

EVALUATION REPORT

Applicant Name:

LG Electronics MobileComm U.S.A., Inc.

Address:

1000 Sylvan Avenue, Englewood Cliffs NJ 07632

Date of Issue :

June 16, 2017

Test Site/Location:

HCT CO., LTD., 74,Seoicheon-ro 578beon-gil,Majangmyeo, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA

FCC ID : ZNFM700TV

APPLICANT : LG Electronics MobileComm U.S.A., Inc.

Test Data Re-Use Summary

Introduction

FCC ID : ZNFM700TV
 Equipment Class(es) : PCE, DTS, DSS
 Rule Part(s) : 2, 15, 22, 24, 27

Application's Statement : The applicant takes full responsibility that the test data referenced below represents compliance for this FCC ID.

Differences
 Brief Description : Some Cellular parts, Bluetooth & WLAN hardware and software of this device are identical to the implementation in ZNFM700H and ZNFM700F. The operational description includes detailed information about the changes between the devices. The data from that application has been verified through appropriate spot checks to demonstrate compliance for this device as shown in the summary table below.

Spot Check Verification Result Summary

(Note: The detail test data can be found in this documents, Appendix A, hereafter)

Category	Spot Check	Verdict
Licensed EMC	ERP / EIRP	Share
	RSE	Share
Unlicensed EMC	Band Edge	Share
	Spurious Emissions	Share

Reference Detail Section

Reference FCC ID	Equipment Class	Folder Test / RF Exposure	Report Title / Section
ZNFM700H	PCE	LTE Report	LTE B7, 17
		GSM WCDMA Report	GSM/WCDMA 850
	DSS	Bluetooth Report	All Sections
	DTS	WLAN DTS Report	All Sections
		BT LE Report	All Sections
ZNFM700F	PCE	LTE Report	LTE B2
		GSM WCDMA Report	GSM/WCDMA 1900



Signature
 Research Engineer / Yuseok Lee
 HCT CO.,LTD

HCT CO.,LTD

Appendix A. The Spot check test data

1. Summary of the spot check for Licensed EMC

1) Reference FCC ID : ZNFM700H

- Re-Use Band(GSM850 / WCDMA B5 / LTE B7, 17)

EFFECTIVE RADIATED POWER(GSM850) / (WCDMA850)

Modulation	Frequency		Mode	ZNFM700H (Reference)	ZNFM700TV (Reuse)	deviation
				(Reference test data)	(Spot check test data)	
	MHz	Ch.		ERP (dBm)	ERP (dBm)	
GSM850	836.6	190	VOICE	22.90	23.56	0.66
WCDMA850	836.6	4183	RMC	18.67	19.44	0.77

RADIATED SPURIOUS EMISSIONS(GSM850) / (WCDMA850)

Modulation	Frequency		Mode	ZNFM700H (Reference)	ZNFM700TV (Reuse)	deviation
				(Reference test data)	(Spot check test data)	
	MHz	Ch.		ERP (dBm)	ERP (dBm)	
GSM850	2509.80	190	VOICE	-37.02	-37.60	-0.58
WCDMA850	2509.80	4183	RMC	-42.97	-45.51	-2.54

EQUIVALENT ISOTROPIC RADIATED POWER(LTE – Band 7)

Modulation	Frequency		Mode Bandwidth	ZNFM700H (Reference)	ZNFM700TV (Reuse)	deviation
				(Reference test data)	(Spot check test data)	
	MHz	Ch.		EIRP (dBm)	EIRP (dBm)	
LTE – B7	2562.5	21375	QPSK(15M)	19.28	18.70	-0.58

RADIATED SPURIOUS EMISSIONS(LTE – Band 7)

Modulation	Frequency		Mode Bandwidth	ZNFM700H (Reference)	ZNFM700TV (Reuse)	deviation
				(Reference test data)	(Spot check test data)	
	ERP			ERP		
	MHz	Ch.		(dBm)	(dBm)	
LTE – B7	7687.5	21375	QPSK(15M)	-41.62	-44.41	-2.79

