

PCTEST ENGINEERING LABORATORY, INC.

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MEASUREMENT REPORT FCC Part 22, 24, 27 LTE

Applicant Name:

Sony Mobile Communications Nya Vattentornet SE-221 88 Lund, Sweden Date of Testing: July 15 - 22, 2013 Test Site/Location: PCTEST Lab., Columbia, MD, USA Test Report Serial No.: 0Y1307011150.PY7

FCC ID : APPLICANT:

SONY MOBILE COMMUNICATIONS

FCC Classification: FCC Rule Part(s): EUT Type: Model(s): Test Device Serial No.: PCS Licensed Transmitter Held to Ear (PCE) §2; §22; §24; §27 Portable Handset PM-0430-BV *identical prototype* [S/N: 8630, 8616]

PY7PM-0430

				ERP/	EIRP					ERP/	EIRP
Mode	Tx Frequency (MHz)	Emission	Modulation	Max.	Max.	Mode	Tx Frequency	Emission	Modulation	Max.	Max.
	(IVITIZ)	Designator		Power (W)	Power (dBm)		(MHz)	Designator		Power (W)	Power (dBm)
LTE Band 17	706.5 - 713.5	4M50G7D	QPSK	0.055	(dBill) 17.42	LTE Band 2	1850.7 - 1909.3	1M10G7D	QPSK	0.181	22.58
LTE Band 17	706.5 - 713.5	4M50W7D	16QAM	0.043	16.32	LTE Band 2	1850.7 - 1909.3	1M10W7D	16QAM	0.146	21.64
LTE Band 17	709 - 711	9M00W7D	QPSK	0.057	17.56	LTE Band 2	1851.5 - 1908.5	2M70G7D	QPSK	0.201	23.04
LTE Band 17	709 - 711	8M97W7D	16QAM	0.046	16.67	LTE Band 2	1851.5 - 1908.5	2M71W7D	16QAM	0.159	22.02
LTE Band 5	824.7 - 848.3	1M09G7D	QPSK	0.150	21.77	LTE Band 2	1852.5 - 1907.5	4M49G7D	QPSK	0.214	23.31
LTE Band 5	824.7 - 848.3	1M09W7D	16QAM	0.122	20.87	LTE Band 2	1852.5 - 1907.5	4M51W7D	16QAM	0.165	22.17
LTE Band 5	825.5 - 847.5	2M70G7D	QPSK	0.159	22.02	LTE Band 2	1855 - 1905	8M97G7D	QPSK	0.230	23.61
LTE Band 5	825.5 - 847.5	2M70W7D	16QAM	0.117	20.69	LTE Band 2	1855 - 1905	8M98W7D	16QAM	0.183	22.63
LTE Band 5	826.5 - 846.5	4M50G7D	QPSK	0.165	22.17	LTE Band 2	1857.5 - 1902.5	13M4G7D	QPSK	0.234	23.69
LTE Band 5	826.5 - 846.5	4M50W7D	16QAM	0.127	21.03	LTE Band 2	1857.5 - 1902.5	13M4W7D	16QAM	0.189	22.77
LTE Band 5	829 - 844	8M97G7D	QPSK	0.158	21.98	LTE Band 2	1860 - 1900	17M9G7D	QPSK	0.232	23.66
LTE Band 5	829 - 844	8M98W7D	16QAM	0.119	20.74	LTE Band 2	1860 - 1900	17M9W7D	16QAM	0.185	22.67
LTE Band 4	1710.7 - 1754.3	1M10G7D	QPSK	0.327	25.15	LTE Band 7	2502.5 - 2565.5	4M50G7D	QPSK	0.146	21.66
LTE Band 4	1710.7 - 1754.3	1M10W7D	16QAM	0.258	24.11	LTE Band 7	2502.5 - 2565.6	4M51W7D	16QAM	0.115	20.60
LTE Band 4	1711.5 - 1753.5	2M70G7D	QPSK	0.336	25.26	LTE Band 7	2505 - 2565	9M01G7D	QPSK	0.152	21.82
LTE Band 4	1711.5 - 1753.5	2M70W7D	16QAM	0.265	24.23	LTE Band 7	2506 - 2565	9M00W7D	16QAM	0.119	20.77
LTE Band 4	1712.5 - 1752.5	4M49G7D	QPSK	0.337	25.27	LTE Band 7	2507.5 - 2562.5	13M5G7D	QPSK	0.116	20.66
LTE Band 4	1712.5 - 1752.5	4M50W7D	16QAM	0.279	24.46	LTE Band 7	2507.5 - 2562.6	13M5W7D	16QAM	0.091	19.58
LTE Band 4	1715 - 1750	8M96G7D	QPSK	0.352	25.47	LTE Band 7	2510 - 2560	17M1G7D	QPSK	0.116	20.64
LTE Band 4	1715 - 1750	8M97W7D	16QAM	0.288	24.59	LTE Band 7	2510 - 2560	17M1W7D	16QAM	0.090	19.56
LTE Band 4	1717.5 - 1747.5	13M4G7D	QPSK	0.336	25.26		•	•	•		•
LTE Band 4	1717.5 - 1747.5	13M4W7D	16QAM	0.256	24.09						
LTE Band 4	1720 - 1745	17M9G7D	QPSK	0.340	25.32						
LTE Band 4	1720 - 1745	17M9W7D	16QAM	0.265	24.24						

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in §2.947. Test results reported herein relate only to the item(s) tested. I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Randy Ortanez President



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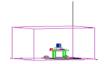


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	6.12	BAND 2 FREQUENCY STABILITY MEASUREMENTS	
	6.13	BAND 7 FREQUENCY STABILITY MEASUREMENTS	
7.0		0 17 PLOTS OF EMISSIONS	
8.0		0 5 PLOTS OF EMISSIONS	
9.0		0 4 PLOTS OF EMISSIONS	
10.0		0 2 PLOTS OF EMISSIONS	
11.0		0 7 PLOTS OF EMISSIONS	
12.0	CONC		

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§2.1033 General Information

APPLICANT:	Sony Mobile Commu	nications		
APPLICANT ADDRESS:	Nya Vattentornet			
	SE-221 88 Lund, Swe	eden		
TEST SITE:	PCTEST ENGINEER	ING LABORATO	RY, INC.	
TEST SITE ADDRESS:	7185 Oakland Mills R	oad, Columbia, N	ID 21045 USA	
FCC RULE PART(S):	§2; §22; §24; §27			
BASE MODEL:	PM-0430-BV			
FCC ID:	PY7PM-0430			
FCC CLASSIFICATION:	PCS Licensed Transr	nitter Held to Ear	(PCE)	
FREQUENCY TOLERANCE:	±0.00025 % (2.5 ppm)		
Test Device Serial No.:	8630, 8616	Production	Pre-Production	Engineering
DATE(S) OF TEST:	July 15 - 22, 2013			
TEST REPORT S/N:	0Y1307011150.PY7			

Test Facility / Accreditations

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

- PCTEST facility is an FCC registered (PCTEST Reg. No. 159966) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules and Industry Canada (2451B-1).
 - PCTEST Lab is accredited to ISO 17025 by U.S. National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP Lab code: 100431-0) in EMC, FCC and Telecommunications.
 - PCTEST Lab is accredited to ISO 17025-2005 by the American Association for Laboratory Accreditation (A2LA) in Specific Absorption Rate (SAR) testing, Hearing Aid Compatibility (HAC) testing, CTIA Test Plans, and wireless testing for FCC and Industry Canada Rules.
 - PCTEST Lab is a recognized U.S. Conformity Assessment Body (CAB) in EMC and R&TTE (n.b. 0982) under the U.S.-EU Mutual Recognition Agreement (MRA).
 - PCTEST TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC Guide 65 by the American National Standards Institute (ANSI) in all scopes of FCC Rules and Industry Canada Standards (RSS).
 - PCTEST facility is an IC registered (2451B-1) test laboratory with the site description on file at Industry Canada.
 - PCTEST is a CTIA Authorized Test Laboratory (CATL) for AMPS, CDMA, and EvDO wireless devices and for Over-the-Air (OTA) Antenna Performance testing for AMPS, CDMA, GSM, GPRS, EGPRS, UMTS (W-CDMA), CDMA 1xEVDO, and CDMA 1xRTT.

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1.0 INTRODUCTION

1.1 Scope

Measurement and determination of electromagnetic emissions (EME) 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 Industry Canada Certification and Engineering Bureau.

1.2 Testing Facility

The map below shows the location of the PCTEST LABORATORY, its proximity to the FCC Laboratory, the Columbia vicinity, the Baltimore-Washington Internt'I (BWI) airport, the city of Baltimore and the Washington, DC area, (See Figure 1-1).

These measurement tests were conducted at the PCTEST Engineering Laboratory, Inc. facility located at 7185 Oakland Mills Road, Columbia, MD 21046. The site coordinates are 39° 10'23" N latitude and 76° 49'50" W longitude. The facility is 0.4 miles North of the FCC laboratory, and the ambient signal and ambient signal strength are approximately equal to those of the FCC laboratory. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2003 on February 15, 2012.

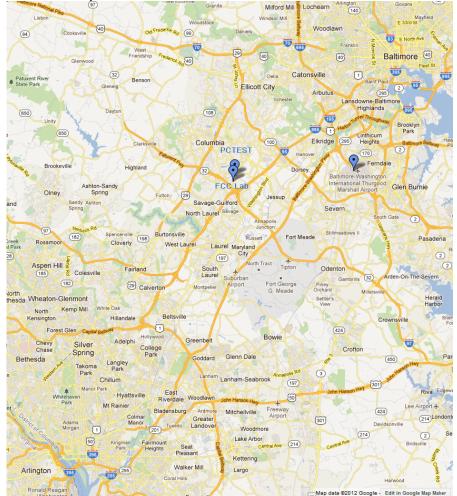


Figure 1-1. Map of the Greater Baltimore and Metropolitan Washington, D.C. area

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2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the **Sony Portable Handset FCC ID: PY7PM-0430**. The test data contained in this report pertains only to the emissions due to the EUT's LTE function.

2.2 Device Capabilities

This device contains the following capabilities:

850/1900 GSM/GPRS/EDGE, 850/1700/1900 WCDMA/HSPA, Band 2, 4, 5, 7, 17 LTE, 802.11a/b/g/n/ac WLAN (DTS/NII), Bluetooth (1x, EDR, LE), ANT+, NFC

2.3 EMI Suppression Device(s)/Modifications

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

2.4 Labeling Requirements

Per 2.925

The FCC identifier shall be permanently affixed to the equipment and shall be readily visible to the purchaser at the time of purchase.

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3.0 DESCRIPTION OF TESTS

3.1 Measurement Procedure

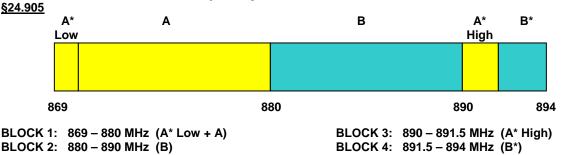
The measurement procedures described in the document titled "Land Mobile FM or PM – Communications Equipment – Measurements and Performance Standards" (ANSI/TIA-603-C-2004) and "Procedures for Compliance Measurement of the Fundamental Emission Power of Licensed Wideband (> 1 MHz) Digital Transmission Systems" (KDB 971168) were used in the measurement of the **Sony Portable Handset FCC ID: PY7PM-0430.**

3.2 Block A Frequency Range §27.5(c)

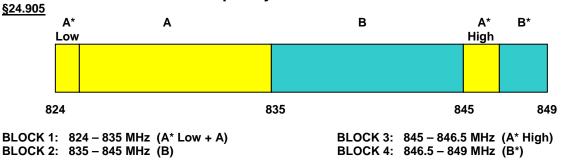
<u>698-746 MHz band</u>. The following frequencies are available for licensing pursuant to this part in the 698-746 MHz band: (1) Three paired channel blocks of 12 megahertz each are available for assignment as follows:

Block A: 698-704 MHz and 728-734 MHz; Block B: 704-710 MHz and 734-740 MHz; and Block C: 710-716 MHz and 740-746 MHz.

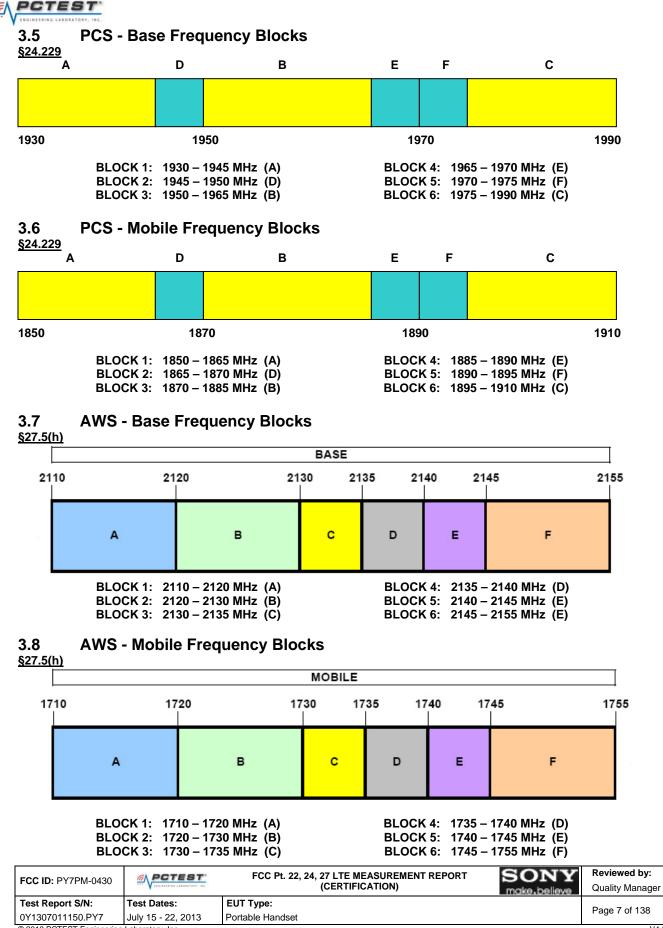




3.4 Cellular - Mobile Frequency Blocks



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3.9 Occupied Bandwidth §2.1049 RSS-Gen(4.6.1) RSS-133(2.3) RSS-139(2.3)

The implementation of this test is performed by the spectrum analyzer's occupied bandwidth function. 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.

3.10 Spurious and Harmonic Emissions at Antenna Terminal §2.1051 §22.917(a)(b) §24.238(a)(b) §27.53(g) §27.53(h) §27.53(m) RSS-132(4.5.1) RSS-133(6.5.1) RSS-139(6.5.1)

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 + 10 log(P) dB. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for Cell band, 698–746 MHz band, or 1 MHz or greater for PCS band, AWS band, BRS and EBS stations. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed for PCS band, AWS band, BRS and EBS stations. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

3.11 Peak-Average Ratio

§24.232(d) §27.50(d.5) RSS-132(5.4) RSS-133(6.4) RSS-139(6.4)

A peak to average ratio measurement is performed at the conducted port of the EUT. For LTE signals, the spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

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3.12 Radiated Power and Radiated Spurious Emissions

§2.1053 §22.913(a.2) §22.917(a) §24.232(c) §24.238(a) §27.50(c.10) §27.50(d.4) §27.53(g) §27.53(h) RSS-132(4.4) RSS-132(4.5.1) RSS-133(6.4) RSS-133(6.5.1) RSS-139(6.5.1)

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. For measurements above 1GHz 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 below 1GHz, the absorbers are removed. An ETS Lindgren Model 2188 raised turntable is used for radiated measurement. It 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. A 78cm high PVC support structure is placed on top of the turntable. A ¾" (~1.9cm) sheet of high density polyethylene is used as the table top and is placed on top of the PVC supports to bring the total height of the table to 80cm.

