



# FCC Part 96.47 Test Report

**Applicant** : Motorola Mobility LLC  
**Equipment** : Mobile Cellular Phone  
**Brand Name** : Motorola  
**Model Name** : XT2113-1, XT2113-1PP  
**FCC ID** : IHDT56ZF3  
**Standard** : FCC Part 96.47

The product was received on Mar. 08, 2021 and testing was completed on Apr. 21, 2021. 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

*Alex Wang*

Approved by: Alex Wang / Manager



**Sporton International (Kunshan) Inc.**

**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**



### History of this test report

Report No.	Version	Description	Issued Date
FG082402-06F	01	Initial issue of report	Apr. 22, 2021

**Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

**Comments and Explanations:**

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



### 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	
<b>Equipment</b>	Mobile Cellular Phone
<b>Brand Name</b>	Motorola
<b>Model Name</b>	XT2113-1, XT2113-1PP
<b>FCC ID</b>	IHDT56ZF3
<b>EUT supports Radios application</b>	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
<b>IMEI Code</b>	356883110009007
<b>HW Version</b>	DVT2
<b>SW Version</b>	RRV31.Q2-20
<b>EUT Stage</b>	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	
<b>Tx Frequency</b>	LTE Band 48: 3550 MHz ~ 3700 MHz
<b>Rx Frequency</b>	LTE Band 48: 3550 MHz ~ 3700 MHz
<b>Maximum Output Power to Antenna</b>	22.99 dBm
<b>Antenna Type</b>	Fixed Internal Antenna
<b>Antenna Gain</b>	1.33 dBi
<b>Type of Modulation</b>	QPSK / 16QAM / 64QAM



### 1.5 Testing Location

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

<b>Test Firm</b>	Sporton International (Kunshan) Inc.		
<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>	Eloise Wang		
<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

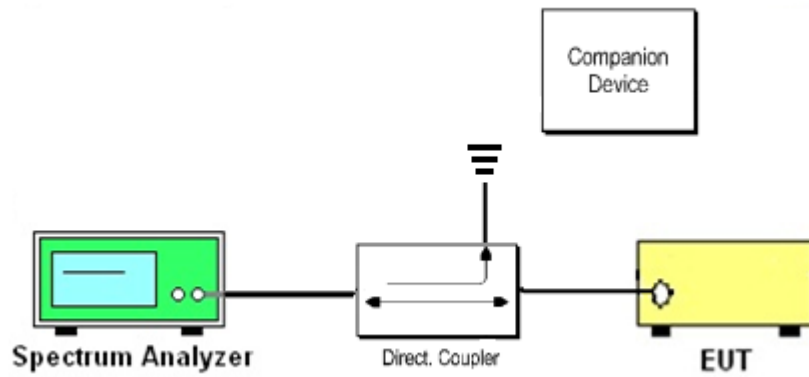
### 1.7 Applicable Standards

- ♦ 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.

