

MPE TEST REPORT

Applicant Shanghai Sunmi Technology Co.,Ltd.
FCC ID 2AH25D3
Product POS System
Brand SUNMI
Model F154A
Report No. EFTA25070076-IE-14-M1
Issue Date December 29, 2025

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC 47 CFR Part 1 §1.1310, §2.1091**. The test results show that the equipment tested can demonstrate compliance with the requirements as documented in this report.



Prepared by: Wei Fangying



Approved by: Xu Kai

Eurofins TA Technology (Shanghai) Co., Ltd.

Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China

TEL: +86-021-50791141/2/3

FAX: +86-021-50791141/2/3-8000

Table of Contents

1	Test Laboratory	3
1.1	Notes of the Test Report.....	3
1.2	Test Facility.....	3
1.3	Testing Location.....	3
1.4	Laboratory Environment	3
2	Description of Equipment Under Test	4
3	Maximum Tune up and Antenna Gain	6
4	MPE Limit.....	7
5	RF Exposure Evaluation Result.....	9
	ANNEX A: The EUT Appearance	10

1 Test Laboratory

1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2 Test Facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

1.3 Testing Location

Company: Eurofins TA Technology (Shanghai) Co., Ltd.
Address: Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
City: Shanghai
Post code: 201201
Country: P. R. China
Contact: Xu Kai
Telephone: +86-021-50791141/2/3
Fax: +86-021-50791141/2/3-8000
Website: <https://www.eurofins.com/electrical-and-electronics>
E-mail: Kain.Xu@cpt.eurofinscn.com

1.4 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25°C
Relative humidity	Min. = 20%, Max. = 80%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

2 Description of Equipment Under Test

Client Information

Applicant	Shanghai Sunmi Technology Co.,Ltd.
Applicant address	Room 505, No.388, Song Hu Road, Yang Pu District, Shanghai, China
Manufacturer	Shanghai Sunmi Technology Co.,Ltd.
Manufacturer address	Room 505, No.388, Song Hu Road, Yang Pu District, Shanghai, China

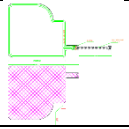
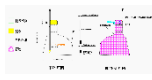
General Technologies

EUT Description			
Model	F154A		
SN	(Original) D406E57RJ0088 (Variant) D401E5AEJ0015		
Hardware Version	D3_MB_V1.2		
Software Version	V1.1		
Frequency	Band	TX (MHz)	RX (MHz)
	Wi-Fi 2.4G	2400 ~ 2483.5	2400 ~ 2483.5
	Wi-Fi 5GHz (U-NII-1)	5150 ~ 5250	5150 ~ 5250
	Wi-Fi 5GHz (U-NII-2A)	5250 ~ 5350	5250 ~ 5350
	Wi-Fi 5GHz (U-NII-2C)	5470 ~ 5725	5470 ~ 5725
	Wi-Fi 5GHz (U-NII-3)	5725 ~ 5850	5725 ~ 5850
	Bluetooth	2400 ~ 2483.5	2400 ~ 2483.5
EUT Description			
Adapter	Manufacturer: Shenzhen Tianyin Electronics Co.Ltd. Model: TPQ-632A240250DW01		
Date of Testing	(Original) July 14, 2025 ~ August 12, 2025 (Variant) October 28, 2025 ~ December 19, 2025		
Date of Sample Received	(Original) July 7, 2025 (Variant)September 1, 2025		
Note: 1. The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant. 2. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.			

F154A (Report No.: EFTA25070076-IE-14-M1) is a variant model of F154B (Report No.: EFTA25070076-IE-07-M1V1).

The data in this report is sourced from the prototype report (Report No.: EFTA25070076-IE-07-M1V1).