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.

Per the guidance of ANSI/TIA-603-C-2004, 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:

$$P_{d [dBm]} = P_{g [dBm]} - cable loss_{[dB]} + antenna gain_{[dBd/dBi]}$$

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 $P_{g \text{ [dBm]}}$ – cable loss $_{\text{[dB]}}$.

The calculated P_d levels are then compared to the absolute spurious emission limit of -13dBm which is equivalent to the required minimum attenuation of 43 + 10log₁₀(Power [Watts]) specified in 22.917(a) and 24.238(a).

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3.13 Frequency Stability / Temperature Variation

<u>§2.1055 §22.863 §22.905 §24.229 §24.235 §27.5(c) §27.5(h) §27.5(i) §27.54 RSS-132(4.3) RSS-133(6.3) RSS-139(6.3)</u>

The frequency stability of the transmitter is measured by:

- a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

Specification – The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block for Part 24 and 27. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ (± 2.5 ppm) of the center frequency for Part 22.

Time Period and Procedure:

1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).

2. The equipment is turned on in a "standby" condition for one minute before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.

3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A sufficient stabilization period at each temperature shall be used prior to each frequency requirement.

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4.0 TEST EQUIPMENT CALIBRATION DATA

Test Equipment Calibration is traceable to the National Institute of Standards and Technology (NIST).

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
-	LTx1	Licensed Transmitter Cable Set	1/17/2013	Annual	1/17/2014	N/A
-	RE1	Radiated Emissions Cable Set (UHF/EHF)	3/29/2013	Annual	3/29/2014	N/A
Agilent	8447D	Broadband Amplifier	5/31/2013	Annual	5/31/2014	2443A01900
Agilent	N9020A	MXA Signal Analyzer	10/9/2012	Annual	10/9/2013	US46470561
Agilent	N5183A	MXG Analog Signal Generator	1/6/2013	Annual	1/6/2014	MY50141900
Agilent	N9030A	PXA Signal Analyzer (44GHz)	1/11/2013	Annual	1/11/2014	MY52350166
Agilent	87405C	Pre-amplifier (0.1 - 18 GHz)	3/11/2013	Annual	3/11/2014	MY53010007
Emco	3115	Horn Antenna (1-18GHz)	1/12/2012	Biennial	1/12/2014	9704-5182
Espec	ESX-2CA	Environmental Chamber	4/16/2013	Annual	4/16/2014	17620
ETS Lindgren	3117	1-18 GHz DRG Horn (Medium)	7/22/2011	Biennial	7/22/2013	125518
ETS Lindgren	3160-09	18-26.5 GHz Standard Gain Horn	5/30/2012	Biennial	5/30/2014	135427
ETS Lindgren	3164-08	Quad Ridge Horn Antenna	11/7/2012	Biennial	11/7/2014	128338
Mini-Circuits	VHF-1200+	High Pass Filter	1/17/2013	Annual	1/17/2014	30923
Mini-Circuits	VHF-3100+	High Pass Filter	1/17/2013	Annual	1/17/2014	30841
Mini-Circuits	PWR-SENS-4RMS	USB Power Sensor	4/17/2013	Annual	4/17/2014	11210140001
Rohde & Schwarz	CMW500	LTE Radio Communication Tester	N/A		N/A	100976
Rohde & Schwarz	TS-PR18	1-18 GHz Pre-Amplifier	5/31/2013	Annual	5/31/2014	100071
Rohde & Schwarz	TS-PR26	18-26.5 GHz Pre-Amplifier	5/31/2013	Annual	5/31/2014	100040
Rohde & Schwarz	ESU26	EMI Test Receiver	2/25/2013	Annual	2/25/2014	100342
Schwarzbeck	UHA 9105	Dipole Antenna (400 - 1GHz) Tx	10/3/2011	Biennial	10/3/2013	91052522TX
Schwarzbeck	UHA 9105	Dipole Antenna (400 - 1GHz) Rx	10/3/2011	Biennial	10/3/2013	91052523RX
Seekonk	NC-100	Torque Wrench (8" lb)	3/5/2012	Triennial	3/5/2015	N/A
Sunol	JB5	Bi-Log Antenna (30M - 5GHz)	1/26/2012	Biennial	1/26/2014	A051107

Table 4-1. Test Equipment

Notes:

Equipment used for signaling with a calibration date of "N/A" shown in this list was only used for maintaining a link between the piece of equipment and the EUT. This equipment was not used to make direct calibrated measurements.

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5.0 SAMPLE CALCULATIONS

Emission Designator

QPSK Modulation

Emission Designator = 8M62G7D

LTE BW = 8.62 MHz G = Phase Modulation 7 = Quantized/Digital Info D = Amplitude/Angle Modulated

16QAM Modulation

Emission Designator = 8M45W7D

LTE BW = 8.45 MHz W = Amplitude/Angle Modulated 7 = Quantized/Digital Info D = Combination (Audio/Data)

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).

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6.0 TEST RESULTS

6.1 Summary

Company Name:	Sony Mobile Communications
FCC ID:	PY7PM-0430
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
Mode(s):	LTE

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Result	Reference
TRANSMITTER MO	DE (TX)				
2.1049	Occupied Bandwidth	N/A		PASS	Section 7.0, 8.0, 9.0, 10.0, 11.0
2.1051 22.917(a) 24.238(a) 27.53(g) 27.53(h) 27.53(m)	Band Edge / Conducted Spurious Emissions	> 43 + 10log ₁₀ (P[Watts]) at Band Edge and for all out-of-band emissions	CONDUCTED	PASS	Section 7.0, 8.0, 9.0, 10.0, 11.0
24.232(d) 27.50(d.5)	Peak-Average Ratio	< 13 dB		PASS	Section 9.0, 10.0
2.1046	Transmitter Conducted Output Power	N/A		PASS	See RF Exposure Report
22.913(a.2)	Effective Radiated Power (Band 5)	< 7 Watts max. ERP		PASS	Section 6.2
27.50(c.10)	Effective Radiated Power (Band 17)	< 3 Watts max. ERP		PASS	Section 6.2
24.232(c) 27.50(h.2)	Equivalent Isotropic Radiated Power (Band 2 EBS)	< 2 Watts max. EIRP		PASS	Section 6.3
27.50(d.4)	Equivalent Isotropic Radiated Power (Band 4)	< 1 Watts max. EIRP	RADIATED	PASS	Section 6.3
2.1053 22.917(a) 24.238(a) 27.53(g) 27.53(h) 27.53(m)	Undesirable Emissions	> 43 + 10log ₁₀ (P[Watts]) for all out-of-band emissions		PASS	Section 6.4, 6.5, 6.6, 6.7, 6.8
2.1055. 22.355 24.235 27.5(i) 27.54	Frequency Stability	< 2.5 ppm (Part 22) and fundamental emissions stay within authorized frequency block (Part 24, 27)		PASS	Section 6.9, 6.10, 6.11, 6.12, 6.13
	Table	6-1. Summary of Test Re	esults		

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 8.0 9.0 10.0 11.0 were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables, directional couplers, and attenuators used as part of the system to maintain a link between the call box and the EUT at all frequencies of interest.
- 3) All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables, attenuators, and couplers.

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6.2 Effective Radiated Power (ERP) §22.913(a.2) §27.50(c.10) RSS-132(4.4)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Battery	RB Size/Offset	Substitute Level [dBm]	Antenna Gain [dBd]	Pol [H/V]	ERP [dBm]	ERP [Watts]	Margin [dB]
706.50	5	QPSK	Standard	1/0	14.99	2.35	H2	17.34	0.054	-17.43
710.00	5	QPSK	Standard	1/0	14.95	2.42	H2	17.37	0.055	-17.40
713.50	5	QPSK	Standard	1/0	14.93	2.49	H2	17.42	0.055	-17.35
706.50	5	16-QAM	Standard	1/0	13.96	2.35	H2	16.31	0.043	-18.46
710.00	5	16-QAM	Standard	1/0	13.63	2.42	H2	16.05	0.040	-18.72
713.50	5	16-QAM	Standard	1/0	13.83	2.49	H2	16.32	0.043	-18.45
709.00	10	QPSK	Standard	1 / 25	14.99	2.35	H2	17.34	0.054	-17.43
710.00	10	QPSK	Standard	1 / 25	15.06	2.42	H2	17.48	0.056	-17.29
711.00	10	QPSK	Standard	1 / 25	15.07	2.49	H2	17.56	0.057	-17.21
709.00	10	16-QAM	Standard	1 / 25	13.96	2.35	H2	16.31	0.043	-18.46
710.00	10	16-QAM	Standard	1 / 25	13.85	2.42	H2	16.27	0.042	-18.50
711.00	10	16-QAM	Standard	1 / 25	14.18	2.49	H2	16.67	0.046	-18.10

Table 6-2. ERP Data (Band 17)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Battery	RB Size/Offset	Substitute Level [dBm]	Antenna Gain [dBd]	Pol [H/V]	ERP [dBm]	ERP [Watts]	Margin [dB]
824.70	1.4	QPSK	Standard	1/0	14.80	4.68	H2	19.48	0.089	-18.97
836.50	1.4	QPSK	Standard	1/5	16.65	4.82	H2	21.47	0.140	-16.98
848.30	1.4	QPSK	Standard	1/0	16.81	4.96	H2	21.77	0.150	-16.68
824.70	1.4	16-QAM	Standard	1/0	13.67	4.68	H2	18.35	0.068	-20.10
836.50	1.4	16-QAM	Standard	1 / 5	15.55	4.82	H2	20.37	0.109	-18.08
848.30	1.4	16-QAM	Standard	1/0	15.91	4.96	H2	20.87	0.122	-17.58
825.50	3	QPSK	Standard	1 / 14	15.12	4.68	H2	19.80	0.096	-18.65
836.50	3	QPSK	Standard	1 / 14	16.54	4.82	H2	21.36	0.137	-17.09
847.50	3	QPSK	Standard	1/0	17.06	4.96	H2	22.02	0.159	-16.43
825.50	3	16-QAM	Standard	1 / 14	14.22	4.68	H2	18.90	0.078	-19.55
836.50	3	16-QAM	Standard	1 / 14	15.41	4.82	H2	20.23	0.106	-18.22
847.50	3	16-QAM	Standard	1/0	15.73	4.96	H2	20.69	0.117	-17.76
826.50	5	QPSK	Standard	1 / 24	15.51	4.68	H2	20.19	0.105	-18.26
836.50	5	QPSK	Standard	1 / 24	16.77	4.82	H2	21.59	0.144	-16.86
846.50	5	QPSK	Standard	1 / 12	17.21	4.96	H2	22.17	0.165	-16.28
826.50	5	16-QAM	Standard	1 / 24	14.58	4.68	H2	19.26	0.084	-19.19
836.50	5	16-QAM	Standard	1 / 24	15.39	4.82	H2	20.21	0.105	-18.24
846.50	5	16-QAM	Standard	1 / 12	16.07	4.96	H2	21.03	0.127	-17.42
829.00	10	QPSK	Standard	1 / 49	16.08	4.68	H2	20.76	0.119	-17.69
836.50	10	QPSK	Standard	1 / 49	16.81	4.82	H2	21.63	0.146	-16.82
844.00	10	QPSK	Standard	1 / 25	17.02	4.96	H2	21.98	0.158	-16.47
829.00	10	16-QAM	Standard	1 / 49	15.26	4.68	H2	19.94	0.099	-18.51
836.50	10	16-QAM	Standard	1 / 49	15.75	4.82	H2	20.57	0.114	-17.88
844.00	10	16-QAM	Standard	1 / 25	15.78	4.96	H2	20.74	0.119	-17.71

Table 6-3. ERP Data (Band 5)

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configurations are shown in the tables above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst case configuration was found with the EUT in the H2 position. The data reported in the table above was measured in this test setup.

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6.3 Equivalent Isotropic Radiated Power (EIRP) §24.232(c) §27.50(d.4) §27.50(h.2) RSS-133(6.4) RSS-139(6.4)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Battery	RB Size/Offset	Substitute Level [dBm]	Antenna Gain [dBi]	Pol [H/V]	EIRP [dBm]	EIRP [Watts]	Margin [dB]
1710.70	1.4	QPSK	Standard	1 / 0	15.26	9.89	V	25.15	0.327	-4.85
1732.50	1.4	QPSK	Standard	1 / 0	14.12	9.85	V	23.97	0.249	-6.03
1754.30	1.4	QPSK	Standard	1 / 0	13.55	9.80	V	23.35	0.216	-6.65
1710.70	1.4	16-QAM	Standard	1 / 0	14.22	9.89	V	24.11	0.258	-5.89
1732.50	1.4	16-QAM	Standard	1 / 0	12.99	9.85	V	22.84	0.192	-7.16
1754.30	1.4	16-QAM	Standard	1 / 0	12.54	9.80	V	22.34	0.172	-7.66
1711.50	3	QPSK	Standard	1 / 7	15.37	9.89	V	25.26	0.336	-4.74
1732.50	3	QPSK	Standard	1 / 14	14.23	9.85	V	24.08	0.256	-5.92
1753.50	3	QPSK	Standard	1 / 0	13.63	9.80	V	23.43	0.221	-6.57
1711.50	3	16-QAM	Standard	1 / 7	14.34	9.89	V	24.23	0.265	-5.77
1732.50	3	16-QAM	Standard	1 / 14	13.26	9.85	V	23.11	0.205	-6.89
1753.50	3	16-QAM	Standard	1 / 0	12.56	9.80	V	22.36	0.172	-7.64
1712.50	5	QPSK	Standard	1 / 12	15.38	9.89	V	25.27	0.337	-4.73
1732.50	5	QPSK	Standard	1 / 0	14.59	9.85	V	24.44	0.278	-5.56
1752.50	5	QPSK	Standard	1 / 0	14.21	9.80	V	24.01	0.252	-5.99
1712.50	5	16-QAM	Standard	1 / 12	14.57	9.89	V	24.46	0.279	-5.54
1732.50	5	16-QAM	Standard	1 / 0	13.23	9.85	V	23.08	0.203	-6.92
1752.50	5	16-QAM	Standard	1 / 0	13.06	9.80	V	22.86	0.193	-7.14
1715.00	10	QPSK	Standard	1 / 25	15.58	9.89	V	25.47	0.352	-4.53
1732.50	10	QPSK	Standard	1 / 0	15.11	9.85	V	24.96	0.313	-5.04
1750.00	10	QPSK	Standard	1 / 0	14.26	9.80	V	24.06	0.255	-5.94
1715.00	10	16-QAM	Standard	1 / 25	14.70	9.89	V	24.59	0.288	-5.41
1732.50	10	16-QAM	Standard	1 / 0	13.97	9.85	V	23.82	0.241	-6.18
1750.00	10	16-QAM	Standard	1 / 0	13.21	9.80	V	23.01	0.200	-6.99
1717.50	15	QPSK	Standard	1 / 0	15.37	9.89	V	25.26	0.336	-4.74
1732.50	15	QPSK	Standard	1 / 0	14.99	9.85	V	24.84	0.305	-5.16
1747.50	15	QPSK	Standard	1 / 0	14.52	9.80	V	24.32	0.271	-5.68
1717.50	15	16-QAM	Standard	1 / 0	14.20	9.89	V	24.09	0.256	-5.91
1732.50	15	16-QAM	Standard	1 / 0	13.93	9.85	V	23.78	0.239	-6.22
1747.50	15	16-QAM	Standard	1 / 0	13.11	9.80	V	22.91	0.196	-7.09
1720.00	20	QPSK	Standard	1 / 0	15.43	9.89	V	25.32	0.340	-4.68
1732.50	20	QPSK	Standard	1 / 0	15.23	9.85	V	25.08	0.322	-4.92
1745.00	20	QPSK	Standard	1 / 0	14.63	9.80	V	24.43	0.278	-5.57
1720.00	20	16-QAM	Standard	1 / 0	14.35	9.89	V	24.24	0.265	-5.76
1732.50	20	16-QAM	Standard	1 / 0	14.07	9.85	V	23.92	0.246	-6.08
1745.00	20	16-QAM	Standard	1 / 0	13.46	9.80	V	23.26	0.212	-6.74

