



# FCC Part 96.47 Test Report

**Applicant** : Motorola Mobility LLC  
**Equipment** : Mobile Cellular Phone  
**Brand Name** : Motorola  
**Model Name** : XT2301-4  
**FCC ID** : IHDT56AH3  
**Standard** : FCC Part 96.47  
**Test Date(s)** : Sep. 23, 2022

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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**APPENDIX A. TEST SETUP PHOTO**





### Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3	96.47	End User Device additional requirement	Pass	-



# 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	XT2301-4
FCC ID	IHDT56AH3
IMEI Code	354336350017059/354336350017067
HW Version	DVT2
SW Version	TTR33.76
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 Frequency	LTE Band 48: 3550 MHz ~ 3700 MHz
Rx Frequency	LTE Band 48: 3550 MHz ~ 3700 MHz
Antenna Type	<Ant. 3> : Monopole Antenna <Ant. 8> : IFA Antenna
Antenna Gain	<Ant. 3> : LTE Band 48 : -1.80 dBi <Ant. 8> : LTE Band 48 : -2.00 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM



### 1.5 Testing Location

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

<b>Test Firm</b>	Sporton International Inc. (Kunshan)		
<b>Test Site Location</b>	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		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	DFS01-KS	CN1257	314309
<b>Test Engineer</b>	Han Lei		
<b>Temperature</b>	21 ~ 24 °C		
<b>Relative Humidity</b>	38 ~ 50 %		

### 1.6 Test Software

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

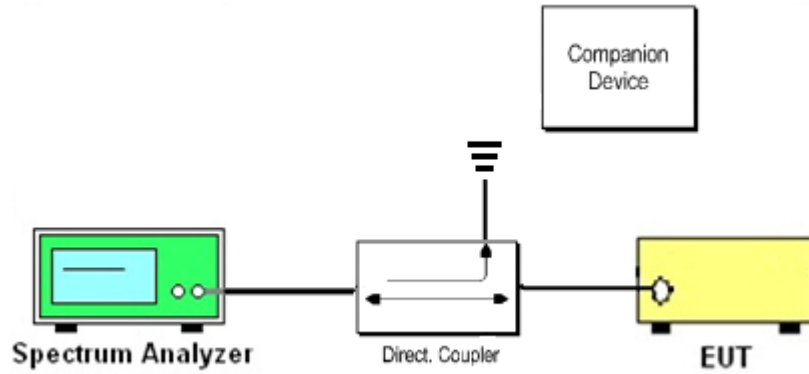
### 1.7 Applicable Standards

- ♦ FCC Part 96.47
- ♦ FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- ♦ WINNF-TS-0122-V1.0.1 CBRS CBSD Test Specification

**Remark:** All test items were verified and recorded according to the standards and without any deviation during the test.

## 2 Test Configuration of Equipment Under Test

### 2.1 Connection Diagram of Test System



The companion device is certified CBRS (FCC ID: S9GQ710US02)



### 3 End User Device additional requirement

#### 3.1 Test Requirement

FCC Part 96.47

(a) End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation.

(1) An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.

#### 3.2 Test Procedure

Following procedure can be done by applying WINNF-TS-0122-V1.0.1 CBRS CBSD Test Specification, use the certified Ruckus CBSD (FCC ID: S9GQ710US02) as companion device to show compliance with Part 96.47 requirement for End User Device (EUD):

