



# TEST REPORT

REPORT NUMBER: B19W50622-EMC-Rev2

ON

**Type of Equipment:** IoT Module  
**Type of Designation:** L710  
**Manufacturer:** Shanghai MobileTek Communication Ltd.

ACCORDING TO

Subpart B, PART 15, RADIO FREQUENCY DEVICES , August 24, 2018  
ICE-003, Issue 6 ,August 2017

**Chongqing Academy of Information and Communication Technology**

*Month date, year*  
*Jul, 07, 2020*

*Signature*

Zhang Yan  
Director

**Note:**

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of Chongqing Academy of Information and Communication Technology.



**Report No.: B19W50622-EMC-Rev2**

**FCC ID:** 2AK9D-L710

**Report Date:** 2020-07-07

**Test Firm Name:** Chongqing Academy of Information and Communication  
Technology

**FCC Registration Number:** CN1239

**Statement**

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Part 15 and ICE-003 Issue 6. The sample tested was found to comply with the requirements defined in the applied rules.

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## **1 General Information**

### **1.1 Notes**

All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Part15 and ICE-003 Issue 6.

The test results of this test report relate exclusively to the item(s) tested as specified in section 2.

The following deviation from, additions to, or exclusions from the test specifications have been made. See Annex C.

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## 1.2 Testers

Name: Chen Xin  
Position: Engineer  
Department: Department of EMC test  
Date: 2020-07-07  
Signature:



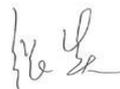
Editor of this test report:

Name: Xiao Yu  
Position: Engineer  
Department: Department of EMC test  
Date: 2020-07-07  
Signature:



Technical responsibility for area of testing:

Name: Zhang Yan  
Position: Manager  
Department: Department of EMC test  
Date: 2020-07-07  
Signature:





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### 1.3 Testing Laboratory information

#### 1.3.1 Location

Name: Chongqing Academy of Information and Communications  
Address: Building B, Technology Innovation Center, No.8, Yuma  
Road, Chayuan New Area, Nan'an District, Chongqing,  
People's Republic of China, 401336  
Tel: +86 23 88069965  
Fax: +86 23 88608777  
Email: liqiao@caict.ac.cn

#### 1.3.2 Details of accreditation status

Accredited by: --  
Registration number: --  
Standard: --

#### 1.3.3 Test location, where different from section 1.3.1

Name: -----  
Address: -----

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## 1.4 Details of applicant or manufacturer

### 1.4.1 Applicant

Name: Shanghai MobileTek Communication Ltd.  
Address: Free Trade Zone No.33, No.17 building 6H Xiya Road ,shanghai  
Country: China  
Telephone: 18616835910  
Fax: +86-21-54451877  
Contact: bin yang  
Email: b.yang@mobiletek.cn

### 1.4.2 Manufacturer (if different from applicant in section 1.4.1)

Name: --  
Address: --  
Country: --

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## 2 Test Item

### 2.1 General Information

Manufacturer:	Shanghai MobileTek Communication Ltd.
Name:	IoT Module
Model Number:	L710
Serial Number:	G4JA3102020006
IMEI:	866884040000001
Production Status:	Product
Receipt date of test item:	2019-11-20

### 2.2 Outline of EUT

The EUT, L710 is a Product supporting GSM 850, PCS 1900, CAT-M BAND 2, Band 4, Band 5, Band 12, Band 13, Band 26, NB-IoT BAND 2, Band 4, Band 5, Band 12, Band 13, Band 26.

### 2.3 Modifications Incorporated in EUT

The EUT has not been modified from what is described by the brand name and unique type identification stated above.

### 2.4 Equipment Configuration

Equipment configuration list:

Item	Generic Description	Manufacturer	Type	Serial No.	Remarks
A	IoT Module	Shanghai MobileTek Communication Ltd.	L710	G4JA310202 0006	None

### 2.5 Other Information

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### 3 Summary of Test Results

A brief summary of the tests carried out is shown as following.

