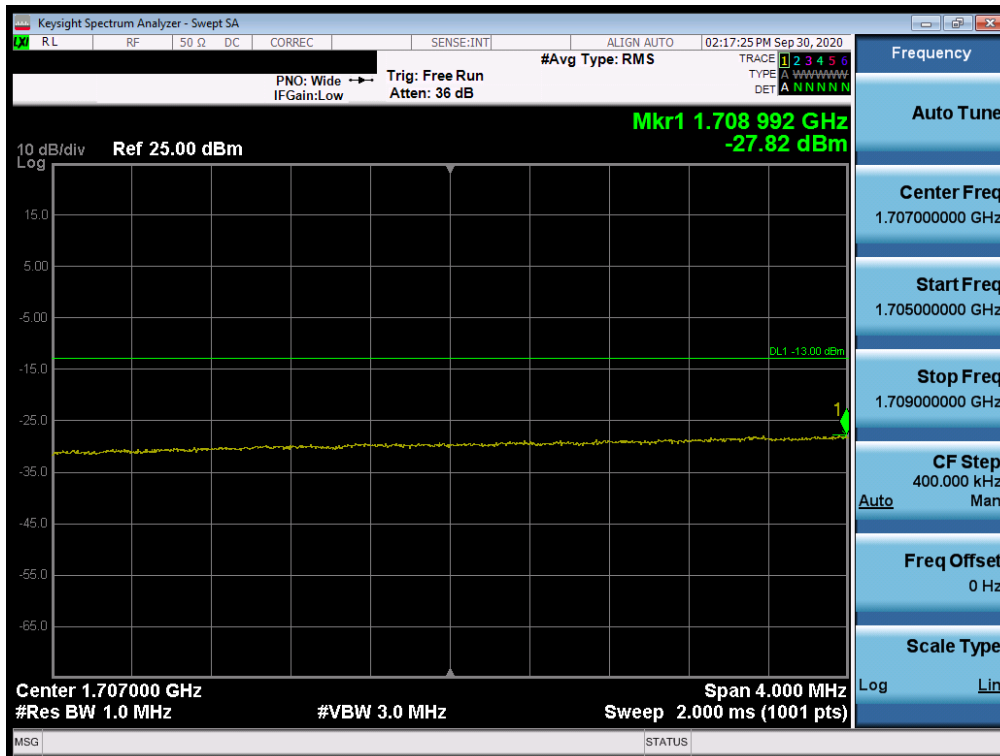
© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

LTE Band 66/4



Plot 7-76. Lower Band Edge Plot (LTE Band 66/4 - 20MHz QPSK – Full RB Configuration)

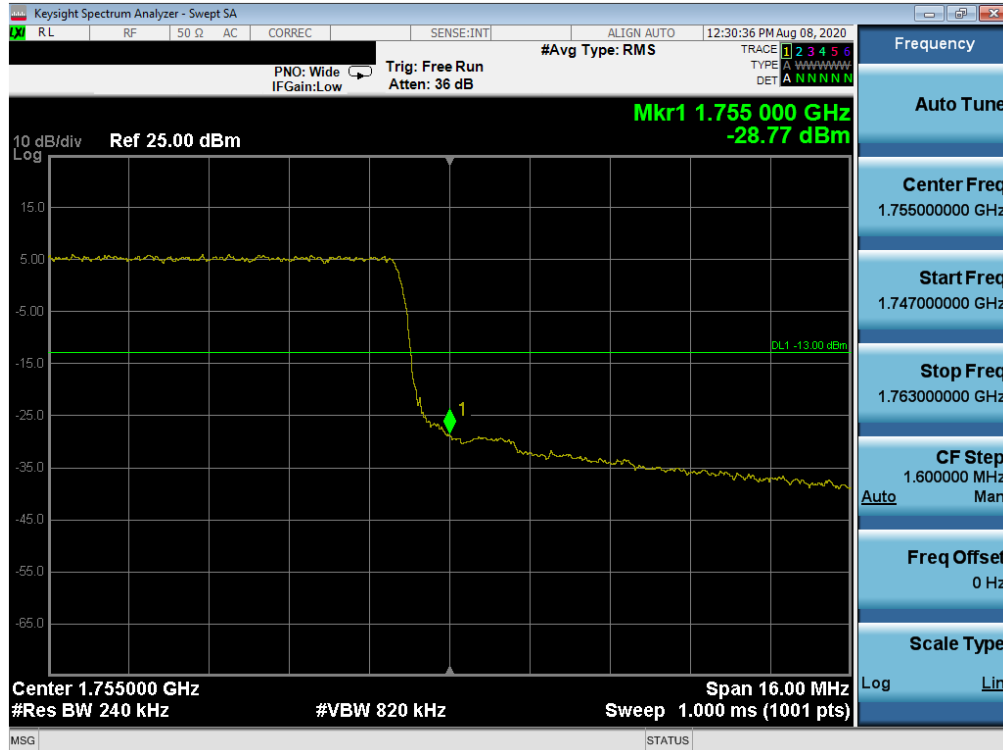


Plot 7-77. Lower Extended Band Edge Plot (LTE Band 66/4 - 20MHz QPSK – Full RB Configuration)

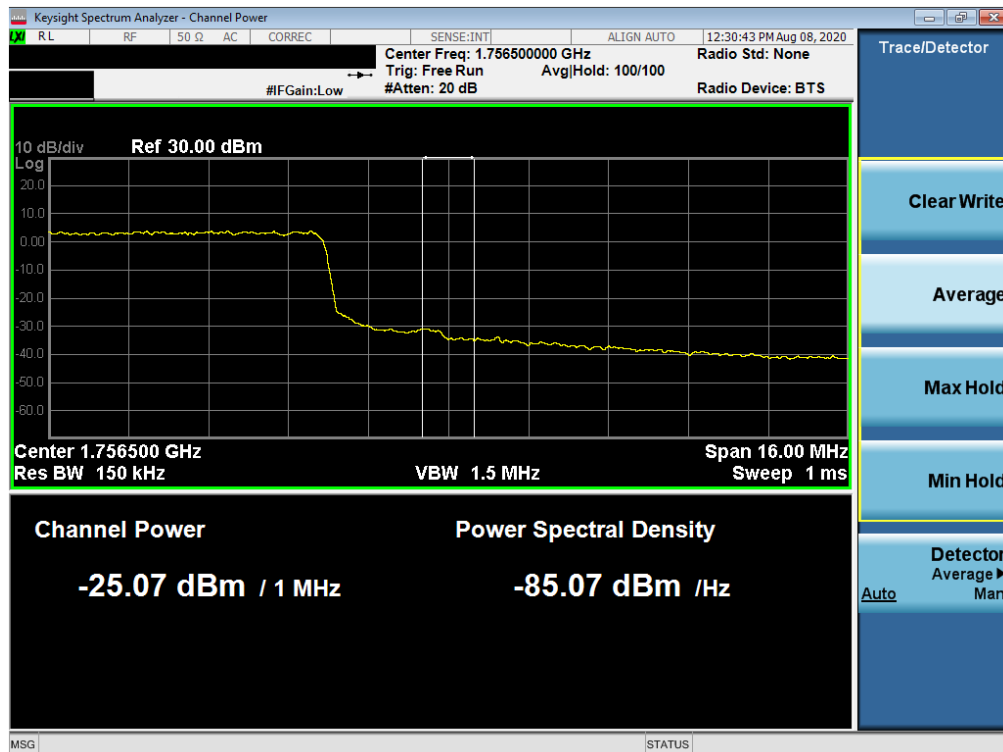
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 63 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-78. Upper Band Edge Plot (LTE Band 4 - 20MHz QPSK – Full RB Configuration)



Plot 7-79. Upper Extended Band Edge Plot (LTE Band 4 - 20MHz QPSK – Full RB Configuration)

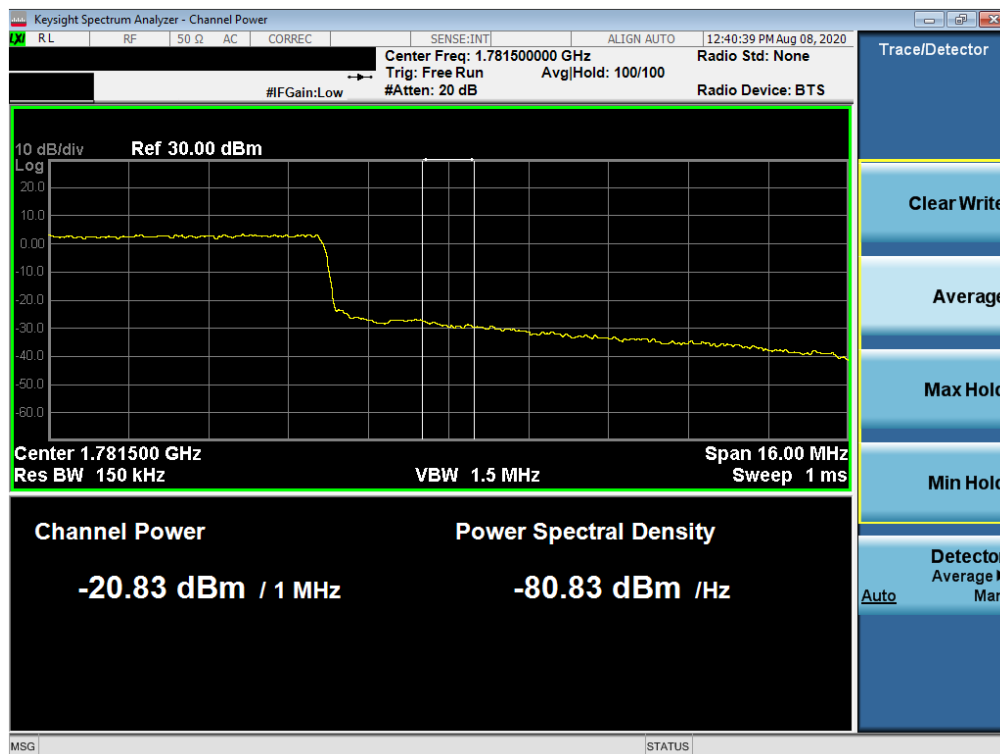
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 64 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-80. Upper Band Edge Plot (LTE Band 66 - 20MHz QPSK – Full RB Configuration)

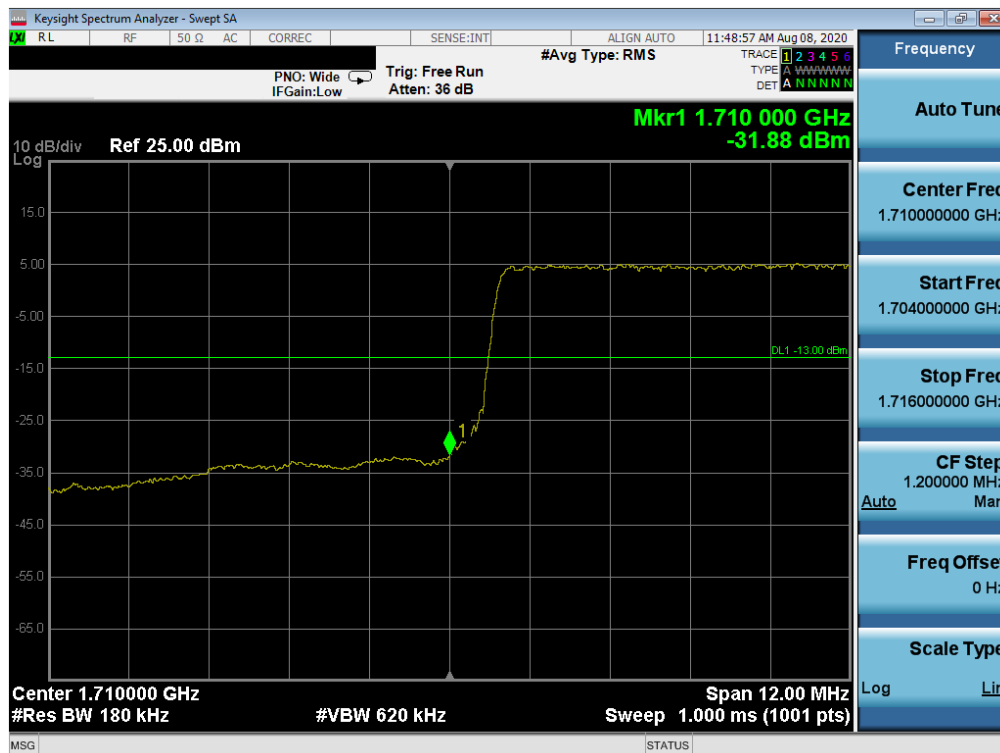


Plot 7-81. Channel Edge Plot (LTE Band 66 - 20MHz QPSK – Full RB Configuration)

