



## SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Report No.:SHCR230700145208

Page: 1 of 22

# TEST REPORT

Application No.:	SHCR2307001452AT
FCC ID:	2AH25T6810
Applicant:	Shanghai Sunmi Technology Co.,Ltd.
Address of Applicant:	Room 505, No.388, Song Hu Road, Yang Pu District, Shanghai, China
Manufacturer:	Shanghai Sunmi Technology Co.,Ltd.
Address of Manufacturer:	Room 505, No.388, Song Hu Road, Yang Pu District, Shanghai, China
Equipment Under Test (EUT):	
EUT Name:	Smart POS system
Model No.:	T6810
HVIN:	T6810, T6810H, T6810M
Standard(s) :	47 CFR Part 2 47 CFR Part 22 47 CFR Part 24 47 CFR Part 27
Date of Receipt:	2023-06-07
Date of Test:	2023-06-26 to 2023-07-01
Date of Issue:	2023-07-03
Test Result:	Pass

\* In the configuration tested, the EUT complied with the standards specified above.

Parlam Zhan

Parlam Zhan  
Laboratory Manager



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号

t (86-21) 61915666  
t (86-21) 61915666

f (86-21) 61915678  
f (86-21) 61915678

[www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
[sgs.china@sgs.com](mailto:sgs.china@sgs.com)



## SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Report No.: SHCR230700145208

Page: 2 of 22

Revision Record			
Version	Description	Date	Remark
00	Add new configuration SKU3.	2023-07-03	Based on KSCR221000185708

Authorized for issue by:			
		Micheal Niu / Project Engineer	
		Parlam Zhan / Reviewer	



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号 邮编: 201612

t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t (86-21) 61915666 f (86-21) 61915678 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)



## SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Report No.: SHCR230700145208

Page: 3 of 22

## 2 Test Summary

Test Item	FCC Rule No.	Requirements	Verdict
Radiated spurious emission	§2.1051 §22.917 §24.238 §27.53	≤ -13dBm(LTE Band2,4,5,12,17) ≤ -25dBm(LTE Band7,38,41)	PASS

### Remark:

Compared with the original report, this report added new configuration SKU3. Compared with SKU1, SKU3 removed code scanning probe, also added one alternative screen and battery. Considering the differences, only test Radiated spurious emissions in this report, other test data please refer to original report.

Note: SKU1: T6810H, SKU2: T6810, SKU3: T6810M



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号

t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t (86-21) 61915666 f (86-21) 61915678 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 3 Contents

	Page
<b>1 COVER PAGE</b>	1
<b>2 TEST SUMMARY</b>	3
<b>3 CONTENTS</b>	4
<b>4 GENERAL INFORMATION</b>	5
4.1 <i>Details of E.U.T.</i>	5
4.2 <i>Test Frequency</i>	6
4.3 <i>Test Environment</i>	8
4.4 <i>Description of Support Units</i>	8
4.5 <i>Measurement Uncertainty</i>	9
4.6 <i>Test Location</i>	10
4.7 <i>Test Facility</i>	10
4.8 <i>Deviation from Standards</i>	10
4.9 <i>Abnormalities from Standard Conditions</i>	10
<b>5 EQUIPMENT LIST</b>	11
5.1 <i>Radiated spurious emission</i>	12
5.1.1 <i>E.U.T. Operation</i>	12
5.1.2 <i>Test Setup Diagram</i>	12
5.1.3 <i>Measurement Procedure and Data</i>	13
<b>2 TEST SETUP PHOTO</b>	22
<b>3 EUT CONSTRUCTIONAL DETAILS (EUT PHOTOS)</b>	22



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: CN.Doccheck@sgs.com**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号

t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t (86-21) 61915666 f (86-21) 61915678 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## 4 General Information

