TEST REPORT

Application No.:	SUCR2603000180TL
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:	Wireless Data Terminal
Model No.:	TF41A
Trade Mark:	SUNMI
FCC ID:	2AH25M3WH
Standards:	FCC 47 CFR Part 15, Subpart E
Date of Receipt:	2026-03-04
Date of Test:	2026-03-13
Date of Issue:	2026-03-31
Test Result :	**PASS ***

* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

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Version

Revision Record			
Version	**Description**	***Date***	***Remark***
01	Original	2026-03-31	/

Authorized for issue by:				
Tested By		Hayley Zhang **Hayley Zhang/Project Engineer**		
Approved By		Cedar Cheng **Cedar Cheng /Reviewer**		

Contents

Version **2**
1 Test Summary **4**
2 General Information **5**
2.1 Details of Client 5
2.2 Test Location 5
2.3 Test Facility 5
2.4 General Description of EUT 6
2.5 Test Environment and Mode 8
2.6 Description of Support Units 8
2.7 Worst-case configuration and mode 8
3 Equipment List **9**
4 Measurement Uncertainty (95% confidence levels, k=2) **10**
5 Test results and Measurement Data **11**
5.1 Antenna Requirement 11
5.2 Maximum e.i.r.p. 13
6 Photographs - Setup Photos **14**
7 Appendix **14**

1 Test Summary

Test Item	FCC Rule No.	Test Requirements	Result
Antenna Requirement	15.203/15.407(a)	--	PASS
Maximum e.i.r.p.	15.407(a)(8)	< 24dBm over the frequency band of Operation, e.i.r.p.	PASS

Remark:

This test report (Report No.: SUCR260300018005 issue on 2026-03-31) is based on the original test report (Report No.: SUCR250500043405 issue on 2025-06-23).
Review this report and original report, this report just changing the parts according to the declaration letter from client.
Therefore in this report only power is performed, and other test data in this report are refer to the previous report with report number SUCR250500043405 issue on 2025-06-23.

2 General Information

2.1 Details of Client

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 Location

Company:	SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.
Address:	South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone
Post code:	215000
Test engineer:	Ives Cheng

2.3 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).

• FCC (Designation Number: CN1312)

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

Test Firm Registration Number: 717327

•ISED (CAB Identifier: CN0120)

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 27594

2.4 General Description of EUT

Power Supply:	3.87V from battery	
IEEE 802.11 WLAN Mode Supported:	☒ 802.11ax (20 MHz channel bandwidth) ☒ 802.11ax (40 MHz channel bandwidth) ☒ 802.11ax (80 MHz channel bandwidth)	
Operation Frequency:	IEEE 802.11 ax(HE20/40/80): 5925 MHz ~ 6425 MHz IEEE 802.11 ax(HE20/40/80): 6425 MHz ~ 6525 MHz IEEE 802.11 ax(HE20/40/80): 6525 MHz ~ 6875 MHz IEEE 802.11 ax(HE20/40/80): 6875 MHz ~ 7125 MHz	
Type of Modulation:	OFDM/OFDMA	
FCC Classification:	6GHz Low Power Indoor Client (6XD)	
Antenna Type:	FPC Antenna	
Smart System:	☒ MIMO	802.11ax: Tx & Rx
Antenna Gain:	UNII-5: 5.81dBi(Ant2); -3.37dBi(Ant3) UNII-6: 3.44dBi(Ant2); -3.87dBi(Ant3) UNII-7: 3.24dBi(Ant2); -3.87dBi(Ant3) UNII-8: -0.39dBi(Ant2); -5.54dBi(Ant3)	
	Note: The antenna gain are derived from the gain information report provided by the manufacturer.	
RF Cable:	2dB	
Remark: 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.		