The differences between variant and original is as below:

Description		Front Camera	Chinese name	Secondary screen NFC	Printer	BT/WIFI Antenna	NFC Antenna	LCD	Adapter
Original	F154B	N	D3 80MM Large and small screen	Y	Y	2.4G:3.49dBi 5G: 4.67dBi		15.6 " FHD+10.1 HD	60W
Variant	F154A	N	D3 80MM Single screen	N	Y		N/A	15.6 " FHD	60W

The detailed product change description please refers to the *Difference Declaration Letter*.

3 Maximum Tune up and Antenna Gain

The numeric gain (G) of the antenna with a gain specified in dB is determined by

Numeric gain (G)= $10^{(\text{antenna gain}/10)}$

Band	Maximum Tune up Tolerance		Antenna Gain (dBi)	Numeric Gain
	(dBm)	(mW)		
Wi-Fi 2.4G	19.00	79.43	3.49	2.23
Wi-Fi 5GHz (U-NII-1)	18.00	63.10	4.40	2.75
Wi-Fi 5GHz (U-NII-2A)	18.00	63.10	4.53	2.84
Wi-Fi 5GHz (U-NII-2C)	18.00	63.10	4.67	2.93
Wi-Fi 5GHz (U-NII-3)	18.00	63.10	4.55	2.85
Bluetooth	9.00	7.94	3.49	2.23

4 MPE Limit

According to section 1.1310 of FCC 47 CFR Part 1, limits for maximum permissible exposure (MPE) are as following.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(i) LIMITS FOR OCCUPATIONAL/CONTROLLED EXPOSURE				
0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*(900/f ²)	<6
30-300	61.4	0.163	1.0	<6
300-1,500			f/300	<6
1,500-100,000			5	<6
(ii) LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE				
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f ²)	<30
30-300	27.5	0.073	0.2	<30
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

*f = frequency in MHz. * = Plane-wave equivalent power density.*

Note1. Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational / controlled limits apply provided he or she is made aware of the potential for exposure.

Note2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

The maximum permissible exposure for for 1500~100,000MHz is 1.0. So

Band	The Maximum Permissible Exposure (mW/cm ²)
Wi-Fi 2.4GHz	1.000
Wi-Fi 5GHz	1.000
Bluetooth	1.000

5 RF Exposure Evaluation Result

RF exposure evaluation method is based on KDB 447498 D01, this calculation is based on the conducted power, maximum power and antenna gain with provides the minimum separation distance. The formula shown below is from OET Bulletin 65 Edition 97-01 Per KDB 447498 D01:

$$S = PG / 4\pi R^2$$

Where: S = power density (in appropriate units, e.g. mW/cm²)

P = Time-average maximum tune up procedure (in appropriate units, e.g., mW)

G = the numeric gain of the antenna

R = distance to the center of radiation of the antenna (20 cm = limit for MPE)

Band	Maximum Tune up (dBm)	Antenna Gain (dBi)	Maximum EIRP (dBm)	PG (mW)	Result (mW/cm ²)	Limit Value (mW/cm ²)	The MPE Ratio
Wi-Fi 2.4G	19.00	3.49	22.490	177.419	0.035	1.000	0.035
Wi-Fi 5GHz (U-NII-1)	18.00	4.40	22.400	173.780	0.035	1.000	0.035
Wi-Fi 5GHz (U-NII-2A)	18.00	4.53	22.530	179.061	0.036	1.000	0.036
Wi-Fi 5GHz (U-NII-2C)	18.00	4.67	22.670	184.927	0.037	1.000	0.037
Wi-Fi 5GHz (U-NII-3)	18.00	4.55	22.550	179.887	0.036	1.000	0.036
Bluetooth	9.00	3.49	12.490	17.742	0.004	1.000	0.004
Note: R = 20cm $\pi = 3.1416$ The MPE Ratio = Mac Result÷Limit Value							

This device does not support transmit simultaneously.

Note: For this device, minimum separation distance is 20cm, even if calculations indicate MPE distance is less.

ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.

*****END OF REPORT *****