



# FCC RF Test Report

APPLICANT : Motorola Mobility LLC  
EQUIPMENT : Mobile Cellular Phone  
BRAND NAME : Motorola  
MODEL NAME : XT1926-2, XT1926-3  
FCC ID : IHDT56WL2  
STANDARD : FCC 47 CFR Part 2, 22(H), 24(E)  
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Dec. 27, 2017 and testing was completed on Feb. 24, 2018. We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI/TIA-603-E and has been 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 (Kunshan) Inc., the test report shall not be reproduced except in full.



Approved by: James Huang / Manager

**Sporton International (Kunshan) Inc.**

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### REVISION HISTORY

| REPORT NO.   | VERSION | DESCRIPTION             | ISSUED DATE   |
|--------------|---------|-------------------------|---------------|
| FG7D2702-01A | Rev. 01 | Initial issue of report | Mar. 13, 2018 |
|              |         |                         |               |
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|              |         |                         |               |



### SUMMARY OF TEST RESULT

| Report Section | FCC Rule                            | Description                          | Limit                                  | Result | Remark                                    |
|----------------|-------------------------------------|--------------------------------------|--|--------|---|
| 3.1            | §22.913(a)(2)                       | Effective Radiated Power             | < 7 Watts                              | PASS   | -   |
|                | §24.232(c)                          | Equivalent Isotropic Radiated Power  | < 2 Watts                              | PASS   | -   |
| 4.4            | §2.1053<br>§22.917(a)<br>§24.238(a) | Field Strength of Spurious Radiation | $< 43 + 10 \log_{10}(P[\text{Watts}])$ | PASS   | Under limit<br>19.97 dB at<br>3759.00 MHz |



# 1 General Description

## 1.1 Applicant

Motorola Mobility LLC  
222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.2 Manufacturer

Motorola Mobility LLC  
222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.3 Product Feature of Equipment Under Test

| Product Feature                 |  |
|---------------------------------|--|
| Equipment                       | Mobile Cellular Phone  |
| Brand Name                      | Motorola   |
| Model Name                      | XT1926-2, XT1926-3   |
| FCC ID                          | IHDT56WL2  |
| EUT supports Radios application | GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/<br>HSPA+/LTE/NFC<br>WLAN 2.4GHz 802.11b/g/n HT20<br>WLAN 5GHz 802.11a/n HT20/HT40<br>WLAN 5GHz 802.11ac VHT20/VHT40/VHT80<br>Bluetooth v3.0+EDR/ Bluetooth v4.0 LE/<br>Bluetooth v4.1 LE/ Bluetooth v4.2 LE/ Bluetooth v5.0 LE |
| IMEI Code                       | Radiation:<br>351854090024535/351854090024543 for sample 1<br>351871090006205 for sample 2   |
| HW Version                      | DVT1B  |
| SW Version                      | evert_n-userdebug 8.0.0 OPW27.88 1825 intcfg,test-keys   |
| EUT Stage                       | Identical Prototype  |

**Remark:**

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. There are two types of EUT sample 1 and sample 2, the differences between two samples are only for SIM slot, sample 1(Model name: XT1926-3) is dual SIM slot, sample 2(Model name: XT1926-2) is single SIM slot.

### 1.4 Product Specification of Equipment Under Test

| Standards-related Product Specification |  |
|---|--|
| <b>Tx Frequency</b>                     | <b>GSM/GPRS/EDGE:</b><br>850: 824.2 MHz ~ 848.8 MHz<br>1900: 1850.2 MHz ~ 1909.8MHz<br><b>WCDMA:</b><br>Band V: 826.4 MHz ~ 846.6 MHz<br>Band II: 1852.4 MHz ~ 1907.6 MHz      |
| <b>Rx Frequency</b>                     | <b>GSM/GPRS/EDGE:</b><br>850: 869.2 MHz ~ 893.8 MHz<br>1900: 1930.2 MHz ~ 1989.8 MHz<br><b>WCDMA:</b><br>Band V: 871.4 MHz ~ 891.6 MHz<br>Band II: 1932.4 MHz ~ 1987.6 MHz     |
| <b>Antenna Type</b>                     | PIFA Antenna   |
| <b>Antenna Gain</b>                     | Cellular Band: -3.1 dBi<br>PCS Band: -0.8 dBi  |
| <b>Type of Modulation</b>               | GSM: GMSK<br>GPRS: GMSK<br>EDGE: GMSK / 8PSK<br>WCDMA : BPSK (Uplink)<br>HSDPA/DC-HSDPA : QPSK (Uplink)<br>HSUPA : QPSK (Uplink)<br>HSPA+ : 16QAM (Uplink)<br>DC-HSDPA : 64QAM |

### 1.5 Modification of EUT

No modifications are made to the EUT during all test items.



