CERTIFICATION TEST REPORT

Report Number. : 11785278-E2V2

Applicant	:	SONY MOBILE COMMUNICATIONS, INC. 4-12-3 HIGASHI-SHINAGAWA, SHINAGAWA -KU, TOKYO, 140-0002, JAPAN
FCC ID	:	PY7-76486N
EUT Description	:	GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac, GPS & NFC
Test Standard(s)	:	FCC 47 CFR PART 15 SUBPART C

Date Of Issue:

August 01, 2017

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	07/06/17	Initial Review	D. Coronia
V2	08/01/17	Updated Section 6.3, added Section 7 and Appendix A	D. Coronia

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	SONY MOBILE COMMUNICATIONS, INC. 4-12-3 HIGASHI-SHINAGAWA, SHINAGAWA -KU, TOKYO, 140-0002, JAPAN
EUT DESCRIPTION:	GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac, GPS & NFC
SERIAL NUMBER:	RADIATED: QV7001PT0N, QV7001Q50N CONDUCTED: QV7000LN0P, QV7000HV0P
DATE TESTED:	JUNE 8 – 23, 2017

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 revisions 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 FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2013.

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
☒ Chamber A(IC: 2324B-1)	☐ Chamber D(IC: 22541-1)
☒ Chamber B(IC: 2324B-2)	☐ Chamber E(IC: 22541-2)
☐ Chamber C(IC: 2324B-3)	☐ Chamber F(IC: 22541-3)
	☐ Chamber G(IC: 22541-4)
	☐ Chamber H(IC: 22541-5)

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 C are covered under Industry Canada company address code 2324B with site numbers 2324B -1 through 2324B-3, respectively. Chambers D through H are covered under Industry Canada company address code 22541 with site numbers 22541 -1 through 22541-5, respectively.
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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:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

4.3. MEASUREMENT UNCERTAINTY

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

Parameter	Uncertainty
Worst Case Conducted Disturbance, 9KHz to 0.15 MHz	3.84 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.65 dB
Worst Case Radiated Disturbance, 9KHz to 30 MHz	3.15 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	5.36 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.32 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.45 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.24 dB

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

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, GPS & NFC.

6. REUSE OF TEST DATA

6.1. INTRODUCTION

According to manufacturer, FCC ID: PY7-81775I and FCC ID: PY7-76486N 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: PY7-81775I test data shall remain representative of FCC ID: PY7-76486N so FCC ID: PY7-76486N leverage test data from FCC ID: PY7-81775I.

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 PY7-81775I and PY7-76486N:

Various components were removed from PY7-81775I to establish PY7-76486N; such components are related only to the cellular part and no change in non-cellular (WLAN/BT/BLE/NFC) parts, which are electronically identical.

6.3. SPOT CHECK VERIFICATION RESULTS SUMMARY

Spot check verification has been done on device PY7-76486N for radiated harmonic spurious and radiated band-edge. The data from the application has been verified through appropriate spot checks to demonstrate compliance for this device as shown in the summary and appendix A.

6.4. REFERENCE DETAIL

Equipment Class	Reference FCC ID	Report Title/Section
DSS (BT)	PY7-81775I	**11740661-E2V3 FCC Report BT**
DTS (BLE)	PY7-81775I	11740661-E3V3 FCC Report BLE
DTS (WLAN)	PY7-81775I	11740661-E4V4 FCC Report DTS
UNII (WLAN)	PY7-81775I	11740661-E5V4 FCC Report UNII
NFC	PY7-81775I	11740661-E7V3 FCC Report NFC

APPENDIX A

PY7-76486N SPOT CHECK RESULTS									
Technology	Test Item	Channel	Measured Frequency	PY7-81775I		PY7-76486N		Delta (dB)	
				Peak	Ave	Peak	Ave	Peak	Ave
BT	**RBE**	**78**	**2480 MHz**	**50.42**	**35.51**	**50.87**	**37.85**	**-0.45**	**-2.34**
	RSE	**39**	**4922 MHz**	**42.28**	**30.32**	**44.39**	**32.92**	**-2.11**	**-2.60**
Note: GFSK is the worst mode									
BLE	RBE	39	2484 MHz	46.21	37.04	48.15	38.86	-1.94	-1.82
	RSE	19	3865 MHz	44.12	33.46	44.11	32.73	0.01	0.73
Note:									
DTS	RBE	13	2484 MHz	48.79	39.89	51.3	41.46	-2.51	-1.57
	RSE	6	3866 MHz	43.95	33.13	43.66	32.01	0.29	1.12
NOTE: 802.11b is the worst mode									
NFC	Fundamental	-	13.56 MHz	22.18		25.54		-2.74	
UNII	RBE	100	5470 MHz	51.49	45.07	53.04	46.08	-1.55	-1.01
(20MHz)	RSE	100	6396 MHz	40.35	33.93	40.06	33.10	0.29	0.83
NOTE: 802.11b mode is the worst									

END OF REPORT