In FCC 15.31, for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in the following table, and the selected channel to perform the test as below:		
Frequency range over which device operates	Number of Measurement Frequencies Required	Location of Measurement Frequency in Band of Operation
1 MHz or less	1	centre
1 MHz to 10 MHz	2	1 near high end, 1 near low end
Greater than 10 MHz	3	1 near high end, 1 near centre, 1 near low end

For UNII-5:		
Mode	Channel	Frequency(MHz)
IEEE 802.11ax 20MHz	1	5955
	45	6175
	93	6415
IEEE 802.11ax 40MHz	3	5965
	43	6165
	91	6405
IEEE 802.11ax 80MHz	7	5985
	39	6145
	87	6385

For UNII-6:		
Mode	Channel	Frequency(MHz)
IEEE 802.11ax 20MHz	97	6435
	105	6475
	113	6515
IEEE 802.11ax 40MHz	99	6445
	107	6485
	115	6525
IEEE 802.11ax 80MHz	103	6465

For UNII-7:		
Mode	Channel	Frequency(MHz)
IEEE 802.11ax 20MHz	117	6535
	149	6695
	181	6855
	185	6875
IEEE 802.11ax 40MHz	123	6565
	147	6685
	179	6845
IEEE 802.11ax 80MHz	119	6545

	135	6625
	151	6705
	167	6785
	183	6865

For UNII-8:		
Mode	Channel	Frequency(MHz)
IEEE 802.11ax 20MHz	189	6895
	209	6995
	233	7115
IEEE 802.11ax 40MHz	187	6885
	195	6925
	211	7005
	227	7085
IEEE 802.11ax 80MHz	199	6945
	215	7025

2.5 Test Environment and Mode

Environment Parameter	102 kPa Selected Values During Tests	
Relative Humidity	44% RH Ambient	
Value	**Temperature(℃)**	**Voltage(V)**
NTNV	23	3.87
Remark: NV: Normal Voltage NT: Normal Temperature		

2.6 Description of Support Units

The EUT has been tested as an independent unit.

2.7 Worst-case configuration and mode

Low data rate was used to test on antenna port conducted tests and radiated spurious emissions since it has the highest maximum power. Following are the worst-case data rates set for test:

Modulation Type	SISO - Data Rate	MIMO - Data Rate
802.11ax (HE 20)	/	MCS0 (16 Mbps)
802.11ax (HE 40)	/	MCS0 (32 Mbps)
802.11ax (HE 80)	/	MCS0 (68 Mbps)

3 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
RF Conducted Test						
1	Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	2026/1/14	2027/1/13
2	Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-15	2025/11/21	2026/11/20
3	MXG Vector signal genitor	KEYSIGHT	N5182B	SUWI-01-38-01	2026/1/14	2027/1/13
4	Signal Generator	ROHDE&SCHWARZ	SMW200A	SUWI-01-07-08	2026/1/14	2027/1/13
5	Signal Generator	ROHDE&SCHWARZ	SMW100A	SUWI-01-08-01	2026/1/14	2027/1/13
6	MXG Vector Signal Generator	ROHDE&SCHWARZ	SMR20	SUWI-01-33-01	2025/11/21	2026/11/20
7	Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW500	SUWI-01-16-13	2025/5/8	2026/5/7
8	Wideband Radio Communication Test Station	Anritsu	MT8000A	SUWI-01-34-02	2025/11/21	2026/11/20
9	Wideband Radio Communication Tester	Anritsu	MT8821C	SUWI-01-26-03	2025/11/21	2026/11/20
10	Power meter	Anritsu	ML2495A	SUWI-01-31-01	2025/11/21	2026/11/20
11	Pulse power sensor	Anritsu	MA2411B	SUWI-01-32-01	2025/11/21	2026/11/20
12	DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	2026/1/14	2027/1/13
13	Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-07	2026/2/11	2027/2/10
14	Temperature Chamber	GIANT FORCE	ICT-017-40-SP-SD	SUWI-01-13-02	2025/5/7	2026/5/6
15	Measurement Software	TST	TST 272 V2.02	SUWI-03-55-03	NCR	NCR
16	RF Control unit	TST	TSCB3023R2	SUWI-02-20-01	NCR	NCR
17	RFCables	Tonscend	NA	SUWI-01-03-01	2026/1/15	2027/1/14

Remark: NCR=No Calibration Requirement.