Table 6-4. EIRP Data (Band 4)

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Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Battery	RB Size/Offset	Substitute Level [dBm]	Antenna Gain [dBi]	Pol [H/V]	EIRP [dBm]	EIRP [Watts]	Margin [dB]
1850.70	1.4	QPSK	Standard	1/3	12.99	9.59	V	22.58	0.181	-10.43
1880.00	1.4	QPSK	Standard	1 / 5	12.89	9.53	V	22.42	0.175	-10.59
1909.30	1.4	QPSK	Standard	1 /0	11.41	9.48	V	20.89	0.123	-12.12
1850.70	1.4	16-QAM	Standard	1/3	12.05	9.59	V	21.64	0.146	-11.37
1880.00	1.4	16-QAM	Standard	1 / 5	11.75	9.53	V	21.28	0.134	-11.73
1909.30	1.4	16-QAM	Standard	1 / 0	10.16	9.48	V	19.64	0.092	-13.37
1851.50	3	QPSK	Standard	1 / 14	13.23	9.59	V	22.82	0.191	-10.19
1880.00	3	QPSK	Standard	1 / 0	13.51	9.53	V	23.04	0.201	-9.97
1908.50	3	QPSK	Standard	1 / 0	13.20	9.48	V	22.68	0.185	-10.33
1851.50	3	16-QAM	Standard	1 / 14	12.43	9.59	V	22.02	0.159	-10.99
1880.00	3	16-QAM	Standard	1 / 0	12.37	9.53	V	21.90	0.155	-11.11
1908.50	3	16-QAM	Standard	1 / 0	12.34	9.48	V	21.82	0.152	-11.19
1852.50	5	QPSK	Standard	1 / 24	13.53	9.59	V	23.12	0.205	-9.89
1880.00	5	QPSK	Standard	1 / 0	13.78	9.53	V	23.31	0.214	-9.70
1907.50	5	QPSK	Standard	1 / 0	13.53	9.48	V	23.01	0.200	-10.00
1852.50	5	16-QAM	Standard	1 / 24	12.58	9.59	V	22.17	0.165	-10.84
1880.00	5	16-QAM	Standard	1 / 0	12.51	9.53	V	22.04	0.160	-10.97
1907.50	5	16-QAM	Standard	1 / 0	12.54	9.48	V	22.02	0.159	-10.99
1855.00	10	QPSK	Standard	1 / 49	14.02	9.59	V	23.61	0.230	-9.40
1880.00	10	QPSK	Standard	1 / 0	13.90	9.53	V	23.43	0.220	-9.58
1905.00	10	QPSK	Standard	1 / 0	13.54	9.48	V	23.02	0.200	-9.99
1855.00	10	16-QAM	Standard	1 / 49	13.04	9.59	V	22.63	0.183	-10.38
1880.00	10	16-QAM	Standard	1 / 0	12.79	9.53	V	22.32	0.171	-10.69
1905.00	10	16-QAM	Standard	1 / 0	12.41	9.48	V	21.89	0.155	-11.12
1857.50	15	QPSK	Standard	1 / 74	14.10	9.59	V	23.69	0.234	-9.32
1880.00	15	QPSK	Standard	1 / 0	13.75	9.53	V	23.28	0.213	-9.73
1902.50	15	QPSK	Standard	1 / 0	13.72	9.48	V	23.20	0.209	-9.81
1857.50	15	16-QAM	Standard	1 / 74	13.18	9.59	V	22.77	0.189	-10.24
1880.00	15	16-QAM	Standard	1 / 0	12.60	9.53	V	22.13	0.163	-10.88
1902.50	15	16-QAM	Standard	1 / 0	12.49	9.48	V	21.97	0.157	-11.04
1860.00	20	QPSK	Standard	1 / 99	14.07	9.59	V	23.66	0.232	-9.35
1880.00	20	QPSK	Standard	1 / 0	13.92	9.53	V	23.45	0.221	-9.56
1900.00	20	QPSK	Standard	1 / 0	13.77	9.48	V	23.25	0.211	-9.76
1860.00	20	16-QAM	Standard	1 / 99	13.08	9.59	V	22.67	0.185	-10.34
1880.00	20	16-QAM	Standard	1 / 0	12.83	9.53	V	22.36	0.172	-10.65
1900.00	20	16-QAM	Standard	1 / 0	12.42	9.48	V	21.90	0.155	-11.11

Table 6-5. EIRP Data (Band 2)

FCC ID: PY7PM-0430	A PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Battery	RB Size/Offset	Substitute Level [dBm]	Antenna Gain [dBi]	Pol [H/V]	EIRP [dBm]	EIRP [Watts]	Margin [dB]
2502.50	5	QPSK	Standard	1 / 0	13.00	8.66	H2	21.66	0.146	-11.35
2535.00	5	QPSK	Standard	1 / 0	10.15	8.68	H2	18.83	0.076	-14.18
2567.50	5	QPSK	Standard	1 / 0	9.03	8.70	H2	17.73	0.059	-15.28
2502.50	5	16-QAM	Standard	1 / 0	11.94	8.66	H2	20.60	0.115	-12.41
2535.00	5	16-QAM	Standard	1 / 0	8.89	8.68	H2	17.57	0.057	-15.44
2567.50	5	16-QAM	Standard	1 / 0	8.07	8.70	H2	16.77	0.048	-16.24
2505.00	10	QPSK	Standard	1 / 0	13.16	8.66	H2	21.82	0.152	-11.19
2535.00	10	QPSK	Standard	1 / 0	10.80	8.68	H2	19.48	0.089	-13.53
2565.00	10	QPSK	Standard	1 / 0	9.14	8.70	H2	17.84	0.061	-15.17
2505.00	10	16-QAM	Standard	1 / 0	12.11	8.66	H2	20.77	0.119	-12.24
2535.00	10	16-QAM	Standard	1 / 0	9.70	8.68	H2	18.38	0.069	-14.63
2565.00	10	16-QAM	Standard	1 / 0	8.27	8.70	H2	16.97	0.050	-16.04
2507.50	15	QPSK	Standard	1 / 0	12.00	8.66	H2	20.66	0.116	-12.35
2535.00	15	QPSK	Standard	1 / 0	10.91	8.68	H2	19.59	0.091	-13.42
2562.50	15	QPSK	Standard	1 / 0	8.96	8.70	H2	17.66	0.058	-15.35
2507.50	15	16-QAM	Standard	1 / 0	10.92	8.66	H2	19.58	0.091	-13.43
2535.00	15	16-QAM	Standard	1 / 0	9.71	8.68	H2	18.39	0.069	-14.62
2562.50	15	16-QAM	Standard	1 / 0	7.92	8.70	H2	16.62	0.046	-16.39
2510.00	20	QPSK	Standard	1 / 0	11.98	8.66	H2	20.64	0.116	-12.37
2535.00	20	QPSK	Standard	1 / 0	11.22	8.68	H2	19.90	0.098	-13.11
2560.00	20	QPSK	Standard	1 / 0	8.89	8.70	H2	17.59	0.057	-15.42
2510.00	20	16-QAM	Standard	1 / 0	10.90	8.66	H2	19.56	0.090	-13.45
2535.00	20	16-QAM	Standard	1 / 0	10.06	8.68	H2	18.74	0.075	-14.27
2560.00	20	16-QAM	Standard	1 / 0	7.93	8.70	H2	16.63	0.046	-16.38

Table 6-6. EIRP Data (Band 7)

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configurations are shown in the tables above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst case configuration was found with the EUT in the V position for LTE bands 4, 2 and in the H2 position for LTE band 7. The data reported in the table above was measured in this test setup.

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6.4 Band 17 Radiated Spurious Emissions §2.1053 §27.53(g)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 709.0		00	MHz
MEASURED OUTPUT POWER:	17.34	dBm =	0.054 W
MODULATION SIGNAL:	QPSK		
BANDWIDTH:	10 MHz		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log ₁₀ (W) =	30.34	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
1418.00	-46.48	5.85	-40.63	Н	57.97
2127.00	-59.70	6.73	-52.97	Н	70.32
2836.00	-85.74	8.03	-77.71	Н	95.05
3545.00	-83.08	7.67	-75.41	Н	92.75
4254.00	-82.32	8.56	-73.76	Н	91.11
4963.00	-80.95	8.91	-72.04	Н	89.38

Table 6-7. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing up on its sole, and the "U" positioning is defined with the EUT standing up on its sole. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 17 Radiated Spurious Measurements (continued) §2.1053 §27.53(g)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	710.00		MHz
MEASURED OUTPUT POWER:	17.48	dBm =	0.056 W
MODULATION SIGNAL:	QPSK		
BANDWIDTH:	10 MHz		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log ₁₀ (W) =	30.48	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
1420.00	-53.53	5.88	-47.64	Н	65.12
2130.00	-59.69	6.79	-52.90	Н	70.38
2840.00	-85.58	7.99	-77.59	Н	95.07
3550.00	-83.03	7.69	-75.34	Н	92.82
4260.00	-82.33	8.58	-73.75	Н	91.23
4970.00	-80.89	8.90	-71.99	Н	89.47

Table 6-8. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 17 Radiated Spurious Measurements (continued) §2.1053 §27.53(g)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 711.0		00	MHz
MEASURED OUTPUT POWER:	17.56	dBm =	<u>0.057</u> W
MODULATION SIGNAL:	QPSK		
BANDWIDTH:	10 MHz		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log ₁₀ (W) =	30.56	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
1422.00	-54.43	5.92	-48.52	Н	66.08
2133.00	-59.27	6.86	-52.42	Н	69.98
2844.00	-85.42	7.96	-77.46	Н	95.02
3555.00	-82.98	7.71	-75.27	Н	92.83
4266.00	-82.31	8.60	-73.70	Н	91.27
4977.00	-80.83	8.89	-71.94	Н	89.51

Table 6-9. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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6.5 Band 5 Radiated Spurious Emissions §2.1053 §22.917(a) RSS-132(4.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	826.50		MHz
MEASURED OUTPUT POWER:	20.19	dBm =	<u>0.105</u> W
MODULATION SIGNAL:	QPSK		
BANDWIDTH:	5 MHz		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log ₁₀ (W) =	33.19	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
1653.00	-51.71	6.72	-44.99	Н	65.18
2479.50	-58.81	7.46	-51.35	н	71.55
3306.00	-83.30	7.33	-75.98	Н	96.17
4132.50	-81.91	8.31	-73.60	Н	93.79
4959.00	-80.88	8.90	-71.98	Н	92.18
5785.50	-78.84	9.45	-69.39	н	89.58

Table 6-10. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing up on its sole, and the "U" positioning is defined with the EUT standing up on its sole. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 5 Radiated Spurious Measurements (continued) §2.1053 §22.917(a) RSS-132(4.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	836.50		MHz
MEASURED OUTPUT POWER:	21.59	dBm =	<u>0.144</u> W
MODULATION SIGNAL:	QPSK		
BANDWIDTH:	5 MHz		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log ₁₀ (W) =	34.59	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
1673.00	-44.18	6.71	-37.47	Н	59.07
2509.50	-50.06	7.49	-42.56	Н	64.16
3346.00	-83.25	7.36	-75.89	Н	97.48
4182.50	-82.15	8.45	-73.70	Н	95.29
5019.00	-80.69	8.87	-71.82	Н	93.41
5855.50	-78.67	9.48	-69.19	Н	90.78

Table 6-11. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 5 Radiated Spurious Measurements (continued) §2.1053 §22.917(a) RSS-132(4.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	846.50		MHz
MEASURED OUTPUT POWER:	22.17	dBm =	0.165W
MODULATION SIGNAL:	QPSK		
BANDWIDTH:	5 MHz		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log ₁₀ (W) =	35.17	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
1693.00	-42.38	6.69	-35.69	Н	57.86
2539.50	-47.80	7.51	-40.29	н	62.46
3386.00	-83.20	7.40	-75.80	Н	97.97
4232.50	-82.29	8.53	-73.76	Н	95.93
5079.00	-80.37	8.82	-71.55	Н	93.72
5925.50	-78.46	9.49	-68.97	Н	91.14

Table 6-12. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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6.6 Band 4 Radiated Spurious Emissions §2.1053 §27.53(h) RSS-139(6.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1715.00		MHz
MEASURED OUTPUT POWER:	25.47	dBm =	W
MODULATION SIGNAL:	QPSK		
BANDWIDTH:	10 MHz		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log ₁₀ (W) =	38.47	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
3430.00	-55.80	9.62	-46.17	Н	71.64
5145.00	-83.32	10.86	-72.46	Н	97.93
6860.00	-81.77	11.93	-69.84	Н	95.31
8575.00	-76.26	11.17	-65.10	Н	90.57
10290.00	-75.41	12.29	-63.12	Н	88.59
12005.00	-44.94	12.64	-32.30	Н	57.77

Table 6-13. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing up on its sole, and the "U" positioning is defined with the EUT standing up on its sole. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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Band 4 Radiated Spurious Measurements (continued) §2.1053 §27.53(h) RSS-139(6.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1732.50)	MHz
MEASURED OUTPUT POWER:	24.96	dBm =	0.313W
MODULATION SIGNAL:	QPSK		
BANDWIDTH:	10 MHz		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log ₁₀ (W) =	37.96	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
3465.00	-57.03	9.71	-47.31	Н	72.27
5197.50	-82.86	10.73	-72.13	Н	97.09
6930.00	-81.48	11.96	-69.51	Н	94.47
8662.50	-75.95	11.09	-64.86	Н	89.82
10395.00	-75.90	12.51	-63.39	Н	88.35
12127.50	-73.50	12.96	-60.54	Н	85.49

Table 6-14. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 4 Radiated Spurious Measurements (continued) §2.1053 §27.53(h) RSS-139(6.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1750.00		MHz
MEASURED OUTPUT POWER:	24.06	dBm =	0.255W
MODULATION SIGNAL:	QPSK		
BANDWIDTH:	10 MHz		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log ₁₀ (W) =	37.06	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
3500.00	-57.69	9.80	-47.89	Н	71.96
5250.00	-82.78	10.77	-72.01	Н	96.07
7000.00	-81.15	11.96	-69.19	н	93.26
8750.00	-75.58	10.99	-64.59	Н	88.66
10500.00	-75.85	12.55	-63.30	Н	87.36
12250.00	-73.91	13.30	-60.61	Н	84.67

Table 6-15. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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6.7 Band 2 Radiated Spurious Emissions §2.1053 §24.238(a) RSS-133(6.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1857.50		MHz
MEASURED OUTPUT POWER:	23.69	dBm =	0.234 W
MODULATION SIGNAL:	QPSK		
BANDWIDTH:	15 MHz		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log ₁₀ (W) =	36.69	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
3715.00	-52.51	9.49	-43.02	Н	66.71
5572.50	-53.78	10.99	-42.80	Н	66.49
7430.00	-78.35	11.01	-67.34	Н	91.02
9287.50	-75.97	11.56	-64.41	Н	88.10
11145.00	-74.73	12.88	-61.85	Н	85.54
13002.50	-71.53	13.21	-58.32	Н	82.00