### 1.6 Specification of Accessory

| Specification of Accessory |                  |  |                                |
|----------------------------|------------------|--|--------------------------------|
| AC Adapter 1(US)           | Brand Name       | Motorola (Salom)   | Model Name SC-22               |
|                            | Power Rating     | I/P: 100-240 Vac, 500mA, O/P: 5Vdc,3000mA or 9Vdc,1600mA or 12Vdc,1200mA |                                |
| AC Adapter 1(EU)           | Brand Name       | Motorola (Salom)   | Model Name SC-23               |
|                            | Power Rating     | I/P: 100-240 Vac, 500mA, O/P: 5Vdc,3000mA or 9Vdc,1600mA or 12Vdc,1200mA |                                |
| AC Adapter 1(UK)           | Brand Name       | Motorola (Salom)   | Model Name SC-24               |
|                            | Power Rating     | I/P: 100-240 Vac, 500mA, O/P: 5Vdc,3000mA or 9Vdc,1600mA or 12Vdc,1200mA |                                |
| AC Adapter 1(IN)           | Brand Name       | Motorola (Salom)   | Model Name SC-25               |
|                            | Power Rating     | I/P: 100-240 Vac, 500mA, O/P: 5Vdc,3000mA or 9Vdc,1600mA or 12Vdc,1200mA |                                |
| AC Adapter 1(AU)           | Brand Name       | Motorola (Salom)   | Model Name SC-26               |
|                            | Power Rating     | I/P: 100-240 Vac, 500mA, O/P: 5Vdc,3000mA or 9Vdc,1600mA or 12Vdc,1200mA |                                |
| AC Adapter 2(US)           | Brand Name       | Motorola (Chenyang)  | Model Name SC-22               |
|                            | Power Rating     | I/P: 100-240 Vac, 500mA, O/P: 5Vdc,3000mA or 9Vdc,1600mA or 12Vdc,1200mA |                                |
| AC Adapter 2(EU)           | Brand Name       | Motorola (Chenyang)  | Model Name SC-23               |
|                            | Power Rating     | I/P: 100-240 Vac, 500mA, O/P: 5Vdc,3000mA or 9Vdc,1600mA or 12Vdc,1200mA |                                |
| AC Adapter 2(UK)           | Brand Name       | Motorola (Chenyang)  | Model Name SC-24               |
|                            | Power Rating     | I/P: 100-240 Vac, 500mA, O/P: 5Vdc,3000mA or 9Vdc,1600mA or 12Vdc,1200mA |                                |
| AC Adapter 2(IN)           | Brand Name       | Motorola (Chenyang)  | Model Name SC-25               |
|                            | Power Rating     | I/P: 100-240 Vac, 500mA, O/P: 5Vdc,3000mA or 9Vdc,1600mA or 12Vdc,1200mA |                                |
| AC Adapter 2(AU)           | Brand Name       | Motorola (Chenyang)  | Model Name SC-26               |
|                            | Power Rating     | I/P: 100-240 Vac, 500mA, O/P: 5Vdc,3000mA or 9Vdc,1600mA or 12Vdc,1200mA |                                |
| Battery                    | Brand Name       | Motorola (ATL)   | Model Name JT40                |
|                            | Power Rating     | 3.8Vdc,3200mAh   | Type Li-ion Polymer            |
| Earphone 1                 | Brand Name       | Motorola (Jiahe)   | Model Name LS-118M-12          |
|                            | Signal Line Type | 1.2 meter, non-shielded cable, without ferrite core                      |                                |
| Earphone 2                 | Brand Name       | Motorola (Lianyun)   | Model Name TS910A-38AMS01WHR-M |
|                            | Signal Line Type | 1.2 meter, non-shielded cable, without ferrite core                      |                                |
| USB Cable                  | Brand Name       | Motorola (Liqi)  | Model Name L32B-053000100-ALL  |
|                            | Signal Line Type | 1.0 meter, shielded cable, without ferrite core                          |                                |



## 1.7 Re-use of Measured Data

### 1.7.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: XT1926-2, XT1926-3, FCC ID: IHDT56WL2) is electrically identical to the reference device (Model: XT1926-6, XT1926-7, FCC ID: IHDT56WL4) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 178919 D01.