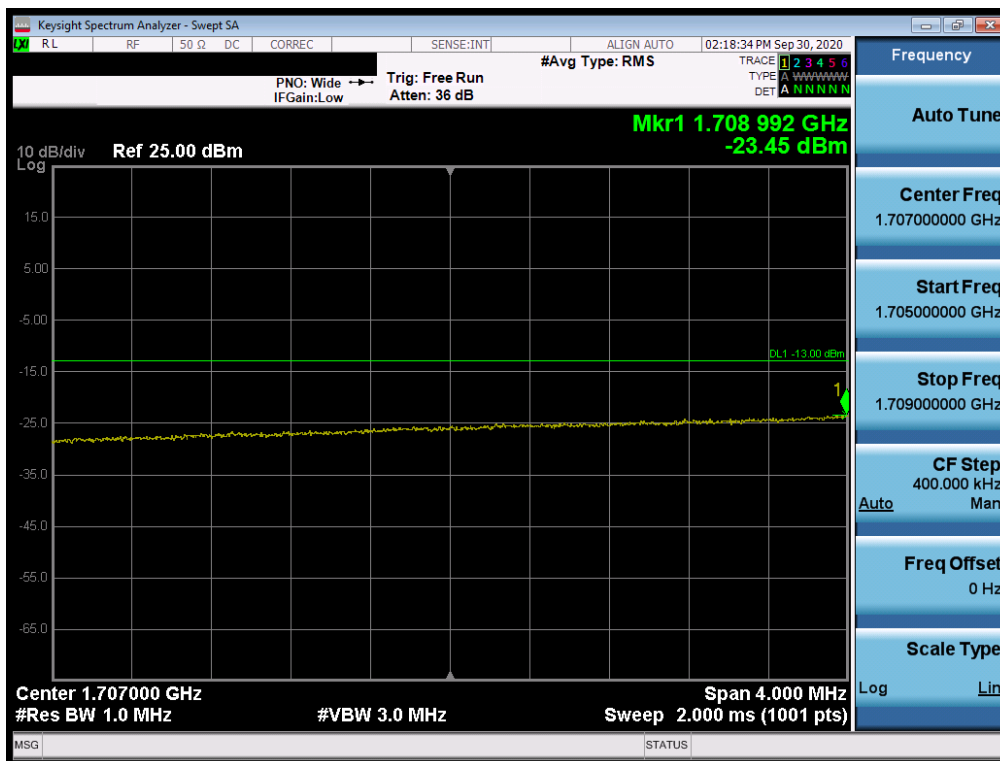
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 65 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-82. Lower Band Edge Plot (LTE Band 66/4 - 15MHz QPSK – Full RB Configuration)

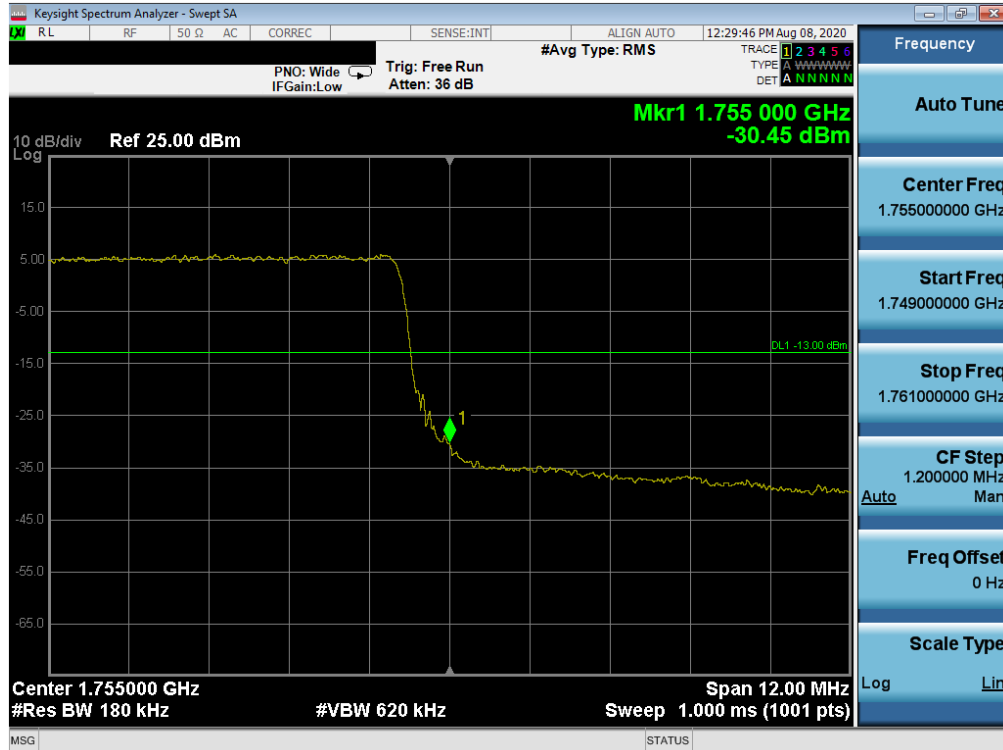


Plot 7-83. Lower Extended Band Edge Plot (LTE Band 66/4 - 15MHz QPSK – Full RB Configuration)

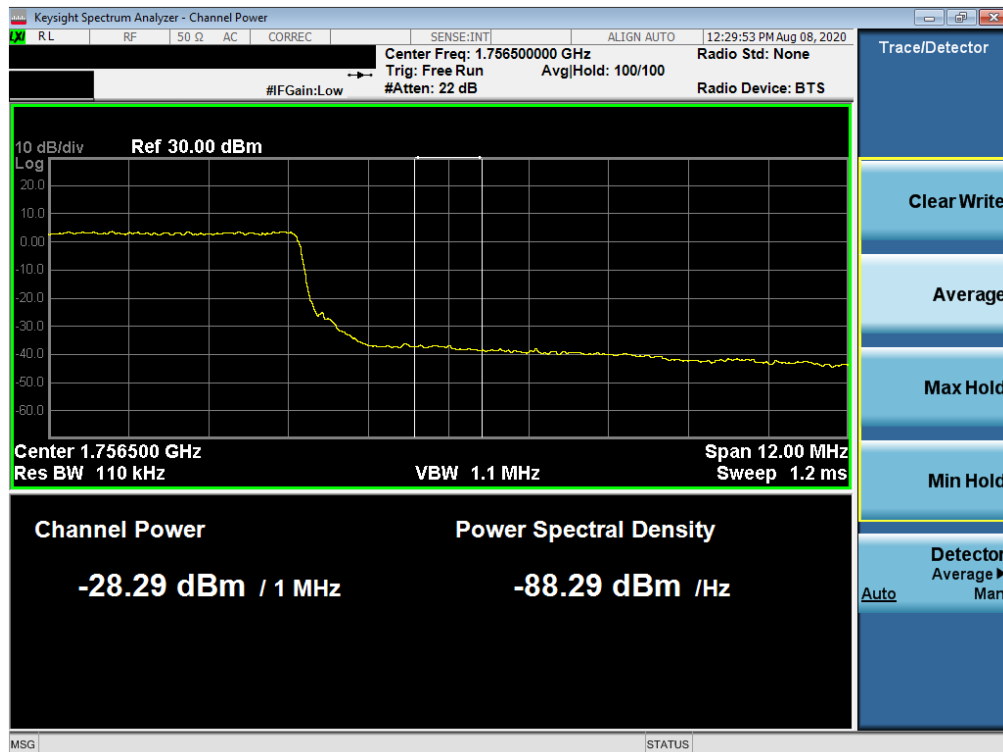
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 66 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-84. Upper Band Edge Plot (LTE Band 4 - 15MHz QPSK – Full RB Configuration)



Plot 7-85. Upper Extended Band Edge Plot (LTE Band 4 - 15MHz QPSK – Full RB Configuration)

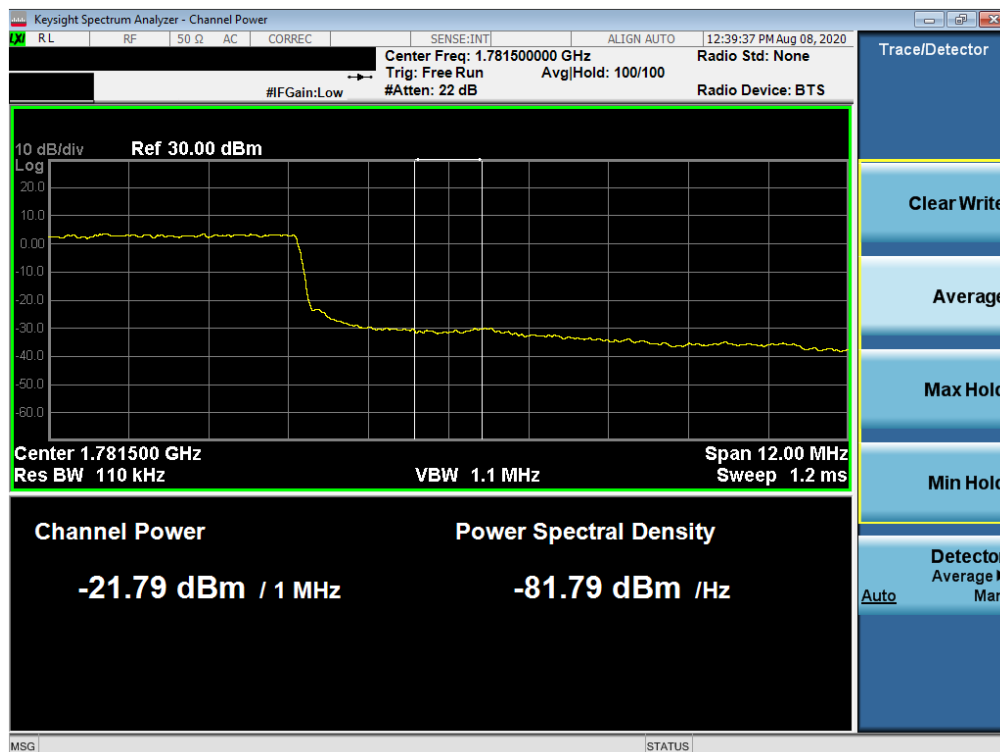
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 67 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-86. Upper Band Edge Plot (LTE Band 66 - 15MHz QPSK – Full RB Configuration)

