



# FCC Part 96.47 Test Report

Applicant : Motorola Mobility LLC  
Equipment : Mobile Cellular Phone  
Brand Name : Motorola  
Model Name : XT2519-1, XT2519-2, XT2519V  
FCC ID : IHDT56AU6  
Standard : FCC Part 96.47  
Test Date(s) : Feb. 17, 2025 ~ Feb. 18, 2025

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	-

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/manufacture 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  
2230 Bandmate Way, Suite 500, Raleigh, NC 27607, USA

## 1.2 Manufacturer

Relay, Inc.  
2230 Bandmate Way, Suite 500, Raleigh, NC 27607, USA

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2519-1, XT2519-2, XT2519V
FCC ID	IHDT56AU6
IMEI Code	355782390034582/355782390034860
HW Version	DVT2
SW Version	V2VD35.27
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 different model name is different for market purpose.

## 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	5G NR n48: 3550 MHz ~ 3700 MHz
Rx Frequency	5G NR n48: 3550 MHz ~ 3700 MHz
Antenna Type	<Ant. 2/4>: PIFA Antenna <Ant. 6/7>: Loop Antenna
Antenna Gain	<Ant. 2>: -4.5 dBi <Ant. 4>: -5.3 dBi <Ant. 6>: -4.9 dBi <Ant. 7>: -5.0 dBi
Type of Modulation	DFT-s-OFDM (PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM) CP-OFDM (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		
<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>	Carry Xu		
<b>Temperature</b>	20~ 24.5 °C		
<b>Relative Humidity</b>	40~ 60 %		

### 1.6 Test Software

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

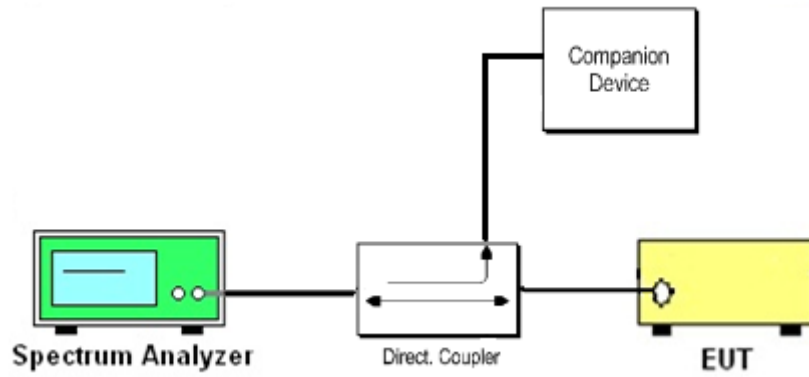
### 1.7 Applicable Standards

- ♦ FCC Part 96.47
- ♦ FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- ♦ WINNF-TS-0122-V1.0.2 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: WBK-RU4370)



### 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-V1.0.2 CBRS CBSD Test Specification, use the certified Ruckus CBSD (FCC ID: WBK-RU4370) as companion device to show compliance with Part 96.47 requirement for End User Device (EUD):