Configuration1		
Specification Clause	Name of Test	Result
15.109(a)/ ICE-003 Issue 5 §6	Radiated Emission	Pass

Test equipment Used:						
Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
1	EMI Test Receiver	R/S	ESU	100367	2021-06-26	Normal
2	Ultra Broadband Antenna	R/S	VULB 9163	00995	2020-08-20	Normal
3	Double-Ridged Horn Antenna	R/S	HF907	100357	2020-08-20	Normal
4	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6.3m	CT000174-1035	2021-06-26	Normal
5	Pre-amplifier	SCU08	SCU08	SCU08	2021-06-26	Normal
6	Pre-amplifier	SCU18	SCU18	SCU18	2021-06-26	Normal

## 4 Test Results

### 4.1 Radiated Emission

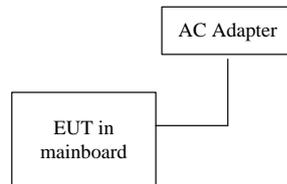
<b>Specifications:</b>	15.109(a)/ ICE-003 Issue 6 §6
<b>Date of Tests</b>	2019-12-10-2019-12-28
<b>Test conditions:</b>	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
<b>Operation Mode</b>	Normal
<b>Test Results:</b>	Pass

#### Limit Level Construction:

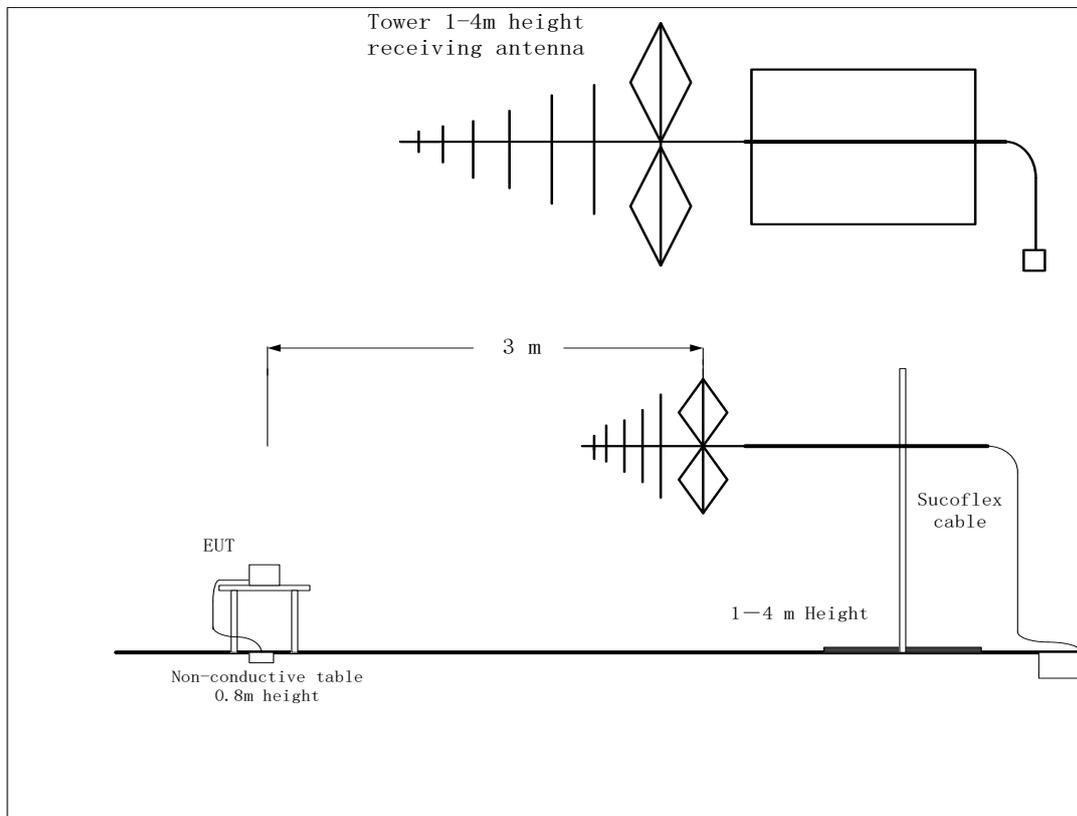
Frequency Range (MHz)	Quasi-Peak (dBuV/m)
30-88	40
88-216	43.5
216-960	46
Above 960	54

Frequency Range (MHz)	Peak (dBuV/m)	Average (dBuV/m)
Above 1000	74	54

#### EUT Setup:



**Test Setup:**



**Test Method:**

For 30-1000MHz, the EUT was placed on the top of a rotating 0.8-m table above the ground at a semi-anechoic chamber. The distance between the EUT and the received antenna was 3 meters. The table was rotated 360 degree and the received antenna mounted on a variable-height antenna tower was varied from 1m to 4m to find the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were set during the measurement. Tested in accordance with the procedures of ANSI C63.4-2014, section 8.3.