Table 6-16. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing up on its sole, and the "U" positioning is defined with the EUT standing up on its sole. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 2 Radiated Spurious Measurements (continued) §2.1053 §24.238(a) RSS-133(6.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1880.00	0	MHz
MEASURED OUTPUT POWER:	23.28	dBm =	<u>0.213</u> W
MODULATION SIGNAL:	QPSK		
BANDWIDTH:	15 MHz	_	
DISTANCE:	3	meters	
LIMIT:	43 + 10 log ₁₀ (W) =	36.28	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
3760.00	-53.72	9.34	-44.38	Н	67.66
5640.00	-55.84	11.20	-44.64	Н	67.92
7520.00	-78.41	11.19	-67.23	Н	90.51
9400.00	-75.72	11.60	-64.13	Н	87.41
11280.00	-74.33	12.78	-61.55	Н	84.83
13160.00	-70.12	12.83	-57.29	Н	80.58

Table 6-17. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 2 Radiated Spurious Measurements (continued) §2.1053 §24.238(a) RSS-133(6.5.1)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	1902.50		MHz
MEASURED OUTPUT POWER:	23.20	dBm =	0.209 W
MODULATION SIGNAL:	QPSK		
BANDWIDTH:	15 MHz		
DISTANCE:	3	meters	
LIMIT:	43 + 10 log ₁₀ (W) =	36.20	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
3805.00	-52.42	9.24	-43.18	Н	66.38
5707.50	-54.83	11.40	-43.43	Н	66.63
7610.00	-78.54	11.37	-67.17	Н	90.37
9512.50	-75.84	11.79	-64.05	Н	87.25
11415.00	-74.54	12.85	-61.69	Н	84.88
13317.50	-69.58	12.57	-57.00	Н	80.20

Table 6-18. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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6.8 Band 7 Radiated Spurious Emissions §2.1053 §27.53(m)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	2505	.00	MHz
MEASURED OUTPUT POWER:	21.82	dBm =	0.152 W
MODULATION SIGNAL:	QPSK		
BANDWIDTH:	10 MHz		
DISTANCE:	3	meters	
LIMIT:	55 + 10 log ₁₀ (W) =	46.82	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
5010.00	-56.22	11.03	-45.19	Н	67.01
7515.00	-78.40	11.18	-67.23	н	89.04
10020.00	-74.87	12.02	-62.85	Н	84.67
12525.00	-74.33	13.70	-60.63	н	82.44
15030.00	-69.27	13.48	-55.79	Н	77.61
17535.00	-61.08	11.39	-49.69	Н	71.51

Table 6-19. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 7 Radiated Spurious Measurements (continued) §2.1053 §27.53(m)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	2535.00)	MHz
MEASURED OUTPUT POWER:	19.48	dBm =	0.089 W
MODULATION SIGNAL:	QPSK	-	
BANDWIDTH:	10 MHz		
DISTANCE:	3	meters	
LIMIT:	55 + 10 log ₁₀ (W) =	44.48	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
5070.00	-57.86	10.96	-46.90	Н	66.38
7605.00	-78.53	11.34	-67.19	Н	86.66
10140.00	-75.07	12.12	-62.95	Н	82.43
12675.00	-74.45	13.80	-60.65	Н	80.13
15210.00	-70.98	14.49	-56.49	Н	75.97
17745.00	-58.51	10.18	-48.33	Н	67.81

Table 6-20. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 7 Radiated Spurious Measurements (continued) §2.1053 §27.53(m)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	2565	.00	MHz
MEASURED OUTPUT POWER:	17.84	dBm =	0.061 W
MODULATION SIGNAL:	QPSK	_	
BANDWIDTH:	10 MHz	_	
DISTANCE:	3	meters	
LIMIT:	55 + 10 log ₁₀ (W) =	42.84	dBc

FREQUENCY (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	SPURIOUS EMISSION LEVEL (dBm)	POL (H/V)	(dBc)
5130.00	-57.30	10.87	-46.43	Н	64.27
7695.00	-78.59	11.48	-67.11	н	84.95
10260.00	-75.40	12.29	-63.11	Н	80.95
12825.00	-73.37	13.55	-59.82	Н	77.66
15390.00	-71.32	15.45	-55.87	Н	73.71
17955.00	-56.88	9.54	-47.33	Н	65.17

Table 6-21. Radiated Spurious Data

NOTES:

- 1. This device was tested under all bandwidths, and RB configurations, and modulations. The worst case configuration is shown in the table above.
- 2. This unit was tested with its standard battery.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The "H" positioning is defined with the EUT lying flat on the test surface, the "H2" positioning is defined with the EUT standing up on its side, and the "V" positioning is defined with the EUT standing upright. The worst configuration was found with the EUT in the H position. The data reported in the table above was measured in this test setup.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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6.9 Band 17 Frequency Stability Measurements §2.1055 §22.355 §27.54

OPERATING FREQUENCY: 710,000,000 Hz

CHANNEL: 23090

 REFERENCE VOLTAGE:
 3.8
 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	+ 20 (Ref)	710,000,003	3	0.0000004
100 %		- 30	709,999,989	-11	-0.0000015
100 %		- 20	709,999,991	-9	-0.0000013
100 %		- 10	709,999,998	-2	-0.0000003
100 %		0	710,000,001	1	0.0000001
100 %		+ 10	710,000,003	3	0.0000004
100 %		+ 20	709,999,992	-8	-0.0000011
100 %		+ 30	709,999,991	-9	-0.0000013
100 %		+ 40	709,999,999	-1	-0.0000001
100 %		+ 50	709,999,985	-15	-0.0000021
115 %	4.37	+ 20	710,000,002	2	0.0000003
BATT. ENDPOINT		+ 20	709,999,997 Stability Data (Br	-3	-0.0000004

Table 6-22. Frequency Stability Data (Band 17)

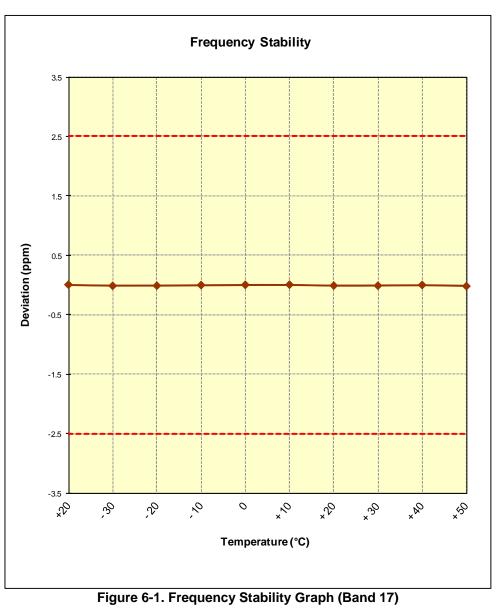
Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain inband when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 17 Frequency Stability Measurements (Cont'd) §2.1055 §22.355 §27.54



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6.10 Band 5 Frequency Stability Measurements

§2.1055 §22.355 RSS-132(4.3)

OPERATING FREQUENCY: 836,500,000 Hz

CHANNEL: 20525

REFERENCE VOLTAGE: 3.8 VDC

DEVIATION LIMIT: ±0.00025 % or 2.5 ppm

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	+20 (Ref)	836,499,990	-10	-0.0000012
100 %		- 30	836,499,987	-13	-0.0000016
100 %		- 20	836,500,002	2	0.0000002
100 %		- 10	836,500,000	0	0.0000000
100 %		0	836,499,996	-4	-0.0000005
100 %		+ 10	836,499,989	-11	-0.0000013
100 %		+ 20	836,499,994	-6	-0.0000007
100 %		+ 30	836,500,000	0	0.0000000
100 %		+ 40	836,500,004	4	0.0000005
100 %		+ 50	836,500,004	4	0.0000005
115 %	4.37	+ 20	836,499,993	-7	-0.0000008
BATT. ENDPOINT	3.40	+ 20	836,499,995	-5	-0.0000006

Table 6-23. Frequency Stability Data (Band 5)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain inband when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 5 Frequency Stability Measurements (Cont'd) §2.1055 §22.355 RSS-132(4.3)

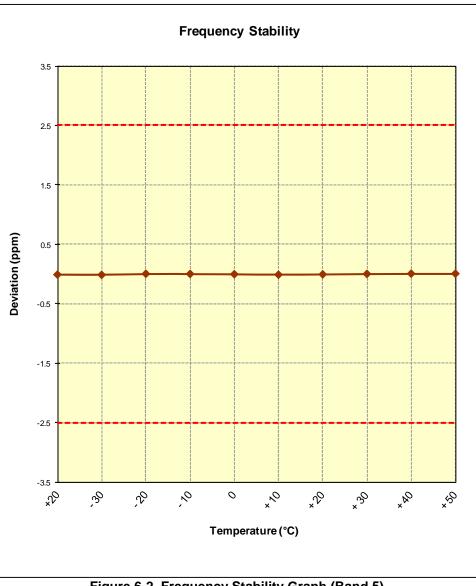


Figure 6-2. Frequency Stability Graph (Band 5)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 4 Frequency Stability Measurements 6.11 §2.1055 §§27.54 RSS-139(6.3)

OPERATING FREQUENCY: 1,732,500,000 Hz

CHANNEL: 20175

REFERENCE VOLTAGE: 3.8 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	+20 (Ref)	1,732,499,994	-6	-0.0000003
100 %		- 30	1,732,500,001	1	0.0000001
100 %		- 20	1,732,499,989	-11	-0.0000006
100 %		- 10	1,732,499,987	-13	-0.0000008
100 %		0	1,732,499,987	-13	-0.0000008
100 %		+ 10	1,732,499,999	-1	-0.0000001
100 %		+ 20	1,732,499,994	-6	-0.0000003
100 %		+ 30	1,732,499,998	-2	-0.0000001
100 %		+ 40	1,732,499,994	-6	-0.0000003
100 %		+ 50	1,732,499,985	-15	-0.0000009
115 %	4.37	+ 20	1,732,500,003	3	0.0000002
BATT. ENDPOINT		+ 20	1,732,499,997	-3	-0.0000002

Table 6-24. Frequency Stability Data (Band 4)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain inband when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 4 Frequency Stability Measurements (Cont'd) §2.1055 §§27.54 RSS-139(6.3)

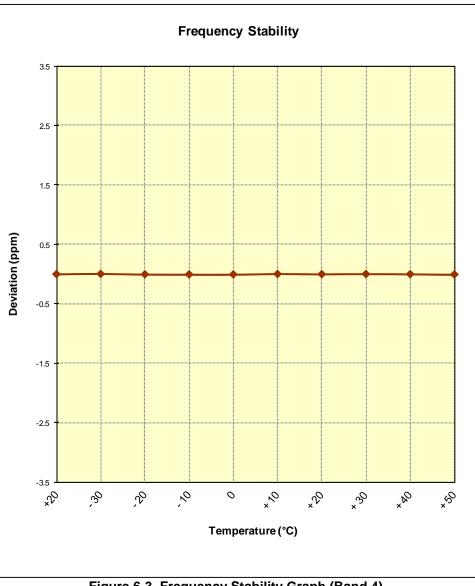


Figure 6-3. Frequency Stability Graph (Band 4)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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6.12 Band 2 Frequency Stability Measurements §2.1055 §24.235 RSS-133(6.3)

OPERATING FREQUENCY: 1,880,000,000 Hz

CHANNEL: 18900

REFERENCE VOLTAGE: 3.8 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	+20 (Ref)	1,880,000,002	2	0.0000001
100 %		- 30	1,879,999,991	-9	-0.0000005
100 %		- 20	1,880,000,001	1	0.0000001
100 %		- 10	1,879,999,987	-13	-0.0000007
100 %		0	1,879,999,993	-7	-0.0000004
100 %		+ 10	1,880,000,001	1	0.0000001
100 %		+ 20	1,879,999,991	-9	-0.0000005
100 %		+ 30	1,879,999,994	-6	-0.0000003
100 %		+ 40	1,879,999,989	-11	-0.0000006
100 %		+ 50	1,880,000,004	4	0.0000002
115 %	4.37	+ 20	1,879,999,986	-14	-0.0000007
BATT. ENDPOINT		+ 20	1,880,000,002 (Stability Data (B	2	0.0000001

 Table 6-25. Frequency Stability Data (Band 2)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain inband when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 2 Frequency Stability Measurements (Cont'd) §2.1055 §24.235 RSS-133(6.3)

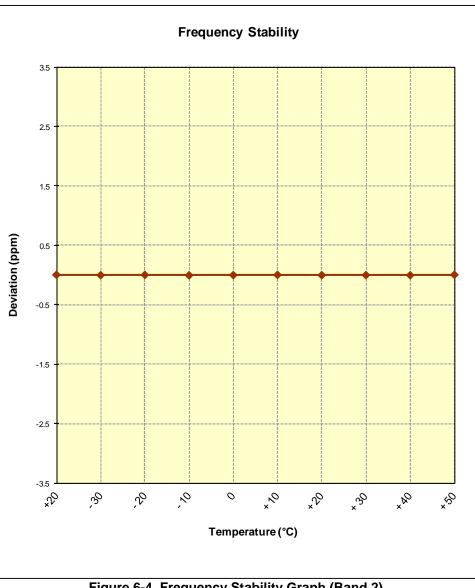


Figure 6-4. Frequency Stability Graph (Band 2)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 7 Frequency Stability Measurements 6.13 §2.1055 §27.5(i) §27.54

OPERATING FREQUENCY: 2,535,000,000 Ηz

> CHANNEL: 2655

REFERENCE VOLTAGE: 3.8 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	+20 (Ref)	2,534,999,993	-7	-0.0000003
100 %		- 30	2,534,999,984	-16	-0.0000006
100 %		- 20	2,534,999,989	-11	-0.0000004
100 %		- 10	2,535,000,002	2	0.0000001
100 %		0	2,535,000,004	4	0.0000002
100 %		+ 10	2,534,999,984	-16	-0.0000006
100 %		+ 20	2,535,000,002	2	0.0000001
100 %		+ 30	2,534,999,994	-6	-0.0000002
100 %		+ 40	2,535,000,000	0	0.0000000
100 %		+ 50	2,534,999,986	-14	-0.0000006
115 %	4.37	+ 20	2,534,999,996	-4	-0.0000002
BATT. ENDPOINT		+ 20	2,535,000,001	1	0.0000000

Table 6-26. Frequency Stability Data (Band 7)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain inband when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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Band 7 Frequency Stability Measurements (Cont'd) §2.1055 §27.5(i) §27.54

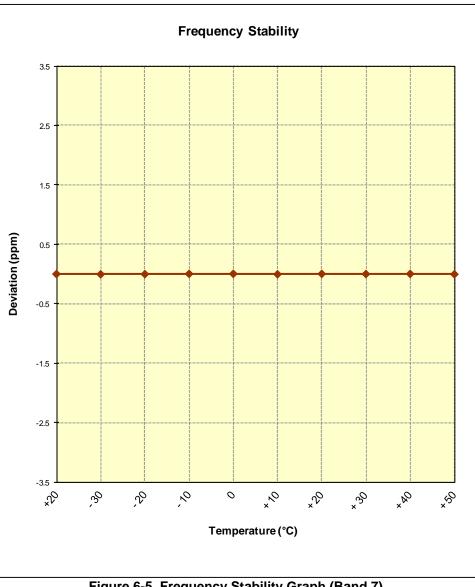


Figure 6-5. Frequency Stability Graph (Band 7)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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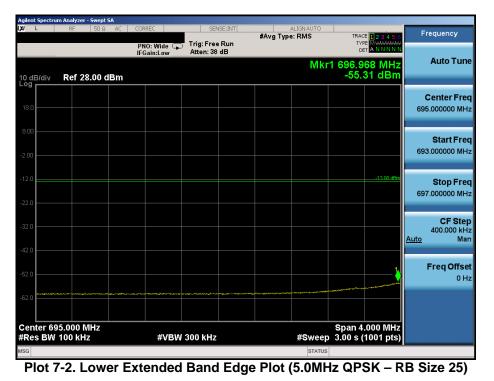


BAND 17 PLOTS OF EMISSIONS 7.0

Note: All bandwidths, RB configurations, and modulations were investigated. The worst case test results are reported below.



