



FCC RF Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2013-2
FCC ID : IHDT56YD2
STANDARD : FCC Part 15 Subpart C §15.247
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

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.

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Reviewed by: Jason Jia / Supervisor

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TABLE OF CONTENTS

1 GENERAL DESCRIPTION.....4

1.1 Applicant4

1.2 Product Feature of Equipment Under Test.....4

1.3 Product Specification of Equipment Under Test.....4

1.4 Modification of EUT4

1.5 Re-use of Measured Data5

APPENDIX A. REFERENCE REPORT



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR932901-01E	Rev. 01	Initial issue of report	Jun. 17, 2019



1 General Description

1.1 Applicant

Motorola Mobility LLC
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1.2 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2013-2
FCC ID	IHDT56YD2
EUT supports Radios application	GSM/WCDMA/LTE/ WLAN 2.4GHz 802.11b/g/n HT20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE FM Receiver/GNSS/NFC
HW Version	DVT2
SW Version	PSB29.21
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.

1.3 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5720 MHz
Antenna Type / Gain	<5150 MHz ~ 5250 MHz> Fixed Internal Monopole Antenna with gain -1.00 dBi <5250 MHz ~ 5350 MHz> Fixed Internal Monopole Antenna with gain -1.20 dBi <5470 MHz ~ 5725 MHz> Fixed Internal Monopole Antenna with gain -1.20 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

1.4 Modification of EUT

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



1.5 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: XT2013-2, FCC ID: IHDT56YD2) is electrically identical to the reference device (Model: XT2013-1, FCC ID: IHDT56YD1) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

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. FR932901E for the reference device Model: XT2013-1, FCC ID: IHDT56YD1).

1.6.3 Reference detail Section:

Equipment Class	Reference FCC ID	Folder Test	Report Title/Section
NII (B1~3)	IHDT56YD1	Part15E (FR932901E)	All sections applicable
NII (B4)	IHDT56YD1	Part15E (FR932901F)	All sections applicable
NII (DFS)	IHDT56YD1	Part15E (FZ932901)	All sections applicable



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: IHDT56YD1.

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	IHDT56YD1 Worst Result	IHDT56YD2 Worst Result	Difference (dB)
Average Conducted Power (dBm)	U-NII-1	11a	18.97	18.02	-0.95
		11n HT20	19.11	19.04	-0.07
		11n HT40	18.14	17.88	-0.26
		11ac VHT20	19.01	19.03	0.02
		11ac VHT40	18.07	17.17	-0.9
		11ac VHT80	15.54	14.82	-0.72
	U-NII-2A	11a	18.57	18.18	-0.39
		11n HT20	18.94	19.18	0.24
		11n HT40	18.44	17.69	-0.75
		11ac VHT20	18.93	18.79	-0.14
		11ac VHT40	18.44	17.85	-0.59
		11ac VHT80	16.62	15.87	-0.75
	U-NII-2C	11a	18.66	17.71	-0.95
		11n HT20	19.45	19	-0.45
		11n HT40	18.66	17.9	-0.76
		11ac VHT20	18.89	19.05	0.16
		11ac VHT40	18.54	17.67	-0.87
		11ac VHT80	16.50	15.68	-0.82
Radiated Spurious Emission (dBuV/m)	U-NII-2C	802. 11ac VHT80	65.25	64.38	-0.87



Appendix A. Reference Report

Please refer to Sporton report number FR932901E which is issued separately.