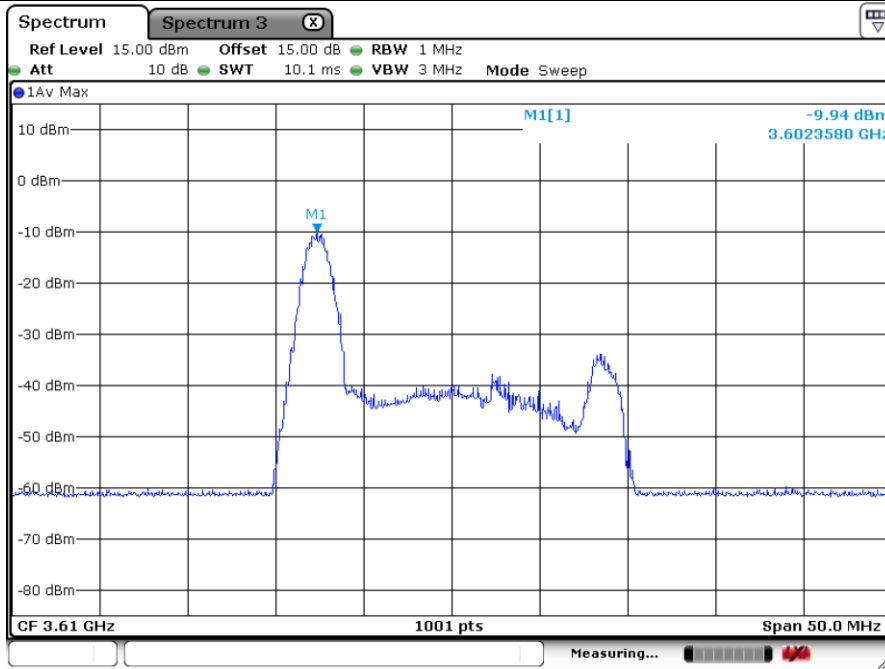
1. Setup with frequency 3600-3620MHz and power level 13dBm/MHz
2. Enable AP service from Ruckus Cloud management
3. Check EUD Tx Frequency and power
4. Disable AP service from Ruckus Cloud management
  - a. Check EUD stops transmission within 10seconds.
  
5. Setup with 3670-3690MHz & power level 8dBm/MHz
6. Enable AP service from Ruckus Cloud management
7. Check EUD Tx Frequency and power
8. Disable AP service from Ruckus Cloud management
  - a. Check EUD stops transmission within 10seconds.



### 3.3 Test Result

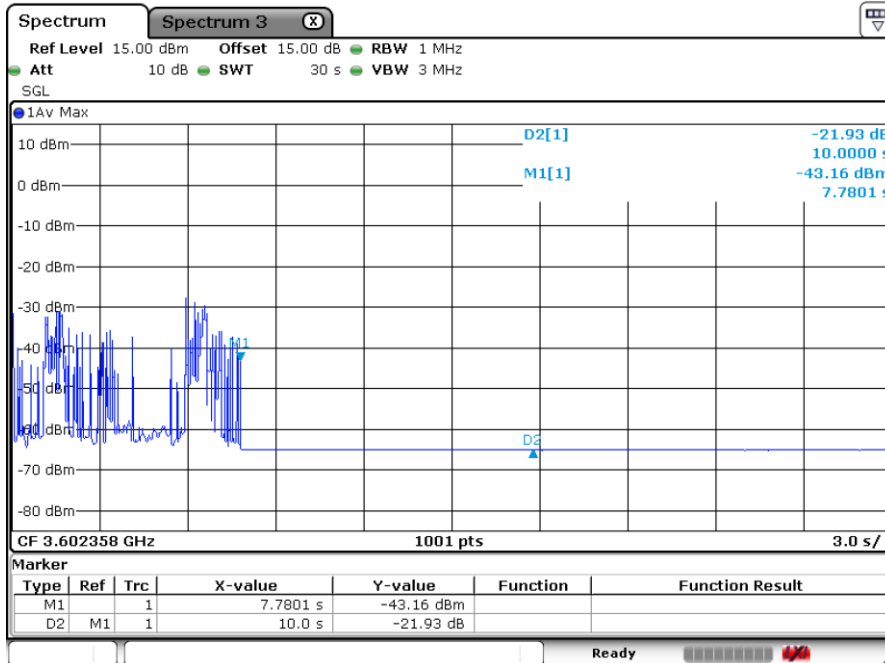
[Step 1] Setup with frequency 3600-3620MHz and power level 13dBm/MHz

[Step 3] Check EUD Tx Frequency and power



Date: 23.SEP.2022 11:22:50

[Step 4.a.] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.