### 1.7.2 Difference Section

For details concerning the similarity with respect to component placement, mechanical/electrical design etc., some difference of population/depopulation to enable support of different cellular bands, please refer to the Product Equality Declaration.

The re-used RF data includes the following bands provided in Appendix D (Sporton RF Report No. FG7D2702A for the reference device Model: XT1926-6, XT1926-7, FCC ID: IHDT56WL4):

### 1.7.3 Spot Check Verification Data Section

In order to confirm hardware similarity of the subject device with the reference device, spot check measurements were performed on the subject device for radiated spurious emission, Conducted Band-edge and Conducted spurious emission, the test result were consistent with FCC ID: IHDT56WL4.

Assertions concerning the similarity of these devices are based on representations by the applicant. The applicant accepts full responsibility for the validity of the similarity claim, and for the determination that verification test data are sufficient to support it.

### 1.7.4 Reference detail Section:

| Equipment Class | Reference FCC ID | Folder Test                    | Report Title/Section   |
|-----------------|------------------|--------------------------------|--|
| PCE (2G/3G)     | IHDT56WL4        | Part22H.24E.27L<br>(FG7D2702A) | All sections<br>(except RSE/ERP/EIRP)<br>applicable for GSM 850/1900,<br>WCDMA Band V/II |



### 1.8 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator

| FCC Rule | System                     | Type of Modulation | Maximum ERP/EIRP (W) |
|----------|----------------------------|--------------------|----------------------|
| Part 22H | GSM850 GSM                 | GMSK               | 0.6095               |
| Part 22H | GSM850 EDGE class 8        | 8PSK               | 0.1303               |
| Part 22H | WCDMA Band V RMC 12.2Kbps  | BPSK               | 0.0587               |
| Part 24E | GSM1900 GSM                | GMSK               | 0.7516               |
| Part 24E | GSM1900 EDGE class 8       | 8PSK               | 0.2877               |
| Part 24E | WCDMA Band II RMC 12.2Kbps | BPSK               | 0.1600               |

### 1.9 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600155-0) and the FCC designation No. is CN5013.

|                           |   |                                       |
|---------------------------|---|---------------------------------------|
| <b>Test Site</b>          | Sporton International (Kunshan) Inc.  |                                       |
| <b>Test Site Location</b> | No.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335 China<br>TEL: +86-512-57900158<br>FAX: +86-512-57900958 |                                       |
| <b>Test Site No.</b>      | <b>Sporton Site No.</b>   | <b>FCC Test Firm Registration No.</b> |
|                           | 03CH03-KS   | 630927                                |

**Note:** The test site complies with ANSI C63.4 2014 requirement.



## 1.10 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 2, 22(H), 24(E)
- ♦ ANSI/TIA-603-E
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v03
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

### **Remark:**

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



## 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems v03 with maximum output power.

Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission.

Radiated emissions were investigated as following frequency range:

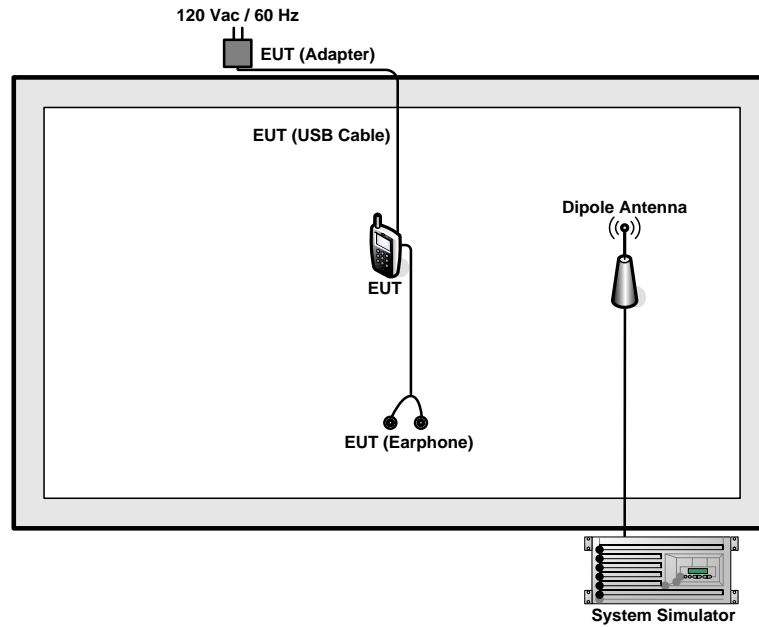
1. 30 MHz to 10th harmonic for GSM850 and WCDMA Band V.
2. 30 MHz to 10th harmonic for GSM1900 and WCDMA Band II.

All modes and data rates and positions were investigated.

Test modes are chosen to be reported as the worst case configuration below:

| Test Modes    |   |
|---------------|---|
| Band          | Radiated TCs  |
| GSM 850       | <ul style="list-style-type: none"> <li>■ GSM Link</li> <li>■ EDGE class 8 Link</li> </ul> |
| GSM 1900      | <ul style="list-style-type: none"> <li>■ GSM Link</li> <li>■ EDGE class 8 Link</li> </ul> |
| WCDMA Band V  | <ul style="list-style-type: none"> <li>■ RMC 12.2Kbps Link</li> </ul>                     |
| WCDMA Band II | <ul style="list-style-type: none"> <li>■ RMC 12.2Kbps Link</li> </ul>                     |

## 2.2 Connection Diagram of Test System



## 2.3 Support Unit used in test configuration

| Item | Equipment        | Trade Name | Model No. | FCC ID | Data Cable | Power Cord        |
|------|------------------|------------|-----------|--------|------------|-------------------|
| 1.   | System Simulator | R&S        | CMU 200   | N/A    | N/A        | Unshielded, 1.8 m |



### 3 Conducted Test Result

#### 3.1 Conducted Output Power and ERP/EIRP

##### 3.1.1 Description of the Conducted Output Power and ERP/EIRP

A system simulator was used to establish communication with the EUT. Its parameters were set to enforce EUT transmitting at the maximum power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The ERP of mobile transmitters must not exceed 7 Watts for GSM850 and WCDMA Band V.

The EIRP of mobile transmitters must not exceed 2 Watts for GSM1900 and WCDMA Band II.

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$ ,  $ERP = EIRP - 2.15$ , where

$P_T$  = transmitter output power in dBm

$G_T$  = gain of the transmitting antenna in dBi

$L_C$  = signal attenuation in the connecting cable between the transmitter and antenna in dB

##### 3.1.2 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure the maximum burst average power for GSM and maximum average power for other modulation signal.