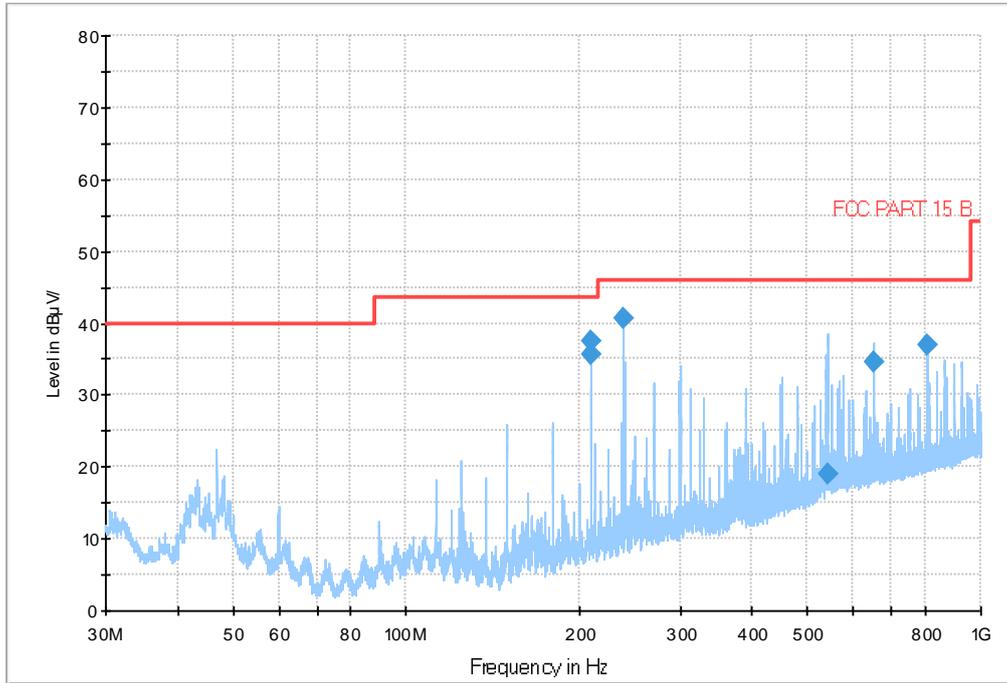
For 1000-18000MHz, the maximal emission value was acquired by adjusting the antenna height, and the table was rotated 360 degree to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were set during the measurement.

Test mode : Boot

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Test Data

RE 30MHz-1GHz



Frequency MHz	QP dBuV/m	Mea.Time ms	RBW KHz	Height cm	Polarity	Azimuth deg	Margin dB	Limit dBuV/m
209.301500	37.4	5000.0	120.000	115.0	H	90.0	6.1	43.5
209.480500	35.7	5000.0	120.000	100.0	V	270.0	7.8	43.5
239.126000	40.7	5000.0	120.000	115.0	H	270.0	5.3	46.0
540.217000	18.9	5000.0	120.000	100.0	V	180.0	27.1	46.0
650.024000	34.6	5000.0	120.000	115.0	H	180.0	11.4	46.0
807.446000	37.0	5000.0	120.000	100.0	H	0.0	9.0	46.0