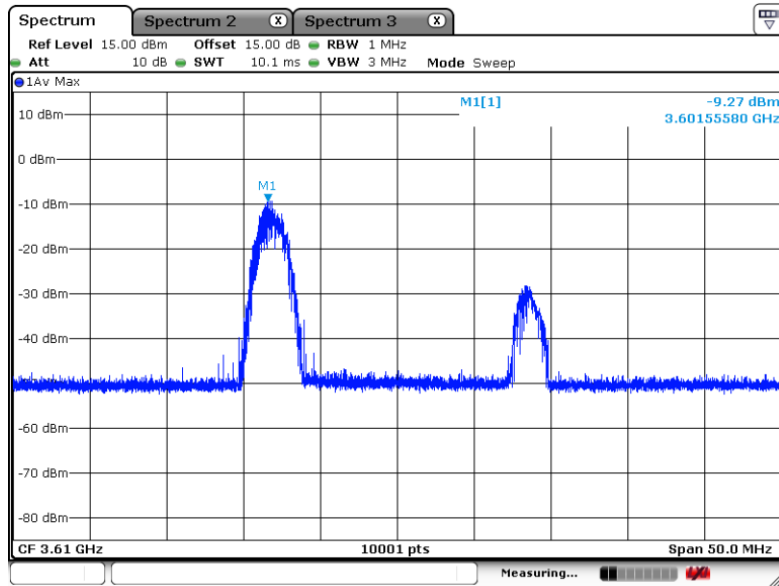




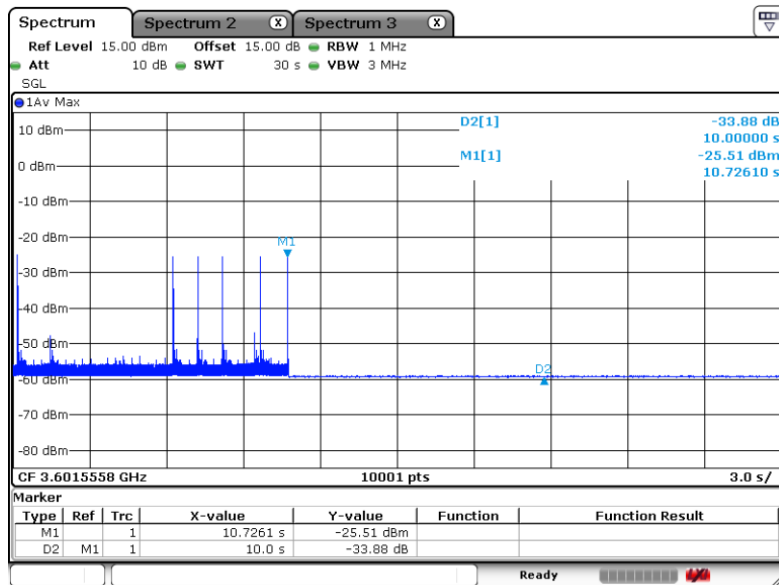
### 3.3 Test Result

[Step 1] Setup with frequency 3615-3635MHz and power level 13dBm/MHz

[Step 3] Check EUD Tx Frequency and power



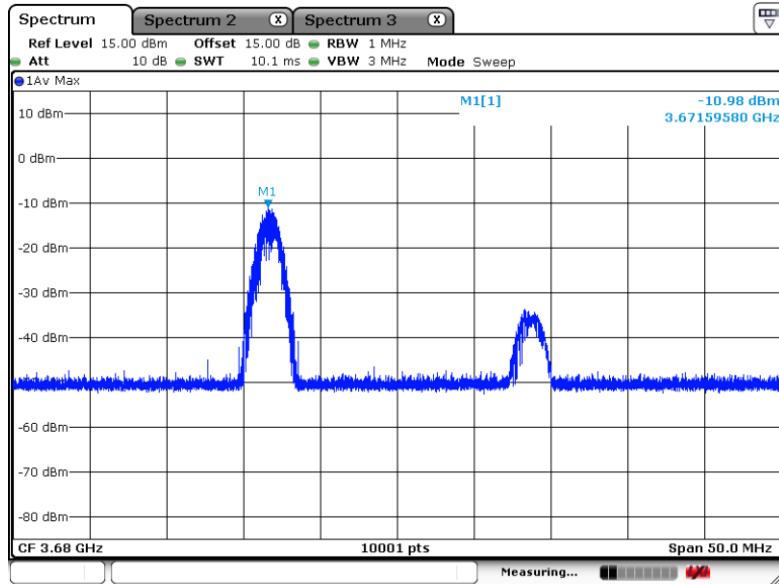
[Step 4.a.] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.





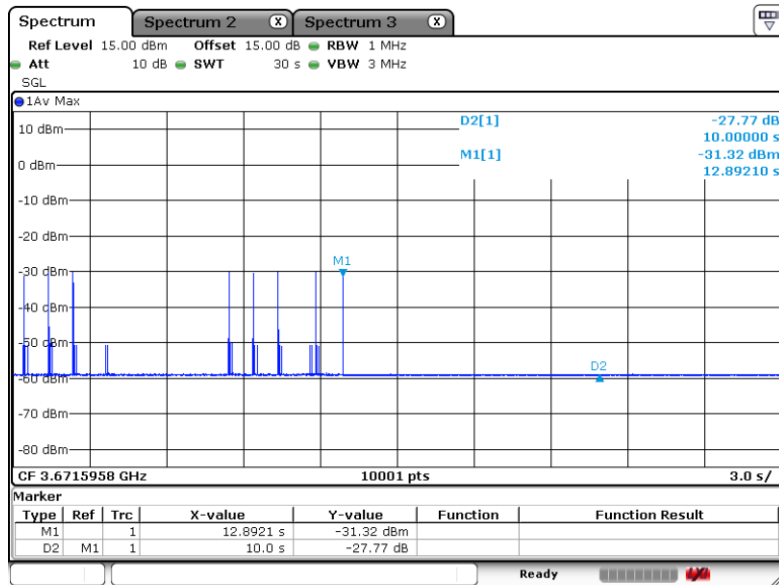
[Step 5] Setup with 3665-3685MHz & power level 8dBm/MHz

[Step 7] Check EUD Tx Frequency and power



[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.





## 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. 7, 2021	Apr. 21, 2021	Jan. 6, 2022	Conducted (DFS01-KS)