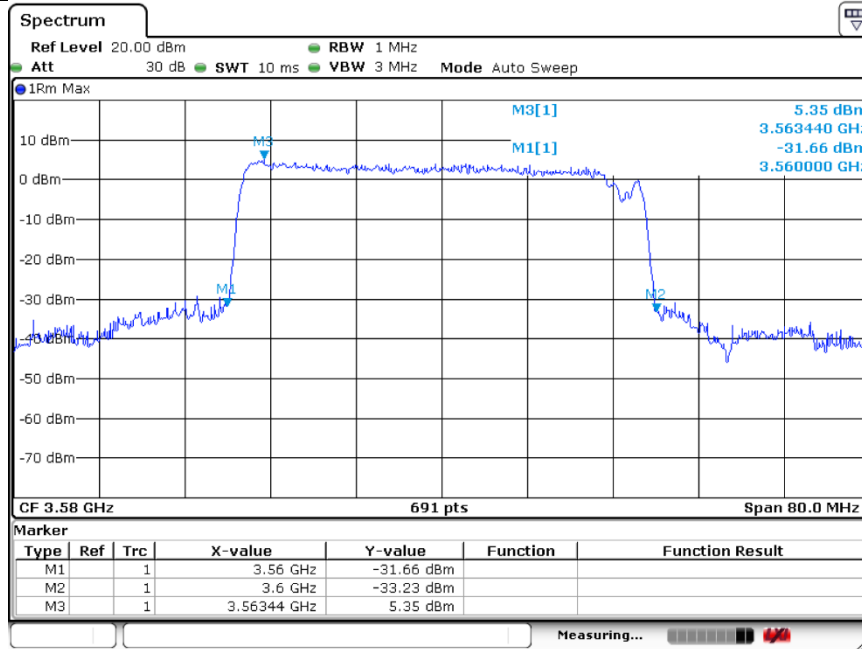
1. Setup with frequency 3560-3600MHz and power level 28dBm/MHz
2. Enable AP service from Cloud management
3. Check EUD Tx Frequency and power
4. Disable AP service from Cloud management
  - a. Check EUD stops transmission within 10 seconds.
  
5. Setup with 3650-3690MHz & power level 18dBm/MHz
6. Enable AP service from Cloud management
7. Check EUD Tx Frequency and power
8. Disable AP service from Cloud management
  - a. Check EUD stops transmission within 10 seconds.