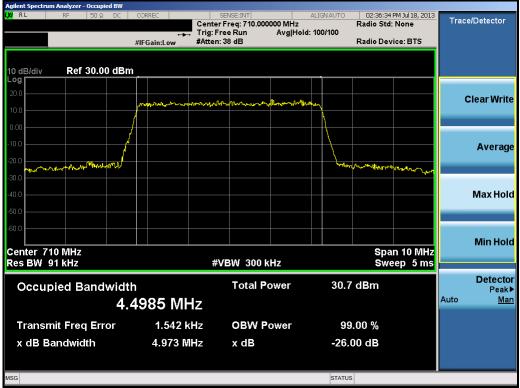
Plot 7-1. Lower Band Edge Plot (5.0MHz QPSK - RB Size 25)



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Plot 7-3. Occupied Bandwidth Plot (5.0MHz QPSK - RB Size 25)



Plot 7-4. Occupied Bandwidth Plot (5.0MHz 16-QAM - RB Size 25)

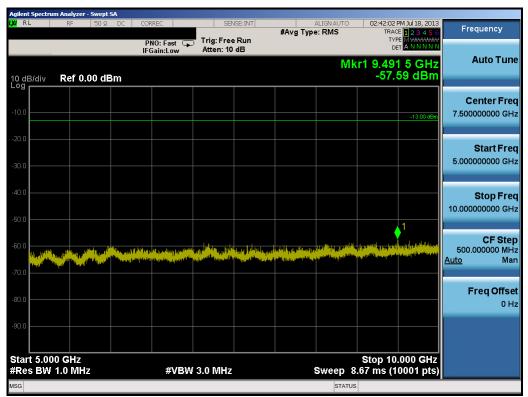
FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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<mark>X/ RL</mark> RF 50Ω D	CORREC	SENSE:INT	#Avg Type:	LIGN AUTO RMS	02:41:37 PM Jul 18, 2 TRACE 1 2 3 4 TYPE MWWW DET A N N N	56 Frequency
10 dB/div Ref 28.00 dBr	IFGain:Low	Atten: 38 dB		Mkr1 4	.980 617 GI -31.05 dB	Iz Auto Tun
18.0						Center Fre 2.515000000 G⊢
-2.00						Start Fre 30.000000 M⊦
-12.0					-13.00	5.000000000 GH
-32.0		يان بار بنومار الموارد .	1. Marilan Marina			CF Ste 497.000000 MH Auto Ma
-42.0 Hydron (blad free dynaffree dag -52.0	yn fywrai yn far wyn farfef fil yn a gyn y yn bref yn byf yn far Yn argenn Swyrg (eu yn y Ammerikau Alfref y Ammerikau Alfref yn y	y a province of the second	<u>ya katan dali dikilik katika ayon ya</u> ka			Freq Offs 0 H
-62.0					Stop 5 000 O	
Start 30 MHz #Res BW 1.0 MHz	#VBW	3.0 MHz	S	weep 8.6	Stop 5.000 G 7 ms (10001 p	its)

Plot 7-5. Conducted Spurious Plot (5.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-6. Conducted Spurious Plot (5.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

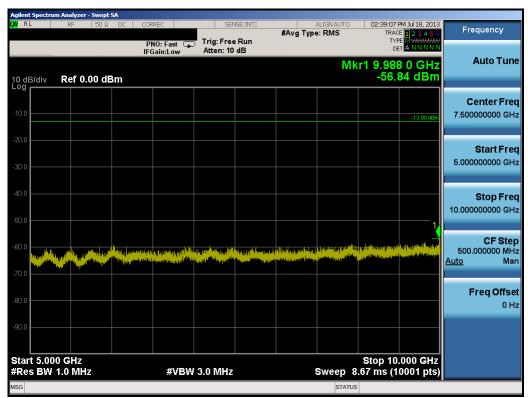
FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
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KIRL RF 50Ω DC	PNO: Fast 😱 Trig	: Free Run	ALIGN AUTO Avg Type: RMS	02:38:41 PM Jul 18, 2013 TRACE 123456 TYPE MWWWWW DET ANNNNN	Frequency
10 dB/div Ref 28.00 dBm	II Gam.Low	en: 38 dB	Mkr1	3.800 242 GHz -30.69 dBm	Auto Tun
18.0					Center Fre 2.515000000 G⊦
2.00					Start Fre 30.000000 MH
12.0				-13.00.dBm	Stop Fre 5.000000000 GH
32.0		والعربة المرابعة والمرابع	ferstillen steller		CF Ste 497.000000 Mi <u>Auto</u> Mi
42.0 <u>Maglatin the fairs billing a part</u> 52.0	n in ander en en fan fan in de geskeren in de seren en e	1994) (1994) - 2014 (1994) (19			Freq Offs 0 F
62.0				Stop 5 000 CH	
Res BW 1.0 MHz	#VBW 3.0 I	MHz	Sweep 8	Stop 5.000 GHz .67 ms (10001 pts)	

Plot 7-7. Conducted Spurious Plot (5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-8. Conducted Spurious Plot (5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

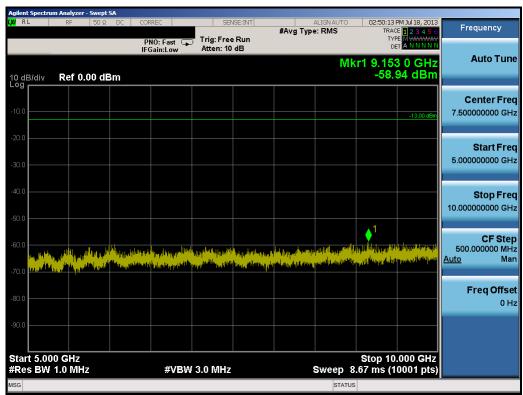
FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 46 of 129
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 46 of 138
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XIRL RF 50ΩDC	PNO: Fast 😱 Trig: Free Run		0:07 PM Jul 18, 2013 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET A N N N N N	ncy
10 dB/div Ref 28.00 dBm	IFGain:Low Atten: 38 dB	Mkr1 4.04		o Tun
18.0			Cente 2.5150000	
2.00			Sta 30.0000	rt Fre
22.0			<u>-43.00 dBm</u> Sto 5.0000000	p Fre 100 GH
32.0			Apple America Apple 1 Apple America Apple 1 Apple America Apple 1 Auto	F Ste 00 MI Mi
	ng kan bag sa ng kalang ng kang sa kan Ng kang sa kang Ng kang sa kang	na n	Freq	Offs 0 I
62.0		Sto	p 5.000 GHz	
Res BW 1.0 MHz	#VBW 3.0 MHz	Sweep 8.67 ms	(10001 pts)	

Plot 7-9. Conducted Spurious Plot (5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-10. Conducted Spurious Plot (5.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 47 of 129
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Agilent Spectrum Analyzer - Swept SA	CORREC	CNCCUNT		ALIGN AUTO	00/51/00 PM 3/110, 2010	
LX/RL RF 50Ω DC		ENSE:INT	#Avg Type		02:51:00 PM Jul 18, 2013 TRACE 1 2 3 4 5 6 TYPE MWWWWW	Frequency
10 dB/div Ref 28.00 dBm	PNO: Wide PT Trig: Fr IFGain:Low Atten: 3			Mkr	1 716.004 MHz -24.99 dBm	Auto Tune
18.0						Center Freq 716.000000 MHz
8.00 mm						Start Fred 715.000000 MHz
-12.0		1			-13.00 dBm	Stop Freq 717.000000 MHz
-32.0				a — — Ar Parla an Ardeniadaar	an an a star an	CF Step 200.000 kH: <u>Auto</u> Mar
-52.0						Freq Offset 0 Hz
-62.0						
Center 716.000 MHz #Res BW 100 kHz	#VBW 300 kH	z		#Sweep	Span 2.000 MHz 1.00 s (1001 pts)	
MSG				STATUS		





Plot 7-12. Upper Extended Band Edge Plot (5.0MHz QPSK – RB Size 25)

FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 49 of 129
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Agilent Spectrum Analyzer - 9	-								
XIL RF	50 Ω AC	CORREC	SEN	ISE:INT	#Avg Typ	ALIGNAUTO	TRAC	E 123456	Frequency
		PNO: Fast 🖵 IFGain:Low	Trig: Free Atten: 38				TYP		
10 dB/div Ref 28.	00 dBm					Mk	r1 697. -43.	70 MHz 99 dBm	Auto Tun
18.0									Center Fre 698.000000 MH
2.00								marka an	Start Fre 688.000000 M⊦
22.0								-13.00.dBm	Stop Fre 708.000000 M⊢
12.0					and the state of the		{		CF Ste 2.000000 M⊦ <u>Auto</u> Ma
52.0				x.d					Freq Offs 0 F
62.0 Center 698.00 MH:	Z	nutra (d.a. nu grand a					Span 2	0.00 MHz 1001 pts)	
Res BW 100 kHz		#VBW	300 kHz				1.00 s (1001 pts)	
SG						STATUS			

Plot 7-13. Lower Band Edge Plot (10.0MHz QPSK – RB Size 50)

-62.0	,	,		aga gang an ar an an an di malan di an Pang	₩₽₽ ₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽							
-52.0							and and a start water and		and the second se			0 Hz
-42.0										1	En	eq Offse
-32.0											40 <u>Auto</u>	0.000 kH: Mar
-22.0												CF Step
												top Fre
-12.0										-13.00 dBm		
-2.00												tart Free
8.00												
18.0												nter Free
10 dB/div Log	Ref 2	8.00 dBn	n					Mkr	1 697.0 -47.1	00 MHz 70 dBm	A	
			PNO: IFGai	Wide 🖵 n:Low	Trig: Free Atten: 38			D.d.Lene			А	uto Tur
	RF	50 Ω AC	CORRE			NSE:INT	#Avg Typ	e: RMS	TRAC	E 123456	Freq	uency

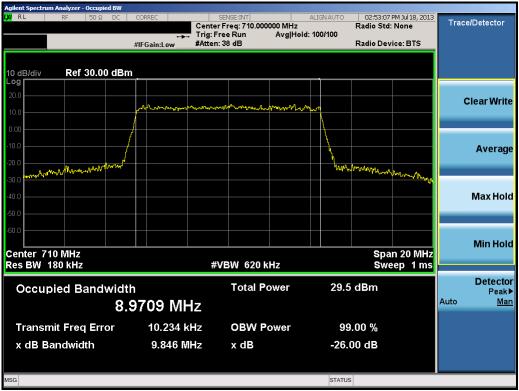
Plot 7-14. Lower Extended Band Edge Plot (10.0MHz QPSK – RB Size 50)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 40 of 120
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Plot 7-15. Occupied Bandwidth Plot (10.0MHz QPSK - RB Size 50)



Plot 7-16. Occupied Bandwidth Plot (10.0MHz 16-QAM - RB Size 50)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 50 of 138
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PNO: Wide Trig: Free Run Atten: 38 dB #Avg Type: RMS Trace Type: RMS Prequency 0 dB/div Ref 28.00 dBm Center Free 716.0004 MHz Center Free 120	Agilent Spectrum Analyzer - Swept SA	CORREC SE	ALCE JAIT			00-00-55 PM 3-410-2012	
IFGaintLow Atten: 38 dB Det ANNNU Mikr1 716.0004 MHz -31.78 dBm -31.78 dBm 0 dB/div Ref 28.00 dBm -31.78 dBm Center Fre 180 -31.78 dBm -31.78 dBm Start Fre 200 -31.78 dBm -31.78 dBm Start Fre 201 -31.78 dBm -31.78 dBm Start Fre 202 -31.78 dBm -31.78 dBm Start Fre 210 -31.78 dBm -31.78 dBm Start Fre 220 -31.78 dBm -31.78 dBm -31.78 dBm 220 -31.78 dBm -31.78 dBm -31.78 dBm 220 -31.78 dBm -31.78 dBm -31.78 dBm 230 -31.78 dBm -31.78 dBm -31.78 dBm 240.000 MH2 -31.78 dBm -31.78 dBm	🗶 RL RF 50Ω DC					03:00:56 PM Jul 18, 2013 TRACE 123456	Frequency
0 Center Free 180 Center Free 200 Start Free 201 Start Free 202 Start Free 203 Start Free 204 Start Free 205 Start Free 206 Start Free 207 Start Free 208 Start Free 209 Start Free 200 Start Free 201 Start Free 202 Start Free 203 Start Free 204 Start Free 205 Start Free 206 Start Free 207 Start Free 208 Start Free 209 Start Free 200 Start Free 201 Start Free 202 Start Free </th <th></th> <th></th> <th></th> <th></th> <th>Mkr</th> <th>DET A N N N N N</th> <th></th>					Mkr	DET A N N N N N	
1100 11000 11000 11000 11000 11000 11000 110000 1100000 1100000 1100000 1100000 11000000 11000000 110000000000000 1100000000000000000000000000000000000	10 dB/div Ref 28.00 dBm					-31.78 dBm	
Start Fre 200 120 120 120 120 120 120 120	18.0						Center Freq 716.000000 MHz
1100 1	-2.00						Start Freq 714.000000 MHz
320 320 400.000 kH 420 400.000 kH 520 520 620 520 <t< td=""><td>-12.0</td><td></td><td></td><td></td><td></td><td>-13 00 dBm</td><td>Stop Freq 718.000000 MHz</td></t<>	-12.0					-13 00 dBm	Stop Freq 718.000000 MHz
62.0 Freq Offse	-32.0	\	1	····	nto provide the state of the state of the	under de sample de la constante	CF Step 400.000 kHz <u>Auto</u> Mar
Span 4.000 MHz Span 4.000 MHz Res BW 100 kHz #VBW 300 kHz #Sweep 1.00 s (1001 pts)	-42.0						Freq Offset 0 Hz
#Res BW 100 kHz #VBW 300 kHz #Sweep 1.00 s (1001 pts)	-62.0						
	Center 716.000 MHz #Res BW 100 kHz	#VBW 300 kH;	,		#Sweep	Span 4.000 MHz 1.00 s (1001 pts)	
SG STATUS	MSG				STATUS	, i con proj	





Plot 7-18. Upper Extended Band Edge Plot (10.0MHz QPSK – RB Size 50)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 51 of 138
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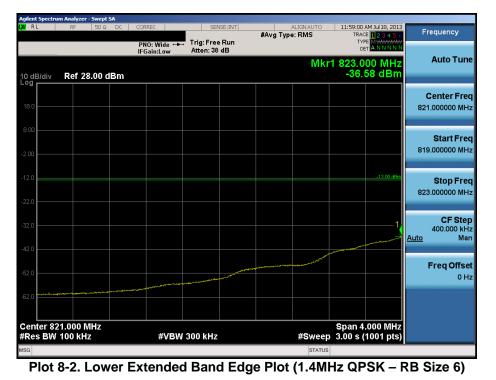


8.0 BAND 5 PLOTS OF EMISSIONS

Note: All bandwidths, RB configurations, and modulations were investigated. The worst case test results are reported below.