4 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Total RF power, conducted	±0.54dB

Remark:
The U_{lab} (lab Uncertainty) is less than $U_{cispr/ETSI}$ (CISPR/ETSI Uncertainty), so the test results
– compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
– non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

5 Test results and Measurement Data

5.1 Antenna Requirement

Standard requirement:	47 CFR Part 15 Section 15.203

The antenna is FPC Antenna and no consideration of replacement. The best case gain of the antenna is
UNII-5: 5.81dBi(Ant2); -3.37dBi(Ant3)
UNII-6: 3.44dBi(Ant2); -3.87dBi(Ant3)
UNII-7: 3.24dBi(Ant2); -3.87dBi(Ant3)
UNII-8: -0.39dBi(Ant2); -5.54dBi(Ant3)

Note:
The antenna gain are derived from the gain information report provided by the manufacturer.
Remark:
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.

Cyclic Delay Diversity (CDD) System:
ANSI C63.10-2020/Cor1-2023
If all antennas have the same gain, G_{ANT}, Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

- For power spectral density (PSD) measurements on all devices,
  Array Gain = 10 log(N_{ANT}/N_{SS} =1) dB.
- For power measurements on IEEE 802.11 devices:
  Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

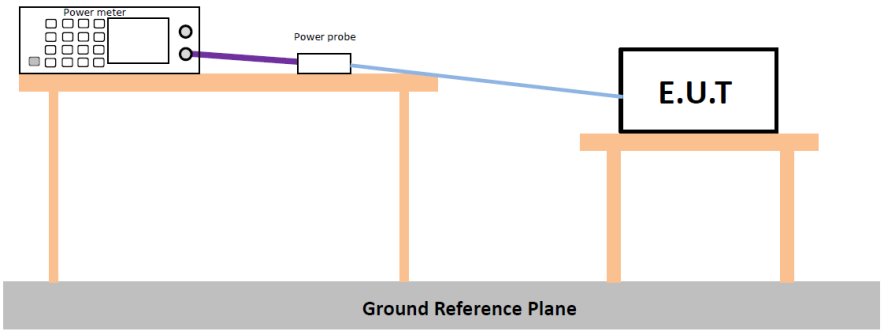
For power, the directional gain may be calculated by using the formulas applicable to equal gain antennas with GANT set equal to the gain of the antenna having the highest gain.
For PSD, the directional gain calculation is following F)2)f)ii).

The Power and PSD limit should be modified if the directional gain of eut is over 6dbi.
The EUT supports CDD System.
All antennas have Unequal antenna gain:

Operation Frequency	ANT2 Gain (dBi)	ANT3 Gain (dBi)	Directional gain For Power (dBi)	Directional gain For PSD (dBi)	Power Limit Reduction (dBm)	PSD Limit Reduction (dBm)
UNII-5	5.81	-3.37	5.81	5.39	0.00	0.00
UNII-6	3.44	-3.87	3.44	3.54	0.00	0.00
UNII-7	3.24	-3.87	3.24	3.40	0.00	0.00
UNII-8	-0.39	-5.54	-0.39	0.42	0.00	0.00

UNII-5:
Power Limit Reduction = Directional gain – 6dBi, (Directional gain < 6dBi) =0
PSD Limit Reduction = Directional gain – 6dBi, (Directional gain < 6dBi) =0
UNII-6:
Power Limit Reduction = Directional gain – 6dBi, (Directional gain < 6dBi) =0
PSD Limit Reduction = Directional gain – 6dBi, (Directional gain < 6dBi) =0
UNII-7:
Power Limit Reduction = Directional gain – 6dBi, (Directional gain < 6dBi) =0
PSD Limit Reduction = Directional gain – 6dBi, (Directional gain < 6dBi) =0
UNII-8:
Power Limit Reduction = Directional gain – 6dBi, (Directional gain < 6dBi) =0
PSD Limit Reduction = Directional gain – 6dBi, (Directional gain < 6dBi) =0

5.2 Maximum e.i.r.p.

Test Requirement:	47 CFR Part 15 Section 15.407(a)
Test Method:	ANSI C63.10-2020/Cor1-2023 Section 12.4
Test Setup:	 * Test with power meter (Detector function: Average)
Test Instruments:	Refer to section 3 for details
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Refer to section 2.7 for details.
Limit:	For client devices operating under the control of an indoor access point in the 5.925-7.125GHz bands, the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.
Test Results:	Pass
The detailed test data see: **Appendix**	