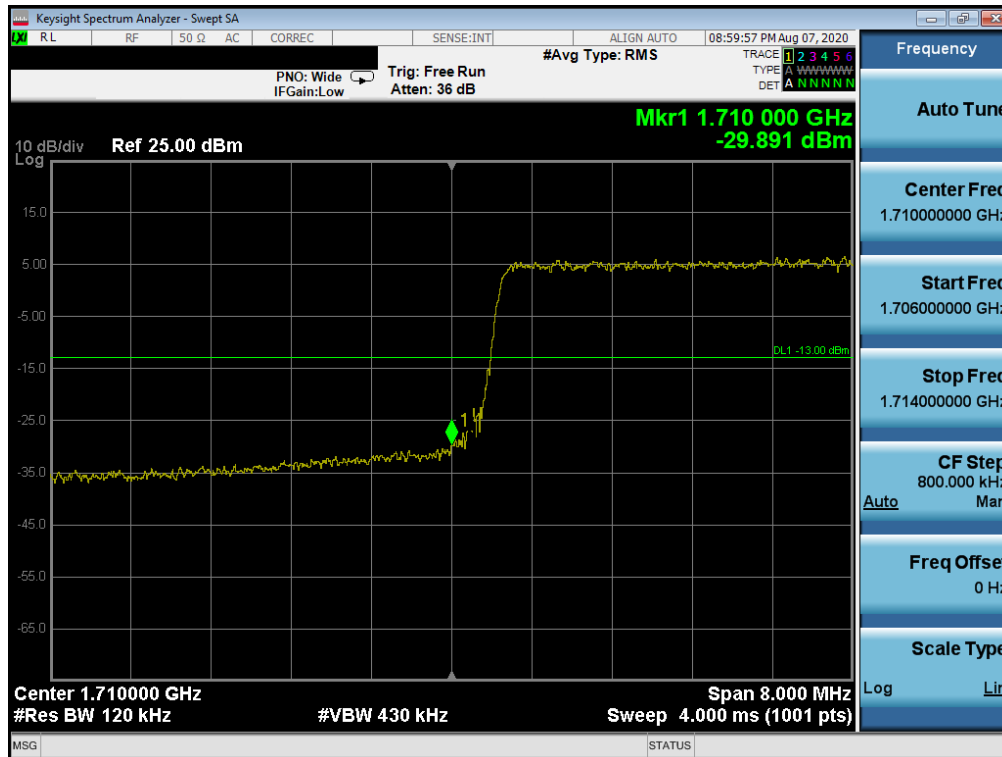


Plot 7-87. Upper Extended Band Edge Plot (LTE Band 66 - 15MHz QPSK – Full RB Configuration)

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 68 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-88. Lower Band Edge Plot (LTE Band 66/4 - 10MHz QPSK – Full RB Configuration)

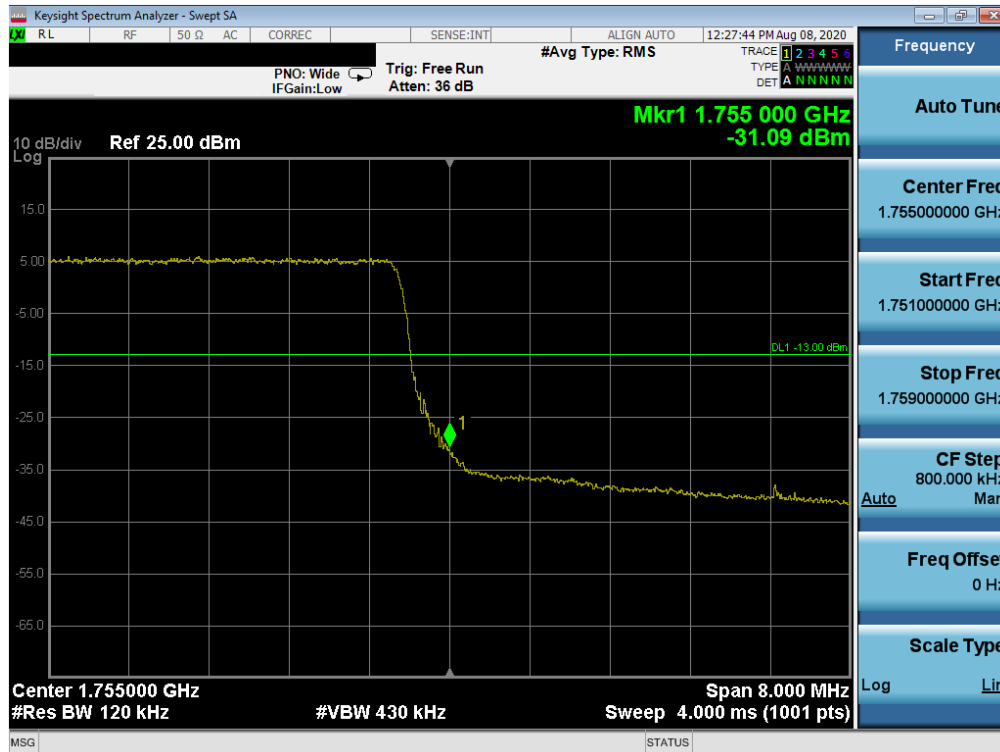


Plot 7-89. Lower Extended Band Edge Plot (LTE Band 66/4 - 10MHz QPSK – Full RB Configuration)

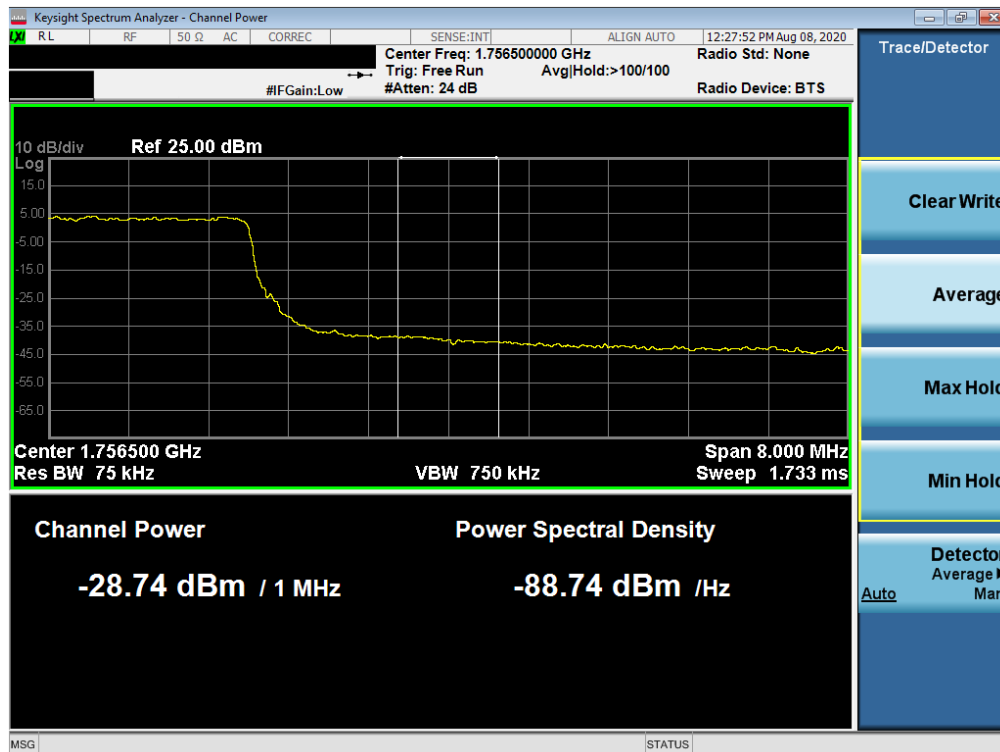
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 69 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-90. Upper Band Edge Plot (LTE Band 4 - 10MHz QPSK – Full RB Configuration)

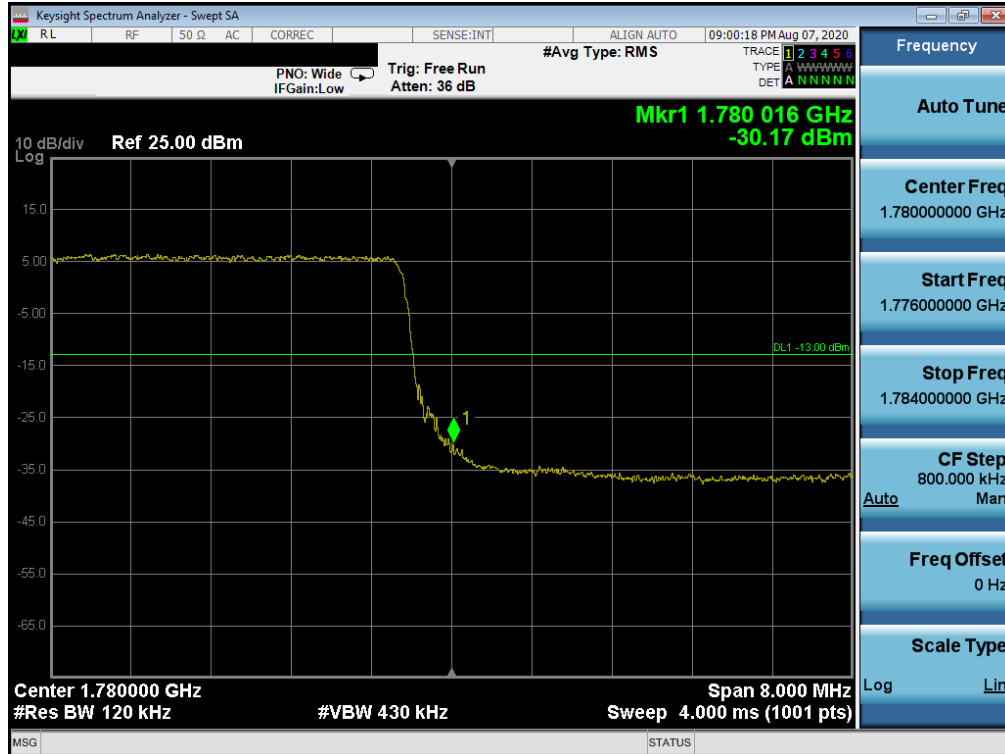


Plot 7-91. Upper Extended Band Edge Plot (LTE Band 4 - 10MHz QPSK – Full RB Configuration)

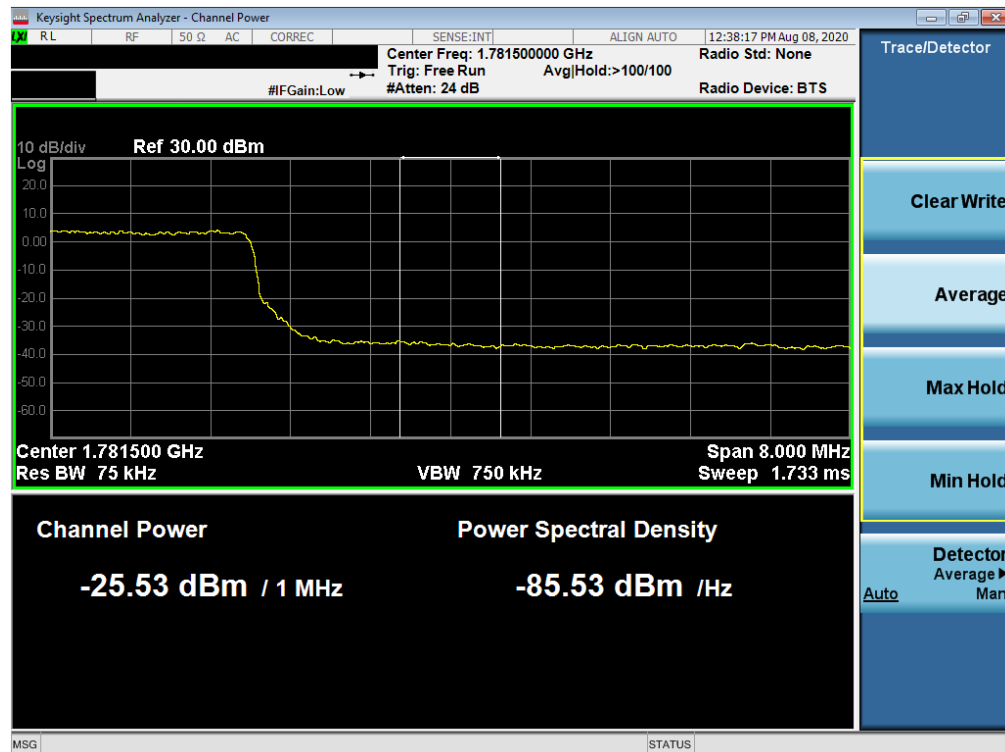
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 70 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-92. Upper Band Edge Plot (LTE Band 66 - 10MHz QPSK – Full RB Configuration)

