Spot Check Evaluation

APPLICANT	:	**Motorola Mobility LLC**
EQUIPMENT	:	**Mobile Cellular Phone**
BRAND NAME	:	**Motorola**
MODEL NAME	:	**XT2345-3**
FCC ID	:	**IHDT56AK2**
STANDARD	:	**47 CFR Part 2, 27(M)** **47 CFR Part 15 Subpart C §15.247** **47 CFR Part 15 Subpart E §15.407**

We, Sporton International Inc. (Kunshan), 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 Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia

ACCREDITED
Cert #5145.02

Sporton International Inc. (Kunshan)
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
292304-01	Rev. 01	Initial issue of report	Nov. 24, 2022

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	XT2345-3
FCC ID	IHDT56AK2
IMEI Code	Conducted: 359460470007678/359460470007686
HW Version	DVT2
SW Version	TLA33.100
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 Modification of EUT

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

1.5 Specification of Accessory

Specification of Accessory				
AC Adapter 1 (US)	**Brand Name**	Motorola(aohai)	**Model Name**	MC-101
AC Adapter 1 (EU)	**Brand Name**	Motorola(aohai)	**Model Name**	MC-102
AC Adapter 1 (UK)	**Brand Name**	Motorola(aohai)	**Model Name**	MC-103
AC Adapter 1 (IN)	**Brand Name**	Motorola(aohai)	**Model Name**	MC-104
AC Adapter 1 (AU)	**Brand Name**	Motorola(aohai)	**Model Name**	MC-105
AC Adapter 1 (AR)	**Brand Name**	Motorola(aohai)	**Model Name**	MC-106
AC Adapter 2 (US)	**Brand Name**	Motorola(chenyang)	**Model Name**	MC-101
AC Adapter 2 (EU)	**Brand Name**	Motorola(chenyang)	**Model Name**	MC-102
AC Adapter 2 (UK)	**Brand Name**	Motorola(chenyang)	**Model Name**	MC-103
AC Adapter 2 (IN)	**Brand Name**	Motorola(chenyang)	**Model Name**	MC-104
AC Adapter 2 (AU)	**Brand Name**	Motorola(chenyang)	**Model Name**	MC-105
AC Adapter 2 (AR)	**Brand Name**	Motorola(chenyang)	**Model Name**	MC-106
AC Adapter 2 (BR)	**Brand Name**	Motorola(chenyang)	**Model Name**	MC-107
AC Adapter 3 (US)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-101
AC Adapter 3 (EU)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-102
AC Adapter 3 (UK)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-103
AC Adapter 3 (AU)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-105
AC Adapter 3 (AR)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-106
AC Adapter 3 (CHILE)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-109
Battery 1	**Brand Name**	Motorola(ATL)	**Model Name**	NH50
Battery 2	**Brand Name**	Motorola(SUNWODA)	**Model Name**	NH50
Earphone 1	**Brand Name**	Motorola(New leader)	**Model Name**	NLD-EM313A-20SF
Earphone 2	**Brand Name**	Motorola(JWELL)	**Model Name**	JWEP1205-L20H
USB Cable 1	**Brand Name**	Motorola (SAIBAO)	**Model Name**	SLQ-A214A
USB Cable 2	**Brand Name**	Motorola (JIEYE)	**Model Name**	JY-C03-410

2 Re-use of Measured Data

2.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: XT2345-3, FCC ID: IHDT56AK2) is electrically identical to the reference device (Model: XT2345-2, FCC ID: IHDT56AK1) for the portions of the circuitry corresponding to the data being re-used. Based on their similarity, the FCC Part 15C (equipment class: DTS, DSS) and FCC Part 15E (equipment class: NII) and FCC Part 27 (equipment class: TNE) reuse the original model's result and do spot-check, following the FCC KDB 484596 D01 v01.

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID: IHDT56AK2 .

2.2 Model Difference Information

The **main** difference between FCC ID: IHDT56AK2 and FCC ID: IHDT56AK1 is as below:

- Remove GSM1900/ WCDMA Band II/IV and LTE Band 2/4/13/26/66.
- Add LTE Band 20/41.