6 Photographs - Setup Photos

Refer to Appendix_Test Setup Photo for SUCR2603000180TL

7 Appendix

1. Maximum Conducted Output Power

1.1 Test Result

1.1.1 Power

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Average Conducted Output Power (dBm)				Verdict
						ANT2	ANT3	MIMO	Limit	
NTNV	802.11ax (HEW20)	MIMO	5955	SU	/	1.46	2.30	4.91	/	Pass
			6175	SU	/	1.03	0.99	4.02	/	Pass
			6415	SU	/	0.97	2.19	4.63	/	Pass
	802.11ax (HEW40)	MIMO	5965	SU	/	5.88	6.25	9.07	/	Pass
			6165	SU	/	5.36	5.37	8.37	/	Pass
			6405	SU	/	5.04	5.93	8.52	/	Pass
	802.11ax (HEW80)	MIMO	5985	SU	/	8.61	8.60	11.62	/	Pass
			6145	SU	/	8.40	7.97	11.20	/	Pass
			6385	SU	/	8.51	8.67	11.60	/	Pass

1.1.2 EIRP

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	E.I.R.P (dBm)				Verdict
						ANT2	ANT3	MIMO	Limit	
NTNV	802.11ax (HEW20)	MIMO	5955	SU	/	7.27	-1.07	10.72	<=24	Pass
			6175	SU	/	6.84	-2.38	9.83	<=24	Pass
			6415	SU	/	6.78	-1.18	10.44	<=24	Pass
	802.11ax (HEW40)	MIMO	5965	SU	/	11.69	2.88	14.88	<=24	Pass
			6165	SU	/	11.17	2.00	14.18	<=24	Pass
			6405	SU	/	10.85	2.56	14.33	<=24	Pass
	802.11ax (HEW80)	MIMO	5985	SU	/	14.42	5.23	17.43	<=24	Pass
			6145	SU	/	14.21	4.60	17.01	<=24	Pass
			6385	SU	/	14.32	5.30	17.41	<=24	Pass

1.1.3 Power

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Average Conducted Output Power (dBm)				Verdict
						ANT2	ANT3	MIMO	Limit	
NTNV	802.11ax (HEW20)	MIMO	6435	SU	/	6.10	5.28	8.72	/	Pass
			6475	SU	/	5.59	4.39	8.04	/	Pass
			6515	SU	/	5.20	4.35	7.81	/	Pass
	802.11ax (HEW40)	MIMO	6445	SU	/	7.25	7.60	10.44	/	Pass
			6485	SU	/	6.96	7.11	10.05	/	Pass
	802.11ax (HEW80)	MIMO	6465	SU	/	8.57	8.87	11.73	/	Pass

1.1.4 EIRP

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	E.I.R.P (dBm)				Verdict
						ANT2	ANT3	MIMO	Limit	
NTNV	802.11ax (HEW20)	MIMO	6435	SU	/	9.54	1.41	12.16	<=24	Pass
			6475	SU	/	9.03	0.52	11.48	<=24	Pass
			6515	SU	/	8.64	0.48	11.25	<=24	Pass
	802.11ax (HEW40)	MIMO	6445	SU	/	10.69	3.73	13.88	<=24	Pass
			6485	SU	/	10.40	3.24	13.49	<=24	Pass
	802.11ax (HEW80)	MIMO	6465	SU	/	12.01	5.00	15.17	<=24	Pass

1.1.5 Power

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Average Conducted Output Power (dBm)				Verdict
						ANT2	ANT3	MIMO	Limit	
NTNV	802.11ax (HEW20)	MIMO	6535	SU	/	0.77	2.65	4.82	/	Pass
			6695	SU	/	1.27	2.80	5.11	/	Pass
			6855	SU	/	2.36	3.29	5.86	/	Pass
	802.11ax (HEW40)	MIMO	6565	SU	/	7.38	6.84	10.13	/	Pass
			6685	SU	/	7.07	7.47	10.28	/	Pass
			6845	SU	/	6.32	7.13	9.75	/	Pass
	802.11ax (HEW80)	MIMO	6625	SU	/	9.35	9.62	12.50	/	Pass
			6705	SU	/	9.05	9.42	12.25	/	Pass
			6785	SU	/	8.60	9.46	12.06	/	Pass