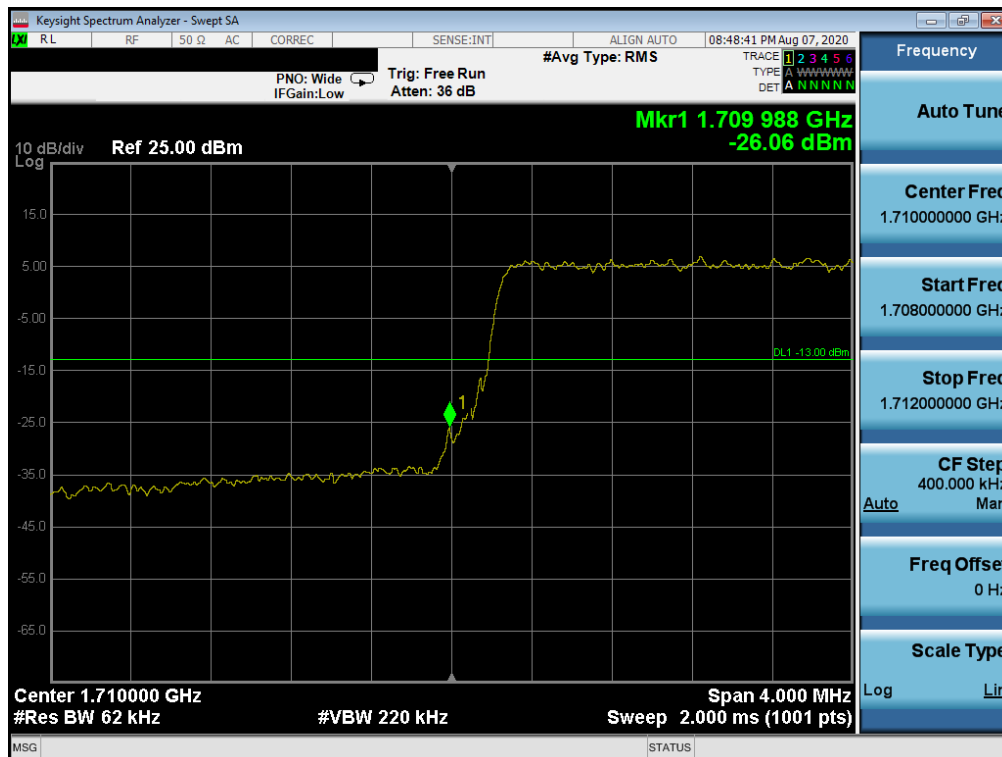


Plot 7-93. Upper Extended Band Edge Plot (LTE Band 66 - 10MHz QPSK – Full RB Configuration)

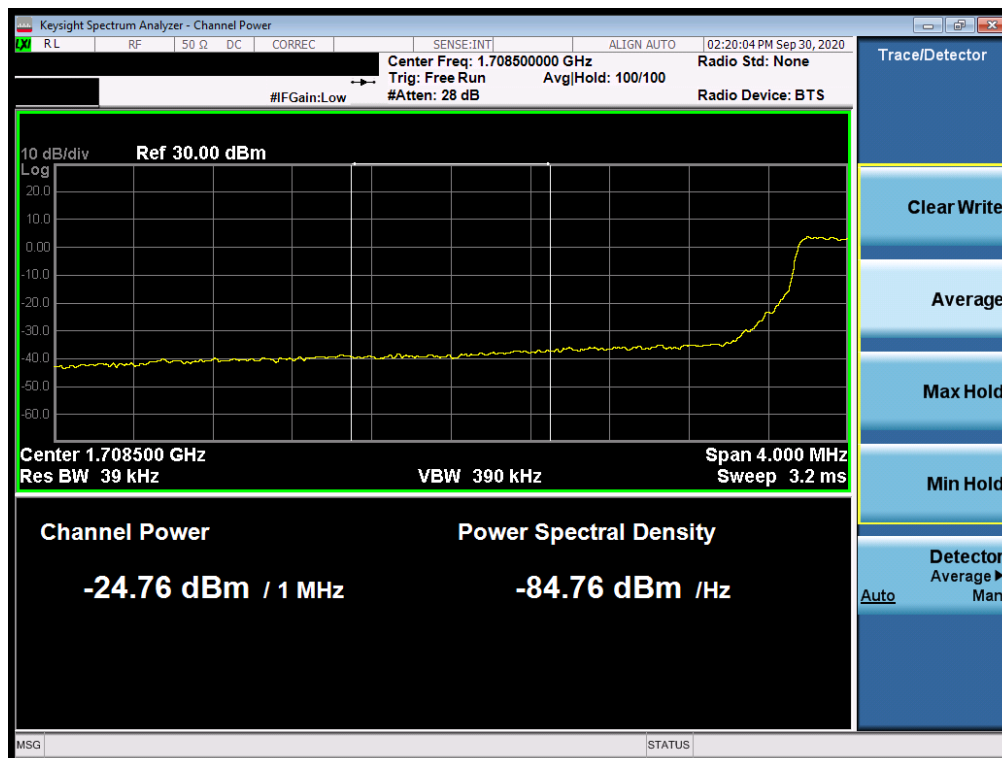
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 71 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-94. Lower Band Edge Plot (LTE Band 66/4 - 5MHz QPSK – Full RB Configuration)



Plot 7-95. Lower Extended Band Edge Plot (LTE Band 66/4 - 5MHz QPSK – Full RB Configuration)

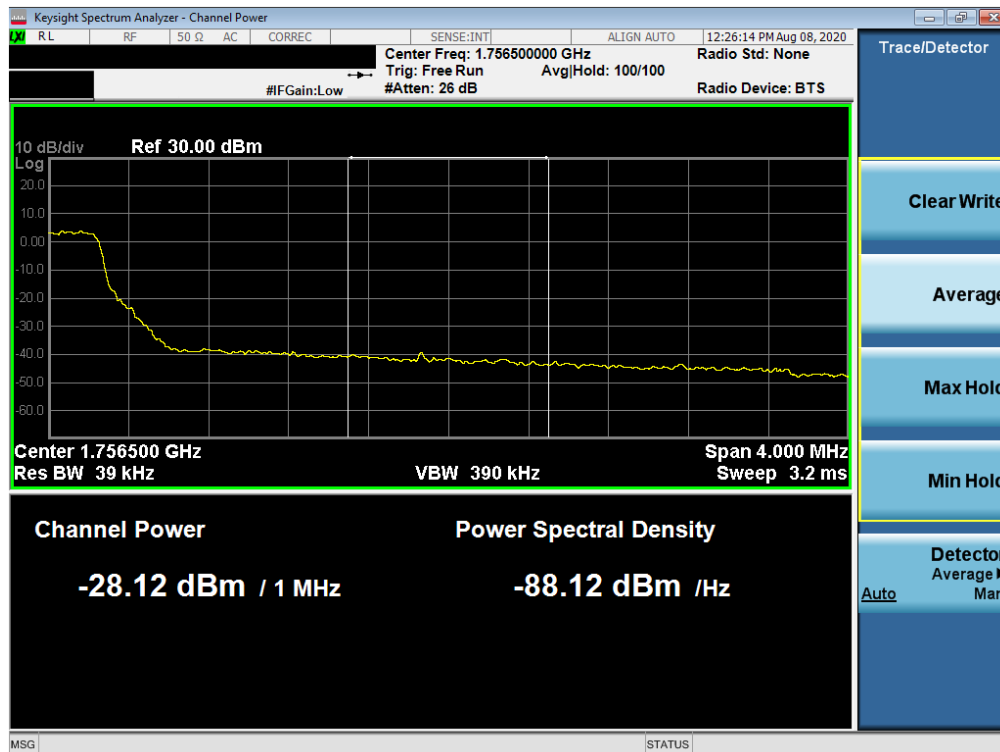
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 72 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-96. Upper Band Edge Plot (LTE Band 4 - 5MHz QPSK – Full RB Configuration)

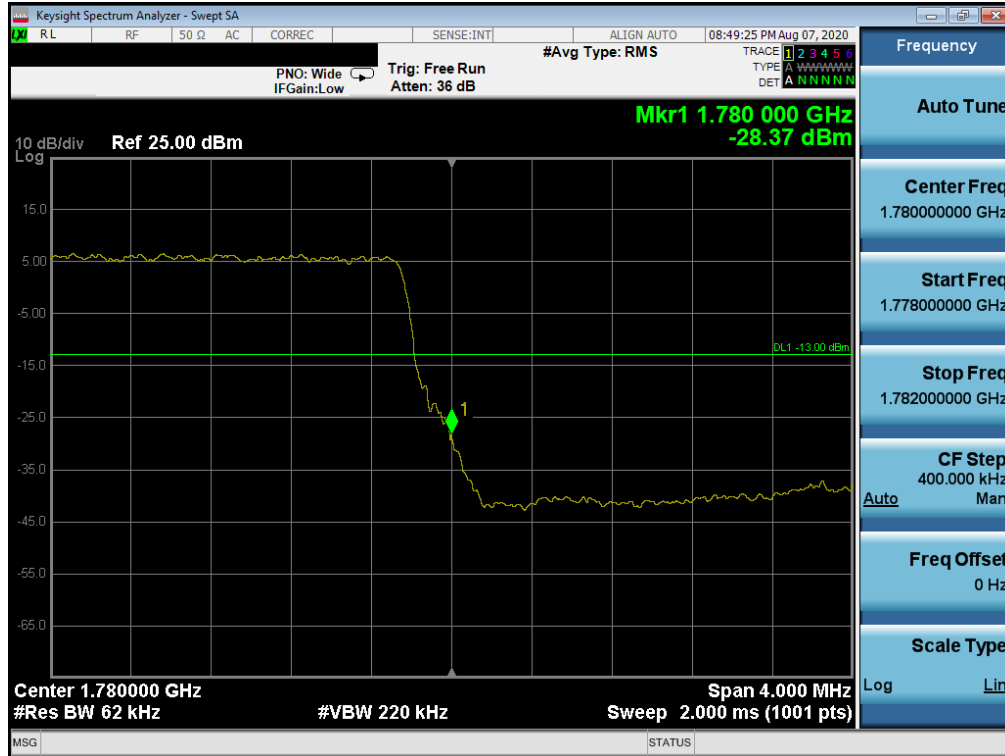


Plot 7-97. Upper Extended Band Edge Plot (LTE Band 4 - 5MHz QPSK – Full RB Configuration)