### 4.1 Details of E.U.T.

Power supply:	DC 5V 1A; DC 5V 2A
Adapter information:	<p>Adapter 1: Model: TPA-46B050100UU Input: 100-240V~ 50/60Hz 0.2A Output: 5.0V 1.0A</p> <p>Adapter 2: Model: TPA-23A050200UU01 Input: 100-240V~ 50/60Hz 0.3A Output: 5.0V 2.0A</p> <p>Adapter 3: Model No.: UC11US PRI: 100-240V~50/60Hz 0.2A SEC: 5.0V 1.0A 5.0W</p>
Battery information:	<p>Model 1: TMPC 1ICP6/59/63 Nominal Voltage: 3.8V Limited Charge Voltage: 4.35V Rated Capacity: 2900mAh</p> <p>Model 2: TMPC 1ICP6/59/63 Nominal Voltage: 3.8V Limited Charge Voltage: 4.35V Rated Capacity: 2900mAh</p>
Test voltage:	DC 3.8V
Serial Number:	PC10E35P10028
Firmware version:	V1.0.0
Sample Type:	Portable production
LTE Operation Frequency Band:	LTE Band 2,4,5,7,12,17,38,41
Modulation Type:	UL: QPSK, 16QAM DL: QPSK, 16QAM, 64QAM
Antenna Type:	FPC Antenna
Antenna Gain:	Band 2: -0.10dBi; Band 4: -1.70dBi; Band 5: -1.60dBi; Band 7: 0.50dBi; Band 12: -6.40dBi; Band 17: -6.40dBi; Band 38: 0.50dBi; Band 41: 0.50dBi (Provided by the manufacturer)
Extreme temp. Tolerance:	-10°C to +50°C
Extreme vol. Limits:	3.46V DC to 4.35V DC (nominal: 3.8V DC)
IMEI:	863407060071936



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号

t (86-21) 61915666  
t (86-21) 61915666

f (86-21) 61915678  
f (86-21) 61915666

[www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
[sgs.china@sgs.com](mailto:sgs.china@sgs.com)

#### 4.2 Test Frequency

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 2	1.4	1850.7	1880	1909.3
	3	1851.5	1880	1908.5
	5	1852.5	1880	1907.5
	10	1855.0	1880	1905.0
	15	1857.5	1880	1902.5
	20	1860.0	1880	1900.0
LTE FDD Band 4	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
	1.4	1710.7	1732.5	1754.3
	3	1711.5	1732.5	1753.5
	5	1712.5	1732.5	1752.5
LTE FDD Band 5	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
	1.4	824.7	836.5	848.3
	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
LTE FDD Band 7	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
	5	2502.5	2535	2567.5
	10	2505	2535	2565
	15	2507.5	2535	2562.5
	20	2510	2535	2560

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号

t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t (86-21) 61915666 f (86-21) 61915678 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 12	1.4	699.7	707.5	715.3
	3	700.5	707.5	714.5
	5	701.5	707.5	713.5
	10	704	707.5	711
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 17	5	706.5	710	713.5
	10	709	710	711
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE TDD Band 38	5	2572.5	2595.0	2617.5
	10	2575.0	2595.0	2615.0
	15	2577.5	2595.0	2612.5
	20	2580.0	2595.0	2610.0
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE TDD Band 41	5	2537.5	2595.0	2652.5
	10	2540.0	2595.0	2650.0
	15	2542.5	2595.0	2647.5
	20	2545.0	2595.0	2645.0

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



NO.588 West Jindu Road, Songjiang District, Shanghai China 201612 t (86-21) 61915666 f (86-21) 61915678 www.sgsgroup.com.cn  
中国·上海·松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915678 sgs.china@sgs.com



## SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Report No.: SHCR230700145208

Page: 8 of 22

### 4.3 Test Environment

Environment Parameter	Selected Values During Tests	
Relative Humidity	48%	
Atmospheric Pressure:	101kPa	
Temperature:	TN	25 °C
	VL	3.46V
Voltage:	VN	3.80V
	VH	4.35V

NOTE: VL= lower extreme test voltage

VN= nominal voltage

VH= upper extreme test voltage

TN= normal temperature

### 4.4 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
The EUT has been tested as an independent unit.			



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号

邮编: 201612

t (86-21) 61915666

f (86-21) 61915678

[www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t (86-21) 61915666

f (86-21) 61915678

[sgs.china@sgs.com](mailto:sgs.china@sgs.com)