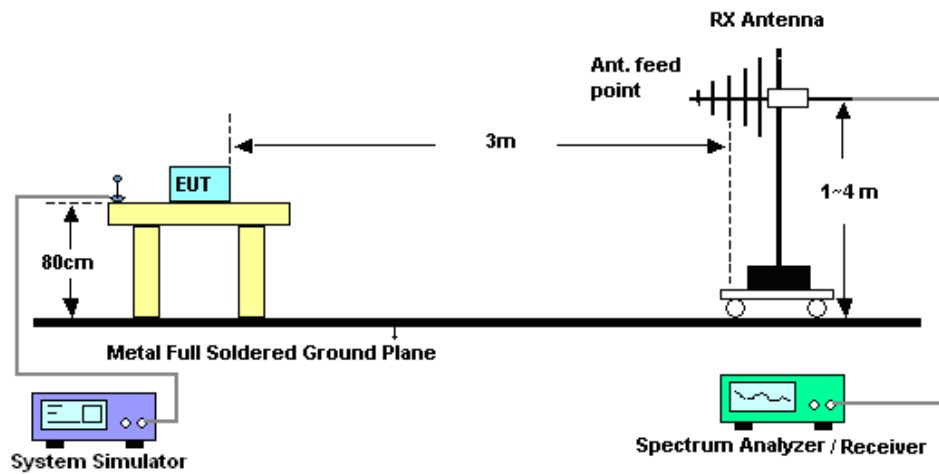
## 4 Radiated Test Items

### 4.1 Measuring Instruments

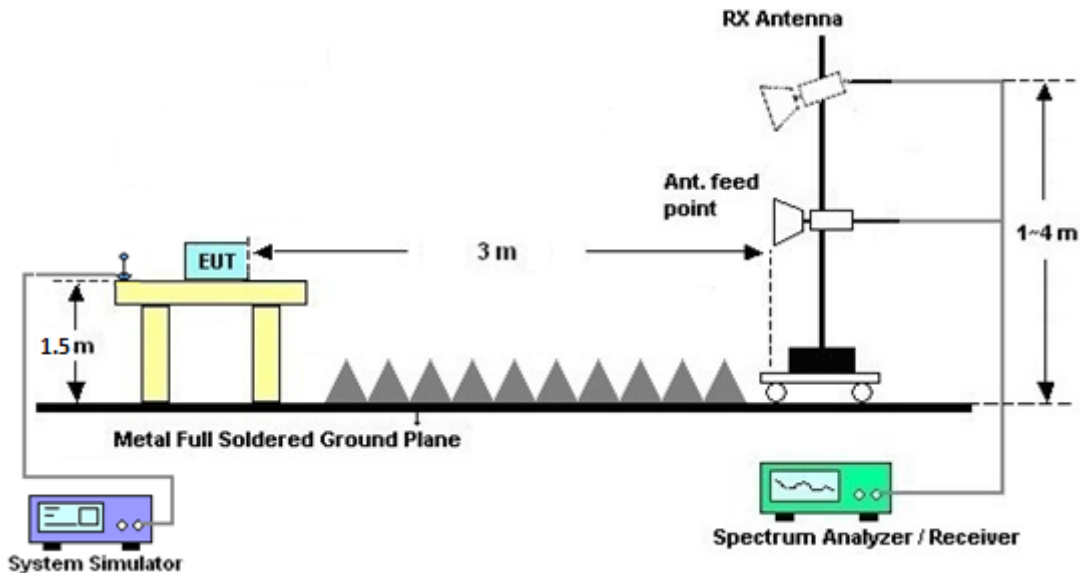
See list of measuring instruments of this test report.

### 4.2 Test Setup

#### 4.2.1 For radiated test from 30MHz to 1GHz



#### 4.2.2 For radiated test above 1GHz



### 4.3 Test Result of Radiated Test

Please refer to Appendix B.



## 4.4 Field Strength of Spurious Radiation Measurement

### 4.4.1 Description of Field Strength of Spurious Radiated Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $43 + 10 \log (P)$  dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

### 4.4.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v03 Section 5.8 and ANSI/TIA-603-E Section 2.2.12.
2. The EUT was placed on a rotatable wooden table 0.8 meters for frequency below 1GHz and 1.5 meter for frequency above 1GHz above the ground.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11.  $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
12.  $ERP \text{ (dBm)} = EIRP - 2.15$
13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
14. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)  
 $= P(W) - [43 + 10\log(P)] \text{ (dB)}$   
 $= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$   
 $= -13\text{dBm}.$