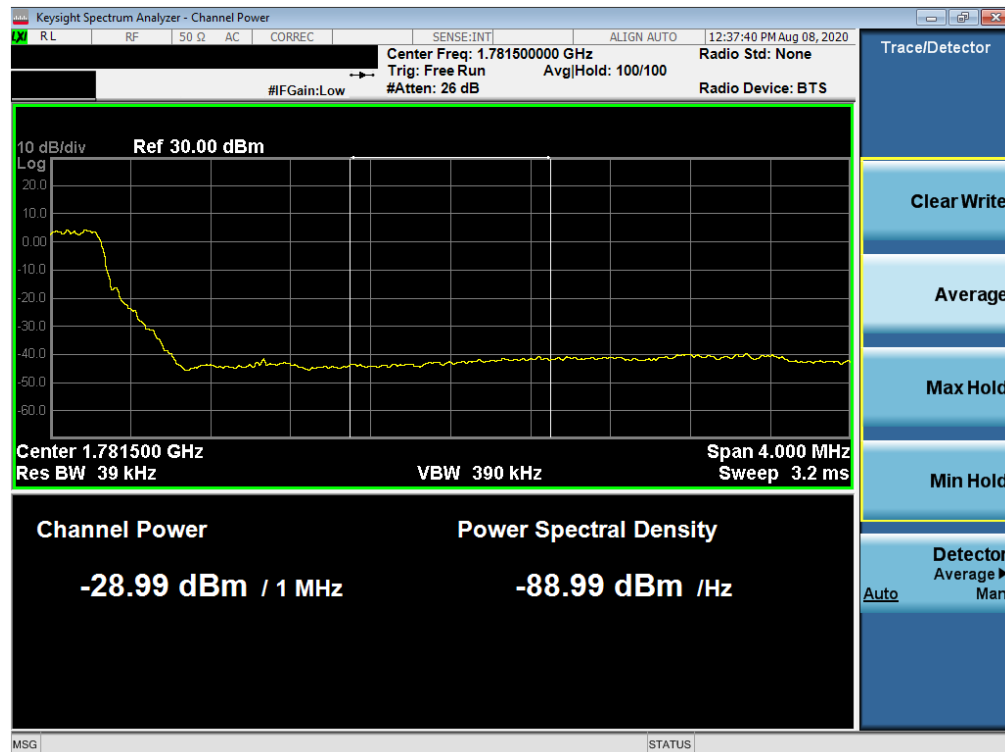
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 73 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-98. Upper Band Edge Plot (LTE Band 66 - 5MHz QPSK – Full RB Configuration)

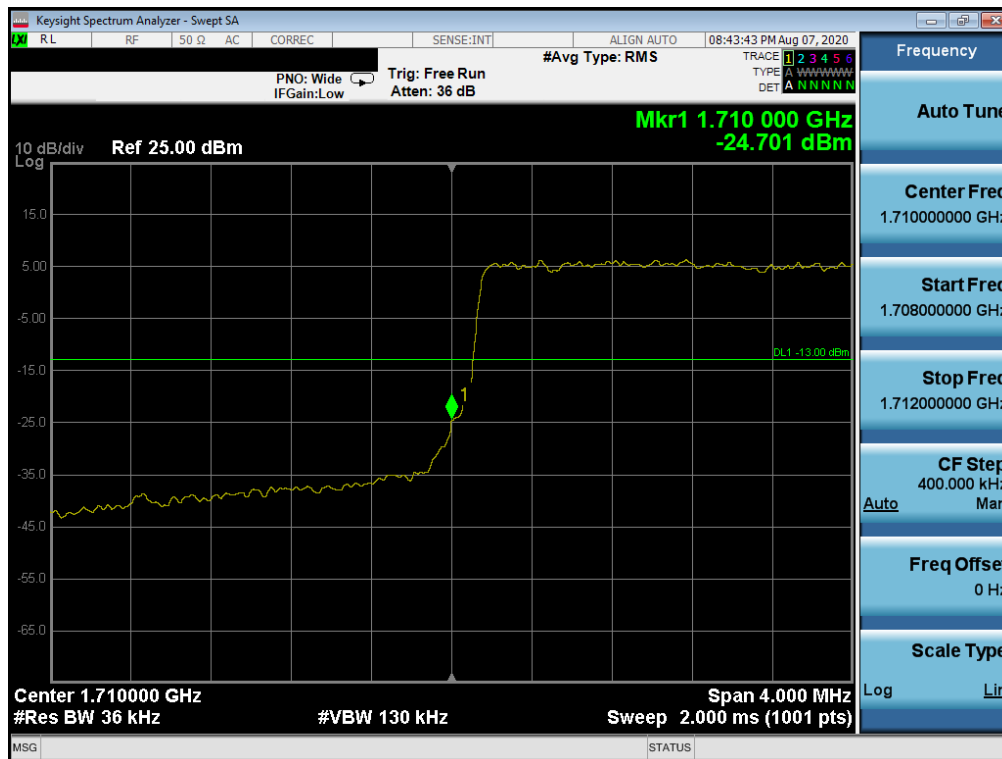


Plot 7-99. Upper Extended Band Edge Plot (LTE Band 66 - 5MHz QPSK – Full RB Configuration)

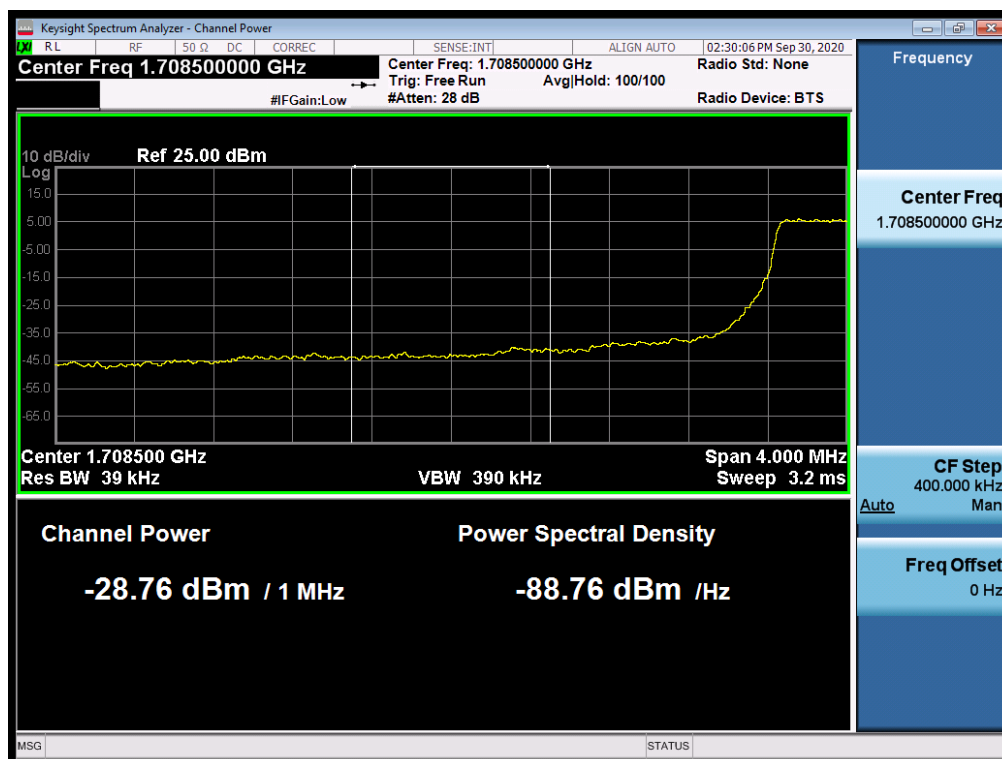
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 74 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-100. Lower Band Edge Plot (LTE Band 66/4 - 3MHz QPSK – Full RB Configuration)

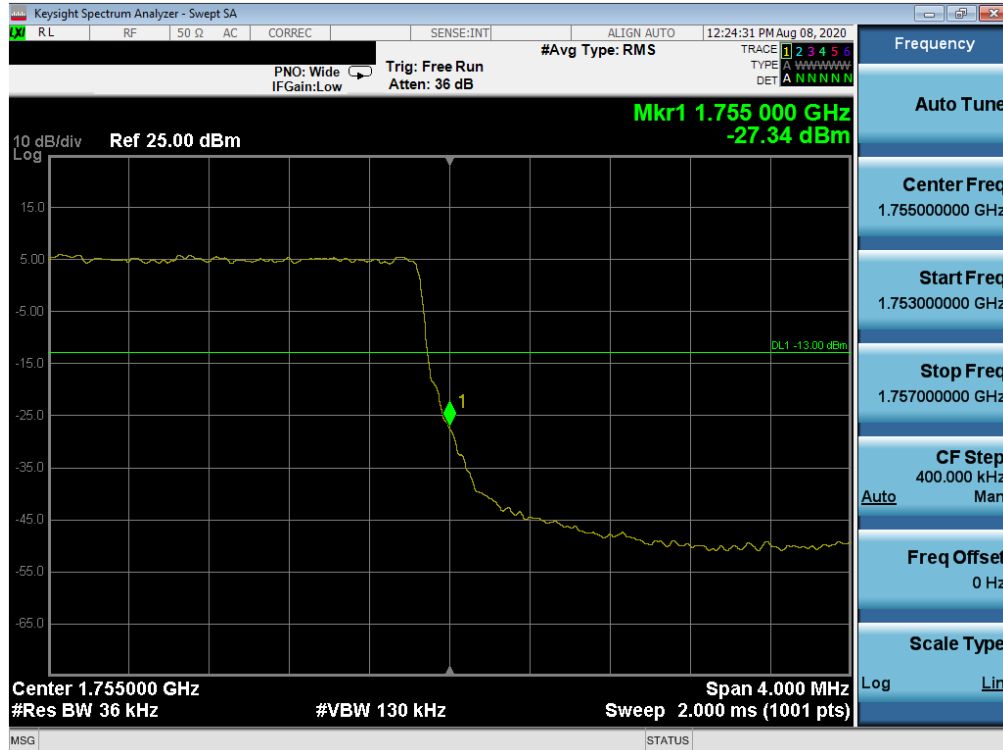


Plot 7-101. Lower Extended Band Edge Plot (LTE Band 66/4 - 3MHz QPSK – Full RB Configuration)

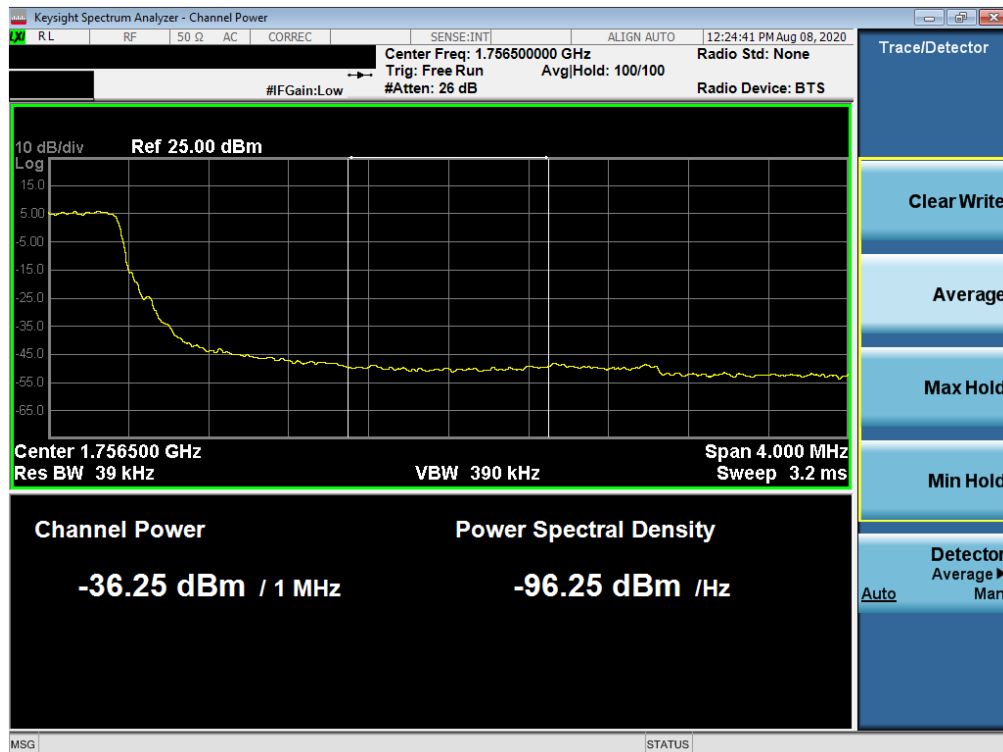
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 75 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-102. Upper Band Edge Plot (LTE Band 4 - 3MHz QPSK – Full RB Configuration)

