



FCC RF Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2113-3
FCC ID : IHDT56ZF4
STANDARD : FCC Part 15 Subpart C §15.225
CLASSIFICATION : (DXX) Low Power Communication Device Transmitter

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



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR082402-01D	Rev. 01	Initial issue of report	Oct. 09, 2020
FR082402-01D	Rev. 02	Update accessory list	Oct. 13, 2020
FR082402-01D	Rev. 03	Revised FCC ID	Oct. 21, 2020



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	XT2113-3
FCC ID	IHDT56ZF4
EUT supports Radios application	GSM/WCDMA/LTE/5G NR/NFC 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 and GNSS
HW Version	DVT2
SW Version	QZK30.Q4-23
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/Rx Frequency Range	13.553 ~ 13.567MHz
Channel Number	1
Antenna Type	Loop Antenna
Type of Modulation	ASK

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.
	03CH02-KS	CN1257	314309

1.7 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH02-KS	AUDIX	E3	6.2009-8-24a

1.8 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: XT2113-3, FCC ID: IHDT56ZF4) is electrically identical to the reference device (Model: XT2113-2, XT2113-5, FCC ID: IHDT56ZF2) 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 B (Sporton RF Report No. FR082402D for the reference device Model: XT2113-2, XT2113-5, FCC ID: IHDT56ZF2).

**1.6.3 Reference detail Section:**

Equipment Class	Reference FCC ID	Folder Test	Report Title/Section
DSS (BR/EDR)	IHDT56ZF2	Part15C(FR082402A)	All sections applicable
DTS (BLE)	IHDT56ZF2	Part15C(FR082402B)	All sections applicable
DTS (WLAN)	IHDT56ZF2	Part15C(FR082402C)	All sections applicable
DXX (NFC)	IHDT56ZF2	Part15C(FR082402D)	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 following test items, the test result were consistent with FCC ID: IHDT56ZF2.

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	IHDT56ZF2 Worst Result	IHDT56ZF4 Worst Result	Difference (dB)
Conducted Power (dBm)	BT BR/EDR	18.12	17.47	0.65
	BT-LE 4.2	10.80	10.74	0.06
	BT-LE 5.0	11.02	10.97	0.05
	802.11b	24.73	24.51	0.22
	802.11g	26.20	26.00	0.20
	11n HT20	26.16	26.03	0.13
Radiated Spurious Emission (dBuV/m)	BT BR/EDR Tx Ch78	56.46	57.47	1.01
	BT4.2 Tx Ch39	48.35	48.99	0.64
	BT5.0 Tx Ch39	51.21	51.08	0.13
	11g Tx Ch11	50.95	50.98	0.03
	NFC TX	57.34	58.02	0.68



2 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz;Ma x 30dBm	Oct. 18, 2019	Sep. 25, 2020	Oct. 17, 2020	Radiation (03CH02-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 10, 2019	Sep. 25, 2020	Nov. 09, 2020	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Dec. 30, 2019	Sep. 25, 2020	Dec. 29, 2020	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002 473	N/A	NCR	Sep. 25, 2020	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Sep. 25, 2020	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Sep. 25, 2020	NCR	Radiation (03CH02-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Jan. 02, 2020	Sep. 25, 2020	Jan. 01, 2021	Radiation (03CH02-KS)

NCR: No Calibration Required



Appendix B. Reference Report

Please refer to Sporton report number FR082402D which is issued separately.