

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	: Digital Spread Spectrum (DSS)

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.

Joimes Muang

Approved by: James Huang / Manager

TESTING NVLAP LAB CODE 600155-0

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TABLE OF CONTENTS

1	GEN	ERAL 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



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR913102A	Rev. 01	Initial issue of report	Apr. 23, 2019



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		

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	79	
Carrier Frequency of Each Channel	2402+n*1 MHz; n=0~78	
Antenna Type / Gain	Monopole Antenna with gain -1.30 dBi	
	Bluetooth BR (1Mbps) : GFSK	
Type of Modulation	Bluetooth EDR (2Mbps) : π /4-DQPSK	
	Bluetooth EDR (3Mbps) : 8-DPSK	

1.5 Modification of EUT

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



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.

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. FR892103A for the reference device Model: XT1952-3, XT1952-4, XT1952DL, FCC ID: IHDT56XR1).

1.6.3 Reference detail Section:

Equipment Class	ment 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



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	BTLE	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



Appendix A. Reference Report

Please refer to Sporton report number FR892103A which is issued separately.