



FCC RF Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Phone
BRAND NAME : Motorola
MODEL NAME : XT2095-2
FCC ID : IHDT56ZJ9
STANDARD : 47 CFR Part 2, 22(H), 24(E)
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)

This is a data re-used report which is only valid together with the original test report. We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures 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.

Jason Jia

Reviewed by: Jason Jia / Supervisor

James Huang

Approved by: James Huang / Manager



Sporton International (Kunshan) Inc.

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People's Republic of China**



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REVISION HISTORY

| REPORT NO. | VERSION | DESCRIPTION | ISSUED DATE |
|--------------|---------|-------------------------|---------------|
| FG080310-06A | Rev. 01 | Initial issue of report | Dec. 29, 2020 |
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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 Phone |
| Brand Name | Motorola |
| Model Name | XT2095-2 |
| FCC ID | IHDT56ZJ9 |
| EUT supports Radios application | GSM/WCDMA/LTE WLAN 2.4GHz 802.11b/g/n HT20 Bluetooth BR/EDR/LE FM Receiver, and GNSS |
| HW Version | DVT2 |
| SW Version | QOF30.396 |
| EUT Stage | Identical Prototype |

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

| Standards-related Product Specification | |
|---|--|
| Tx Frequency | GSM/GPRS/EDGE: 850: 824.2 MHz ~ 848.8 MHz 1900: 1850.2 MHz ~ 1909.8MHz WCDMA: Band V: 826.4 MHz ~ 846.6 MHz Band II: 1852.4 MHz ~ 1907.6 MHz |
| Rx Frequency | GSM/GPRS/EDGE: 850: 869.2 MHz ~ 893.8 MHz 1900: 1930.2 MHz ~ 1989.8 MHz WCDMA: Band V: 871.4 MHz ~ 891.6 MHz Band II: 1932.4 MHz ~ 1987.6 MHz |
| Antenna Type | Fixed Internal Antenna |
| Antenna Gain | Cellular Band: -4.30 dBi PCS Band: -2.20 dBi |
| Type of Modulation | GSM: GMSK GPRS: GMSK EDGE: GMSK / 8PSK WCDMA : BPSK HSDPA/DC-HSDPA : QPSK HSUPA : QPSK HSPA+ : 16QAM DC-HSDPA : 64QAM |

1.5 Modification of EUT

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



1.6 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

| | | | |
|---------------------------|--|----------------------------|---------------------------------------|
| Test Firm | Sporton International (Kunshan) Inc. | | |
| Test Site Location | No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958 | | |
| Test Site No. | Sporton Site No. | FCC Designation No. | FCC Test Firm Registration No. |
| | 03CH04-KS | CN1257 | 314309 |

1.7 Test Software

| Item | Site | Manufacture | Name | Version |
|------|-----------|-------------|------|--------------|
| 1. | 03CH04-KS | AUDIX | E3 | 6.2009-8-24a |



1.8 Re-use of Measured Data

1.8.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: XT2095-2, FCC ID: IHDT56ZJ9) is electrically identical to the reference device (Model: XT2095-1, FCC ID: IHDT56ZJ4) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

1.8.2 Difference Section

For details concerning the similarity with respect to component placement, mechanical/electrical design etc., please refer to the Product Equality Declaration.

The re-used RF data includes the following bands provided in Appendix B (Sporton RF Report No. FG080310A for the reference device Model: XT2095-1, FCC ID: IHDT56ZJ4).

1.8.3 Reference detail Section:

| Equipment Class | Reference FCC ID | Folder Test | Report Title/Section |
|-----------------|------------------|--------------------------------|-------------------------|
| PCE(2G/3G) | IHDT56ZJ4 | Part22H.24E.27L (FG080310A) | All sections applicable |

1.8.4 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 the following test items, the test result were consistent with FCC ID: IHDT56ZJ4.

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.

| Test Item | Mode | IHDT56ZJ4 Worst Result | IHDT56ZJ9 Worst Result | Difference (dB) |
|----------------------------------|-------------------------|------------------------|------------------------|-----------------|
| Radiated Spurious Emission (dBm) | GSM 850 Middle channel | -39.10 | -41.49 | 2.39 |
| | WCDMA 1900 High channel | -48.83 | -49.81 | 0.98 |



2 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-44G,MAX 30dB | Apr. 15, 2020 | Dec. 18, 2020 | Apr. 14, 2021 | Radiation (03CH04-KS) |
| Bilog Antenna | TeseQ | CBL6111D | 49922 | 30MHz-1GHz | Jan. 03, 2020 | Dec. 18, 2020 | Jan. 02, 2021 | Radiation (03CH04-KS) |
| Horn Antenna | Schwarzbeck | BBHA9120D | 1356 | 1GHz~18GHz | Apr. 20, 2020 | Dec. 18, 2020 | Apr. 19, 2021 | Radiation (03CH04-KS) |
| SHF-EHF Horn | Com-power | AH-840 | 101115 | 18GHz~40GHz | Jun. 05, 2020 | Dec. 18, 2020 | Jun. 04, 2021 | Radiation (03CH04-KS) |
| Amplifier | SONOMA | 310N | 187289 | 9KHz-1GHz | Jan. 03, 2020 | Dec. 18, 2020 | Jan. 02, 2021 | Radiation (03CH04-KS) |
| Amplifier | MITEQ | EM18G40G GA | 060728 | 18~40GHz | Jan. 08, 2020 | Dec. 18, 2020 | Jan. 07, 2021 | Radiation (03CH04-KS) |
| high gain Amplifier | MITEQ | AMF-7D-00 101800-30-1 0P | 2025788 | 1Ghz-18Ghz | Jan. 03, 2020 | Dec. 18, 2020 | Jan. 02, 2021 | Radiation (03CH04-KS) |
| Amplifier | Keysight | 83017A | MY57280106 | 500MHz~26.5GHz | Oct. 14, 2020 | Dec. 18, 2020 | Oct. 13, 2021 | Radiation (03CH04-KS) |
| AC Power Source | Chroma | 61601 | F104090004 | N/A | NCR | Dec. 18, 2020 | NCR | Radiation (03CH04-KS) |
| Turn Table | ChamPro | EM 1000-T | 060762-T | 0~360 degree | NCR | Dec. 18, 2020 | NCR | Radiation (03CH04-KS) |
| Antenna Mast | ChamPro | EM 1000-A | 060762-A | 1 m~4 m | NCR | Dec. 18, 2020 | NCR | Radiation (03CH04-KS) |

NCR: No Calibration Required



3 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

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

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

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

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

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

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



Appendix B. Reference Report

Please refer to Sporton report number FG080310A which is issued separately.