

EVALUATION REPORT

Applicant Name:
 LG Electronics MobileComm U.S.A., Inc.

Date of Evaluation:
 July 21, 2016

Address:
 1000 Sylvan Avenue, Englewood Cliffs NJ 07632

Test Site/Location:
 HCT CO., LTD., 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA

FCC ID	: ZNFK200F
APPLICANT	: LG Electronics MobileComm U.S.A., Inc.

Test Data Re-Use Summary

Introduction

FCC ID: ZNFK200F
 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 ZNFK200MT. 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
SAR:	GSM 850/1900	Share
	WCDMA 850 /1700 / 1900	Share
	2.4 GHz WLAN	Share
	LTE B4/7	Share
Licensed EMC	ERP/EIRP	Share
	RSE	Share
Unlicensed EMC	Band Edge	Share
	Spurious Emissions	Share

Reference Detail Section

Equipment Class	Reference FCC ID	Folder Test/RF Exposure	Report Title/Section
PCE	ZNFK200MT	SAR Report	All Sections(Except for LTE B2, 17)
	ZNFK200MT	LTE report	All Sections(Except for LTE B2, 17)
	ZNFK200MT	GSM WCDMA report	All Sections
DSS	ZNFK200MT	Bluetooth Report	All Sections
DTS	ZNFK200MT	WLAN DTS Report	All Sections
	ZNFK200MT	BT LE Report	All Sections
	ZNFK200MT	SAR report	All Sections



Signature
 Manager / Chang Seok. Choi
 HCT CO.,LTD

Appendix A. The Spot check test data

1. Summary of the spot check for Unlicensed EMC

Report	Test Item	Channel	Measured Frequency	LG-K200MT Result [dBuV/m]		LG-K200F Result [dBuV/m]		Gap [dB]	
				Peak	Average	Peak	Average	Peak	Average
BT	Band Edge	78	2483.5 MHz~2500 MHz	66.94	39.29	66.41	38.86	0.53	0.43
	RSE	0	4804 MHz	48.25	34.26	47.68	34.17	0.57	0.09
			7206 MHz	55.66	41.11	55.08	40.97	0.58	0.14
BT LE	Band Edge	39	2483.5 MHz~2500 MHz	49.37	37.42	48.95	37.59	0.42	-0.17
	RSE	0	4804 MHz	47.06	37.32	47.78	37.97	-0.72	-0.65
			7206 MHz	55.4	44.72	54.93	44.77	0.47	-0.05
DTS	Band Edge	11	2483.5 MHz~2500 MHz	70.81	50.9	69.89	50.76	0.92	0.14
	RSE	1	4824 MHz	48.45	38.87	48.79	38.78	-0.34	0.09
			7236 MHz	54.84	42.53	54.8	42.42	0.04	0.11

2. Summary of the spot check for SAR

To determine data reuse, we performed spot checked as below table.

Band	ZNFK200MT model: LG-K200MT Result Scaled 1g SAR (W/kg)	ZNFK200F Additional model: LG-K200F LGK200F, K200F Result Scaled 1g SAR (W/kg)	Deviation
GSM 850	0.706	0.727	2.9%
GSM 1900	0.793	0.735	7.9%
UMTS 850	0.553	0.602	8.1%
UMTS 1700	0.500	0.564	11.3%
UMTS 1900	0.755	0.687	9.9%
LTE 4 (AWS)	0.726	0.652	11.3%
LTE 7	0.645	0.736	12.4%
2.4GHz WLAN	1.020	1.011	0.9%

3. Summary of the spot check for Licensed EMC

EFFECTIVE RADIATED POWER(GSM850) / (WCDMA850)

Modulation	Frequency		Mode	ZNFK200MT	ZNFK200F	deviation
				(Reference test data)	(Spot check test data)	
	ERP	ERP				
	(dBm)	(dBm)				
MHz	Ch.					
GSM850	836.6	190	VOICE	31.48	27.98	-3.50
WCDMA850	826.4	4132	RMC	22.24	18.28	-3.96

EQUIVALENT ISOTROPIC RADIATED POWER

(GSM1900) / (WCDMA1900) / (WCDMA1700) / LTE Band 4 / LTE Band 7

Modulation	Frequency		Mode	ZNFK200MT	ZNFK200F	deviation
				(Reference test data)	(Spot check test data)	
	EIRP	EIRP				
	(dBm)	(dBm)				
MHz	Ch.					
GSM1900	1880.0	661	VOICE	30.98	28.99	-1.99
WCDMA1900	1907.6	9538	RMC	21.89	21.31	-0.58
WCDMA1700	1752.6	1513	RMC	22.22	18.87	-3.35
LTE4	1753.5	20385	QPSK	22.26	20.93	-1.33
LTE7	2565.0	21400	QPSK	19.44	18.56	-0.88

RADIATED SPURIOUS EMISSIONS (GSM850) / (WCDMA850)

Modulation	Model	Frequency		ZNFK200MT	ZNFK200F	deviation
				(Reference test data)	(Spot check test data)	
		ERP	ERP			
		(dBm)	(dBm)			
MHz	Ch.					
GSM850	ZNFK200MT	848.8	251	-26.66	-35.03	-8.37
	ZNFK200F					
WCDMA850	ZNFK200MT	846.6	4233	-31.74	-32.05	-0.31
	ZNFK200F					

**RADIATED SPURIOUS EMISSIONS
(GSM1900) / (WCDMA1900) / (WCDMA1700) / LTE Band 4 / LTE Band 7**

Modulation	Model	Frequency		ZNFK200MT	ZNFK200F	deviation
				(Reference test data)	(Spot check test data)	
		EIRP	EIRP			
		(dBm)	(dBm)			
MHz	Ch.					
GSM1900	ZNFK200MT	1850.2	512	-35.71	-37.63	-1.92
	ZNFK200F					
WCDMA1900	ZNFK200MT	1880.0	9400	-38.35	-39.90	-1.55
	ZNFK200F					
WCDMA1700	ZNFK200MT	1752.6	1513	-37.71	-39.08	-1.37
	ZNFK200F					
LTE4	ZNFK200MT	1720.0	20050	-32.52	-31.56	0.96
	ZNFK200F					
LTE7	ZNFK200MT	2505.0	20800	-28.14	-26.50	1.64
	ZNFK200F					