EFFECTIVE RADIATED POWER(LTE – Band 17)

Modulation	Frequency		Mode Bandwidth	ZNFM700H (Reference)	ZNFM700TV (Reuse)	deviation
				(Reference test data)	(Spot check test data)	
	ERP			ERP		
	MHz	Ch.		(dBm)	(dBm)	
LTE – B17	710	23790	QPSK(5M)	15.58	16.17	0.59

RADIATED SPURIOUS EMISSIONS(LTE – Band 17)

Modulation	Frequency		Mode Bandwidth	ZNFM700H (Reference)	ZNFM700TV (Reuse)	deviation
				(Reference test data)	(Spot check test data)	
	ERP			ERP		
	MHz	Ch.		(dBm)	(dBm)	
LTE – B17	2130.0	710	QPSK(10M)	-40.32	-39.82	0.50

2) Reference FCC ID : ZNFM700F

- Re-Use Band(GSM1900 / WCDMA B2 / LTE B2)

EQUIVALENT ISOTROPIC RADIATED POWER(GSM1900) / (WCDMA1900)

Modulation	Frequency		Mode	ZNFM700F	ZNFM700TV	deviation
				(Reference)	(Reuse)	
				(Reference test data)	(Spot check test data)	
	MHz	Ch.		EIRP	EIRP	
		(dBm)	(dBm)			
GSM1900	1880.0	661	VOICE	25.92	26.24	0.32
WCDMA1900	1880.0	9400	RMC	19.57	18.91	-0.66

RADIATED SPURIOUS EMISSIONS(GSM1900) / (WCDMA 1900)

Modulation	Frequency		Mode	ZNFM700F	ZNFM700TV	deviation
				(Reference)	(Reuse)	
				(Reference test data)	(Spot check test data)	
	MHz	Ch.		EIRP	EIRP	
		(dBm)	(dBm)			
GSM1900	9,251.0	512	VOICE	-29.41	-29.93	-0.52
WCDMA1900	7,409.6	9262	RMC	-40.30	-40.38	-0.08

EQUIVALENT ISOTROPIC RADIATED POWER(LTE – Band 2)

Modulation	Frequency		Mode Bandwidth	ZNFM700F	ZNFM700TV	deviation
				(Reference)	(Reuse)	
				(Reference test data)	(Spot check test data)	
	MHz	Ch.		EIRP	EIRP	
		(dBm)	(dBm)			
LTE - B2	1880.0	18900	QPSK(3M)	19.73	19.25	-0.48

RADIATED SPURIOUS EMISSIONS(LTE – Band 2)

Modulation	Frequency		Mode Bandwidth	ZNFM700F	ZNFM700TV	deviation
				(Reference)	(Reuse)	
	(Reference test data)	(Spot check test data)				
	EIRP	EIRP				
MHz		Ch.		(dBm)	(dBm)	
LTE - B2	9400.0	18900	QPSK(1.4M)	-37.07	-37.05	0.02

2. Summary of the spot check for Unlicensed EMC

Report	Test Item	Channel	Measured Frequency	LG-M700H Result [dBuV/m]		LG-M700TV Result [dBuV/m]		Gap [dB]	
				Peak	Average	Peak	Average	Peak	Average
BT	Band Edge	78	2483.5 MHz~2500 MHz	67.16	37.61	67.66	38.19	0.50	0.58
	RSE	78	7440 MHz	60.22	48.10	59.11	47.23	-1.11	-0.87
BT LE	Band Edge	39	2483.5 MHz~2500 MHz	54.14	43.30	54.09	43.29	-0.05	-0.01
	RSE	39	7440 MHz	58.76	45.98	58.17	45.79	-0.59	-0.19
DTS	Band Edge	11	2483.5 MHz~2500 MHz	65.64	47.48	65.05	45.53	-0.59	-1.95
	RSE	11	4924 MHz	54.61	47.15	54.86	47.32	0.25	0.17