#### 4.5 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	$8.4 \times 10^{-8}$
2	Timeout	2s
3	Duty cycle	0.37%
4	Occupied Bandwidth	3%
5	RF conducted power	0.6dB
6	RF power density	2.84dB
7	Conducted Spurious emissions	0.75dB
8	RF Radiated power	4.6dB (Below 1GHz) 4.1dB (Above 1GHz)
9	Radiated Spurious emission test	4.2dB (Below 30MHz) 4.4dB (30MHz-1GHz) 4.8dB (1GHz-18GHz) 5.2dB (Above 18GHz)
10	Temperature test	1°C
11	Humidity test	3%
12	Supply voltages	1.5%
13	Time	3%

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

#### 4.6 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. E&E Lab  
588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China  
Tel: +86 21 6191 5666 Fax: +86 21 6191 5678

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).

#### 4.7 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 6332.01)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. is accredited by the American Association for Laboratory Accreditation(A2LA).

- **FCC (Designation Number: CN1301)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been recognized as an accredited testing laboratory.

- **ISED (CAB Identifier: CN0020)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. EMC Laboratory has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.  
Company Number: 8617A

- **VCCI (Member No.: 3061)**

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-13868, C-14336, T-12221, G-10830 respectively.

#### 4.8 Deviation from Standards

None

#### 4.9 Abnormalities from Standard Conditions

None

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号 邮编: 201612 t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
EEC EMC Lab t (86-21) 61915666 f (86-21) 61915678 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## 5 Equipment List

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
<b>RF Conducted Test</b>					
Spectrum Analyzer	R&S	FSP-30	SHEM002-1	2022-12-20	2023-12-19
Spectrum Analyzer	Keysight	N9020B	SHEM241-1	2022-12-20	2023-12-19
Spectrum Analyzer	Agilent	N9020A	SHEM181-1	2022-08-02	2023-08-01
Signal Generator	R&S	SMR20	SHEM006-1	2022-08-02	2023-08-01
Signal Generator	Agilent	N5182A	SHEM182-1	2022-08-02	2023-08-01
Communication Tester	R&S	CMW270	SHEM183-1	2023-06-01	2024-05-31
Communication Tester	R&S	CMW500	SHEM268-1	2023-06-01	2024-05-31
Power Sensor	Keysight	U2021XA * 4	SHEM184-1	2022-08-02	2023-08-01
Splitter	Anritsu	MA1612A	SHEM185-1	/	/
Coupler	e-meca	803-S-1	SHEM186-1	/	/
High-low Temp Cabinet	Suzhou Zhihe	TL-40	SHEM087-1	2022-11-08	2024-11-07
AC Power Stabilizer	APC	KDF-31020T-V0-F0	SHEM216-1	2022-12-20	2023-12-19
DC Power Supply	MCH	MCH-303A	SHEM210-1	2022-12-20	2023-12-19
Conducted test Cable	/	RF01~RF04	/	2022-12-20	2023-12-19
Switcher	Tonscend	JS0806	SHEM184-1	2022-08-02	2023-08-01
Test software	Tonscend	JS Tonscend BT/WIFI System	Version: 2.6	/	/
Coaxial Cable	TST		SHEM263-1	2022-08-02	2023-08-01
Test software	TST	TST PASS	Version: 2.0	/	/
<b>RF Radiated Test</b>					
EMI test Receiver	R&S	ESU40	SHEM051-1	2022-12-20	2023-12-19
Spectrum Analyzer	R&S	FSP-30	SHEM002-1	2022-12-20	2023-12-19
Communication Tester	R&S	CMW500	SHEM268-1	2023-06-01	2024-05-31
Loop Antenna (9kHz-30MHz)	Schwarzbeck	FMZB1519	SHEM135-1	2022-12-20	2023-12-19
Antenna (25MHz-2GHz)	Schwarzbeck	VULB9168	SHEM048-1	2021-09-11	2023-09-10
Antenna (25MHz-2GHz)	Schwarzbeck	VULB9168	SHEM202-1	2022-05-07	2024-05-06
Horn Antenna (1-18GHz)	Schwarzbeck	HF906	SHEM009-1	2022-08-11	2024-08-10
Horn Antenna (1-18GHz)	Schwarzbeck	BBHA9120D	SHEM050-1	2021-09-18	2023-09-17
Horn Antenna (14-40GHz)	Schwarzbeck	BBHA 9170	SHEM049-1	2021-09-18	2023-09-17
Pre-Amplifier	HP	8447D	SHEM236-1	2022-08-02	2023-08-01
High-amplifier (14-40GHz)	Schwarzbeck	10001	SHEM049-2	2022-12-20	2023-12-19
Band Filter	LORCH	9BRX-875/X150	SHEM156-1	/	/
Band Filter	LORCH	13BRX-1950/X500	SHEM083-2	/	/
Band Filter	LORCH	5BRX-2400/X200	SHEM155-1	/	/
Band Filter	LORCH	5BRX-5500/X1000	SHEM157-2	/	/
High pass Filter	Wainwright	WHK3.0/18G	SHEM157-1	/	/
High pass Filter	Wainwright	WHKS1700	SHEM157-3	/	/
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2021-05-25	2024-05-24
RE test Cable	/	RE01, RE02, RE06	/	2023-01-07	2024-01-06
Test software	FARAD	EZ_EMC	1.1.4.2	/	/