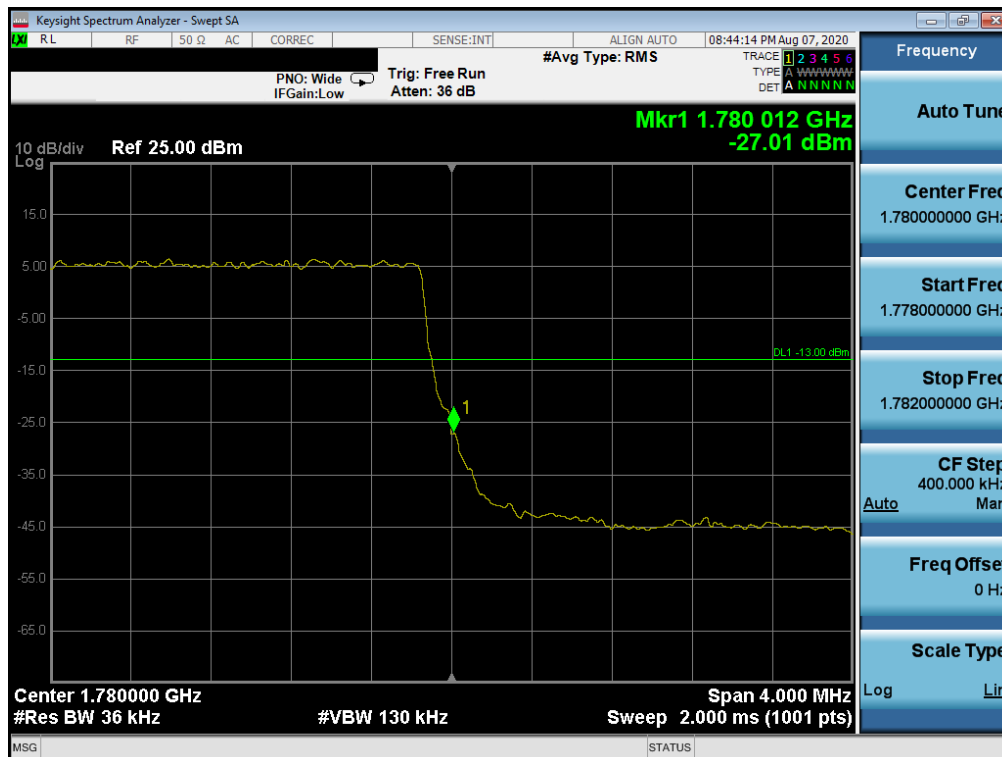


Plot 7-103. Upper Extended Band Edge Plot (LTE Band 4 - 3MHz QPSK – Full RB Configuration)

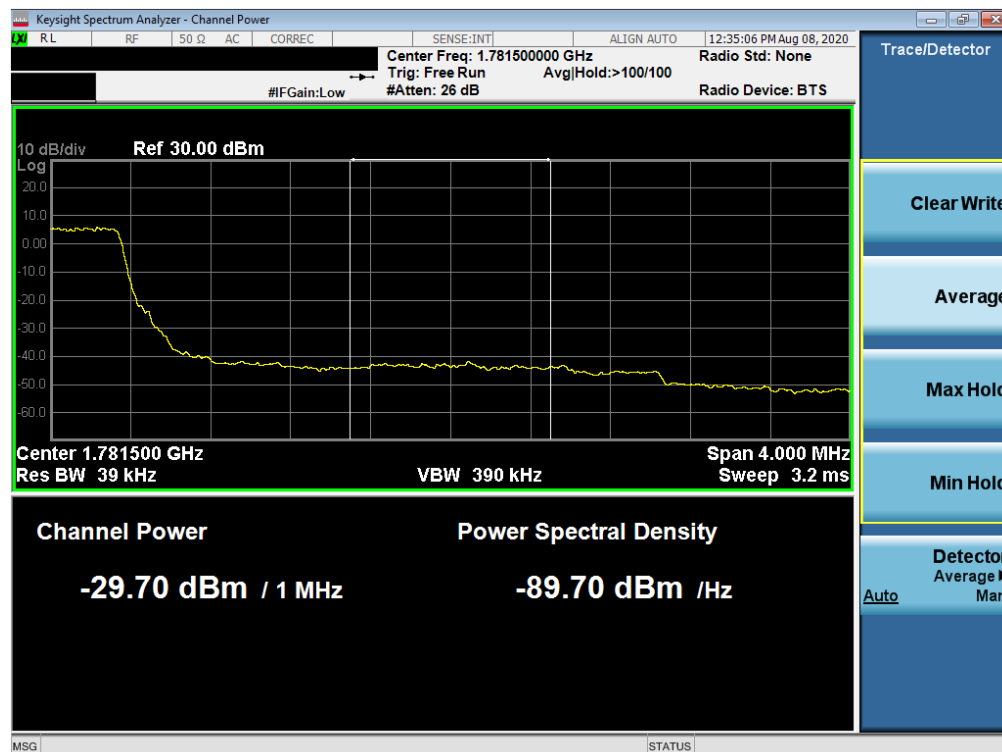
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 76 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-104. Upper Band Edge Plot (LTE Band 66 - 3MHz QPSK – Full RB Configuration)

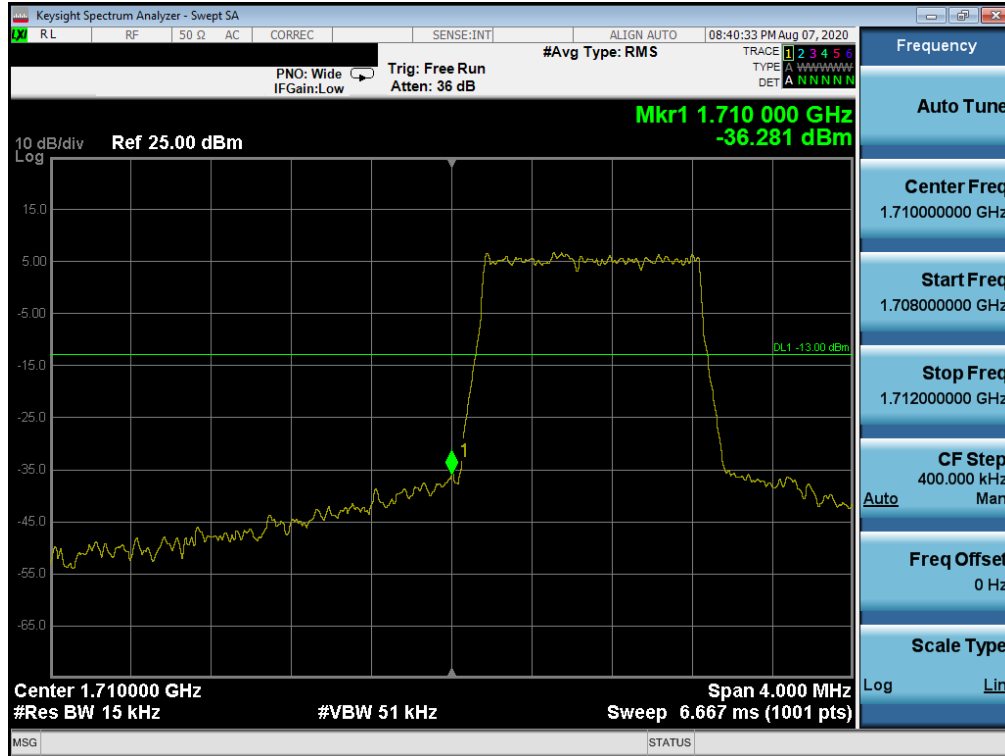


Plot 7-105. Upper Extended Band Edge Plot (LTE Band 66 - 3MHz QPSK – Full RB Configuration)

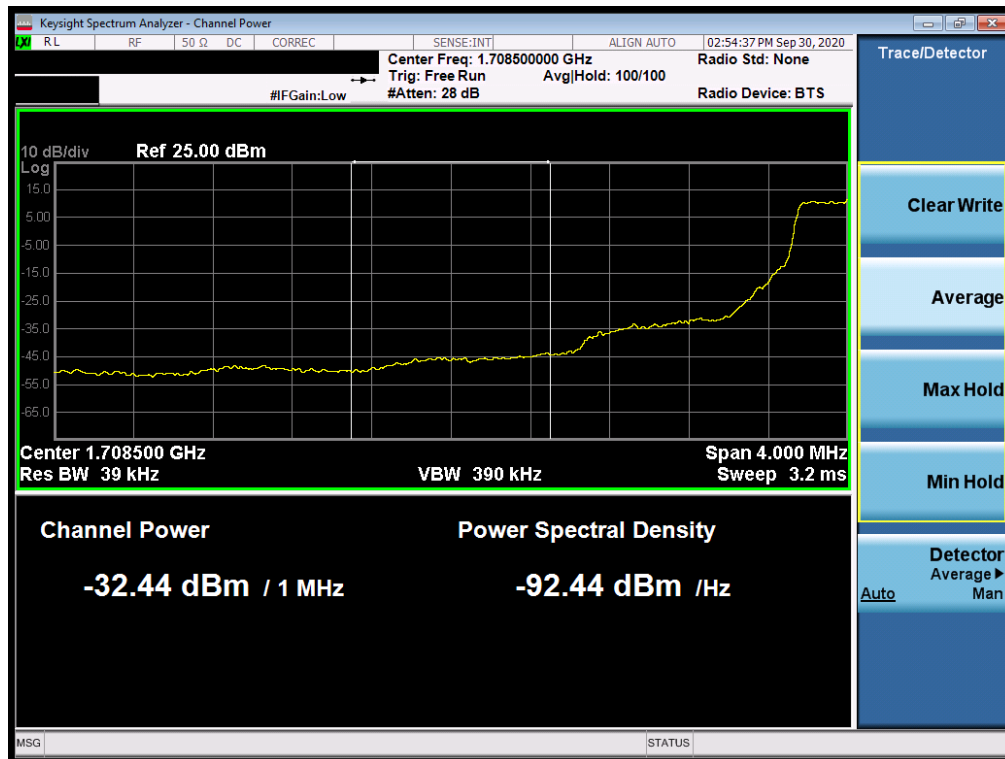
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 77 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-106. Lower Band Edge Plot (LTE Band 66/4 – 1.4MHz QPSK – Full RB Configuration)

