

 Report No.:
 SUCR241100045507

 Rev.:
 01

 Page:
 1 of 7

# **TEST REPORT**

Application No.:	SUCR2411000455AT
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
EUT Description:	POS System
Model No.:	L15C1, L15D1
÷.	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Trade Mark:	SUNMI
FCC ID:	2AH25T3
Standards:	47 CFR Part 2.1091
	FCC KDB 447498 D01 v06
Date of Receipt:	November 14, 2024
Date of Issue:	December 23, 2024
Test Result:	PASS*

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

Hayley Zhang

Prepared by: Hayley Zhang/ Project Manager

Cloud Peng

Approved by: Cloud Peng/ Technical Manager

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> <u>Conditions.aspx</u> 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 sool 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 (Suzhou) Co., Ltd. Wireless Laboratory



 Report No.:
 SUCR241100045507

 Rev.:
 01

 Page:
 2 of 7

### 1 Version

Revision Record								
Version	Chapter	Date	Modifier	Remark				
01		December 23, 2024		Original				

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> <u>Conditions.aspx</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx</a> <u>Contained hereon</u> 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 sool 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 (Suzhou) Co., Ltd. Wireless Laboratory



 Report No.:
 SUCR241100045507

 Rev.:
 01

 Page:
 3 of 7

### Contents

1	Vers	sion	2
2	Gen	eral Information	4
	2.1	Client Information	4
	2.2	Test Facility	4
	2.3	General Description of EUT	5
3	RF	Exposure Evaluation	6
	3.1	RF Exposure Compliance Requirement	6

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> <u>Conditions.aspx</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx</a> <u>Contained hereon</u> 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 sool 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 (Suzhou) Co., Ltd. Wireless Laboratory



 Report No.:
 SUCR241100045507

 Rev.:
 01

 Page:
 4 of 7

## 2 General Information

### **2.1 Client Information**

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

### 2.2 Test Facility

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

#### • A2LA (Certificate No. 6336.01)

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6336.01.

#### Innovation, Science and Economic Development Canada

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0120.

IC#: 27594.

• FCC – Designation Number: CN1312

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized as an accredited testing laboratory.

Designation Number: CN1312.

Test Firm Registration Number: 717327

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> <u>Conditions.aspx</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx</a> <u>Document.aspx</u>. 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 soole 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 (Suzhou) Co., Ltd. Wireless Laboratory



Report No.:	SUCR241100045507
Rev.:	01
Page:	5 of 7

### 2.3 General Description of EUT

EUT Description:	POS System				
Model No.:	L15C1, L15D1				
Trade Mark:	SUNMI				
Hardware Version:	6225Coreboard_MB_V3.0				
Software Version:	1.0.0				
Power Supply:	24V				
Antenna Type:	Internal Antenna				
Antenna Gain*:	Bluetooth:2.2dBi 802.11b/g/n (HT20/40):2.2dBi 802.11a/n (HT20/40/VHT20/40/80): 5150MHz to 5250MHz: 2.20 dBi 5250MHz to 5350MHz: 2.90 dBi 5470MHz to 5725MHz: 3.70 dBi 5725MHz to 5850MHz: 3.90 dBi Note: The antenna gain are derived from the gain information report provided by the manufacturer.				
Note: *Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, SGS is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion. Remark:					

1. As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

2. The only difference between the two models is that L15C1 comes with a printer and L15D1 does not come with a printer, everything else is exactly the same.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-
Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-
Document.aspx. 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 (Suzhou) Co., Ltd. Wireless Laboratory



Report No.: SUCR241100045507 01 Rev.: 6 of 7 Page:

### **3 RF Exposure Evaluation**

### 3.1 RF Exposure Compliance Requirement

#### 3.1.1 Limits

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm2)	Averaging time (minutes)					
(A) Limits for Occupational/Controlled Exposures									
0.3-3.0	614	1.63	*(100)	6					
3.0-30	1842/f	4.89/f	*(900/f2)	6					
30-300	61.4	0.163	1.0	6					
300-1500	/	1	f/300	6					
1500-100,000	/	/	5	6					
	(B) Limits for General P	opulation/Uncontrolled	Exposure						
0.3-1.34	614	1.63	*(100)	30					
1.34-30	824/f	2.19/f	*(180/f2)	30					
30-300	30-300 27.5		0.2	30					
300-1500	/	/	f/1500	30					
1500-100,000	/	/	1.0	30					

F=frequency in MHz

=Plane-wave equivalent power density

RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

Friis Formula

Friis transmission formula:  $Pd = (Pout^{*}G)/(4^{*} Pi^{*} R^{2})$ Where Pd = power density in mW/cm2 Pout = output power to antenna in mW G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

Pd id the limit of MPE, 1 mW/cm2. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-This document is issued by the Company subject to its General Conditions of Service printed overlear, available on request or accessible at <a href="http://www.sgs.com/en/en/ems-and-Conditions-apy">http://www.sgs.com/en/ems-and-Conditions-apy</a>. Conditions.apyx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/en/ems-and-Conditions-apy">http://www.sgs.com/en/ems-and-Conditions-Terms-and-Conditions-Terms-and-Conditions-apyx and, for electronic Documents, subject to Terms and Donditions for Electronic Documents at <a href="http://www.sgs.com/en/en/ems-and-Conditions-apy">http://www.sgs.com/en/ems-and-Conditions/Term

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 (Suzhou) Co. 1td South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000 t (86-512) 62992980 www.sgsgroup.com.cn Wireless Laboratory



Report No.: SUCR241100045507 Rev.: 01 7 of 7 Page:

#### 3.1.2 Test Procedure

Software provided by client enabled the EUT to transmit data at lowest, middle and highest channel

individually

#### 3.1.3 EUT RF Exposure Evaluation

Output Power Into Antenna & RF Exposure Evaluation Distance:

This confirmed that the device comply with MPE limit.

Band	Frequency	Max power (dBm)	Ant Gain (dBi)	ERP (dBm)	Max ERP (mW)	Max Power (mW)	ERP 20 (mW)	Distance R (cm)	Limit (mW)	Result	Ratio
Bluetooth	2480	9.78	2.2	9.83	9.62	9.51	3060	13	1347	Pass	0.01
WLAN 2.4GHz	2437	20.19	2.2	20.24	105.68	104.47	3060	13	1349	Pass	0.08
Wifi 5GHz B1	5180.0	15	2.2	15.05	31.99	31.62	3060	13	1257	Pass	0.03
Wifi 5GHz B2	5260.0	15	2.9	15.75	37.58	31.62	3060	13	1255	Pass	0.03
Wifi 5GHz B3	5500.0	15	3.7	16.55	45.19	31.62	3060	13	1250	Pass	0.04
Wifi 5GHz B4	5745.0	15	3.9	16.75	47.32	31.62	3060	13	1245	Pass	0.04

Remark: Frame-average power=Burst power+ Division Factors(-9.19)

---End of Report---

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Conditions/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-an

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 (Suzhou) Co., Ltd. South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000 t (86-512) 62992980 www.sgsgroup.com.cn Wireless Laboratory