



FCC RF Test Report

APPLICANT : LG Electronics Mobile Comm USA
EQUIPMENT : Smart phone
BRAND NAME : LG
MODEL NAME : LG-X240F
FCC ID : ZNFX240F
STANDARD : 47 CFR Part 2, 22(H), 24(E), 27
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Oct. 18, 2016 and testing was completed on Feb. 18, 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.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.



TABLE OF CONTENTS

REVISION HISTORY.....	3
1 GENERAL DESCRIPTION	4
1.1 Applicant	4
1.2 Manufacturer	4
1.3 Product Feature of Equipment Under Test.....	4
1.4 Re-use of Measured Data	5
1.5 Modification of EUT	5
1.6 ERP/EIRP Power, Frequency Tolerance, and Emission Designator	6
2 LIST OF MEASURING EQUIPMENT	7
3 UNCERTAINTY OF EVALUATION	8
APPENDIX A. ORIGINAL REPORT	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG6O1804B	Rev. 01	Initial issue of report	Feb. 20, 2017



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-X240F
FCC ID	ZNFX240F
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE WLAN 11b/g/n HT20/HT40 Bluetooth BR/EDR/LE
HW Version	PP2
SW Version	LGX240FAT-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.



1.4 Re-use of Measured Data

1.4.1 Introduction Section

The original model (FCC ID: ZNFX240H) and the variant model (FCC ID: ZNFX240F) has identical PCB layout, antenna, SW implementation for Bluetooth/Wi-Fi/GPS/GSM/WCDMA/LTE. Based on their similarity, the FCC Part 15C (equipment class: DTS, DSS) and Part 22, 24, 27 (equipment class: PCE) test data issued for original model also apply for the variant model.

And the applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID : ZNFX240F).

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 22H	826.5 ~ 846.5	0.0989	0.0128 ppm	4M52G7D
Part 22H	829.0 ~ 844.0	0.0959	0.0128 ppm	9M09G7D
Part 22H	826.5 ~ 846.5	0.0785	0.0128 ppm	4M51W7D
Part 22H	829.0 ~ 844.0	0.0659	0.0128 ppm	9M05W7D
Part 24E	1852.5 ~ 1907.5	0.1932	0.0102 ppm	4M50G7D
Part 24E	1860.0 ~ 1900.0	0.1393	0.0102 ppm	18M4G7D
Part 24E	1857.5 ~ 1902.5	0.1153	0.0102 ppm	13M5W7D
Part 24E	1860.0 ~ 1900.0	0.1135	0.0102 ppm	18M5W7D
Part 27	1715.0 ~ 1750.0	0.2307	0.0105 ppm	9M07G7D
Part 27	1720.0 ~ 1745.0	0.2344	0.0105 ppm	18M3G7D
Part 27	1720.0 ~ 1745.0	0.2333	0.0105 ppm	18M4W7D
Part 27	2507.5 ~ 2562.5	0.1607	0.0107 ppm	13M5G7D
Part 27	2510.0 ~ 2560.0	0.1500	0.0107 ppm	18M4G7D
Part 27	2510.0 ~ 2560.0	0.1245	0.0107 ppm	18M5W7D



2 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D&00800	35419&03	30MHz to 1GHz	Jan. 07, 2017	Jan. 25, 2017~ Feb. 18, 2017	Jan. 06, 2018	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Aug. 19, 2016	Jan. 25, 2017~ Feb. 18, 2017	Aug. 18, 2017	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Feb. 27, 2016	Jan. 25, 2017~ Feb. 18, 2017	Feb. 26, 2017	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Jan. 25, 2017~ Feb. 18, 2017	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Jan. 25, 2017~ Feb. 18, 2017	N/A	Radiation (03CH07-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800	35419&03	30MHz to 1GHz	Jan. 07, 2017	Jan. 25, 2017~ Feb. 18, 2017	Jan. 06, 2018	Radiation (03CH07-HY)



3 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.70
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.50
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.20
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Appendix A. Original Report

Please refer to Sporton report number FG6O1802B.