

EMC TEST REPORT

Applicant Shanghai Sunmi Technology
Co.,Ltd.

FCC ID 2AH25T5F3A

Product Wireless data POS System

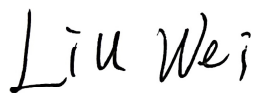
Brand SUNMI

Model T5F3A

Report No. EFTA25110176-IE-01-E1

Issue Date January 5, 2026

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC Code CFR47 Part15B (2025)/ ANSI C63.4-2014**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.



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Summary of measurement results

Number	Test Case	Clause in FCC Rules	Conclusion
1	Radiated Emission	FCC Part15.109, ANSI C63.4-2014	PASS
2	Conducted Emission	FCC Part15.107, ANSI C63.4-2014	PASS
Date of Testing: November 15, 2025 ~ November 18, 2025			
Date of Sample Received: November 13, 2025			
Note:			
1. The conformity assessment in this report is based on a direct comparison of the test results with the limits by Eurofins TA Technology (Shanghai) Co., Ltd., without considering measurement uncertainty.			

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.

A2LA (Certificate Number: 3857.01)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3 Testing Location

Company: Eurofins TA Technology (Shanghai) Co., Ltd.
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2 General Description of Equipment Under Test

2.1 Applicant and Manufacturer 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

2.2 General Information

EUT Description			
Device Type	Portable Device		
Model	T5F3A		
Lab internal SN	251113-17-001		
HW Version	SM11 MB V1.1		
SW Version	4.0.0		
Power Rating	DC 7.7V		
Connecting I/O Port(s)	Please refer to the User's Manual.		
Antenna Type	Internal Antenna		
Frequency	Band	Tx (MHz)	Rx (MHz)
	GSM 850	824 ~ 849	869 ~ 894
	GSM 1900	1850 ~ 1910	1930 ~ 1990
	WCDMA Band II	1850 ~ 1910	1930 ~ 1990
	WCDMA Band IV	1710 ~ 1755	2110 ~ 2155
	WCDMA Band V	824 ~ 849	869 ~ 894
	LTE Band 2	1850 ~ 1910	1930 ~ 1990
	LTE Band 4	1710 ~ 1755	2110 ~ 2155
	LTE Band 5	824 ~ 849	869 ~ 894
	LTE Band 7	2500 ~ 2570	2620 ~ 2690
	LTE Band 26	814 ~ 849	859 ~ 894
	LTE Band 38	2570 ~ 2620	2570 ~ 2620
	LTE Band 41	2496 ~ 2690	2496 ~ 2690
	Bluetooth	2400 ~ 2483.5	2400 ~ 2483.5
	Wi-Fi 2.4GHz	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
	Zigbee	2405 ~ 2480	2405 ~ 2480
	NFC	13.56	13.56
EUT Accessory			
Adapter	Manufacturer: Shenzhen Tianyin Electronics Co.,Ltd Model: TPA-418G050200UU01 Input: 100-240V~50/60Hz 0.3A Output: 5.0V ---2.0A		
Battery 1	Manufacturer: Guangdong Highpower New Energy Technology Co., Ltd. Model: HPPA DC 7.7V, 2550mAh		
Battery 2	Manufacturer: Guangdong Fenghua New Energy Co.Ltd. Model: FHPO DC 7.7V, 2550mAh		
USB Cable	Manufacturer: Saibao (Jiangxi) Industry Co., LTD Model: SSM-A033A 150cm Cable, Shielded		
Note: 1. The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant. 2. There are more than one Battery, each one should be applied throughout the compliance test respectively, however, only the worst case (Battery 1) will be recorded in this report.			

