

EVALUATION REPORT

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

Date of Evaluation:
 March 27, 2018

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 : ZNFQ610EA

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

Equipment Class(es) : PCE, DTS, DSS

Rule Part(s) : 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 ZNFQ610FA. 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.

The detail test data can be found in this documents, Appendix A.

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	Report Title	Section
ZNFQ610FA	PCE	2G, 3G Report	All sections (Except for WCDMA B4)
		LTE Report	All sections (Except for LTE B2,4,7,66)
	DSS	Bluetooth Report	All sections
	DTS	WLAN DTS Report	All sections
		BT LE Report	All sections



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 Engineer of Telecommunication Testing Center



Report approved by : Jong Seok Lee
 Manager of Telecommunication Testing Center

Appendix A. The Spot check test data

1. Summary of the spot check for Licensed EMC

1.1 EFFECTIVE RADIATED POWER

Modulation	Frequency		Mode	ZNFQ610FA (dBm)	ZNFQ610EA (dBm)	Deviation (dB)
	MHz	Ch.				
GSM850	836.6	190	VOICE	26.97	26.69	-0.28
WCDMA850	836.6	4183	RMC	18.68	18.07	-0.61

Modulation	Frequency		Mod/ Bandwidth	ZNFQ610FA (dBm)	ZNFQ610EA (dBm)	Deviation (dB)
	MHz	Ch.				
LTE – B5	836.5	20525	QPSK(10M)	17.94	17.64	-0.30
LTE – B12(17)	707.5	23095	QPSK(3M)	18.02	17.96	-0.06

1.2 EQUIVALENT ISOTROPIC RADIATED POWER

Modulation	Frequency		Mode	ZNFQ610FA (dBm)	ZNFQ610EA (dBm)	Deviation (dB)
	MHz	Ch.				
GSM1900	1880.0	661	VOICE	28.84	27.41	-1.43
WCDMA1900	1880.0	9400	RMC	21.66	20.67	-0.99

1.3 RADIATED SPURIOUS EMISSIONS

Modulation	Frequency		Mode	ZNFQ610FA (dBm)	ZNFQ610EA (dBm)	Deviation (dB)
	MHz	Ch.				
GSM850	2472.60	128	VOICE	-42.17	-39.37	2.80
WCDMA850	2539.80	4233	RMC	-54.13	-52.58	1.55

Modulation	Frequency		Mod/ Bandwidth	ZNFQ610FA (dBm)	ZNFQ610EA (dBm)	Deviation (dB)
	MHz	Ch.				
LTE – B5	2509.5	20525	QPSK(5M)	-51.27	-53.99	-2.72
LTE – B12(17)	2122.50	23095	QPSK(3M)	-38.59	-40.90	-2.31

Modulation	Frequency		Mode	ZNFQ610FA (dBm)	ZNFQ610EA (dBm)	Deviation (dB)
	MHz	Ch.				
GSM1900	9251.00	512	VOICE	-29.64	-32.59	-2.95
WCDMA1900	7409.60	9262	RMC	-43.72	-42.02	1.70

2. Summary of the spot check for Unlicensed EMC

Report	Test Item	Channel	Measured Frequency [MHz]	ZNFQ610FA		ZNFQ610EA		Deviation	
				(dBuV/m)		(dBuV/m)		(dB)	
				Peak	Average	Peak	Average	Peak	Average
BT	Band Edge	78	2483.5 ~2500	63.92	58.72	62.53	57.67	1.39	1.05
	RSE	39	4882	50.25	37.88	51.17	37.71	-0.92	0.17
		78	7440	57.15	43.80	58.06	43.89	-0.91	-0.09
BT LE	Band Edge	39	2483.5 ~2500	54.55	46.19	54.80	45.93	-0.25	0.26
	RSE	19	4880	51.53	41.65	50.86	41.36	0.67	0.29
		39	7440	57.70	47.75	58.37	47.50	-0.67	0.25
DTS	Band Edge	13	2483.5 ~2500	59.49	46.86	58.00	46.32	1.49	0.54
	RSE	1	4824	51.49	40.77	51.02	40.70	0.47	0.07
		1	7236	57.01	45.10	56.70	44.69	0.31	0.41