



TEST REPORT

REPORT NUMBER: I20W00001-EMC-Rev1

ON

Type of Equipment: LTE Module

Type of Designation: L506

Manufacturer: Shanghai MobileTek Communication Ltd.

ACCORDING TO

Subpart B, PART 15, RADIO FREQUENCY DEVICES , August 24, 2018

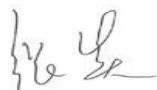
ICE-003, Issue 6 ,August 2017

Chongqing Academy of Information and Communication Technology

Month date, year

June, 12, 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.:I20W00001-EMC-Rev1

FCC ID: 2AK9DL506LA1

Report Date: 2020-06-12

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: 2020-05-28

Signature:



Editor of this test report:

Name: Xiao Yu
Position: Engineer
Department: Department of EMC test
Date: 2020-06-04

Signature:



Technical responsibility for area of testing:

Name: Zhang Yan
Position: Manager
Department: Department of EMC test
Date: 2020-06-04

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 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: LTE Module
Model Number: L506
Serial Number: G4K51401010006
IMEI: 865699031154043
Production Status: Product
Receipt date of test item: 2020-05-25

2.2 Outline of EUT

The EUT, L506 is a module supporting WCDMA Band 5, LTE Band 4 and Band 5.

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	Module	Shanghai MobileTek Communication Ltd.	L506	G4K51401010006	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 6 §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	vulb9163-544	2021-11-24	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

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4 Test Results

4.1 Radiated Emission

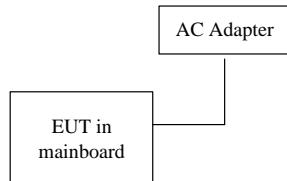
Specifications:	15.109(a)/ ICE-003 Issue 6 §6
Date of Tests	2020-05-25-2020-06-04
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Operation Mode	Normal
Test Results:	Pass

Limit Level Construction:

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

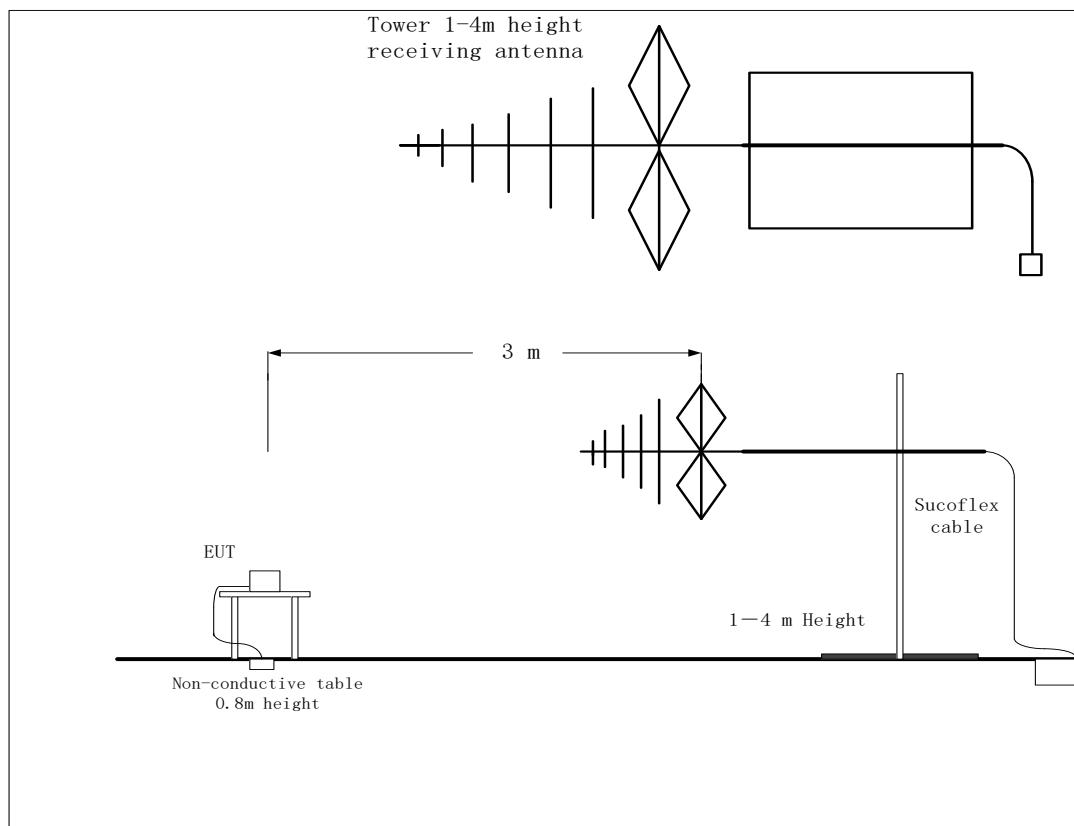
Frequency Range (MHz)	Peak (dBuV/m)	Average (dBuV/m)
Above 1000	74	54

