Spot Check Evaluation

APPLICANT	**:**	**Motorola Mobility LLC**
EQUIPMENT	**:**	**Mobile Cellular Phone**
BRAND NAME	**:**	**Motorola**
MODEL NAME	**:**	**XT2323-4, XT2323-7**
FCC ID	**:**	**IHDT56AL3**
STANDARD	**:**	**47 CFR Part 2, 22(H), 24(E), 27(M), 27(H), 27(Q), 90(S)** **47 CFR Part 15 Subpart C §15.247** **47 CFR Part 15 Subpart E §15.407**
TEST DATE(S)	**:**	**Jun. 02, 2023 ~ Jun. 15, 2023**

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

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
340401-04	Rev. 01	Initial issue of report	Jun. 28, 2023

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

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	XT2323-4, XT2323-7
FCC ID	IHDT56AL3
IMEI Code	Conducted: 354478360011399/354478360011407
HW Version	DVT2
SW Version	T2TV33.27
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The two models XT2323-4, XT2323-7 are only for market differentiation, all the others are the same.
3. The EUT has two working states, flip open state and flip close state.

1.4 Specification of Accessory

Specification of Accessory				
Base Battery	**Brand Name**	Motorola(ATL)	**Model Name**	PM29
Flip Battery	**Brand Name**	Motorola(ATL)	**Model Name**	PV11

1.5 Modification of EUT

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

1.6 Testing Site

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	TH01-KS DFS01-KS	CN1257	314309

1.7 Test Software

Item	Site	Manufacturer	Name	Version
1.	DFS01-KS	Sporton	Test Tools	1.0

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: XT2323-4, XT2323-7, FCC ID: IHDT56AL3) is electrically identical to the reference device (Model: XT2323-1, FCC ID: IHDT56AL8) 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, 6XD) and FCC Part 22, 24, 27, 90S (equipment class: PCE) reuse the original model's result and do spot-check, following the FCC KDB 484596 D01 Referencing Test Data v01.

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID: IHDT56AL3.

2.2 Model Difference Information

The **main** difference between FCC ID: IHDT56AL8 and FCC ID: IHDT56AL3 is as below:

- Remove LTE B13/20/32/43/48/66/66C, 5G NR n2/n5/n7/n20/n26/n38/n66.
- Add LTE B11;

Other differences and all the details of similarity and difference can be found in the confidential documents (XT2323-4, XT2323-7_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	IHDT56AL8	Original Grant	FR340401A	IHDT56AL3	All sections applicable
	DTS (BLE)	2400~2483.5	IHDT56AL8	Original Grant	FR340401B	IHDT56AL3	All sections applicable
	DTS (WLAN)	2400~2483.5	IHDT56AL8	Original Grant	FR340401C	IHDT56AL3	All sections applicable
15E	NII	5180~5240	IHDT56AL8	Original Grant	FR340401E	IHDT56AL3	All sections applicable
		5260~5320	IHDT56AL8	Original Grant	FR340401E FZ340401	IHDT56AL3	All sections applicable
		5500~5720	IHDT56AL8	Original Grant	FR340401E FZ340401	IHDT56AL3	All sections applicable
		5745~5825	IHDT56AL8	Original Grant	FR340401E	IHDT56AL3	All sections applicable
	6XD	5925~7125	IHDT56AL8	Original Grant	FR340401F	IHDT56AL3	All sections applicable
22, 24, 27, 90, 96,	PCE (GSM)	GSM 850/1900	IHDT56AL8	Original Grant	FG340401A	IHDT56AL3	All sections applicable
	PCE (WCDMA)	Band II, IV, V	IHDT56AL8	Original Grant	FG340401A	IHDT56AL3	All sections applicable
	PCE (LTE)	B2/5/12/17/25/26	IHDT56AL8	Original Grant	FG340401B	IHDT56AL3	All sections applicable
		B7/38/41/7C/ 38C/41C	IHDT56AL8	Original Grant	FG340401C	IHDT56AL3	All sections applicable
		B26 (90S)	IHDT56AL8	Original Grant	FG340401D	IHDT56AL3	All sections applicable
		B42/42C (Part27Q)	IHDT56AL8	Original Grant	FG340401E	IHDT56AL3	All sections applicable
		B2/4/5/7 (Inter CA)	IHDT56AL8	Original Grant	FG340401H	IHDT56AL3	All sections applicable

2.4 Spot Check Verification Data Section

Conducted power test and radiated spurious emission 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.

All test procedures follow the related section of parent report.