2.3 Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test standards

FCC Code CFR47 Part15B (2025)

ANSI C63.4-2014

2.4 Test Mode

Test Mode	
Mode 1	Adapter + USB cable + EUT + camera On
Mode 2	Adapter + USB cable + EUT + play (1kHz)
Mode 3	Adapter + USB cable + EUT + Bluetooth WLAN NFC receiver
Mode 4	USB Copy (EUT with PC) + USB cable
Mode 5	USB Copy (PC with EUT) + USB cable
Mode 6	Battery powered + EUT + camera On
Mode 7	Battery powered + +EUT + play (1kHz)
Mode 8	Battery powered +EUT + Bluetooth WLAN NFC receiver

Test Type	Test Mode	Worst Mode
Radiated Emission	Mode 1-8	Mode 5
Conducted Emission	Mode 1-6	Mode 5
After technical evaluation or/and preliminary test, the test data of the worst-case condition was recorded in this report.		

3 Test Case Results

3.1 Radiated Emission

Ambient Condition

Temperature	Relative humidity
15°C ~ 35°C	30% ~ 60%

Methods of Measurement

The EUT is placed on a non-metallic table 0.8m above the horizontal metal reference ground plane. The distance between EUT and receive antenna should be 3 meters. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.4-2014. Sweep the whole frequency band through the range from 30MHz to the 5th harmonic of the carrier. During the test, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees for detecting the maximum of radiated signal level.

The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing. During the test, the EUT is worked at maximum output power.

Set the spectrum analyzer in the following:

Below 1GHz:

RBW=100 kHz / VBW=300 kHz / Sweep=AUTO

Above 1GHz:

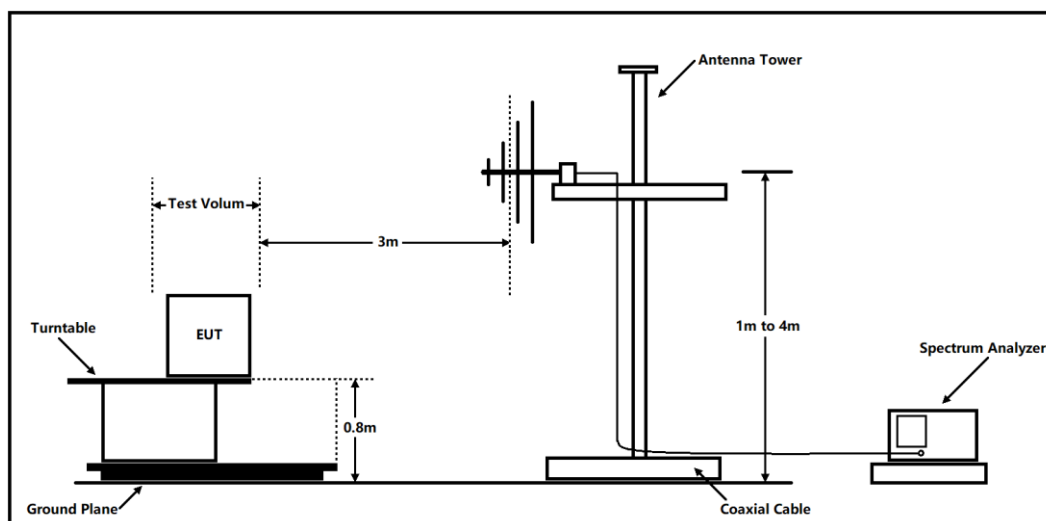
(a) PEAK Detector: RBW=1MHz / VBW=3MHz/ Sweep=AUTO