Plot 8-1. Lower Band Edge Plot (1.4MHz QPSK - RB Size 6)



FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 52 of 129
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Plot 8-3. Occupied Bandwidth Plot (1.4MHz QPSK - RB Size 6)



Plot 8-4. Occupied Bandwidth Plot (1.4MHz 16-QAM - RB Size 6)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 52 of 129
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Agilent Spectrum Analyzer - Swept SA						1
LXX RL RF 50Ω DC		NSE:INT	#Avg Type	ALIGN AUTO	12:00:42 PM Jul 18, 2013 TRACE 1 2 3 4 5 6 TYPE MWWWWW	Frequency
	PNO: Wide 🖵 Trig: Fre IFGain:Low Atten: 3	e Run 3 dB		Mkr	TYPE A N N N N DET A N N N N N 1 849.000 MHz -19.102 dBm	Auto Tune
10 dB/div Ref 28.00 dBm						Center Freq 849.000000 MHz
-2.00						Start Freq 848.000000 MHz
-12.0		1			-13.00.dBm	Stop Freq 850.000000 MHz
-32.0				and the second second		CF Step 200.000 kHz <u>Auto</u> Mar
-52.0						Freq Offset 0 Hz
-62.0					Spop 2 000 Milia	
Center 849.000 MHz #Res BW 100 kHz	#VBW 300 kHz			#Sweep	Span 2.000 MHz 1.00 s (1001 pts)	
MSG				STATUS		





Plot 8-6. Upper Extended Band Edge Plot (1.4MHz QPSK – RB Size 6)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 54 of 138
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Agilent Spectrum Analyzer - Swept SA	CORREC	SENSE:INT	ALIGNAUTO	12:17:59 PM Jul 18, 2013	
	_		#Avg Type: RMS	TRACE 123456 TYPE MWWWW	Frequency
10 dB/div Ref 28.00 dBm		rig: Free Run Atten: 38 dB	Mk	r1 824.000 MHz -18.533 dBm	Auto Tune
18.0					Center Freq 824.000000 MHz
-2.00					Start Fred 823.000000 MHz
-12.0		1		-13.00.dBm	Stop Freq 825.000000 MHz
-32.0					CF Step 200.000 kH: <u>Auto</u> Mar
-42.0					Freq Offse 0 H
-62.0					
Center 824.000 MHz #Res BW 100 kHz	#VBW 30	10 kHz	#Swee	Span 2.000 MHz 5 1.00 s (1001 pts)	
MSG			STATUS	3	





Plot 8-8. Lower Extended Band Edge Plot (3.0MHz QPSK – RB Size 15)

FCC ID: PY7PM-0430	A PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager		
Test Report S/N:	Test Dates:	EUT Type:		Page 55 of 138		
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Plot 8-9. Occupied Bandwidth Plot (3.0MHz QPSK - RB Size 15)



Plot 8-10. Occupied Bandwidth Plot (3.0MHz 16-QAM – RB Size 15)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage EC of 129
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gilent Spectrum Analyzer - Swept SA <mark>0</mark> RL RF 50 Ω DC	CORREC	SENSE:INT	ALIGN #Avg Type: RM	AUTO 12:19:39 F	M Jul 18, 2013	Frequency
	PNO: Wide 🖵 IFGain:Low) Trig: Free Run Atten: 38 dB		TYP	123456 M ******** TANNNNN	
	IFGain:Low	Atten: 00 GB		Mkr1 849.0		Auto Tun
0 dB/div Ref 28.00 dBm				-20.7	0 dBm	
						Center Fre
18.0						849.000000 MH
8.00						
8.00						Start Fre
2.00		<u>}</u>				848.000000 MH
12.0		1			-13.00.dBm	Stop Fre
22.0		X				850.000000 MH
						CF Ste
32.0						200.000 kł
42.0						<u>Auto</u> Ma
						Freq Offs
52.0						01
62.0						
04.0						
Center 849.000 MHz				Snan 2	000 MHz	
Res BW 100 kHz	#VBW	300 kHz	#\$	Span 2. weep 1.00 s (*	1001 pts)	
SG				STATUS		





Plot 8-12. Upper Extended Band Edge Plot (3.0MHz QPSK – RB Size 15)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 57 of 129
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Agilent Spectrum Analyzer - Swept SA						
LXURL RF 50Ω DC		SENSE:INT	#Avg Typ	ALIGNAUTO e: RMS	12:29:12 PM Jul 18, 2013 TRACE 1 2 3 4 5 6 TYPE MWWWWW	Frequency
10 dB/div Ref 28.00 dBm	PNO: Wide 🖵 Trig: Fr IFGain:Low Atten:	ree Run 38 dB		Mkr	TYPE MWWWWW DET ANNNNN 824.000 MHz -23.778 dBm	Auto Tune
18.0						Center Freq 824.000000 MHz
-2.00						Start Freq 823.000000 MHz
-12.0		1			-13.00 dBm	Stop Freq 825.000000 MHz
-32.0						CF Step 200.000 kHz <u>Auto</u> Mar
-42.0						Freq Offset 0 Hz
-62.0 Center 824.000 MHz					Span 2.000 MHz	
#Res BW 100 kHz	#VBW 300 kH	Iz		#Sweep	1.00 s (1001 pts)	
MSG				STATUS		





Plot 8-14. Lower Extended Band Edge Plot (5.0MHz QPSK – RB Size 25)

FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 50 of 120
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Plot 8-16. Occupied Bandwidth Plot (5.0MHz 16-QAM - RB Size 25)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 59 of 138	
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Agilent Spectrum Analyzer - Swept SA <mark>X/</mark> R L RF 50 Ω DC	CORREC	SENSE:INT		ALIGNAUTO	12:34:12 PM Jul 18, 2013	Frequency
		ree Run	#Avg Typ	e: RMS	TRACE 123456 TYPE MWWWWW DET A N N N N N	
	IFGain:Low Atten:	38 dB				
10 dB/div Ref 28.00 dBm				WKF	1 849.000 MHz -25.066 dBm	
Log						Center Free
18.0						849.000000 MH
8.00						Start Free
-2.00						848.000000 MH:
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
-12.0					-13.00 dBm	Stop Free
-22.0		<b>√</b> ¹ ——				850.000000 MH
						CF Ste
-32.0						200.000 kH Auto Ma
-42.0						
						Freq Offse
-52.0						0 H:
-62.0						
Center 849.000 MHz					Span 2.000 MHz	
#Res BW 100 kHz	#VBW 300 kF	z			1.00 s (1001 pts)	
ISG				STATUS		





Plot 8-18. Upper Extended Band Edge Plot (5.0MHz QPSK – RB Size 25)

FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 60 of 120
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Agilent Spectrum Analyzer - Swept SA XI R L RF 50 Ω DC	CORREC	SENSE:INT	#Avg Typ	ALIGN AUTO e: RMS	12:41:38 PM Jul 18, 2013 TRACE 1 2 3 4 5 6 TYPE MWWWWW	Frequency
10 dB/div Ref 28.00 dBm	PNO: Wide 🖵 IFGain:Low	Atten: 38 dB		Mkr	DET A NNNNN 1 824.000 MHz -30.287 dBm	Auto Tune
18.0						Center Fre 824.000000 MH
2.00				• <u> </u>		Start Fre 822.000000 M⊦
22.0					-13.00.dBm	Stop Fre 826.000000 M⊦
32.0	nonanosff laboration of the second	1				CF Ste 400.000 kH <u>Auto</u> Ma
52.0						Freq Offs 0 H
62.0					Span 4.000 MHz	
#Res BW 100 kHz	#VBW	300 kHz		#Sweep	Span 4.000 MHz 1.00 s (1001 pts)	





Plot 8-20. Lower Extended Band Edge Plot (10.0MHz QPSK - RB Size 50)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 61 of 138	
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 61 01 136	
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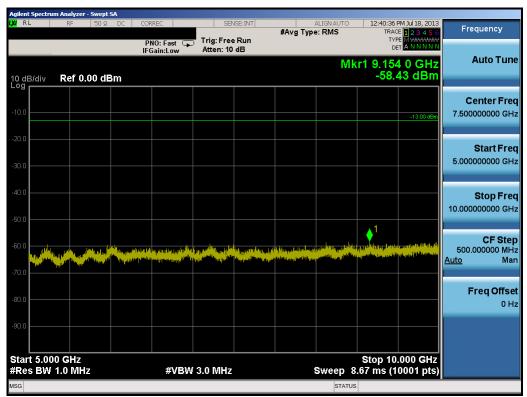
Plot 8-22. Occupied Bandwidth Plot (10.0MHz 16-QAM - RB Size 50)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Daga 62 of 129	
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Plot 8-23. Conducted Spurious Plot (10.0MHz QPSK - RB Size 1, RB Offset 0- Low Channel)



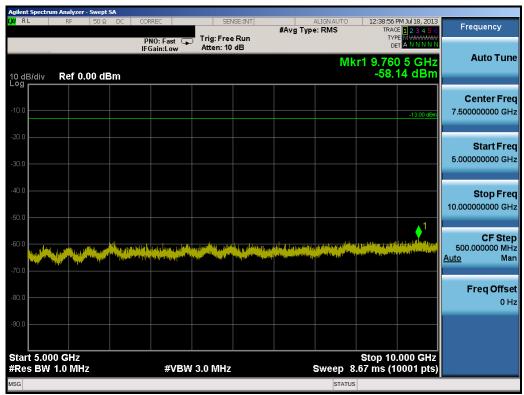
Plot 8-24. Conducted Spurious Plot (10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager		
Test Report S/N:	Test Dates:	EUT Type:		Daga 62 of 129		
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 63 of 138		
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XIRL RF 50Ω DC	CORREC SENSE:INT	ALIGNAUTO 12 #Avg Type: RMS	:38:25 PM Jul 18, 2013 TRACE 1 2 3 4 5 6 TYPE MWWWW	Frequency
10 dB/div Ref 28.00 dBm	PNO: Fast Trig: Free Run IFGain:Low Atten: 38 dB	Mkr1 3.7	67 937 GHz -30.64 dBm	Auto Tuno
18.0				<b>Center Fre</b> 2.515000000 GH
2.00				<b>Start Fre</b> 30.000000 MH
-12.0			-13.00.dBm	<b>Stop Fre</b> 5.000000000 GH
-32.0		our mediately in the local part of the local sectors of the local sector	an a la gran de la sta des para a la sta La serva y composition de la sta des para de la sta de la sta de la sta	<b>CF Ste</b> 497.000000 MH <u>Auto</u> Ma
-42.0 -52.0 -52.0		y per a ster alle di Manda e mondore per di		Freq Offso 0 ⊦
-62.0				
Start 30 MHz #Res BW 1.0 MHz	#VBW 3.0 MHz	Steep 8.67 n	op 5.000 GHz ns (10001 pts)	

Plot 8-25. Conducted Spurious Plot (10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 8-26. Conducted Spurious Plot (10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

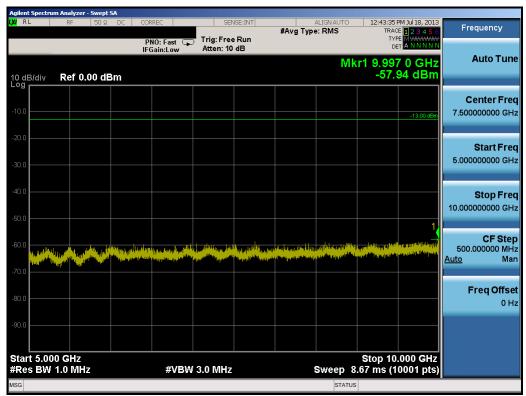
FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 64 of 129
0Y1307011150.PY7 July 15 - 22, 2013		Portable Handset		Page 64 of 138
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<b>X/</b> RL RF 50 Ω D(	PNO: Fast 😱 Trig:	Free Run	ALIGNAUTO 7g Type: RMS	12:43:10 PM Jul 18, 2013 TRACE 123456 TYPE MWWWWW DET A N N N N N	Frequency
10 dB/div Ref 28.00 dBn	in outline ow	n: 38 dB	Mkr1	3.820 619 GHz -30.84 dBm	Auto Tuno
18.0					<b>Center Fre</b> 2.515000000 GH
2.00					Start Fre 30.000000 M⊢
-12.0				-13 NN 48m	Stop Fre 5.000000000 G⊢
-32.0		n h h a shuiling an a shuiling			CF Ste 497.000000 MH <u>Auto</u> Ma
	ng panalat ng mang ang kanalat na paktanan dalam kanan na sa ng mang kala pang kana pakananan na kanalat na pakta kang man				Freq Offs 0 F
-62.0					
Start 30 MHz #Res BW 1.0 MHz	#VBW 3.0 N	IHz	Sweep 8	Stop 5.000 GHz .67 ms (10001 pts)	

Plot 8-27. Conducted Spurious Plot (10.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)



Plot 8-28. Conducted Spurious Plot (10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage CE of 129
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 65 of 138
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Agilent Spectrum Analyzer - Swept SA	CORREC SEN	ce.aut	ALIGN AUTO	0-44-14 PM 3-410-2012	
LX/RL RF 50Ω DC		#Avg Type		L2:44:14 PM Jul 18, 2013 TRACE 1 2 3 4 5 6 TYPE MWWWWW	Frequency
	PNO: Wide Trig: Free IFGain:Low Atten: 38		Mkr1 8	49.004 MHz -32.07 dBm	Auto Tune
10 dB/div Ref 28.00 dBm				-32.07 dBm	
18.0					Center Fred 849.000000 MHz
-2.00					Start Fred 847.000000 MHz
-12.0				-13 00 dBm	Stop Fred 851.000000 MH2
-32.0		1		an a	CF Step 400.000 kH: <u>Auto</u> Mar
-52.0					<b>Freq Offse</b> 0 H
-62.0 Center 849.000 MHz				non 4 000 MHz	
#Res BW 100 kHz	#VBW 300 kHz		#Sweep 1.	pan 4.000 MHz 00 s (1001 pts)	
MSG			STATUS		





Plot 8-30. Upper Extended Band Edge Plot (10.0MHz QPSK – RB Size 50)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 66 of 128
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 66 of 138
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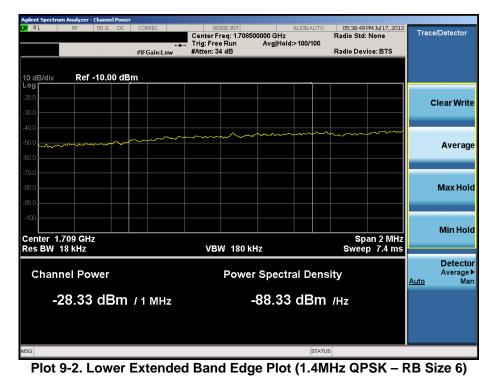


#### 9.0 **BAND 4 PLOTS OF EMISSIONS**

Note: All bandwidths, RB configurations, and modulations were investigated. The worst case test results are reported below.