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com**

## 5.1 Radiated spurious emission

Test Requirement: §2.1051

Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit: ≤ -13dBm(LTE Band2,4,5,12,17)

≤ -25dBm(LTE Band7,38,41)

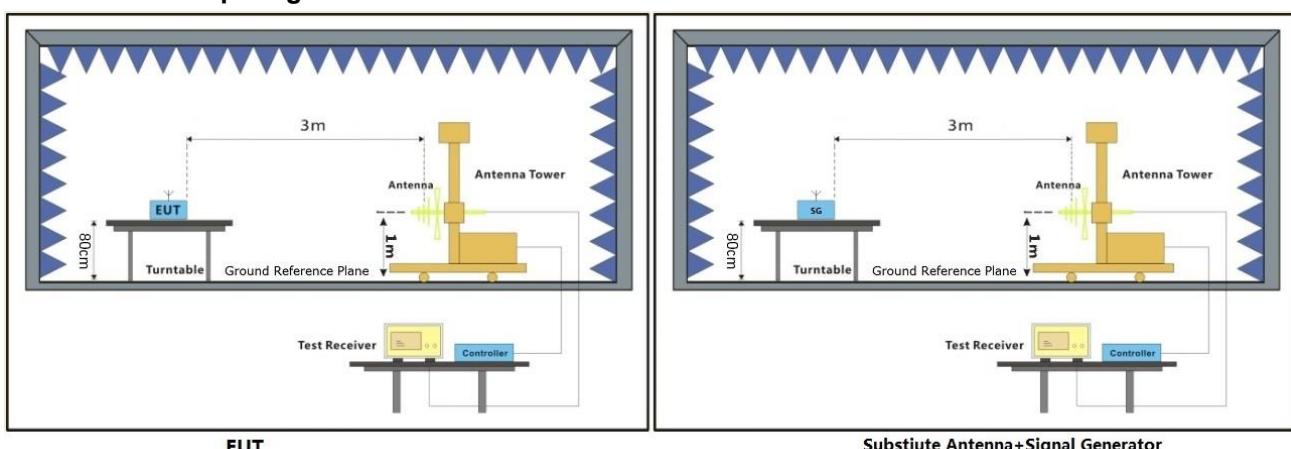
### 5.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar

Test mode: Tx mode, Keep the EUT in transmitting mode.