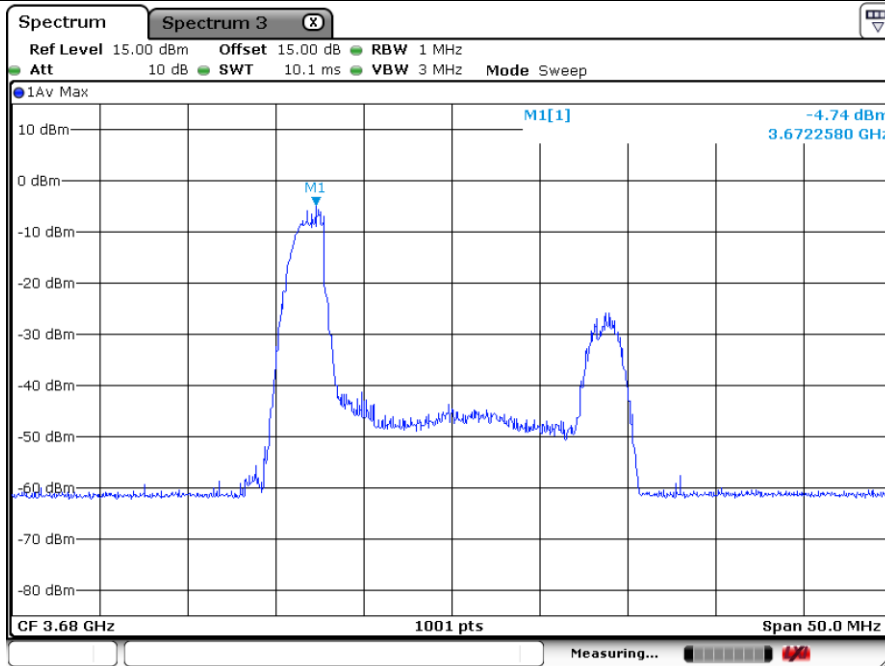


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[Step 5] Setup with 3670-3690MHz & power level 8dBm/MHz

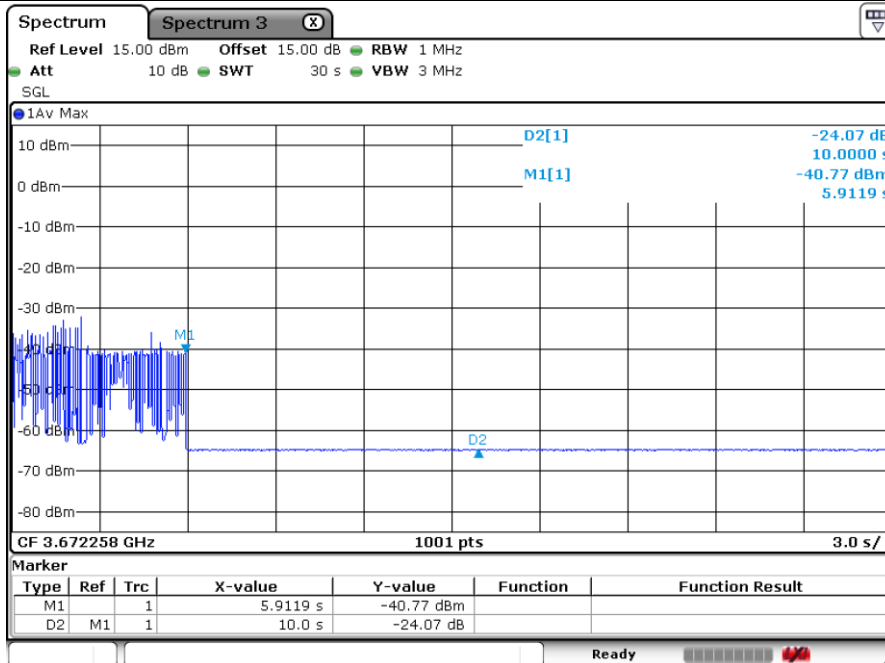
[Step 7] Check EUD Tx Frequency and power



Date: 23.SEP.2022 11:56:10

[Step 8.a.] After changing the frequency and power level,

The module (EUT) discontinues operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD. Test result is PASS.



Date: 23.SEP.2022 11:59:13



## 4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Signal Analyzer	R&S	FSV7	101472	10Hz~7GHz	Jan. 06, 2022	Sep. 23, 2022	Jan. 05, 2023	Conducted (DFS01-KS)

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