



**FCC CFR47 PART 15 SUBPART C**

**BLUETOOTH LOW ENERGY**

**CERTIFICATION TEST REPORT**

**FOR**

**GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac & NFC**

**FCC ID: PY7-PM0942**

**REPORT NUMBER: 16J22997-E31V3**

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*Prepared for*

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**NVLAP LAB CODE 200065-0**

Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V1	4/22/2016	Initial issue	C. OOI
V2	5/6/2016	Added Section 6	C. OOI
V3	5/9/2016	Updated Issue Date	C. OOI

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# 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** SONY MOBILE COMMUNICATIONS, INC.

**EUT DESCRIPTION:** GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac & NFC

**SERIAL NUMBER:** CB5129YWFF, CB5129YWGW, CB5129YNPZ, CB5129YNZZ

**DATE TESTED:** March 7 - 17, 2016

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Pass

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revision section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013 for FCC, FCC CFR 47 Part 2, and FCC CFR 47 Part 15.

## 3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

47173 Benicia Street	47266 Benicia Street
<input type="checkbox"/> Chamber A	<input type="checkbox"/> Chamber D
<input type="checkbox"/> Chamber B	<input type="checkbox"/> Chamber E
<input checked="" type="checkbox"/> Chamber C	<input type="checkbox"/> Chamber F
	<input type="checkbox"/> Chamber G
	<input type="checkbox"/> Chamber H

The above test sites and facilities are covered under FCC Test Firm Registration # 208313.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0.

Chambers A through H are covered under Industry Canada company address code 2324B with site numbers 2324B -1 through 2324B-8, respectively.

## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

### 4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

### 4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 9KHz to 30 MHz	2.14 dB
Radiated Disturbance, 30 to 1000 MHz	4.98 dB
Radiated Disturbance,1000 to 6000 MHz	3.86 dB
Radiated Disturbance,6000 to 18000 MHz	4.23 dB
Radiated Disturbance,18000 to 26000 MHz	5.30 dB
Radiated Disturbance,26000 to 40000 MHz	5.23 dB

Uncertainty figures are valid to a confidence level of 95%.

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## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac & NFC.

## 6. REUSE OF TEST DATA

### 6.1. INTRODUCTION

According to manufacturer attestation letter, FCC ID: PY7-PM0941 and FCC ID: PY7-PM0942 unlicensed radios (WLAN/BT/BLE/NFC) are electrically identical. They share the same chipset, same power and same antenna performance including antenna gain. The FCC ID: PY7-PM0941 test data shall remain representative of FCC ID: PY7-PM0942 so FCC ID: PY7-PM0942 leverage test data from FCC ID: PY7-PM0941.

The applicant takes full responsibility that the test data as referenced in this section represent compliance for this FCC ID.

### 6.2. DEVICES DIFFERENCES

Difference between PY7-PM0941 and PY7-PM0942:

Various components were removed from PY7-PM0941 to establish PY7-PM0942, such components are related only to the cellular part and no change in non-cellular (WLAN/Bluetooth/NFC) parts, which are electronically identical.

### 6.3. SPOT CHECK VERIFICATION

Spot check verification has been done on device FCC ID: PY7-PM0942 for radiated harmonic, spurious and radiated bandedge. Test results were consistent with FCC ID: PY7-PM0941.

### 6.4. REFERENCE DETAIL

Equipment Class	Reference FCC ID	Report Title/Section
DTS (WLAN)	PY7-PM0941	16J22997-E4V2 FCC Report DTS WLAN
DTS (BLE)	PY7-PM0941	16J22997-E3V2 FCC Report BLE
NII (WLAN)	PY7-PM0941	16J22997-E5V3 FCC Report UNII WLAN
DSS (BT)	PY7-PM0941	16J22997-E2V3 FCC Report BT
DXX (NFC)	PY7-PM0941	16J22997-E6V2 FCC Report NFC

**END OF TEST REPORT**