(b) AVERAGE Detector: RBW=1MHz / VBW=3MHz / Sweep=AUTO

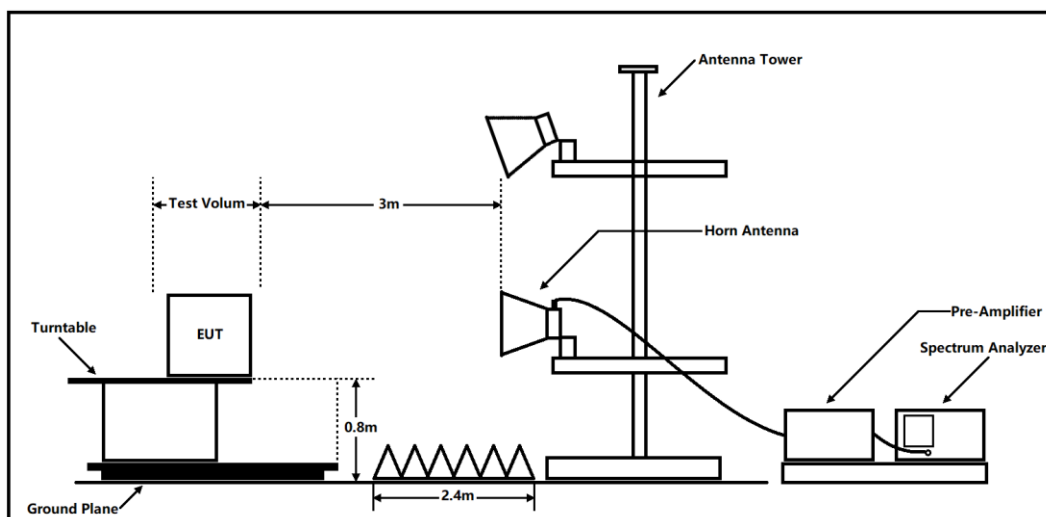
The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the worst case was recorded.

Test Setup

Below 1GHz



Above 1GHz



Note: Area side: 2.4mX3.6m

Antenna Tower meets ANSI C63.4 requirements for measurements above 1 GHz by keeping the antenna aimed at the EUT during the antenna's ascent/ descent along the antenna mast.

Limits

Class B

Frequency (MHz)	Field Strength (dB μ V/m)	Detector
30 -88	40.0	Quasi-peak
88-216	43.5	Quasi-peak
216 – 960	46.0	Quasi-peak
960-1000	54.0	Quasi-peak
1000-5 th harmonic of the highest frequency or 40GHz, which is lower	54 74	Average Peak

Frequency range of radiated measurements

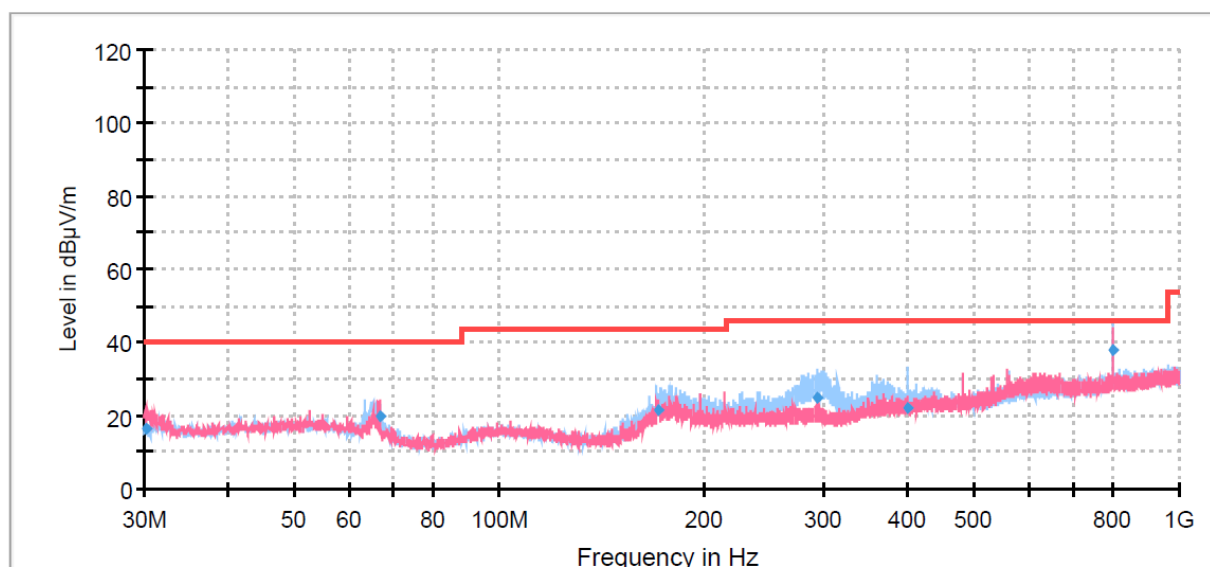
Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower.