### 5.1.2 Test Setup Diagram



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-21) 61915666, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号 邮编: 201612

t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t (86-21) 61915666 f (86-21) 61915678 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

### 5.1.3 Measurement Procedure and Data

#### Test Procedure:

- (1) On a test site, the EUT shall be placed on a turntable and in the position closest to the normal use as declared by the user.
- (2) The test antenna shall be oriented initially for vertical polarization located 3m from the EUT to correspond to the transmitter.
- (3) The output of the antenna shall be connected to the measuring receiver and either a peak or quasi-peak detector was used for the measurement as indicated on the report. The detector selection is based on how close the emission level was approaching the limit.
- (4) The transmitter shall be switched on; if possible, without the modulation and the measurement receiver shall be tuned to the frequency of the transmitter under test.
- (5) The test antenna shall be raised and lowered through the specified range of height until the measuring receiver detects a maximum signal level.
- (6) The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- (7) The test antenna shall be raised and lowered again through the specified range of height until the measuring receiver detects a maximum signal level.
- (8) The maximum signal level detected by the measuring receiver shall be noted.
- (9) The measurement shall be repeated with the test antenna set to horizontal polarization.
- (10) Replace the antenna with a proper Antenna (substitution antenna).
- (11) The substitution antenna shall be oriented for vertical polarization and, if necessary, the length of the substitution antenna shall be adjusted to correspond to the frequency of transmitting.
- (12) The substitution antenna shall be connected to a calibrated signal generator.
- (13) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- (14) The test antenna shall be raised and lowered through the specified range of the height to ensure that the maximum signal is received.
- (15) The input signal to substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuation setting of the measuring receiver.
- (16) The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
- (17) The measurement shall be repeated with the test antenna and the substitution antenna oriented for horizontal polarization.

Remark: We have evaluated different adapters and battery modes. The battery mode is the worst, and only the battery mode is tested finally.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

LTE BAND 2-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3720.000	-53.40	-13	-40.40	Horizontal
5580.000	-57.87	-13	-44.87	Horizontal
7440.000	-53.36	-13	-40.36	Horizontal
3720.000	-59.89	-13	-46.89	Vertical
5580.000	-60.60	-13	-47.60	Vertical
7440.000	-56.61	-13	-43.61	Vertical

LTE BAND 2-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3760.000	-54.72	-13	-41.72	Horizontal
5640.000	-61.03	-13	-48.03	Horizontal
7520.000	-56.86	-13	-43.86	Horizontal
3760.000	-54.13	-13	-41.13	Vertical
5640.000	-59.68	-13	-46.68	Vertical
7520.000	-58.67	-13	-45.67	Vertical

LTE BAND 2-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3800.000	-57.37	-13	-44.37	Horizontal
5700.000	-59.67	-13	-46.67	Horizontal
7600.000	-56.61	-13	-43.61	Horizontal
3800.000	-51.57	-13	-38.57	Vertical
5700.000	-58.66	-13	-45.66	Vertical
7600.000	-53.92	-13	-40.92	Vertical



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

LTE BAND 4-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3440.000	-59.44	-13	-46.44	Horizontal
5160.000	-59.64	-13	-46.64	Horizontal
6880.000	-54.36	-13	-41.36	Horizontal
3440.000	-59.90	-13	-46.90	Vertical
5160.000	-56.82	-13	-43.82	Vertical
6880.000	-55.52	-13	-42.52	Vertical

LTE BAND 4-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3465.000	-56.27	-13	-43.27	Horizontal
5197.500	-61.23	-13	-48.23	Horizontal
6930.000	-55.50	-13	-42.50	Horizontal
3465.000	-58.60	-13	-45.60	Vertical
5197.500	-62.02	-13	-49.02	Vertical
6930.000	-59.16	-13	-46.16	Vertical

LTE BAND 4-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3490.000	-60.13	-13	-47.13	Horizontal
5235.000	-61.75	-13	-48.75	Horizontal
6980.000	-56.78	-13	-43.78	Horizontal
3490.000	-54.43	-13	-41.43	Vertical
5235.000	-59.51	-13	-46.51	Vertical
6980.000	-54.40	-13	-41.40	Vertical



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



## SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Report No.: SHCR230700145208

Page: 16 of 22

### LTE BAND 5-Low channel

Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1658.000	-51.32	-13	-38.32	Horizontal
2487.000	-57.96	-13	-44.96	Horizontal
3316.000	-52.93	-13	-39.93	Horizontal
1658.000	-58.75	-13	-45.75	Vertical
2487.000	-55.83	-13	-42.83	Vertical
3316.000	-53.82	-13	-40.82	Vertical