EUT Setup:



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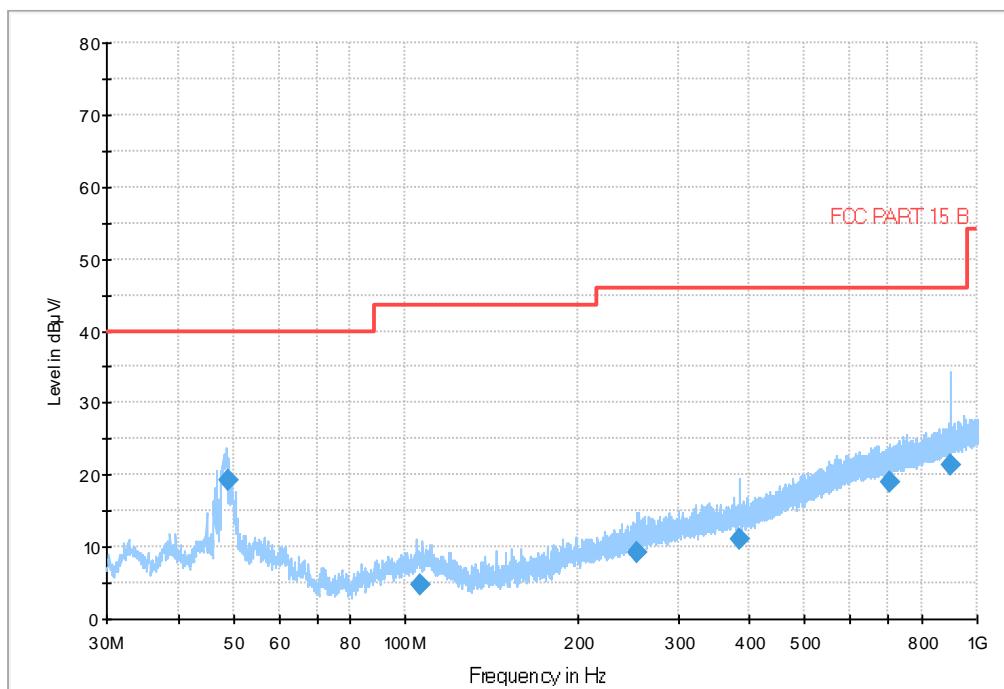
Test Setup:

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 Data

RE 30 MHz-1GHz



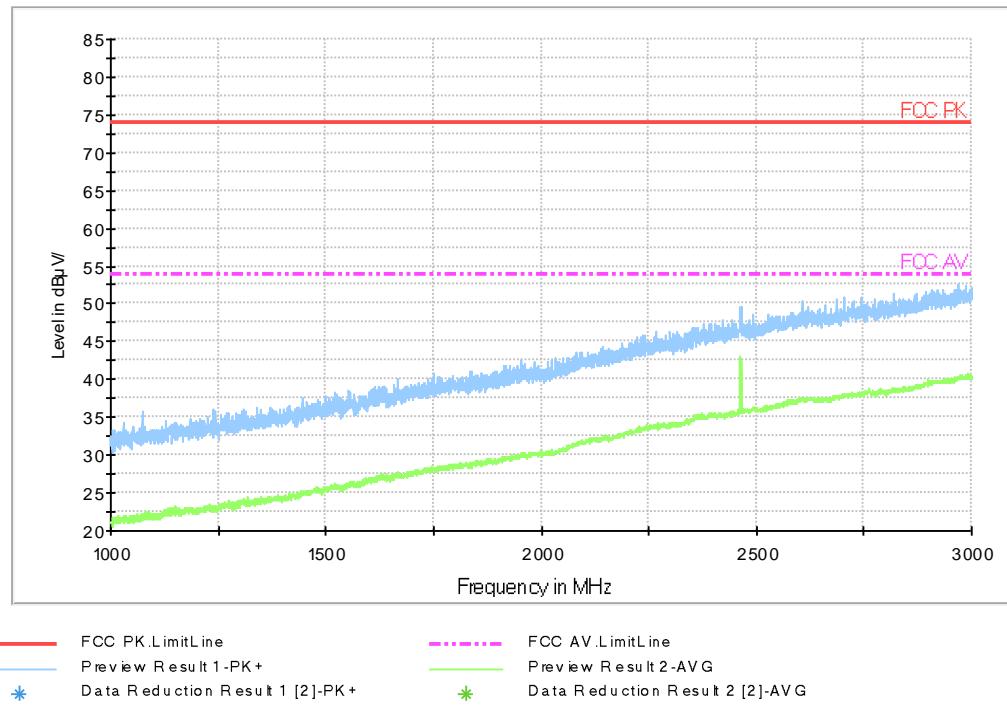
RE 30M-1GHz Horizontal and Vertical

Frequency MHz	QP dB μ V/m	Mea.Time ms	RBW KHz	Height cm	Polarity	Azimuth deg	Margin dB μ V/m	Limit dB μ V/m
48.875500	19.4	5000.0	120.000	281.0	V	90.0	20.6	40.0
106.375500	4.8	5000.0	120.000	201.0	H	180.0	38.7	43.5
254.570000	9.3	5000.0	120.000	102.0	H	180.0	36.7	46.0
383.850000	11.0	5000.0	120.000	217.0	H	180.0	35.0	46.0
702.470500	19.0	5000.0	120.000	102.0	V	90.0	27.0	46.0
895.513000	21.5	5000.0	120.000	102.0	V	90.0	24.5	46.0

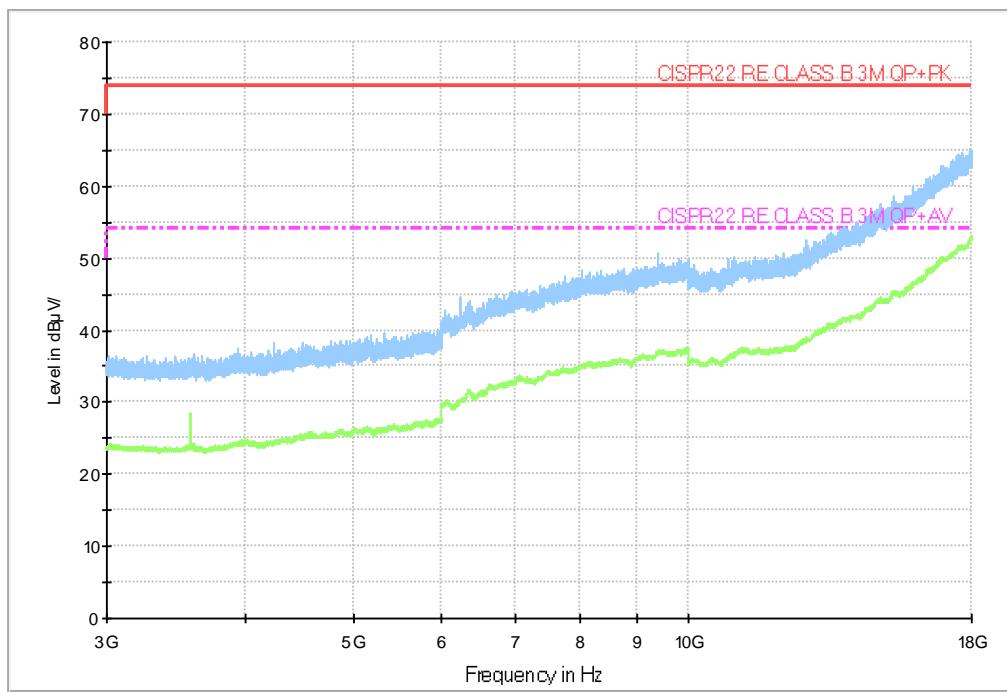
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RE 1GHz-3GHz



RE 3GHz-18GHz



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Test photo

See the Pic1~2 in document" L506 EMC Test Setup Photos".

Annex A External Photos

See the document" L506 -External Photos".

Annex B Internal Photos

See the document" L506 -Internal Photos".

ANNEX C Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

————— The End of this Report ————

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