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

Test Item	Mode	IHDT56AL8 Parent Worst Result	IHDT56AL3 Variant Check Result	Difference (dB)
Conducted Power (dBm)	BT2.0	19.52	18.62	-0.90
	BLE 1M	8.45	8.42	-0.03
	BLE 2M	8.56	8.47	-0.09
	2.4G WLAN 11b	26.96	26.7	-0.26
	2.4G WLAN 11g	28.97	27.97	-1.00
	2.4G WLAN 11n20	28.9	27.78	-1.12
	2.4G WLAN 11n40	28.9	28.11	-0.79
	2.4G WLAN 11ax20	28.98	28.58	-0.40
	2.4G WLAN 11ax40	28.97	28.3	-0.67
	5G WLAN 11a U-NII-1	21.37	21.22	-0.15
	5G WLAN 11a U-NII-2A	21.19	21.14	-0.05
	5G WLAN 11a U-NII-2C	20.93	20.83	-0.10
	5G WLAN 11a U-NII-3	22.52	22.34	-0.18
	5G WLAN 11n20 U-NII-1	22.25	22.1	-0.15
	5G WLAN 11n20 U-NII-2A	22.49	22.19	-0.30
	5G WLAN 11n20 U-NII-2C	22.26	22.14	-0.12
	5G WLAN 11n20 U-NII-3	22.31	22.28	-0.03
	5G WLAN 11n40 U-NII-1	22.27	22.14	-0.13
	5G WLAN 11n40 U-NII-2A	22.53	22.43	-0.10
	5G WLAN 11n40 U-NII-2C	22.49	22.3	-0.19
	5G WLAN 11n40 U-NII-3	22.22	22.07	-0.15
	5G WLAN 11ac20 U-NII-1	22.34	22.25	-0.09
	5G WLAN 11ac20 U-NII-2A	22.54	22.16	-0.38
	5G WLAN 11ac20 U-NII-2C	22.3	22.17	-0.13
	5G WLAN 11ac20 U-NII-3	22.32	22.26	-0.06
	5G WLAN 11ac40 U-NII-1	22.3	22.28	-0.02
	5G WLAN 11ac40 U-NII-2A	22.55	22.41	-0.14
	5G WLAN 11ac40 U-NII-2C	22.53	22.42	-0.11
	5G WLAN 11ac40 U-NII-3	22.28	22.11	-0.17
	5G WLAN 11ac80 U-NII-1	19.87	19.82	-0.05
	5G WLAN 11ac80 U-NII-2A	20.67	20.63	-0.04
	5G WLAN 11ac80 U-NII-2C	22.48	22.33	-0.15
	5G WLAN 11ac80 U-NII-3	22.21	22.11	-0.10
	5G WLAN 11ac160 U-NII-2A	19.59	19.52	-0.07
	5G WLAN 11ac160 U-NII-2C	19.67	19.66	-0.01
	5G WLAN 11ax20 U-NII-1	22.36	22.25	-0.11
	5G WLAN 11ax20 U-NII-2A	22.55	22.28	-0.27
	5G WLAN 11ax20 U-NII-2C	22.34	22.24	-0.10
	5G WLAN 11ax20 U-NII-3	22.41	22.33	-0.08
	5G WLAN 11ax40 U-NII-1	22.33	22.29	-0.04
	5G WLAN 11ax40 U-NII-2A	22.57	22.37	-0.20

	5G WLAN 11ax40 U-NII-2C	22.55	22.46	-0.09
	5G WLAN 11ax40 U-NII-3	22.3	22.21	-0.09
	5G WLAN 11ax80 U-NII-1	19.89	19.84	-0.05
	5G WLAN 11ax80 U-NII-2A	20.71	20.69	-0.02
	5G WLAN 11ax80 U-NII-2C	22.51	22.4	-0.11
	5G WLAN 11ax80 U-NII-3	22.24	22.17	-0.07
	5G WLAN 11ax160 U-NII-2A	19.61	19.53	-0.08
	5G WLAN 11ax160 U-NII-2C	19.72	19.68	-0.04
	6G WLAN 11a U-NII-5	13.33	13.2	-0.13
	6G WLAN 11a U-NII-6	13.19	13.15	-0.04
	6G WLAN 11a U-NII-7	12.96	12.85	-0.11
	6G WLAN 11a U-NII-8	12.93	12.75	-0.18
	6G WLAN 11ax20 U-NII-5	13.59	13.36	-0.23
	6G WLAN 11ax20 U-NII-6	13.12	13.1	-0.02
	6G WLAN 11ax20 U-NII-7	13.28	13.24	-0.04
	6G WLAN 11ax20 U-NII-8	13.31	13.22	-0.09
	6G WLAN 11ax40 U-NII-5	16.24	16.15	-0.09
	6G WLAN 11ax40 U-NII-6	16.1	16.02	-0.08
	6G WLAN 11ax40 U-NII-7	16.3	16.02	-0.28
	6G WLAN 11ax40 U-NII-8	16.22	16.13	-0.09
	6G WLAN 11ax80 U-NII-5	16.41	16.39	-0.02
	6G WLAN 11ax80 U-NII-6	17.7	17.64	-0.06
	6G WLAN 11ax80 U-NII-7	17.78	17.11	-0.67
	6G WLAN 11ax80 U-NII-8	17.38	17.33	-0.05
	6G WLAN 11ax160 U-NII-5	16.49	16.42	-0.07
	6G WLAN 11ax160 U-NII-6	17.62	17.54	-0.08
	6G WLAN 11ax160 U-NII-7	17.63	17.19	-0.44
	6G WLAN 11ax160 U-NII-8	17.46	17.36	-0.10
	GSM 850	33.04	33.00	-0.04
	GSM 1900	31.28	31.23	-0.05
	WCDMA B2	23.95	23.82	-0.13
	WCDMA B4	23.83	23.75	-0.08
	WCDMA B5	24.27	24.20	-0.07
	LTE Band 25	22.82	22.67	-0.15
	LTE Band 2	22.79	22.79	0.00
	LTE Band 26H	22.67	22.62	-0.05
	LTE Band 5	22.61	22.59	-0.02
	LTE Band 26L-90S	22.64	22.47	-0.17
	LTE Band 7	22.83	22.63	-0.2
	LTE Band 7C	21.45	21.37	-0.08
	LTE Band 12	22.48	22.31	-0.17
	LTE Band 17	22.42	22.31	-0.11
	LTE Band 41	24.62	24.55	-0.07
	LTE Band 38	22.85	22.65	-0.2
	LTE Band 41C	23.82	23.71	-0.11
	LTE Band 38C	21.44	21.30	-0.14
	LTE Band 42	23.46	23.29	-0.17
	LTE Band 42C	21.33	21.32	-0.01

