FCC RF Test Report

APPLICANT : Motorola Mobility LLC EQUIPMENT : Mobile Cellular Phone

BRAND NAME : T-Mobile

MODEL NAME : XT1952-T

FCC ID : IHDT56XR4

STANDARD : FCC Part 15 Subpart C §15.247

CLASSIFICATION : (DTS) Digital Transmission System

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.



Approved by: James Huang / Manager

Sporton International (Kunshan) Inc.

No. 1098, Pengxi North Road, Kunshan Economic Development Zone, Jiangsu Province 215335, China

Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: IHDT56XR4 Page Number : 1 of 6
Report Issued Date : Apr. 23, 2019
Report Version : Rev. 01

Report No.: FR913102B

TABLE OF CONTENTS

| 1 | GENERAL DESCRIPTION | | |
|---|---------------------|---|-----|
| - | | | |
| | 1.1 | Applicant | .4 |
| | 1.2 | Manufacturer | .4 |
| | 1.3 | Product Feature of Equipment Under Test | .4 |
| | 1.4 | Product Specification of Equipment Under Test | .4 |
| | 1.5 | Modification of EUT | .4 |
| | 1.6 | Re-use of Measured Data | . 5 |

APPENDIX A. REFERENCE REPORT

Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: IHDT56XR4 Page Number : 2 of 6
Report Issued Date : Apr. 23, 2019
Report Version : Rev. 01

Report No.: FR913102B

REVISION HISTORY

| REPORT NO. | VERSION | DESCRIPTION | ISSUED DATE |
|------------|---------|-------------------------|---------------|
| FR913102B | Rev. 01 | Initial issue of report | Apr. 23, 2019 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Sporton International (Kunshan) Inc.
TEL: 86-512-57900158

FAX: 86-512-57900958 FCC ID: IHDT56XR4 Page Number : 3 of 6
Report Issued Date : Apr. 23, 2019
Report Version : Rev. 01

Report No.: FR913102B

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 | T-Mobile | | |
| Model Name | XT1952-T | | |
| FCC ID | IHDT56XR4 | | |
| EUT supports Radios application | GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/ HSPA+(16QAM uplink is not supported)/LTE WLAN 2.4GHz 802.11b/g/n HT20 WLAN 5GHz 802.11a/n HT20/HT40 Bluetooth BR / EDR/ LE | | |
| HW Version | DVT 2 | | |
| SW Version | PCY29.123 | | |
| EUT Stage | Production Unit | | |

Report No.: FR913102B

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/Rx Frequency Range | 2402 MHz ~ 2480 MHz | | |
| Number of Channels | 40 | | |
| Carrier Frequency of Each Channel | 40 Channel(37 hopping + 3 advertising channel) | | |
| Antenna Type / Gain | Monopole Antenna with gain -1.30 dBi | | |
| Type of Modulation | Bluetooth LE : GFSK | | |

1.5 Modification of EUT

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

 Sporton International (Kunshan) Inc.
 Page Number
 : 4 of 6

 TEL: 86-512-57900158
 Report Issued Date
 : Apr. 23, 2019

 FAX: 86-512-57900958
 Report Version
 : Rev. 01

FCC ID : IHDT56XR4 Report Template No.: BU5-FR15CWL Version 2.0

1.6 Re-use of Measured Data

1.6.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: XT1952-T, FCC ID: IHDT56XR4) is electrically identical to the reference device (Model: XT1952-3, XT1952-4, XT1952DL, FCC ID: IHDT56XR1) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

Report No.: FR913102B

1.6.2 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 A (Sporton RF Report No. FR892103B for the reference device Model: XT1952-3, XT1952-4, XT1952DL, FCC ID: IHDT56XR1).

1.6.3 Reference detail Section:

| Equipment Class | Reference FCC ID | Folder Test | Report Title/Section |
|-----------------|------------------|---------------------|-------------------------|
| DSS (BR/EDR) | IHDT56XR1 | Part15C (FR892103A) | All sections applicable |
| DTS (BLE) | IHDT56XR1 | Part15C (FR892103B) | All sections applicable |
| DTS (WLAN) | IHDT56XR1 | Part15C (FR892103C) | All sections applicable |

 Sporton International (Kunshan) Inc.
 Page Number
 : 5 of 6

 TEL: 86-512-57900158
 Report Issued Date
 : Apr. 23, 2019

 FAX: 86-512-57900958
 Report Version
 : Rev. 01

FCC ID : IHDT56XR4 Report Template No.: BU5-FR15CWL Version 2.0

1.6.4 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 radiated spurious emission, the test result were consistent with FCC ID: IHDT56XR1.

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 | IHDT56XR1 Worst Result | IHDT56XR4 Worst Result | Difference (dB) |
|----------------------|--------------|---------------------------|---------------------------|-----------------|
| | BT (1Mbps) | 11.56 | 11.45 | 0.11 |
| | BT (2Mbps) | 11.66 | 11.51 | 0.15 |
| Peak | BT (3Mbps) | 11.94 | 11.81 | 0.13 |
| Conducted Power | BT LE | 2.43 | 2.12 | 0.31 |
| (dBm) | 802.11b | 20.99 | 20.54 | 0.45 |
| | 802.11g | 23.54 | 23.12 | 0.42 |
| | 11n HT20 | 22.75 | 22.35 | 0.4 |
| | | | | |
| Radiated | BT (BR/EDR) | 48.46 | 53.26 | 4.8 |
| Spurious Emission | BT (LE) | 39.2 | 44.16 | 4.96 |
| (dBuV/m) | 802.11n-HT20 | 50.24 | 45.26 | -4.98 |

Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: IHDT56XR4 Page Number : 6 of 6
Report Issued Date : Apr. 23, 2019
Report Version : Rev. 01

Report No.: FR913102B

Appendix A. Reference Report

Please refer to Sporton report number FR892103B which is issued separately.

Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: IHDT56XR4 Page Number : A1 of A1
Report Issued Date : Apr. 23, 2019
Report Version : Rev. 01

Report No.: FR913102B