## 5 List of Measuring Equipment

| Instrument            | Manufacturer | Model No.            | Serial No. | Characteristics      | Calibration Date | Test Date     | Due Date      | Remark                |
|-----------------------|--------------|----------------------|------------|----------------------|------------------|---------------|---------------|-----------------------|
| EXA Spectrum Analyzer | Keysight     | N9010A               | MY55150244 | 10Hz~44GHz           | Apr. 18, 2017    | Feb. 24, 2018 | Apr. 17, 2018 | Radiation (03CH03-KS) |
| Bilog Antenna         | TeseQ        | CBL6112D             | 35406      | 25MHz~2GHz           | Apr. 22, 2017    | Feb. 24, 2018 | Apr. 21, 2018 | Radiation (03CH03-KS) |
| Horn Antenna          | Schwarzbeck  | BBHA9120 D           | 9120D-1356 | 1GHz~18GHz           | Apr. 22, 2017    | Feb. 24, 2018 | Apr. 21, 2018 | Radiation (03CH03-KS) |
| SHF-EHF Horn          | Schwarzbeck  | BBHA 9170            | BBHA170249 | 15GHz~40GHz          | Feb. 07, 2018    | Feb. 24, 2018 | Feb. 06, 2019 | Radiation (03CH03-KS) |
| Amplifier             | com-power    | PA-103A              | 161069     | 1MHz~1000MHz / 32 dB | Apr. 18, 2017    | Feb. 24, 2018 | Apr. 17, 2018 | Radiation (03CH03-KS) |
| Amplifier             | MITEQ        | TTA1840-35-HG        | 1887435    | 18GHz~40GHz          | Oct. 12, 2017    | Feb. 24, 2018 | Oct. 11, 2018 | Radiation (03CH03-KS) |
| high gain Amplifier   | MITEQ        | AMF-7D-00 101800-30- | 2025788    | 1GHz~18GHz           | Apr. 18, 2017    | Feb. 24, 2018 | Apr. 17, 2018 | Radiation (03CH03-KS) |
| Amplifier             | Agilent      | 8449B                | 3008A02370 | 1GHz~26.5GHz         | Oct. 12, 2017    | Feb. 24, 2018 | Oct. 11, 2018 | Radiation (03CH03-KS) |
| AC Power Source       | Chroma       | 61601                | F104090004 | N/A                  | NCR              | Feb. 24, 2018 | NCR           | Radiation (03CH03-KS) |
| Turn Table            | ChamPro      | EM 1000-T            | 060762-T   | 0~360 degree         | NCR              | Feb. 24, 2018 | NCR           | Radiation (03CH03-KS) |
| Antenna Mast          | ChamPro      | EM 1000-A            | 060762-A   | 1 m~4 m              | NCR              | Feb. 24, 2018 | NCR           | Radiation (03CH03-KS) |

NCR: No Calibration Required



## 6 Uncertainty of Evaluation

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

|   |       |
|---|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 2.8dB |
|---|-------|

### Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

|   |       |
|---|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 3.3dB |
|---|-------|



## Appendix A. Test Results of Conducted Test

### ERP/EIRP

| GSM850 (G <sub>T</sub> - L <sub>C</sub> = -3.1dBi) |        |        |        |
|--|--------|--------|--------|
| Channel  | 128    | 189    | 251    |
|  | (Low)  | (Mid)  | (High) |
| Frequency  | 824.2  | 836.4  | 848.8  |
| (MHz)  |        |        |        |
| Conducted Power (dBm)                              | 32.60  | 32.84  | 33.10  |
| Conducted Power (Watts)                            | 1.8197 | 1.9231 | 2.0417 |
| ERP(dBm)   | 27.35  | 27.59  | 27.85  |
| ERP(Watts)   | 0.5433 | 0.5741 | 0.6095 |

| EDGE850 (G <sub>T</sub> - L <sub>C</sub> = -3.1dBi) |        |        |        |
|---|--------|--------|--------|
| Channel   | 128    | 189    | 251    |
|   | (Low)  | (Mid)  | (High) |
| Frequency   | 824.2  | 836.4  | 848.8  |
| (MHz)   |        |        |        |
| Conducted Power (dBm)                               | 26.39  | 26.38  | 26.40  |
| Conducted Power (Watts)                             | 0.4355 | 0.4345 | 0.4365 |
| ERP(dBm)  | 21.14  | 21.13  | 21.15  |
| ERP(Watts)  | 0.1300 | 0.1297 | 0.1303 |



| GSM1900 ( $G_T - L_C = -0.8\text{dBi}$ ) |        |        |        |
|--|--------|--------|--------|
| Channel                                  | 512    | 661    | 810    |
|  | (Low)  | (Mid)  | (High) |
| Frequency                                | 1850.2 | 1880   | 1909.8 |
| (MHz)                                    |        |        |        |
| Conducted Power (dBm)                    | 29.56  | 29.21  | 28.95  |
| Conducted Power (Watts)                  | 0.9036 | 0.8337 | 0.7852 |
| EIRP(dBm)                                | 28.76  | 28.41  | 28.15  |
| EIRP(Watts)                              | 0.7516 | 0.6934 | 0.6531 |