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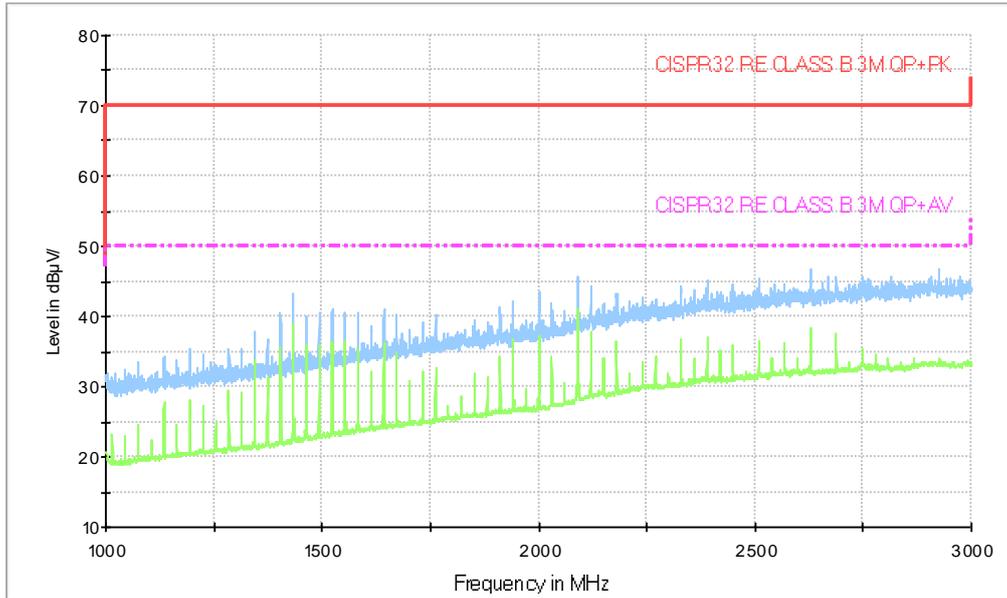
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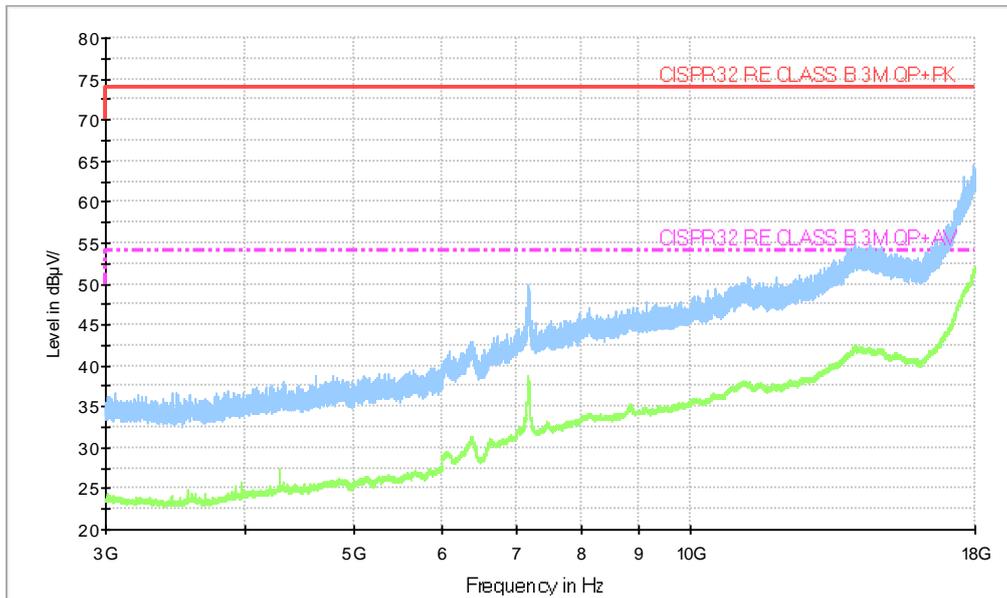
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RE 1GHz-3GHz



- CISPR32 RE CLASS B 3M QP+PK.LimitLine
- - - CISPR32 RE CLASS B 3M QP+AV.LimitLine
- Preview Result 1-PK+
- Preview Result 2-AVG
- \* Data Reduction Result 1 [2]-PK+
- \* Data Reduction Result 2 [2]-AVG

RE 3GHz-18GHz



- CISPR22 RE CLASS B 3M QP+PK.LimitLine
- - - CISPR22 RE CLASS B 3M QP+AV.LimitLine
- Preview Result 1-PK+
- Preview Result 2-AVG
- \* Data Reduction Result 1 [3]-PK+
- \* Data Reduction Result 2 [3]-AVG

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**Test photo**

See the Pic1~2 in document "L710\_EMC Test Setup Photos".

**Annex A External Photos**

See the document "L710 -External Photos".

**Annex B Internal Photos**

See the document "L710 -Internal Photos".

**ANNEX C Deviations from Prescribed Test Methods**

No deviation from Prescribed Test Methods.

————— **The End of this Report** —————

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