# **FCC RF Test Report**

APPLICANT : LG Electronics Mobile Comm USA

**EQUIPMENT**: Smart phone

BRAND NAME : LG

MODEL NAME : LG-X240ds FCC ID : ZNFX240DS

STANDARD : 47 CFR Part 2, 27

**CLASSIFICATION**: PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Dec. 10, 2016 and testing was completed on Feb. 22, 2017. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA / EIA-603-D-2010 and the testing has shown the tested sample to be in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager

#### SPORTON INTERNATIONAL INC.

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Report No.: FG6D1019B

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### **REVISION HISTORY**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG6D1019B	Rev. 01	Initial issue of report	Mar. 23, 2017

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## 1 General Description

## 1.1 Applicant

#### **LG Electronics Mobile Comm USA**

LG Twin Towers 20, Yeouido-Dong Youngdeungpo-Gu, Seoul 150-721, Republic Of Korea

#### 1.2 Manufacturer

#### **Arima Communications Corp.**

6F, No. 866, Jhongjheng Rd., Jhonghe Dist., New Taipei City 23586, Taiwan

### 1.3 Product Feature of Equipment Under Test

Product Feature				
Equipment	Smart phone			
Brand Name	LG			
Model Name	LG-X240ds			
FCC ID	ZNFX240DS			
	GSM/EGPRS/WCDMA/HSPA/LTE			
EUT supports Radios application	WLAN 11b/g/n HT20/HT40			
	Bluetooth BR/EDR/LE			
HW Version	DV			
SW Version	LGX240dsAT-00-V08a-CIS-XX-NOV-17-2016+0			
EUT Stage	Production Unit			

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

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#### 1.4 Re-use of Measured Data

#### 1.4.1 Introduction Section

The original model (FCC ID: ZNFX240YK) and the variant model (FCC ID: ZNFX240DS) has identical PCB layout, antenna, SW implementation for GSM/WCDMA/LTE. Based on their similarity, the FCC Part 22, 24, 27 (equipment class: PCE) test data issued for original model also apply for the variant model.

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And the applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID: ZNFX240DS).

#### 1.4.2 Difference Section

Please refer to Spot Check Evaluation.

#### 1.4.3 Spot Check Verification Data Section

Please refer to Spot Check Evaluation.

#### 1.4.4 Reference detail Section:

Please refer to Spot Check Evaluation.

#### 1.5 Modification of EUT

No modifications are made to the EUT during all test items.

## 1.6 ERP/EIRP Power, Frequency Tolerance, and Emission Designator

FCC Rule	Frequency Range (MHz)	ERP/EIRP (W)	Frequency Tolerance (ppm)	Emission Designator
Part 27	2510.0 ~ 2560.0	0.1297	0.0087 ppm	18M5G7D
Part 27	2510.0 ~ 2560.0	0.1012	0.0087 ppm	18M5W7D

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## 2 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Horn Antenna	SCHWARZBEC K	BBHA 9120 D	9120D-1325	1GHz ~ 18GHz	Sep. 30, 2016	Feb. 17, 2017 ~ Feb. 22, 2017	Sep. 29, 2017	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800	40103&04	30MHz to 1GHz	Jan. 07, 2017	Feb. 17, 2017 ~ Feb. 22, 2017	Jan. 06, 2018	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	N/A	Mar. 14, 2016	Feb. 17, 2017 ~ Feb. 22, 2017	Mar. 13, 2017	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500- B	N/A	1m~4m	N/A	Feb. 17, 2017 ~ Feb. 22, 2017	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Feb. 17, 2017 ~ Feb. 22, 2017	N/A	Radiation (03CH13-HY)

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## 3 Uncertainty of Evaluation

#### **Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)**

Measuring Uncertainty for a Level of	4.90
Confidence of 95% (U = 2Uc(y))	4.90

#### <u>Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)</u>

Measuring Uncertainty for a Level of	5.40
Confidence of 95% (U = 2Uc(y))	5.40

#### **Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)**

Measuring Uncertainty for a Level of	4.30
Confidence of 95% (U = 2Uc(y))	1100

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## **Appendix A. Original Report**

Please refer to Sporton report number FG6D1013B.

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