Test Item	Mode	IHDT56AL8 Parent Worst Result	IHDT56AL3 Variant Check Result	Difference (dB)
Radiated Spurious Emission (dBm)	Part24E-PCS 1900_M_ CH	-38.86	-41.21	-2.35
	Part24E-WCDMA 1900_H_ CH	-52.01	-52.13	-0.12
	Part27M-B41C_H_ CH	-40.48	-42.68	-2.20

Test Item	Mode	IHDT56AL8 Parent Worst Result	IHDT56AL3 Variant Check Result	Difference (dB)
CBP (dBm)	UNII-8 BW160M CH Freq. 6985MHz	-62.92	-62.75	0.17

Conclusion:
Radiated spurious emission 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.

Based on the spot check test result, the test data from the original model is representative for the variant model. The power level and RSE 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 CBP detection mechanism/software/antenna gain is used in the variant. Hence, all test cases refer to parent report for CBP.

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	Jun. 15, 2023	Oct. 11, 2023	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 05, 2023	Jun. 15, 2023	Jan. 04, 2024	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 05, 2023	Jun. 15, 2023	Jan. 04, 2024	Conducted (TH01-KS)
Signal Analyzer	R&S	FSV7	101632	10Hz~7GHz	Jan. 05, 2023	Jun. 07, 2023	Jan. 04, 2024	CBP (DFS01-KS)
MXG-B RF Vector Signal Genertor	Keysight	5182B /5182BX07	MY56200417 /MY59360210	9kHz~7.2GHz	May 16, 2023	Jun. 07, 2023	May 15, 2024	CBP (DFS01-KS)
Vector Signal Generator	R&S	SMBV100A	258305	9kHz~6GHz	Jan. 05, 2023	Jun. 07, 2023	Jan. 04, 2024	CBP (DFS01-KS)
Combiner	MTJ Cooperation	MTJ7112	N/A	0.4-6GHz	NCR	Jun. 07, 2023	NCR	CBP (DFS01-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471079	10Hz-44G,MAX 30dB	Oct. 12, 2022	Jun. 02, 2023	Oct. 11, 2023	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Oct. 16, 2022	Jun. 02, 2023	Oct. 15, 2023	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Apr. 09, 2023	Jun. 02, 2023	Apr. 08, 2024	Radiation (03CH04-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	1284	1GHz~18GHz	Oct. 16, 2022	Jun. 02, 2023	Oct. 15, 2023	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 08, 2023	Jun. 02, 2023	Jan. 07, 2024	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380827	9KHz-1GHz	Jul. 11, 2022	Jun. 02, 2023	Jul. 10, 2023	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 05, 2023	Jun. 02, 2023	Jan. 04, 2024	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060840	1Ghz-18Ghz	Oct. 12, 2022	Jun. 02, 2023	Oct. 11, 2023	Radiation (03CH04-KS)
Amplifier	Agilent	8449B	3008A02370	1Ghz-18Ghz	Oct. 12, 2022	Jun. 02, 2023	Oct. 11, 2023	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jun. 02, 2023	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jun. 02, 2023	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jun. 02, 2023	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required.

4 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Power	±0.46 dB

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.82dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.56dB

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.54dB

——— THE END ———