### LTE BAND 5-Middle channel

Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1673.000	-52.94	-13	-39.94	Horizontal
2509.500	-60.11	-13	-47.11	Horizontal
3346.000	-56.46	-13	-43.46	Horizontal
1673.000	-54.57	-13	-41.57	Vertical
2509.500	-61.43	-13	-48.43	Vertical
3346.000	-58.32	-13	-45.32	Vertical

### LTE BAND 5-High channel

Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1688.000	-57.38	-13	-44.38	Horizontal
2532.000	-62.12	-13	-49.12	Horizontal
3376.000	-54.42	-13	-41.42	Horizontal
1688.000	-60.68	-13	-47.68	Vertical
2532.000	-62.73	-13	-49.73	Vertical
3376.000	-53.43	-13	-40.43	Vertical

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号

t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
邮编: 201612 t (86-21) 61915666 f (86-21) 61915678 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)



## SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Report No.: SHCR230700145208

Page: 17 of 22

### LTE BAND 7-Low channel

Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5020.000	-55.20	-25	-30.20	Horizontal
7530.000	-58.23	-25	-33.23	Horizontal
10040.000	-56.16	-25	-31.16	Horizontal
5020.000	-52.99	-25	-27.99	Vertical
7530.000	-56.37	-25	-31.37	Vertical
10040.000	-53.12	-25	-28.12	Vertical

### LTE BAND 7-Middle channel

Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5070.000	-55.63	-25	-30.63	Horizontal
7605.000	-58.72	-25	-33.72	Horizontal
10140.000	-56.50	-25	-31.50	Horizontal
5070.000	-56.42	-25	-31.42	Vertical
7605.000	-57.66	-25	-32.66	Vertical
10140.000	-59.38	-25	-34.38	Vertical

### LTE BAND 7-High channel

Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5120.000	-53.03	-25	-28.03	Horizontal
7680.000	-62.61	-25	-37.61	Horizontal
10240.000	-53.09	-25	-28.09	Horizontal
5120.000	-55.50	-25	-30.50	Vertical
7680.000	-61.04	-25	-36.04	Vertical
10240.000	-53.62	-25	-28.62	Vertical

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab  
NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号 邮编: 201612

t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
t (86-21) 61915666 f (86-21) 61915678 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

LTE BAND 12-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1408.000	-52.00	-13	-39.00	Horizontal
2112.000	-58.00	-13	-45.00	Horizontal
2816.000	-54.42	-13	-41.42	Horizontal
1408.000	-59.04	-13	-46.04	Vertical
2112.000	-57.25	-13	-44.25	Vertical
2816.000	-54.53	-13	-41.53	Vertical

LTE BAND 12-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1415.000	-59.31	-13	-46.31	Horizontal
2122.500	-59.23	-13	-46.23	Horizontal
2830.000	-58.28	-13	-45.28	Horizontal
1415.000	-53.67	-13	-40.67	Vertical
2122.500	-59.21	-13	-46.21	Vertical
2830.000	-59.66	-13	-46.66	Vertical

LTE BAND 12-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1422.000	-58.19	-13	-45.19	Horizontal
2133.000	-58.97	-13	-45.97	Horizontal
2844.000	-53.08	-13	-40.08	Horizontal
1422.000	-55.59	-13	-42.59	Vertical
2133.000	-60.48	-13	-47.48	Vertical
2844.000	-54.05	-13	-41.05	Vertical



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

LTE BAND 17-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1418.000	-56.39	-13	-43.39	Horizontal
2127.000	-60.23	-13	-47.23	Horizontal
2836.000	-55.76	-13	-42.76	Horizontal
1418.000	-51.62	-13	-38.62	Vertical
2127.000	-59.05	-13	-46.05	Vertical
2836.000	-57.77	-13	-44.77	Vertical

LTE BAND 17-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1420.000	-55.57	-13	-42.57	Horizontal
2130.000	-57.40	-13	-44.40	Horizontal
2840.000	-57.42	-13	-44.42	Horizontal
1420.000	-56.36	-13	-43.36	Vertical
2130.000	-61.67	-13	-48.67	Vertical
2840.000	-59.61	-13	-46.61	Vertical