Plot 9-1. Lower Band Edge Plot (1.4MHz QPSK - RB Size 6)



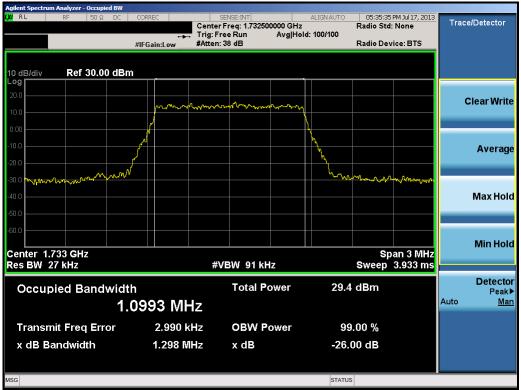
Reviewed by: FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT SON FCC ID: PY7PM-0430 CTEST (CERTIFICATION) Quality Manager make.believe Test Report S/N: Test Dates: EUT Type: Page 67 of 138 0Y1307011150.PY7 July 15 - 22, 2013 Portable Handset V4.5

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Plot 9-3. Occupied Bandwidth Plot (1.4MHz QPSK - RB Size 6)



Plot 9-4. Occupied Bandwidth Plot (1.4MHz 16-QAM - RB Size 6)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dege 60 of 120
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 68 of 138
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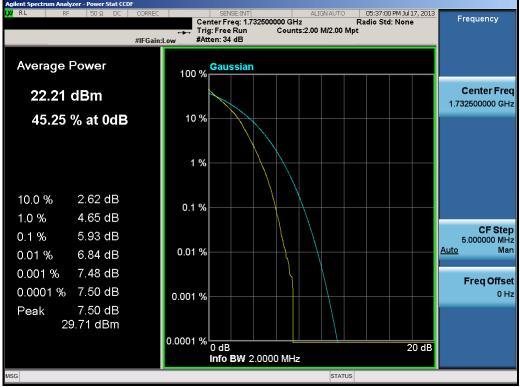
Plot 9-5. Upper Band Edge Plot (1.4MHz QPSK - RB Size 6)



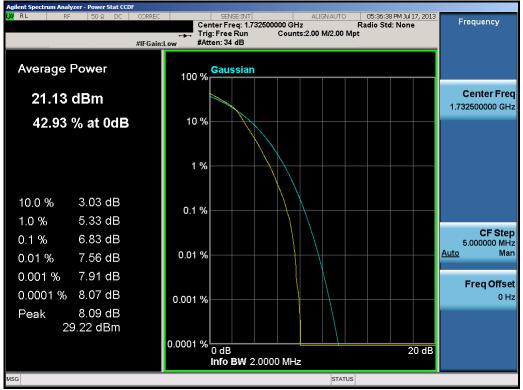
#### Plot 9-6. Upper Extended Band Edge Plot (1.4MHz QPSK – RB Size 6)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 69 of 138
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 69 01 138
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Plot 9-8. PAR Plot (1.4MHz 16-QAM - RB Size 6)

FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dogo 70 of 120	
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 70 of 138	
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Agilent Spectrum Analyzer - Swept SA	CORREC	SENSE:INT	ALIGNAUTO	05-40-55 PM 3-417-0010	
			#Avg Type: RMS	05:42:56 PM Jul 17, 2013 TRACE 123456	Frequency
10 dB/div Ref 28.00 dBm		Free Run n: 38 dB	Mkr1	TYPE ANNNNN DET ANNNNN 1.709 998 GHz -28.44 dBm	Auto Tune
18.0					Center Freq 1.710000000 GHz
-2.00				dill readourse and the second second	Start Fred 1.709000000 GHz
-12.0					<b>Stop Fred</b> 1.711000000 GHz
-32.0	Manual and and the second	<u>/</u>			CF Step 200.000 kH: <u>Auto</u> Mar
-42.0					Freq Offse 0 H:
-62.0				Span 2.000 MHz	
#Res BW 30 kHz	#VBW 91 kH	łz	#Sweep	1.00 s (1001 pts)	
MSG			STATUS		



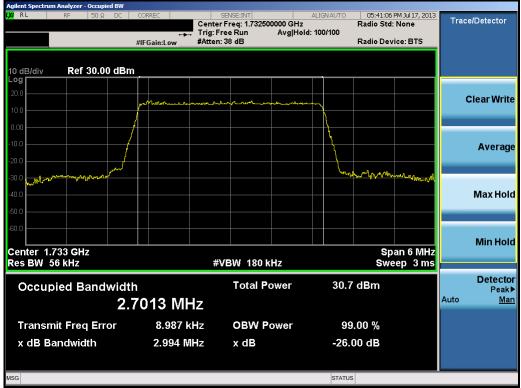


### Plot 9-10. Lower Extended Band Edge Plot (3.0MHz QPSK – RB Size 15)

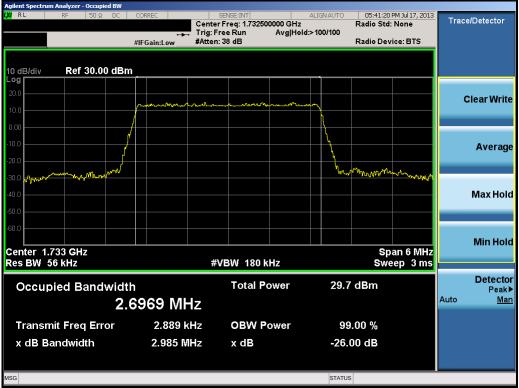
FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dege 71 of 129	
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 71 of 138	
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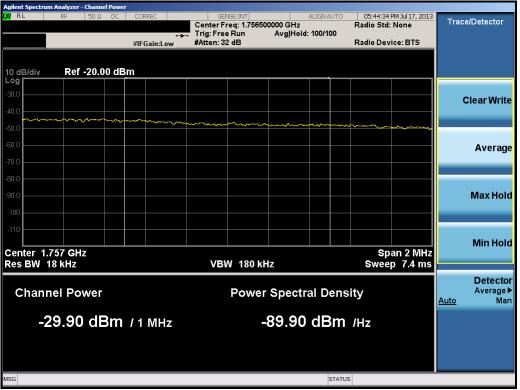
Plot 9-12. Occupied Bandwidth Plot (3.0MHz 16-QAM – RB Size 15)

FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Daga 72 of 129	
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 72 of 138	
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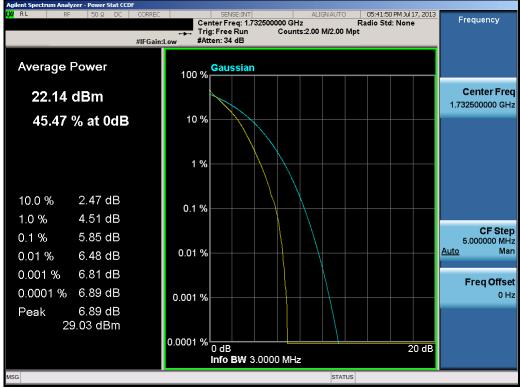
Plot 9-13. Upper Band Edge Plot (3.0MHz QPSK – RB Size 15)



Plot 9-14. Upper Extended Band Edge Plot (3.0MHz QPSK – RB Size 15)

FCC ID: PY7PM-0430	A PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 72 of 120
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 73 of 138
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Plot 9-16. PAR Plot (3.0MHz 16-QAM – RB Size 15)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 74 of 129
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 74 of 138
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Agilent Spectrum Analyzer - Swept SA						
<mark>IX</mark> RL RF 50Ω DC	CORREC	SENSE:INT	#Avg Type:	LIGN AUTO	05:49:42 PM Jul 17, 2013 TRACE 1 2 3 4 5 6 TYPE MWWWW	Frequency
10 dB/div Ref 28.00 dBm	IFGain:Low	Trig: Free Run Atten: 38 dB		Mkr1 ′	1.710 000 GHz -28.390 dBm	Auto Tune
18.0						Center Freq 1.710000000 GHz
-2.00				-afranki Angelaga -		Start Freq 1.709000000 GHz
-12.0		1			-13 00 dBm	<b>Stop Freq</b> 1.711000000 GHz
-32.0	and a start of the					CF Step 200.000 kHz <u>Auto</u> Mar
-42.0						Freq Offset 0 Hz
-62.0 Center 1.710000 GHz					Span 2.000 MHz	
#Res BW 51 kHz	#VBW 1	50 kHz		#Sweep	1.00 s (1001 pts)	
MSG				STATUS		

Plot 9-17. Lower Band Edge Plot (5.0MHz QPSK – RB Size 25)



## Plot 9-18. Lower Extended Band Edge Plot (5.0MHz QPSK – RB Size 25)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Daga 75 of 120	
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 75 of 138	
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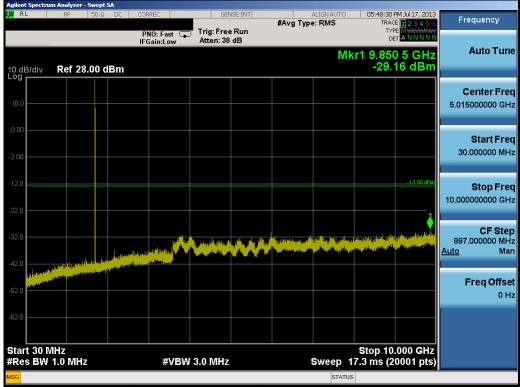
Plot 9-19. Occupied Bandwidth Plot (5.0MHz QPSK - RB Size 25)



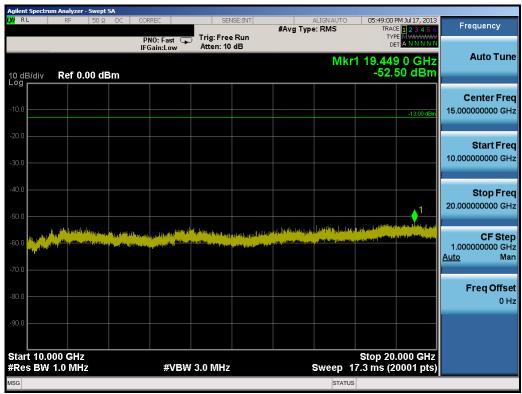
Plot 9-20. Occupied Bandwidth Plot (5.0MHz 16-QAM - RB Size 25)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Daga 76 of 129	
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 76 of 138	
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Plot 9-21. Conducted Spurious Plot (5.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)



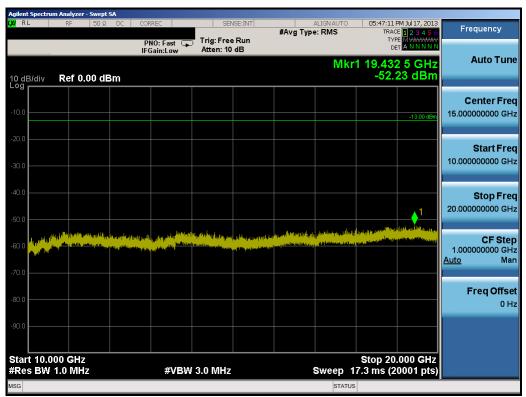
Plot 9-22. Conducted Spurious Plot (5.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager		
Test Report S/N:	Test Dates:	EUT Type:		Daga 77 of 129		
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 77 of 138		
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Plot 9-23. Conducted Spurious Plot (5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 9-24. Conducted Spurious Plot (5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

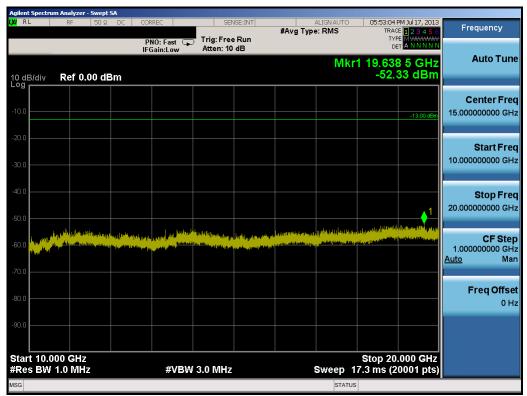
FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 70 of 100
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 78 of 138
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Plot 9-25. Conducted Spurious Plot (5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 9-26. Conducted Spurious Plot (5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager		
Test Report S/N:	Test Dates:	EUT Type:		Dega 70 of 120		
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 79 of 138		
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Agilent Spectrum Analyzer - Swept SA	CORREC SEN	VSE:INT	ALIGNAUTO	05:53:49 PM Jul 17, 2013	
		#Avg 1	ype: RMS	TRACE 123456 TYPE MWWWWW	Frequency
	PNO: Wide Trig: Free IFGain:Low Atten: 38			DETANNNN	
10 dB/div Ref 28.00 dBm			Mkr1 ′	1.755 002 GHz -28.66 dBm	Auto Tune
18.0					<b>Center Fred</b> 1.755000000 GHz
8.00 -2.00					<b>Start Fred</b> 1.754000000 GH:
-12.0				-13 ND dBm	<b>Stop Fred</b> 1.756000000 GH:
-32.0		'			<b>CF Ste</b> j 200.000 kH <u>Auto</u> Ma
-42.0					Freq Offse 0 H
-62.0					
Center 1.755000 GHz #Res BW 51 kHz	#VBW 150 kHz		#Sweep	Span 2.000 MHz 1.00 s (1001 pts)	
MSG			STATUS		

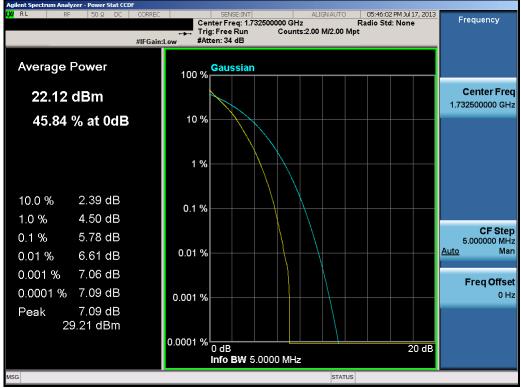
Plot 9-27. Upper Band Edge Plot (5.0MHz QPSK – RB Size 25)



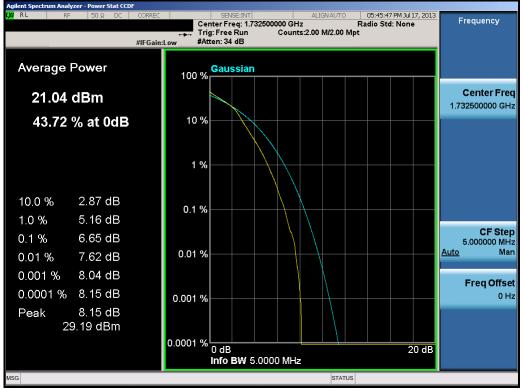
## Plot 9-28. Upper Extended Band Edge Plot (5.0MHz QPSK – RB Size 25)

FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 80 of 138	
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 60 01 136	
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Plot 9-30. PAR Plot (5.0MHz 16-QAM – RB Size 25)

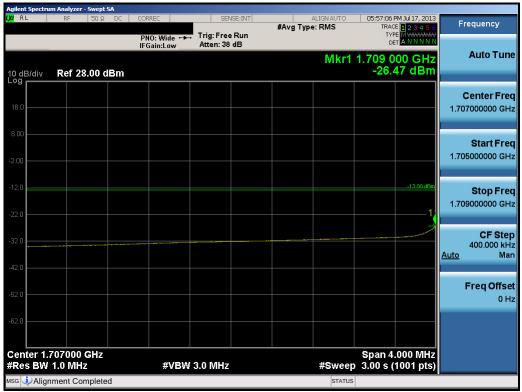
FCC ID: PY7PM-0430			SONY make.believe	Reviewed by: Quality Manager		
Test Report S/N:	Test Dates:	EUT Type:		Dage 01 of 120		
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 81 of 138		
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V4.5 04/15/2013



Agilent Spectrum Analyzer - Swept SA					
🗶 RL RF 50Ω DC	CORREC	SENSE:INT	ALIGN A #Avg Type: RMS	JTO 05:56:43 PM Jul 17, 2013 TRACE 1 2 3 4 5 6	Frequency
10 dB/div <b>Ref 28.00 dBm</b>	PNO: Wide 🖵 IFGain:Low	Trig: Free Run Atten: 38 dB	М	TRACE 1 2 3 4 5 6 TYPE MWWWWW Det ANNNNN kr1 1.710 000 GHz -32.778 dBm	
18.0					Center Freq 1.710000000 GHz
-2.00					<b>Start Freq</b> 1.708000000 GHz
-12.0					<b>Stop Freq</b> 1.712000000 GHz
-32.0		1			<b>CF Step</b> 400.000 kHz <u>Auto</u> Man
-42.0					Freq Offset 0 Hz
-62.0					
Center 1.710000 GHz #Res BW 100 kHz	#VBW	300 kHz	#Sv	Span 4.000 MHz veep 1.00 s (1001 pts)	
MSG			s	TATUS	