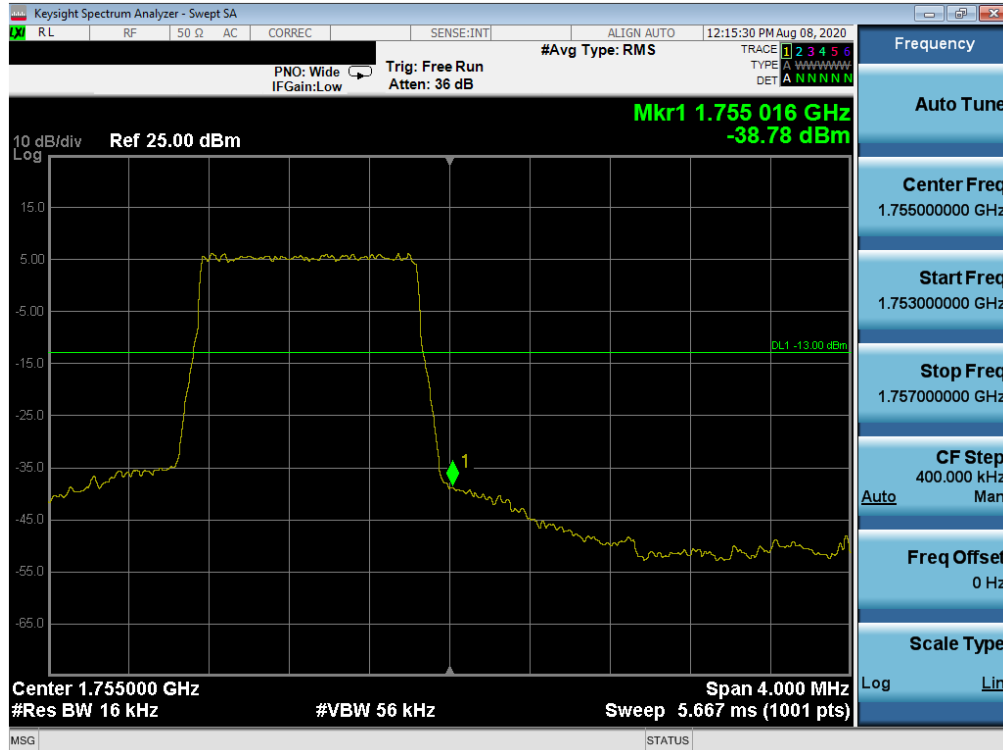


Plot 7-107. Lower Extended Band Edge Plot (LTE Band 66/4 – 1.4MHz QPSK – Full RB Configuration)

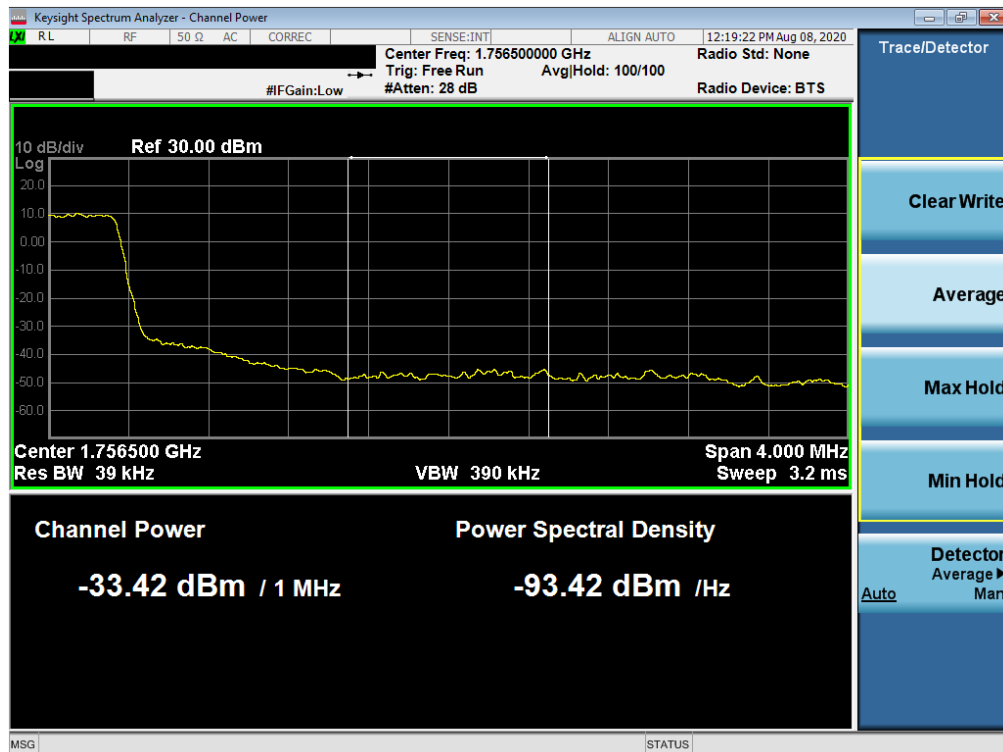
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 78 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-108. Upper Band Edge Plot (LTE Band 4 – 1.4MHz QPSK – Full RB Configuration)

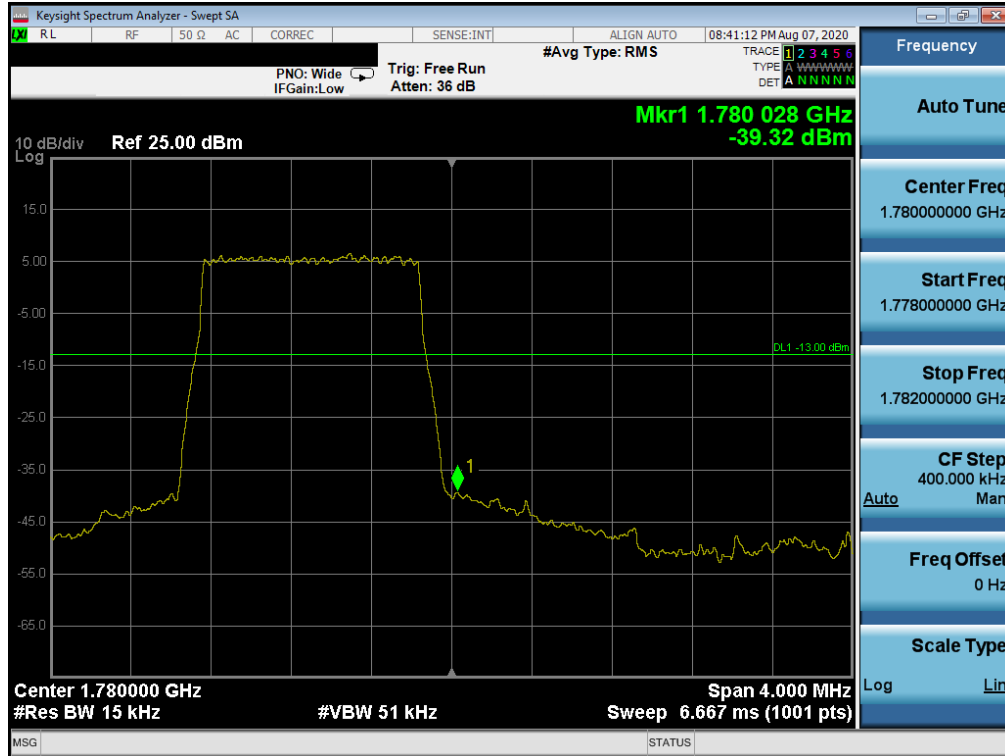


Plot 7-109. Upper Extended Band Edge Plot (LTE Band 4 – 1.4MHz QPSK – Full RB Configuration)

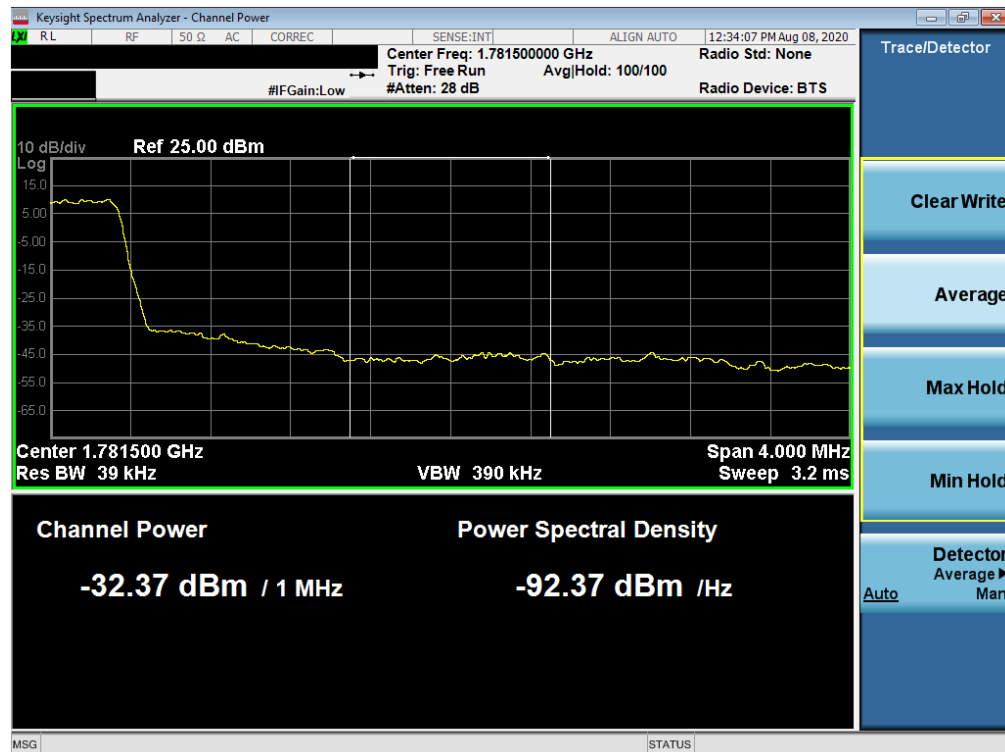
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 79 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-110. Upper Band Edge Plot (LTE Band 66 – 1.4MHz QPSK – Full RB Configuration)



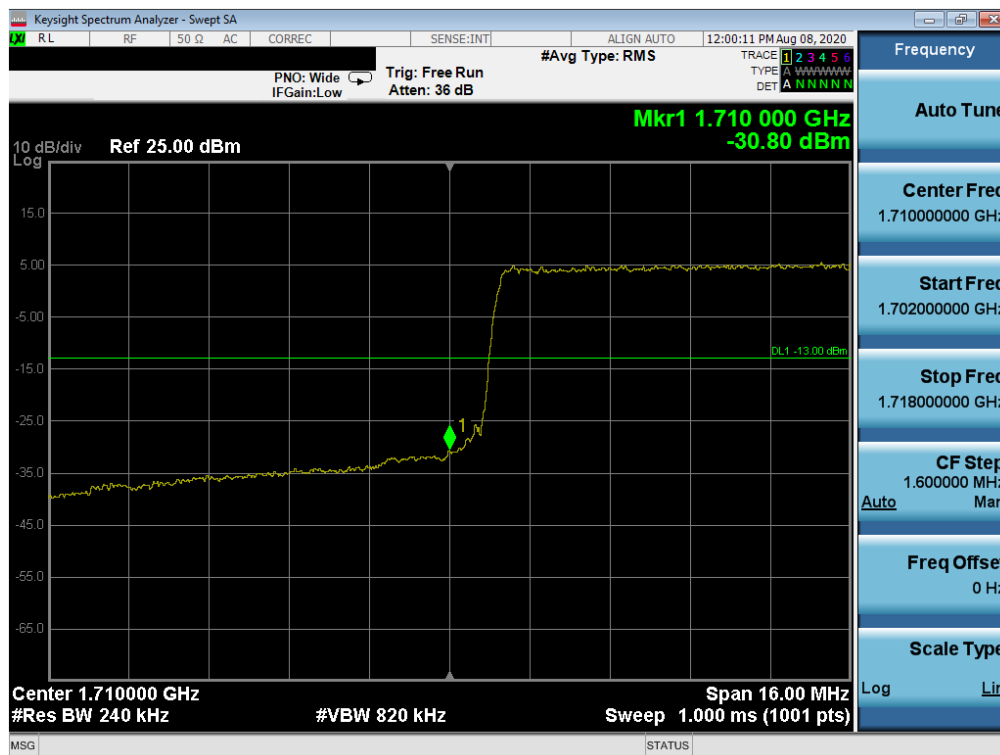
Plot 7-111. Upper Extended Band Edge Plot (LTE Band 66 – 1.4MHz QPSK – Full RB Configuration)