1.1.6 EIRP

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	E.I.R.P (dBm)				Verdict
						ANT2	ANT3	MIMO	Limit	
NTNV	802.11ax (HEW20)	MIMO	6535	SU	/	4.01	-1.22	8.06	<=24	Pass
			6695	SU	/	4.51	-1.07	8.35	<=24	Pass
			6855	SU	/	5.60	-0.58	9.10	<=24	Pass
	802.11ax (HEW40)	MIMO	6565	SU	/	10.62	2.97	13.37	<=24	Pass
			6685	SU	/	10.31	3.60	13.52	<=24	Pass
			6845	SU	/	9.56	3.26	12.99	<=24	Pass
	802.11ax (HEW80)	MIMO	6625	SU	/	12.59	5.75	15.74	<=24	Pass
			6705	SU	/	12.29	5.55	15.49	<=24	Pass
			6785	SU	/	11.84	5.59	15.30	<=24	Pass

1.1.7 Power

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Average Conducted Output Power (dBm)				Verdict
						ANT2	ANT3	MIMO	Limit	
NTNV	802.11ax (HEW20)	MIMO	6895	SU	/	-3.20	-3.43	-0.30	/	Pass
			6995	SU	/	-2.27	-2.80	0.48	/	Pass
			7115	SU	/	-4.23	-4.43	-1.32	/	Pass
	802.11ax (HEW40)	MIMO	6925	SU	/	8.12	9.41	11.82	/	Pass
			7005	SU	/	8.46	9.78	12.18	/	Pass
			7085	SU	/	7.95	10.42	12.37	/	Pass
	802.11ax (HEW80)	MIMO	6945	SU	/	8.07	9.26	11.72	/	Pass
			7025	SU	/	8.35	9.76	12.12	/	Pass

1.1.8 EIRP

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	E.I.R.P (dBm)				Verdict
						ANT2	ANT3	MIMO	Limit	
NTNV	802.11ax (HEW20)	MIMO	6895	SU	/	-3.59	-8.97	-0.69	<=24	Pass
			6995	SU	/	-2.66	-8.34	0.09	<=24	Pass
			7115	SU	/	-4.62	-9.97	-1.71	<=24	Pass
	802.11ax (HEW40)	MIMO	6925	SU	/	7.73	3.87	11.43	<=24	Pass
			7005	SU	/	8.07	4.24	11.79	<=24	Pass
			7085	SU	/	7.56	4.88	11.98	<=24	Pass
	802.11ax (HEW80)	MIMO	6945	SU	/	7.68	3.72	11.33	<=24	Pass
			7025	SU	/	7.96	4.22	11.73	<=24	Pass

1.1.9 Power

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Average Conducted Output Power (dBm)				Verdict
						ANT2	ANT3	MIMO	Limit	
NTNV	802.11ax (HEW20)	MIMO	6875	SU	/	5.27	5.86	8.58	/	Pass
	802.11ax (HEW40)	MIMO	6885	SU	/	7.14	8.24	10.74	/	Pass
	802.11ax (HEW80)	MIMO	6865	SU	/	8.29	9.20	11.78	/	Pass

1.1.10 EIRP

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	E.I.R.P (dBm)				Verdict
						ANT2	ANT3	MIMO	Limit	
NTNV	802.11ax (HEW20)	MIMO	6875	SU	/	4.88	0.32	8.19	<=24	Pass
	802.11ax (HEW40)	MIMO	6885	SU	/	6.75	2.70	10.35	<=24	Pass
	802.11ax (HEW80)	MIMO	6865	SU	/	11.53	5.33	15.02	<=24	Pass

1.1.11 Power

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Average Conducted Output Power (dBm)				Verdict
						ANT2	ANT3	MIMO	Limit	
NTNV	802.11ax (HEW40)	MIMO	6525	SU	/	8.02	8.07	11.06	/	Pass
	802.11ax (HEW80)	MIMO	6545	SU	/	9.23	9.05	12.15	/	Pass

1.1.12 EIRP

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	E.I.R.P (dBm)				Verdict
						ANT2	ANT3	MIMO	Limit	
NTNV	802.11ax (HEW40)	MIMO	6525	SU	/	11.26	4.20	14.30	<=24	Pass
	802.11ax (HEW80)	MIMO	6545	SU	/	12.47	5.18	15.39	<=24	Pass

---End of Report---