TEST REPORT

Application No.:	SUCR2502000112AT
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.:	L15C2, L15D2 ♣
♣	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:	2AH25T3L
Standards:	47 CFR Part 2.1091 FCC KDB 447498 D01 v06
Date of Receipt:	February 25, 2025
Date of Issue:	April 8, 2025
Test Result:	**PASS***

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

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Version

Revision Record			
Version	**Description**	***Date***	***Remark***
00	Original	April 8, 2025	/

Authorized for issue by:				
Tested By				
		Hayley Zhang / Project Manager		
Approved By				
		Cloud Peng/Technical Manager		

Contents

1 General Information

1.1 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

1.2 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

1.3 General Description of EUT

EUT Description:	POS System			
Model No.:	L15C2, L15D2			
Trade Mark:	SUNMI			
Hardware Version:	6225Coreboard_MB_V3.0			
Software Version:	1.0.0			
Power Supply:	24V			
Antenna Type:	☐ External, ☒ Internal			
Antenna Gain:	GSM850:	0.16dBi	GSM1900:	-1.98dBi
	WCDMA Band II:	-1.98dBi	WCDMA Band IV:	-3.08dBi
	WCDMA Band V:	0.16dBi		
	LTE Band 2:	-1.98dBi	LTE Band 4:	-3.08dBi
	LTE Band 5:	0.16dBi	LTE Band 7:	0.84dBi
	LTE Band 12:	0.34dBi	LTE Band 13:	-1.51dBi
	LTE Band 17:	0.34dBi	LTE Band 25:	-1.98dBi
	LTE Band 26:	0.16dBi	LTE Band 30:	-1.44dBi
	LTE Band 38:	-0.79dBi	LTE Band 41:	0.84dBi
	LTE Band 66:	-2.51dBi	LTE Band 71:	0.77dBi
	Bluetooth:	1.88dBi		
	WIFI 2.4G:	1.88dBi		
	5G WIFI(U-NII-1):	2.81dBi;		
	5G WIFI(U-NII-2A):	2.85dBi;		
	5G WIFI(U-NII-2C):	3.04dBi;		
	5G WIFI(U-NII-3):	0.77dBi;		
	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 L15C2 comes with a printer and L15D2 does not come with a printer, everything else is exactly the same.

2 RF Exposure Evaluation

2.1 RF Exposure Compliance Requirement

2.1.1 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	/	/	f/300	6
1500-100,000	/	/	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f2)	30
30-300	27.5	0.073	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.

2.1.2 Test Procedure

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

2.1.3 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
GSM850	824.2	34	0.16	32.01	191.43	302.69	1681	20	1681	Pass	0.18
GSM1900	1850.2	31	-1.98	26.87	58.61	151.71	3060	20	3060	Pass	0.05
WCDMA Band II	1852.4	25	-1.98	20.87	122.18	316.23	3060	20	3060	Pass	0.10
WCDMA Band IV	1712.4	25	-3.08	19.77	94.84	316.23	3060	20	3060	Pass	0.10
WCDMA Band V	826.4	25	0.16	23.01	199.99	316.23	1686	20	1686	Pass	0.19
LTE Band 2	1850.7	25	-1.98	20.87	122.18	316.23	3060	20	3060	Pass	0.10
LTE Band 4	1710.7	25	-3.08	19.77	94.84	316.23	3060	20	3060	Pass	0.10
LTE Band 5	824.7	25	0.16	23.01	199.99	316.23	1682	20	1682	Pass	0.19
LTE Band 7	2502.5	25	0.84	23.69	233.88	316.23	3060	20	3060	Pass	0.10
LTE Band 12	699.7	25	0.34	23.19	208.45	316.23	1427	20	1427	Pass	0.22
LTE Band 13	779.5	25	-1.51	21.34	136.14	316.23	1590	20	1590	Pass	0.20
LTE Band 17	706.5	25	0.34	23.19	208.45	316.23	1441	20	1441	Pass	0.22
LTE Band 25	1850.7	25	-1.98	20.87	122.18	316.23	3060	20	3060	Pass	0.10
LTE Band 26 (814-824)	814.7	25	0.16	23.01	199.99	316.23	1662	20	1662	Pass	0.19
LTE Band 26 (824-849)	824.7	25	0.16	23.01	199.99	316.23	1682	20	1682	Pass	0.19
LTE Band 30	2307.5	25	-1.44	21.41	138.36	316.23	3060	20	3060	Pass	0.10
LTE Band 38	2572.5	25	-0.79	22.06	160.69	316.23	3060	20	3060	Pass	0.10
LTE Band 41	2498.5	25	0.84	23.69	233.88	316.23	3060	20	3060	Pass	0.10
LTE Band 66	1710.7	25	-2.51	20.34	108.14	316.23	3060	20	3060	Pass	0.10
LTE Band 71	665.5	25	0.77	23.62	230.14	316.23	1358	20	1358	Pass	0.23
Bluetooth	2402	10.53	1.88	10.26	10.62	11.30	3060	20	3060	Pass	0.00
WLAN 2.4GHz	2412	19.56	1.88	19.29	84.92	90.36	3060	20	3060	Pass	0.03
WLAN 5GHz B1	5180	14.42	2.81	15.08	32.21	27.67	3060	20	3060	Pass	0.01
WLAN 5GHz B2	5260	14.68	2.85	15.38	34.51	29.38	3060	20	3060	Pass	0.01
WLAN 5GHz B3	5500	14.52	3.04	15.41	34.75	28.31	3060	20	3060	Pass	0.01
WLAN 5GHz B4	5745	10.05	0.77	8.67	7.36	10.12	3060	20	3060	Pass	0.00

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

For 13.56MHz: 54.37dBuV/m@3m=0.0000826mW<1mW base on section 3.6 of SUCR250200011207

	Evaluation method	Exempt Limit(mW)	Verdict
☒	Blanket 1 mW Blanket Exemption	1mW	Yes

So, the device is to qualify for SAR test exemption, the exemption report is in lieu of the SAR report.

2.1.4 Exposure calculations for multiple sources

To ensure compliance with the MPE for a controlled environment, the sum of the ratios of the power density to the corresponding MPE should not exceed unity. That is

$$\sum_{i=1}^{n} \frac{S_i}{MPE_i} \leq 1$$

The product also has multiple transmitters The Simultaneous Transmission Possibilities are as below:

Simultaneous Tx Combination	Configuration
1	WWAN + Bluetooth+ WiFi 2.4G+ WiFi 5G

No.	Mode	Result Ratio	Total Ratio	Limit	Result
1	LTE Band 71	0.23	0.28	1.00	Pass
	Bluetooth	0.00			
	WiFi 2.4G	0.03			
	WiFi 5G	0.01			

Remark: This WWAN Band was recalculated on worst Band.

---End of Report---