Other differences and all the details of similarity and difference can be found in the confidential documents (XT2345-3_Operational Description of Product Equality Declaration).

2.3 Reference detail Section:

Rule Part	Equipment Class	Frequency Band (MHz)	Reference FCC ID(Parent)	Type Grant/ Permissive Change	Reference Title	FCC ID Filling (Variant)	Report Title/Section
15C	DSS (BR/EDR)	2400~2483.5	IHDT56AK1	Original Grant	FR292306A	IHDT56AK2	All sections applicable
	DTS (BLE)	2400~2483.5	IHDT56AK1	Original Grant	FR292306B	IHDT56AK2	All sections applicable
	DTS (WLAN)	2400~2483.5	IHDT56AK1	Original Grant	FR292306C	IHDT56AK2	All sections applicable
15E	NII	5150~5250	IHDT56AK1	Original Grant	FR292306D	IHDT56AK2	All sections applicable
	NII	5250~5350	IHDT56AK1	Original Grant	FR292306D	IHDT56AK2	All sections applicable
	NII	5470~5725	IHDT56AK1	Original Grant	FR292306D	IHDT56AK2	All sections applicable
	NII	5725~5850	IHDT56AK1	Original Grant	FR292306D	IHDT56AK2	All sections applicable
	DFS	5250~5350 5470~5725	IHDT56AK1	Original Grant	FZ292306	IHDT56AK2	All sections applicable
27	TNE (LTE)	B7/38	IHDT56AK1	Original Grant	FR292306B	IHDT56AK2	All sections applicable

2.4 Spot Check Verification Data Section

Conducted power test against the variant model based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model

Summary for power and RSE spot check for each rule entry and technology is listed as below:

Test Item	Mode	IHDT56AK1 Parent Worst Result	IHDT56AK2 Variant Check Result	Difference (dB)
Conducted Power (dBm)	BT BR/EDR	11.12	11.11	-0.01
	BLE 1Mbps	1.77	1.66	-0.11
	BLE 2Mbps	1.71	1.62	-0.09
	11b, 2.4GHz	22.47	22.36	-0.11
	11g, 2.4GHz	24.56	24.45	-0.11
	11n HT20, 2.4GHz	24.44	24.16	-0.28
	11a, 5.2GHz	18.49	18.03	-0.46
	11a, 5.3GHz	18.04	17.77	-0.27
	11a, 5.5GHz	18.24	17.85	-0.39
	11a, 5.8GHz	18.02	17.65	-0.37
	11n HT20, 5.2GHz	18.46	18.11	-0.35
	11n HT20, 5.3GHz	18.04	17.72	-0.32
	11n HT20, 5.5GHz	18.15	17.67	-0.48
	11n HT20, 5.8GHz	17.92	17.41	-0.51
	11ac VHT20, 5.2GHz	17.56	17.31	-0.25
	11ac VHT20, 5.3GHz	17.32	17.11	-0.21
	11ac VHT20, 5.5GHz	17.21	17.05	-0.16
	11ac VHT20, 5.8GHz	17.56	17.50	-0.06
	LTE B7	22.93	23.08	0.15
	LTE B38	23.12	22.69	-0.43

Conclusion:

Based on the spot check test result, the test data from the original model is representative for the variant model. The power level spot check are shown within expected level compliant to limit line.

We are using power and ERP/EIRP measurements from the original parent model reports to list on the grant.

The same DFS detection mechanism/software is used in the variant. Hence, there is no spot check data for DFS EUD hand-shaking mechanism.

We confirm that the test data reuse policy of FCC KDB 484596 D01 Referencing Test Data v01 has been followed and the test data as referenced from the parent model report represents compliance with new FCC ID.

3 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 12, 2022	Nov. 24, 2022	Oct. 11, 2023	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	Aug. 25, 2022	Nov. 24, 2022	Aug. 24, 2023	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 05, 2022	Nov. 24, 2022	Jan. 04, 2023	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	1339163	300MHz~40GHz	Oct. 12, 2022	Nov. 24, 2022	Oct. 11, 2023	Conducted (TH01-KS)

NCR: No Calibration Required.

-THE END-