

# 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.

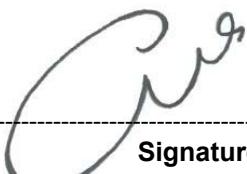
**Spot Check Verification Result Summary**

(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         |

  
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**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<br>(Reference) | ZNFM700TV<br>(Reuse)   | deviation |
|------------|-----------|------|-------|-------------------------|------------------------|-----------|
|            |           |      |       | (Reference test data)   | (Spot check test data) |           |
|            | MHz       | Ch.  |       | ERP<br>(dBm)            | ERP<br>(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<br>(Reference) | ZNFM700TV<br>(Reuse)   | deviation |
|------------|-----------|------|-------|-------------------------|------------------------|-----------|
|            |           |      |       | (Reference test data)   | (Spot check test data) |           |
|            | MHz       | Ch.  |       | ERP<br>(dBm)            | ERP<br>(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<br>Bandwidth | ZNFM700H<br>(Reference) | ZNFM700TV<br>(Reuse)   | deviation |
|------------|-----------|-------|-------------------|-------------------------|------------------------|-----------|
|            |           |       |                   | (Reference test data)   | (Spot check test data) |           |
|            | MHz       | Ch.   |                   | EIRP<br>(dBm)           | EIRP<br>(dBm)          |           |
| LTE – B7   | 2562.5    | 21375 | QPSK(15M)         | 19.28                   | 18.70                  | -0.58     |

**RADIATED SPURIOUS EMISSIONS(LTE – Band 7)**

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

**EFFECTIVE RADIATED POWER(LTE – Band 17)**

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

**RADIATED SPURIOUS EMISSIONS(LTE – Band 17)**

| Modulation | Frequency |     | Mode<br>Bandwidth | ZNFM700H<br>(Reference) | ZNFM700TV<br>(Reuse)   | deviation |
|------------|-----------|-----|-------------------|-------------------------|------------------------|-----------|
|            |           |     |                   | (Reference test data)   | (Spot check test data) |           |
|            | ERP       |     |                   | ERP                     |                        |           |
|            | (dBm)     |     |                   | (dBm)                   |                        |           |
|            | MHz       | Ch. |                   |                         |                        |           |
| 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<br>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<br>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    |