| EDGE1900 ( $G_T - L_C = -0.8\text{dBi}$ ) |        |        |        |
|---|--------|--------|--------|
| Channel                                   | 512    | 661    | 810    |
|   | (Low)  | (Mid)  | (High) |
| Frequency                                 | 1850.2 | 1880   | 1909.8 |
| (MHz)                                     |        |        |        |
| Conducted Power (dBm)                     | 25.26  | 25.31  | 25.39  |
| Conducted Power (Watts)                   | 0.3357 | 0.3396 | 0.3459 |
| EIRP(dBm)                                 | 24.46  | 24.51  | 24.59  |
| EIRP(Watts)                               | 0.2793 | 0.2825 | 0.2877 |



| WCDMA Band V ( $G_T - L_{C=}$ -3.1dBi) |        |        |        |
|--|--------|--------|--------|
| Channel                                | 4132   | 4182   | 4233   |
|  | (Low)  | (Mid)  | (High) |
| Frequency                              | 826.4  | 836.4  | 846.6  |
| (MHz)                                  |        |        |        |
| Conducted Power (dBm)                  | 22.89  | 22.84  | 22.94  |
| Conducted Power (Watts)                | 0.1945 | 0.1923 | 0.1968 |
| ERP(dBm)                               | 17.64  | 17.59  | 17.69  |
| ERP(Watts)                             | 0.0581 | 0.0574 | 0.0587 |

| WCDMA Band II ( $G_T - L_{C=}$ -0.8dBi) |        |        |        |
|---|--------|--------|--------|
| Channel                                 | 9262   | 9400   | 9538   |
|   | (Low)  | (Mid)  | (High) |
| Frequency                               | 1852.4 | 1880   | 1907.6 |
| (MHz)                                   |        |        |        |
| Conducted Power (dBm)                   | 22.70  | 22.79  | 22.84  |
| Conducted Power (Watts)                 | 0.1862 | 0.1901 | 0.1923 |
| EIRP(dBm)                               | 21.90  | 21.99  | 22.04  |
| EIRP(Watts)                             | 0.1549 | 0.1581 | 0.1600 |



## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission

| GSM850 (GSM) |                   |             |               |                   |                   |                    |                      |                       |                    |
|--------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel      | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle       | 1672              | -55.23      | -13           | -42.23            | -55.55            | -57.14             | 1.14                 | 5.20                  | H                  |
|              | 2510              | -34.33      | -13           | -21.33            | -41.94            | -36.96             | 1.12                 | 5.90                  | H                  |
|              | 3345              | -67.01      | -13           | -54.01            | -71.13            | -70.22             | 1.34                 | 6.70                  | H                  |
|              | 1672              | -64.36      | -13           | -51.36            | -63.46            | -66.27             | 1.14                 | 5.20                  | V                  |
|              | 2510              | -43.10      | -13           | -30.10            | -50.18            | -45.73             | 1.12                 | 5.90                  | V                  |
|              | 3345              | -65.74      | -13           | -52.74            | -70.88            | -68.95             | 1.34                 | 6.70                  | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| GSM850 (EDGE class 8) |                   |             |               |                   |                   |                    |                      |                       |                    |
|-----------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel               | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                | 1672              | -63.29      | -13           | -50.29            | -63.61            | -65.20             | 1.14                 | 5.20                  | H                  |
|                       | 2510              | -65.81      | -13           | -52.81            | -70.11            | -68.44             | 1.12                 | 5.90                  | H                  |
|                       | 3345              | -67.65      | -13           | -54.65            | -71.77            | -70.86             | 1.34                 | 6.70                  | H                  |
|                       | 1672              | -67.74      | -13           | -54.74            | -66.84            | -69.65             | 1.14                 | 5.20                  | V                  |
|                       | 2510              | -68.77      | -13           | -55.77            | -71.84            | -71.40             | 1.12                 | 5.90                  | V                  |
|                       | 3345              | -64.11      | -13           | -51.11            | -69.25            | -67.32             | 1.34                 | 6.70                  | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| GSM1900 (GSM) |                   |              |               |                   |                   |                    |                      |                       |                    |
|---------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel       | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle        | 3759              | -32.97       | -13           | -19.97            | -45.53            | -38.14             | 1.83                 | 7.00                  | H                  |
|               | 5640              | -48.16       | -13           | -35.16            | -60.54            | -55.78             | 2.18                 | 9.80                  | H                  |
|               | 7521              | -60.52       | -13           | -47.52            | -77.75            | -70.19             | 2.53                 | 12.20                 | H                  |
|               | 3759              | -41.28       | -13           | -28.28            | -53.86            | -46.45             | 1.83                 | 7.00                  | V                  |
|               | 5640              | -45.11       | -13           | -32.11            | -60.09            | -52.73             | 2.18                 | 9.80                  | V                  |
|               | 7521              | -56.18       | -13           | -43.18            | -77.28            | -65.85             | 2.53                 | 12.20                 | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| GSM1900 (EDGE class 8) |                   |              |               |                   |                   |                    |                      |                       |                    |
|------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                 | 3759              | -36.82       | -13           | -23.82            | -48.57            | -41.99             | 1.83                 | 7.00                  | H                  |
|                        | 5640              | -50.42       | -13           | -37.42            | -62.59            | -58.04             | 2.18                 | 9.80                  | H                  |
|                        | 7521              | -58.84       | -13           | -45.84            | -76.07            | -68.51             | 2.53                 | 12.20                 | H                  |
|                        | 3759              | -37.20       | -13           | -24.20            | -50.74            | -42.37             | 1.83                 | 7.00                  | V                  |
|                        | 5640              | -49.56       | -13           | -36.56            | -63.73            | -57.18             | 2.18                 | 9.80                  | V                  |
|                        | 7521              | -54.19       | -13           | -41.19            | -75.29            | -63.86             | 2.53                 | 12.20                 | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| WCDMA Band V (RMC 12.2Kbps) |                   |             |               |                   |                   |                    |                      |                       |                    |
|-----------------------------|-------------------|-------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                     | Frequency ( MHz ) | ERP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                      | 1672              | -70.80      | -13           | -57.80            | -71.12            | -72.71             | 1.14                 | 5.20                  | H                  |
|                             | 2510              | -68.81      | -13           | -55.81            | -73.11            | -71.44             | 1.12                 | 5.90                  | H                  |
|                             | 3345              | -69.57      | -13           | -56.57            | -73.69            | -72.78             | 1.34                 | 6.70                  | H                  |
|                             | 1672              | -71.82      | -13           | -58.82            | -70.92            | -73.73             | 1.14                 | 5.20                  | V                  |
|                             | 2510              | -70.17      | -13           | -57.17            | -73.24            | -72.80             | 1.12                 | 5.90                  | V                  |
|                             | 3345              | -68.46      | -13           | -55.46            | -73.6             | -71.67             | 1.34                 | 6.70                  | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| WCDMA Band II (RMC 12.2Kbps) |                   |              |               |                   |                   |                    |                      |                       |                    |
|------------------------------|-------------------|--------------|---------------|-------------------|-------------------|--------------------|----------------------|-----------------------|--------------------|
| Channel                      | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle                       | 3762              | -39.92       | -13           | -26.92            | -51.16            | -45.09             | 1.83                 | 7.00                  | H                  |
|                              | 5643              | -57.68       | -13           | -44.68            | -69.85            | -65.30             | 2.18                 | 9.80                  | H                  |
|                              | 7521              | -59.80       | -13           | -46.80            | -77.03            | -69.47             | 2.53                 | 12.20                 | H                  |
|                              | 3759              | -41.35       | -13           | -28.35            | -53.91            | -46.52             | 1.83                 | 7.00                  | V                  |
|                              | 5643              | -57.29       | -13           | -44.29            | -71.46            | -64.91             | 2.18                 | 9.80                  | V                  |
|                              | 7521              | -56.07       | -13           | -43.07            | -77.17            | -65.74             | 2.53                 | 12.20                 | V                  |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



## **Appendix D. Reference Report**

Please refer to Sporton report number FG7D2702A which is issued separately.