# **FCC RF Test Report**

APPLICANT : Motorola Mobility LLC EQUIPMENT : Mobile Cellular Phone

BRAND NAME : Motorola

MODEL NAME : XT2005-5, XT2005-1PP, XT2005-1

FCC ID : IHDT56YA1

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.

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Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: IHDT56YA1 Page Number : 1 of 6
Report Issued Date : May 09, 2019
Report Version : Rev. 01

Report No.: FR922110-02C

# **TABLE OF CONTENTS**

1	GEN	ERAL DESCRIPTION	)N4	
	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: IHDT56YA1 Page Number : 2 of 6
Report Issued Date : May 09, 2019
Report Version : Rev. 01

Report No. : FR922110-02C

# **REVISION HISTORY**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR922110-02C	Rev. 01	Initial issue of report	May 09, 2019

Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: IHDT56YA1 Page Number : 3 of 6
Report Issued Date : May 09, 2019
Report Version : Rev. 01

Report No. : FR922110-02C

# 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	XT2005-5, XT2005-1PP, XT2005-1		
FCC ID	IHDT56YA1		
EUT supports Radios application	CDMA/EV-DO/GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/HSPA+(16QAM uplink is not supported)/LTEWLAN 2.4GHz 802.11b/g/n HT20/HT40WLAN 5GHz 802.11a/n HT20/HT40Bluetooth BR / EDR / LEFM Receiver/GNSS		
HW Version	88941-1-12		
SW Version	fastboot_surfna_oem_userdebug_9_PPB29.12_2fc78_intcfg-t est-keys_oem		
EUT Stage	Identical Prototype		

Report No.: FR922110-02C

**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 Channel Frequency Range	2412 MHz ~ 2462 MHz		
Antenna Type / Gain	IFA Antenna with gain -2.47 dBi		
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)		

### 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
 : May 09, 2019

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

FCC ID : IHDT56YA1 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: XT2005-5, XT2005-1PP, XT2005-1, FCC ID: IHDT56YA1) is electrically identical to the reference device (Model: XT2005-4, XT2005DL, XT2005-5, FCC ID: IHDT56YA2) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

Report No.: FR922110-02C

#### 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. FR922110-01C for the reference device Model: XT2005-4, XT2005DL, XT2005-5, FCC ID: IHDT56YA2).

#### 1.6.3 Reference detail Section:

Equipment Class	Reference FCC ID	Folder Test	Report Title/Section
DSS (BR/EDR)	IHDT56YA2	Part15C(FR922110-01A)	All sections applicable
DTS (BLE)	IHDT56YA2	Part15C(FR922110-01B)	All sections applicable
DTS (WLAN)	IHDT56YA2	Part15C(FR922110-01C)	All sections applicable

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

 TEL: 86-512-57900158
 Report Issued Date
 : May 09, 2019

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

FCC ID : IHDT56YA1 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: IHDT56YA2.

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	IHDT56YA2 Worst Result	IHDT56YA1 Worst Result	Difference (dB)
	BT (1Mbps)	11.81	11.15	0.66
	BT (2Mbps)	11.93	11.39	0.54
	BT (3Mbps)	12.23	11.69	0.54
Peak Conducted	BT LE	2.75	2.38	0.37
Power (dBm)	802.11b	21.69	21.22	0.47
(ubiii)	802.11g	20.83	20.29	0.54
	11n HT20	19.45	18.75	0.70
	11n HT40	19.32	19.02	0.30
Radiated	BT (BR/EDR)	53.87	54.19	0.32
Spurious Emission	BT (LE)	44.17	43.61	-0.56
(dBuV/m)	802.11g	50.99	48.83	-2.16

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: IHDT56YA1 Page Number : 6 of 6
Report Issued Date : May 09, 2019
Report Version : Rev. 01

Report No.: FR922110-02C

# Appendix A. Reference Report

Please refer to Sporton report number FR922110-01C which is issued separately.

Sporton International (Kunshan) Inc.

TEL: 86-512-57900158 FAX: 86-512-57900958 FCC ID: IHDT56YA1 Page Number : A1 of A1
Report Issued Date : May 09, 2019
Report Version : Rev. 01

Report Template No.: BU5-FR15CWL Version 2.0

Report No.: FR922110-02C