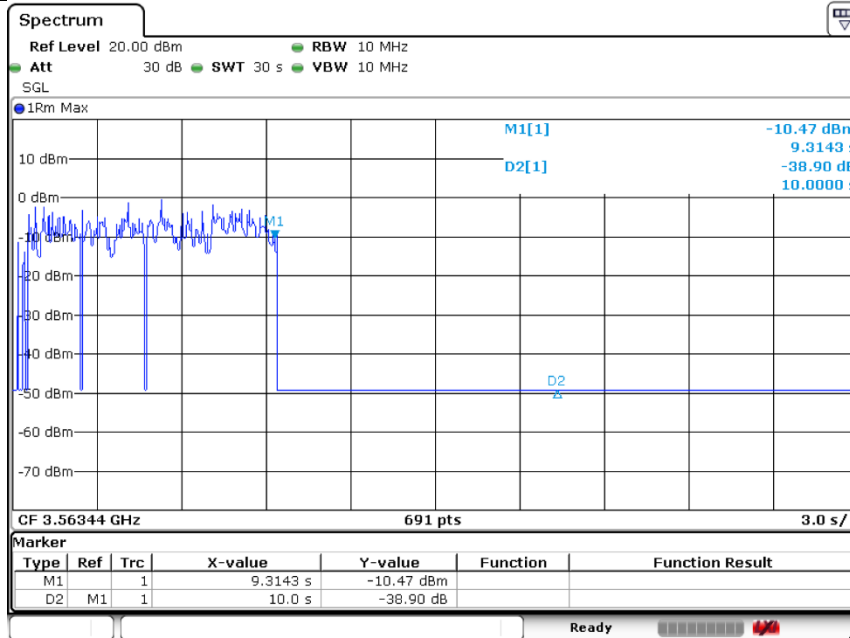
### 3.3 Test Result

[Step 1] Setup with frequency 3560--3600MHz and power level 28dBm/MHz

[Step 3] Check EUD Tx Frequency and power



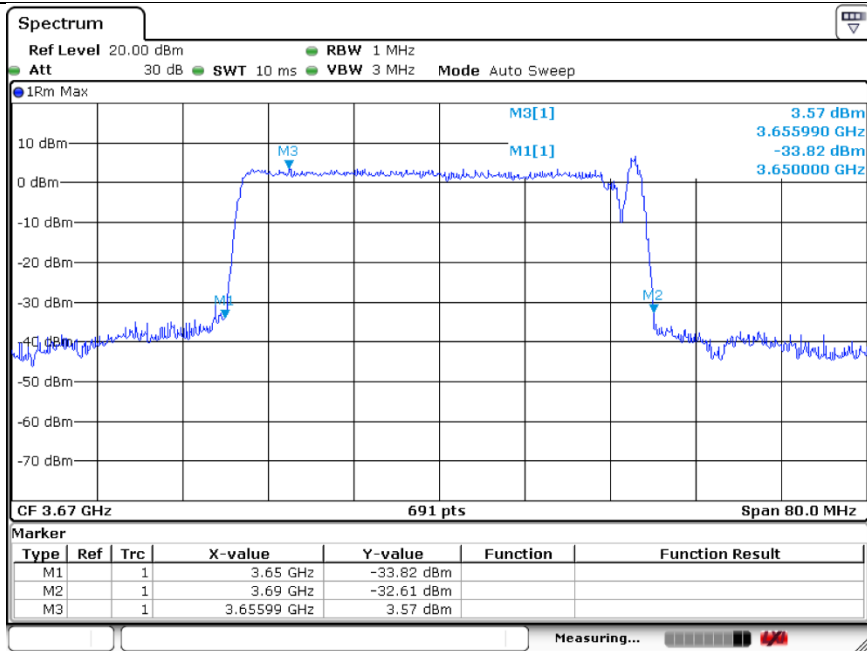
[Step 4.a.] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.





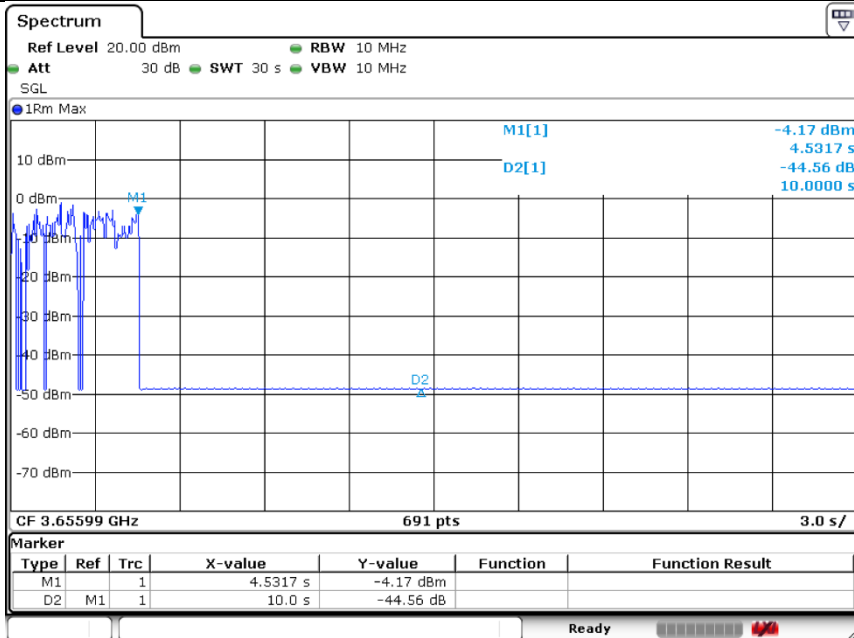
[Step 5] Setup with frequency 3650-3690MHz and power level 18dBm/MHz

[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. 02, 2025	Feb. 17, 2025~ Feb. 18, 2025	Jan. 01, 2026	Conducted (DFS01-KS)
Combiner	MTJ Cooperation	MTJ7114-M	N/A	0.5GHz~18GHz	NCR	Feb. 17, 2025~ Feb. 18, 2025	NCR	Conducted (DFS01-KS)



## 5 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. 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

Conducted Generated signal Levels	±0.56 dB
Conducted Time	0.38%

----- THE END -----