LTE BAND 17-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1422.000	-53.79	-13	-40.79	Horizontal
2133.000	-61.56	-13	-48.56	Horizontal
2844.000	-55.03	-13	-42.03	Horizontal
1422.000	-60.51	-13	-47.51	Vertical
2133.000	-59.88	-13	-46.88	Vertical
2844.000	-53.20	-13	-40.20	Vertical



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号

邮编: 201612

t (86-21) 61915666

f (86-21) 61915678

[www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t (86-21) 61915666

f (86-21) 61915678

[sgs.china@sgs.com](mailto:sgs.china@sgs.com)

LTE BAND 38-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5160.000	-57.86	-25	-32.86	Horizontal
7740.000	-59.18	-25	-34.18	Horizontal
10320.000	-54.65	-25	-29.65	Horizontal
5160.000	-58.89	-25	-33.89	Vertical
7740.000	-58.69	-25	-33.69	Vertical
10320.000	-54.20	-25	-29.20	Vertical

LTE BAND 38-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5190.000	-55.88	-25	-30.88	Horizontal
7785.000	-60.61	-25	-35.61	Horizontal
10380.000	-58.84	-25	-33.84	Horizontal
5190.000	-51.40	-25	-26.40	Vertical
7785.000	-58.53	-25	-33.53	Vertical
10380.000	-55.50	-25	-30.50	Vertical

LTE BAND 38-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5220.000	-60.77	-25	-35.77	Horizontal
7830.000	-59.28	-25	-34.28	Horizontal
10440.000	-56.71	-25	-31.71	Horizontal
5220.000	-57.91	-25	-32.91	Vertical
7830.000	-63.07	-25	-38.07	Vertical
10440.000	-54.81	-25	-29.81	Vertical



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号

邮编: 201612

t (86-21) 61915666

f (86-21) 61915678

[www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)

t (86-21) 61915666

f (86-21) 61915678

[sgs.china@sgs.com](mailto:sgs.china@sgs.com)

LTE BAND 41-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5012.000	-58.25	-25	-33.25	Horizontal
7518.000	-56.77	-25	-31.77	Horizontal
10024.000	-53.28	-25	-28.28	Horizontal
5012.000	-54.15	-25	-29.15	Vertical
7518.000	-60.56	-25	-35.56	Vertical
10024.000	-53.76	-25	-28.76	Vertical

LTE BAND 41-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5186.000	-53.65	-25	-28.65	Horizontal
7779.000	-58.78	-25	-33.78	Horizontal
10372.000	-57.29	-25	-32.29	Horizontal
5186.000	-50.94	-25	-25.94	Vertical
7779.000	-61.96	-25	-36.96	Vertical
10372.000	-56.30	-25	-31.30	Vertical

LTE BAND 41-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5360.000	-52.78	-25	-27.78	Horizontal
8040.000	-60.67	-25	-35.67	Horizontal
10720.000	-55.48	-25	-30.48	Horizontal
5360.000	-54.14	-25	-29.14	Vertical
8040.000	-61.76	-25	-36.76	Vertical
10720.000	-52.50	-25	-27.50	Vertical

**Remark:**

We have tested all modulation and all Bandwidth, but only the worst case data presented in this report.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号

t (86-21) 61915666 f (86-21) 61915678 [www.sgsgroup.com.cn](http://www.sgsgroup.com.cn)  
邮编: 201612 t (86-21) 61915666 f (86-21) 61915678 [sgs.china@sgs.com](mailto:sgs.china@sgs.com)



## SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Report No.: SHCR230700145208

Page: 22 of 22

## 2 Test Setup Photo

Refer to Appendix - Test Setup Photo for SHCR2307001452AT

## 3 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for SHCR2307001452AT

- End of the Report -



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
EEC EMC Lab

NO.588 West Jindu Road, Songjiang District, Shanghai China 201612  
中国·上海·松江区金都西路588号

邮编: 201612

t (86-21) 61915666

f (86-21) 61915678

www.sgsgroup.com.cn  
sgs.china@sgs.com