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 80 of 151

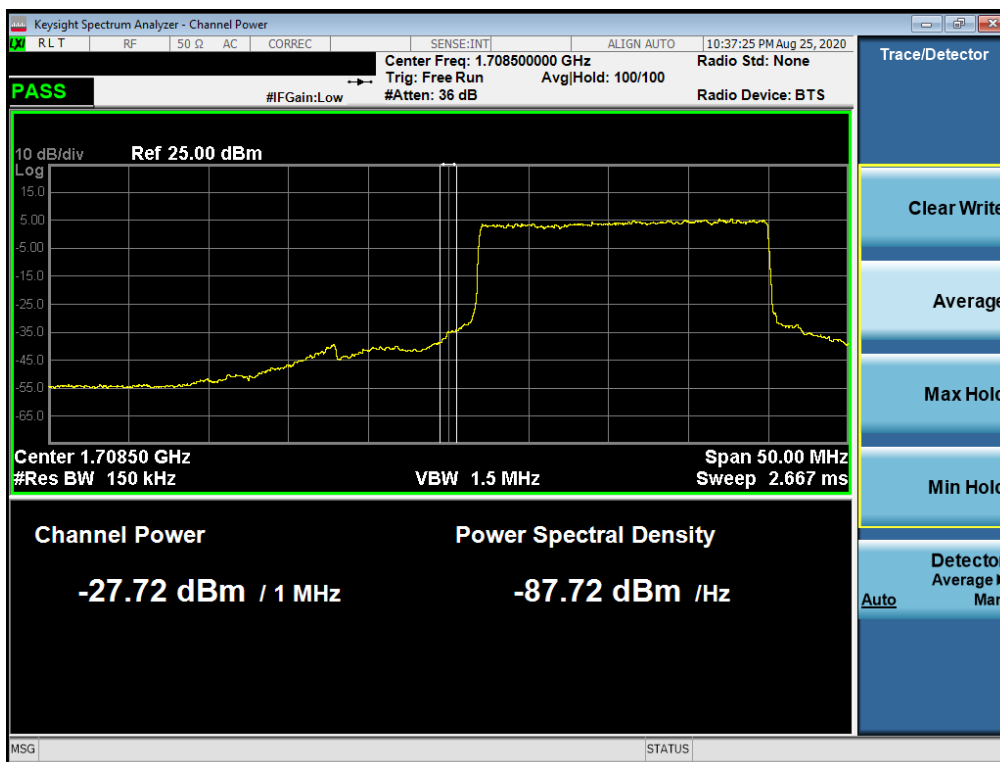
© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

NR Band n66



Plot 7-112. Lower Band Edge Plot (NR Band n66 – 20.0MHz - Full RB)



Plot 7-113. Lower Extended Band Edge Plot (NR Band n66 – 20.0MHz - Full RB)

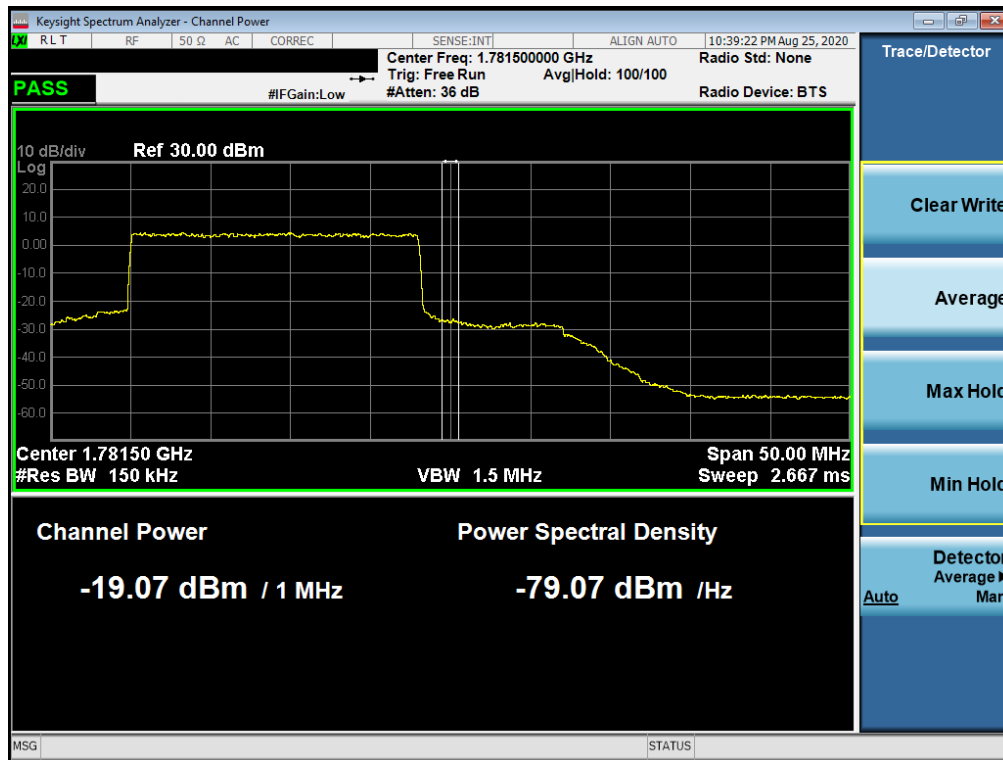
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 81 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-114. Upper Band Edge Plot (NR Band n66 – 20.0MHz - Full RB)



Plot 7-115. Upper Extended Band Edge Plot (NR Band n66 – 20.0MHz - Full RB)

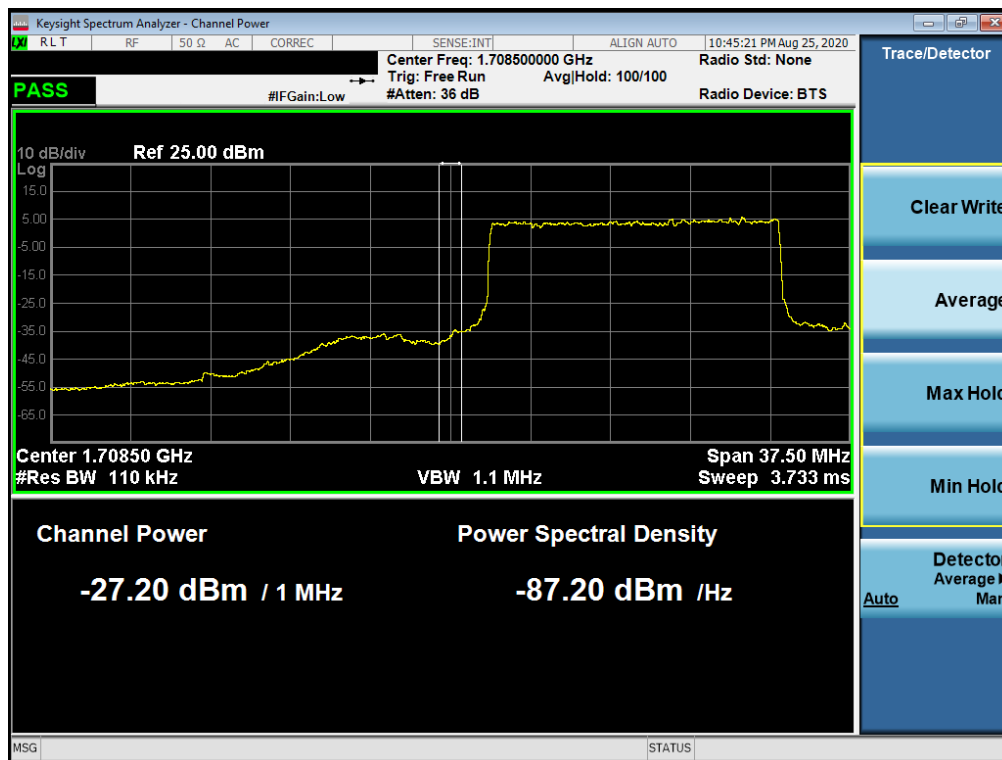
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 82 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-116. Lower Band Edge Plot (NR Band n66 – 15.0MHz - Full RB)



Plot 7-117. Lower Extended Band Edge Plot (NR Band n66 – 15.0MHz - Full RB)

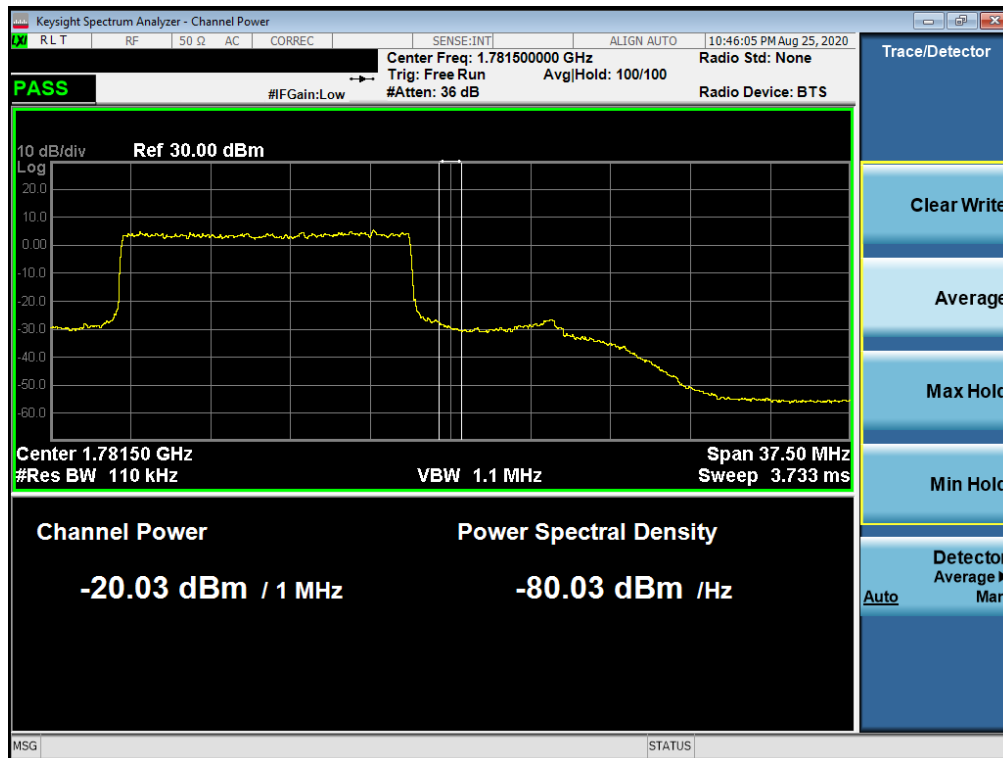
FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 83 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



Plot 7-118. Upper Band Edge Plot (NR Band n66 – 15.0MHz - Full RB)



Plot 7-119. Upper Extended Band Edge Plot (NR Band n66 – 15.0MHz - Full RB)

FCC ID: PY7-57441Y	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SONY	Approved by: Quality Manager
Test Report S/N: 1M2007070106-15-R2.PY7	Test Dates: 7/9 – 9/30/2020	EUT Type: Portable Handset		Page 84 of 151

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.