Plot 9-32. Lower Extended Band Edge Plot (10.0MHz QPSK - RB Size 50)

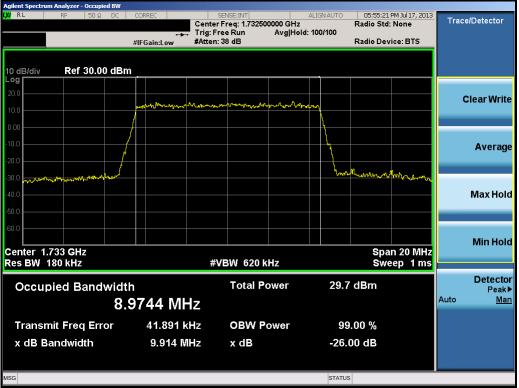
FCC ID: PY7PM-0430	A PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 02 of 120
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset	Page 82 of 138	
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Plot 9-33. Occupied Bandwidth Plot (10.0MHz QPSK - RB Size 50)



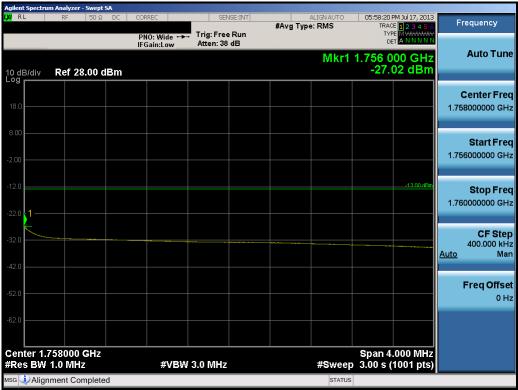
Plot 9-34. Occupied Bandwidth Plot (10.0MHz 16-QAM - RB Size 50)

FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager		
Test Report S/N:	Test Dates:	EUT Type:		Dogo 02 of 120		
0Y1307011150.PY7	July 15 - 22, 2013	2013 Portable Handset		Page 83 of 138		
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Agilent Spectrum Analyzer - Swept SA	CORREC SE	NSE:INT	A	JGNAUTO	05:57:54 PM Jul 17, 2013	
	PNO: Wide 🧊 Trig: Fre		#Avg Type:		TRACE 123456 TYPE MINIMUM	Frequency
	IFGain:Low Atten: 3				DETANNNN	
10 dB/div Ref 28.00 dBm				Mkr1 ′	1.755 004 GHz -33.38 dBm	
18.0						Center Fred 1.755000000 GHz
-2.00						<b>Start Fred</b> 1.753000000 GHz
-12.0						<b>Stop Fred</b> 1.757000000 GH2
-32.0		1		**************************************		CF Stej 400.000 kH <u>Auto</u> Ma
						Freq Offse 0 H
-62.0 Center 1.755000 GHz					Span 4.000 MHz	
#Res BW 100 kHz	#VBW 300 kHz	:		#Sweep	1.00 s (1001 pts)	
MSG				STATUS		





Plot 9-36. Upper Extended Band Edge Plot (10.0MHz QPSK – RB Size 50)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager			
Test Report S/N:	Test Dates:	EUT Type:		Page 84 of 138			
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Plot 9-38. PAR Plot (10.0MHz 16-QAM – RB Size 50)

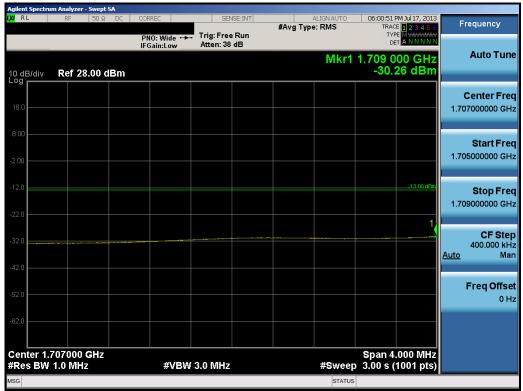
FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager			
Test Report S/N:	Test Dates:	EUT Type:		Page 85 of 138			
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 65 01 136			
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04/15/2013



g <b>ilent Spectrum Analyzer - Swept SA</b> <mark>KI</mark> RL RF 50 Ω DC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	06:00:30 PM Jul 17, 2013 TRACE <b>1</b> 2 3 4 5 6 TYPE M <del>WWWW</del>	Frequency
10 dB/div Ref 28.00 dBm	PNO: Wide 🌩 IFGain:Low	Atten: 38 dB	Mkr	1 1.710 000 GHz -35.298 dBm	Auto Tune
-og					Center Fre 1.710000000 GH
2.00					Start Fre 1.707000000 G⊦
22.0				-13 00 dBm	Stop Fre 1.713000000 G⊦
32.0					CF Ste 600.000 kH <u>Auto</u> Ma
52.0					Freq Offs 0 F
62.0	#\/D\\/	470 kHz	#D	Span 6.000 MHz p 1.00 s (1001 pts)	
Res BW 150 kHz	#VBW	470 kHz	#Swee		



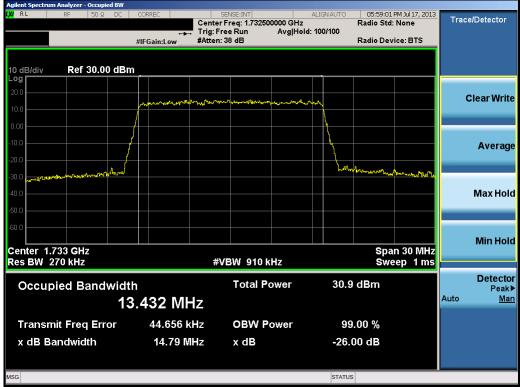


Plot 9-40. Lower Extended Band Edge Plot (15.0MHz QPSK - RB Size 75)

FCC ID: PY7PM-0430	PCTEST	FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager			
Test Report S/N:	Test Dates:	EUT Type:		Daga 96 of 129			
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Plot 9-41. Occupied Bandwidth Plot (15.0MHz QPSK - RB Size 75)

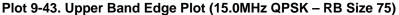


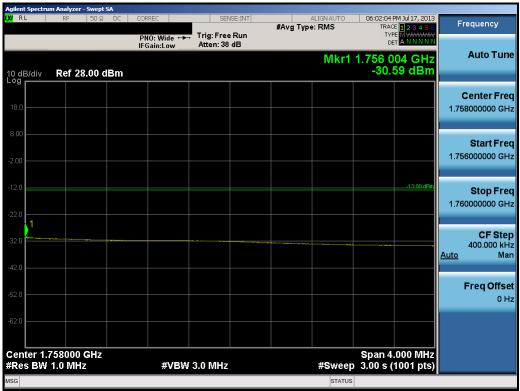
Plot 9-42. Occupied Bandwidth Plot (15.0MHz 16-QAM - RB Size 75)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 07 of 120
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 87 of 138
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Agilent Spectrum Analyzer - Swept SA	CORREC	SENSE:INT		LIGNAUTO	06:01:41 PM :	W17 2012	
			#Avg Type		TRACE	23456	Frequency
	PNO: Wide 😱 IFGain:Low	Trig: Free Run Atten: 38 dB			DET	NNNNN	
				Mkr1	1.755 00 -35.93	6 GHz	Auto Tune
10 dB/div Ref 28.00 dBm					-35.93	авт	
							Center Freq
18.0							1.755000000 GHz
8.00							
0.00							Start Freq
-2.00							1.752000000 GHz
-12.0						-13.00.dBm	Stop Freq
-22.0							1.758000000 GHz
-22.0							
-32.0		1					CF Step 600.000 kHz
		and the second s					<u>Auto</u> Man
-42.0							
-52.0							Freq Offset
							0 Hz
-62.0							
Center 1.755000 GHz					Span 6.00 1.00 s (10	00 MHz	
#Res BW 150 kHz	#VBW	470 kHz			1.00 s (10	01 pts)	
MSG				STATUS			



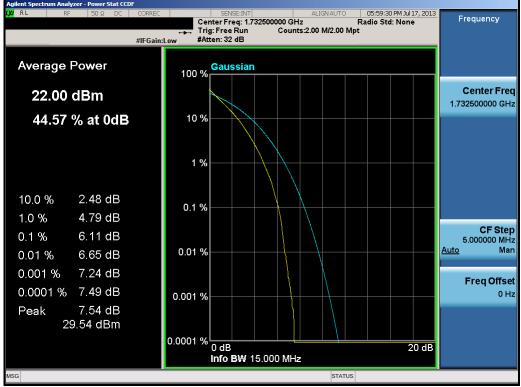


Plot 9-44. Upper Extended Band Edge Plot (15.0MHz QPSK – RB Size 75)

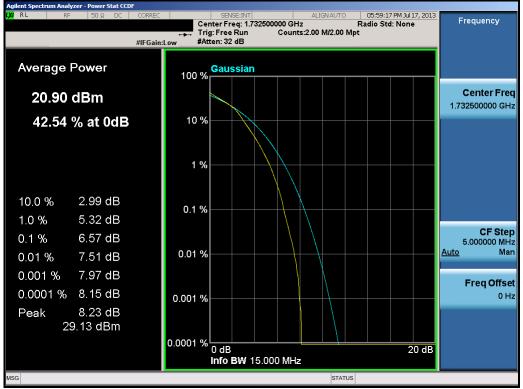
FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager			
Test Report S/N:	Test Dates:	EUT Type:		Page 88 of 138			
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 66 01 136			
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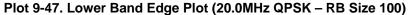
Plot 9-46. PAR Plot (15.0MHz 16-QAM – RB Size 75)

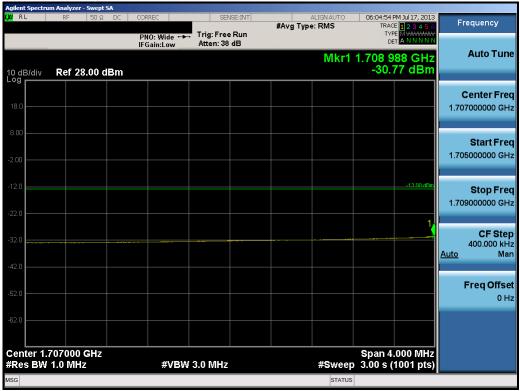
FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager		
Test Report S/N:	Test Dates:	EUT Type:		Daga 90 of 129		
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04/15/2013



Agilent Spectrum Analyzer - Swept SA XI RL RF 50 Ω DC	CORREC	SENSE:INT	AL #Avg Type:	IGN AUTO RMS	06:04:31 PM TRACE	4 Jul 17, 2013 <b>1</b> 2 3 4 5 6 M <del>WWWWW</del>	Frequency
10 dB/div Ref 28.00 dBm	PNO: Wide 😱 IFGain:Low	Trig: Free Run Atten: 38 dB		Mkr1 1	DET 1.710 00 -35.89	ANNNNN	Auto Tune
18.0							Center Free 1.710000000 GH:
2.00				<u> </u>			<b>Start Fre</b> 1.706000000 GH
-12.0						-13.00.dBm	<b>Stop Fre</b> 1.714000000 GH
-32.0		1					CF Stej 800.000 kH <u>Auto</u> Ma
-52.0							Freq Offse 0 H
-62.0 Center 1.710000 GHz #Res BW 200 kHz	#\/B\M	620 kHz		#Sween	Span 8.0 1.00 s (1	000 MHz	
	#¥8544	V4V10114		STATUS	1.00 5 (1	oor pisj	





Plot 9-48. Lower Extended Band Edge Plot (20.0MHz QPSK - RB Size 100)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 00 of 128
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Engineering Laboratory, ESLE







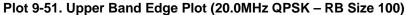


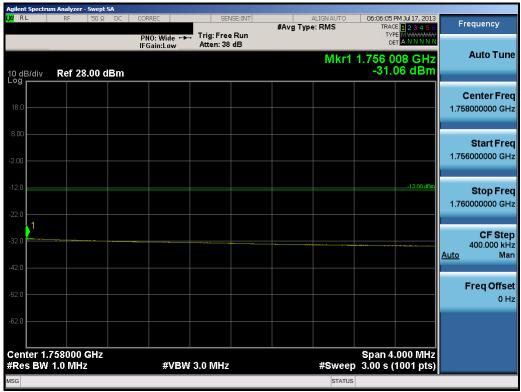
Plot 9-50. Occupied Bandwidth Plot (20.0MHz 16-QAM - RB Size 100)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 91 of 138
0Y1307011150.PY7	July 15 - 22, 2013	Portable Handset		Page 91 01 136
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<b>Χ΄ RL</b>   RF   50 Ω DC	CORREC PNO: Wide IFGain:Low			#Avg Type	ALIGN AUTO e: RMS	00:05:42 F	M Jul 17, 2013 <b>1 2 3 4 5 6</b> M <del>WWWWW</del>	Frequency
							-	
						DE		
10 dB/div Ref 28.00 dBm					Mkr1	1.755 0 -35.9	08 GHz 96 dBm	Auto Tu
18.0								<b>Center Fr</b> 1.755000000 G
2.00								<b>Start Fr</b> 1.751000000 G
-12.0							-13.00.dBm	<b>Stop Fr</b> 1.759000000 G
-32.0			1					<b>CF St</b> ( 800.000 k <u>Auto</u> M
-62.0								Freq Offs 0
.62.0								
Center 1.755000 GHz #Res BW 200 kHz	#VBW	/ 620 kHz			#Sweep	Span 8. 1.00 s (	000 MHz 1001 pts)	
MSG STATUS								

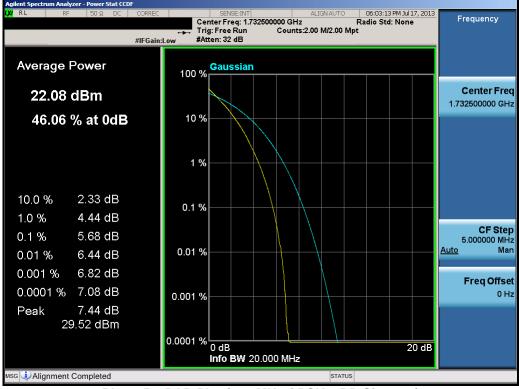




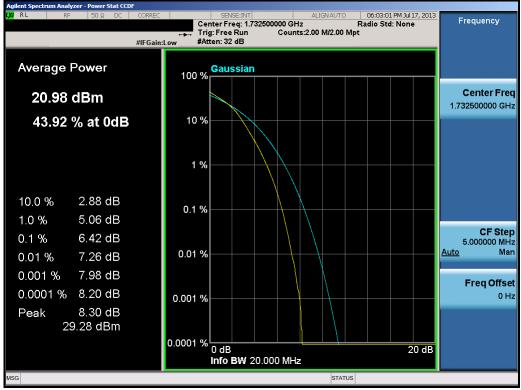
Plot 9-52. Upper Extended Band Edge Plot (20.0MHz QPSK – RB Size 100)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dege 02 of 129
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## Plot 9-53. PAR Plot (20.0MHz QPSK - RB Size 100)



Plot 9-54. PAR Plot (20.0MHz 16-QAM - RB Size 100)

FCC ID: PY7PM-0430		FCC Pt. 22, 24, 27 LTE MEASUREMENT REPORT (CERTIFICATION)	SONY make.believe	Reviewed by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 02 of 129
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