Test Results

Sweep the whole frequency band through the range from 30MHz to the 5th harmonic of the carrier. The Emissions in the frequency band 18GHz – 40GHz is more than 20dB below the limit are not reported.

The following graphs display the maximum values of horizontal and vertical by software.

A symbol ($\text{dB}\mu\text{V}/\text{m}$) in the test plot below means (dB $\mu\text{V}/\text{m}$)



~ QP Level @Spectrum Overview H
 ~ QP Level @Spectrum Overview V
 ◆ QP Level @Final Results
 — QP Limit

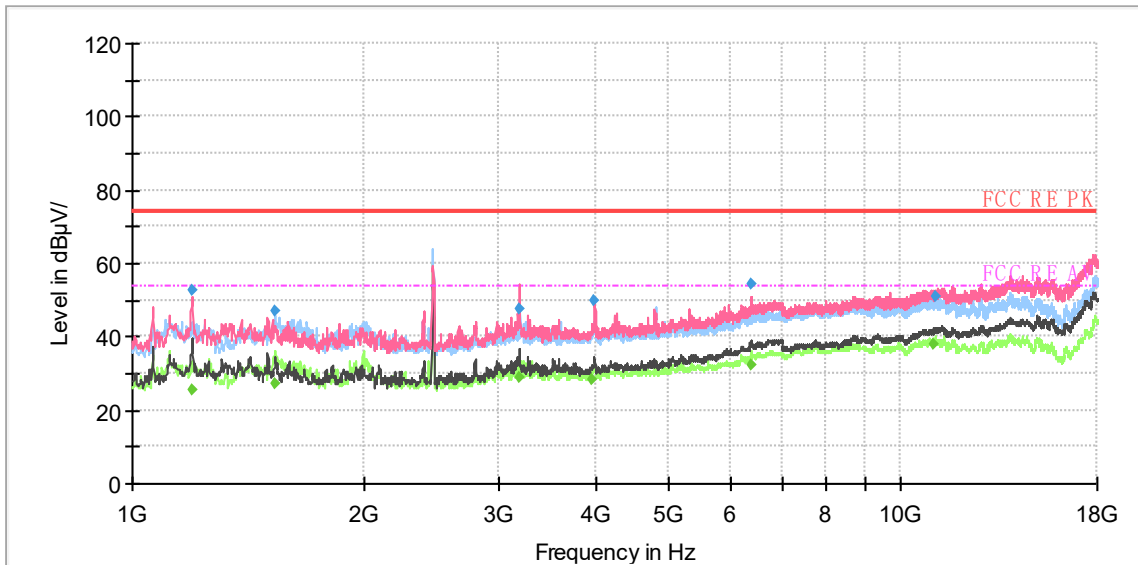
Radiated Emission from 30MHz to 1GHz

Final Result

Frequency (MHz)	QuasiPeak (dB $\mu\text{V}/\text{m}$)	Limit (dB $\mu\text{V}/\text{m}$)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
30.12	16.68	40.00	23.32	108.0	V	99.00	17
66.62	19.76	40.00	20.24	225.0	V	156.00	17
170.66	21.41	43.50	22.09	175.0	H	98.00	16
293.14	25.00	46.00	21.00	124.0	H	153.00	21
400.06	21.86	46.00	24.14	108.0	H	196.00	23
800.04	38.21	46.00	7.79	101.0	H	125.00	30

Remark: 1. Correction Factor = Antenna factor + Insertion loss(cable loss)

2. Margin = Limit – Quasi-Peak



PK Level @Spectrum Overview H PK Level @Spectrum Overview V PK Level @Final Results PK Limit
 AVG Level @Spectrum Overview H AVG Level @Spectrum Overview V AVG Level @Final Results AVG Limit

Radiated Emission from 1GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1195.50	---	25.66	54.00	28.34	1000.00	199.0	V	167.00	-15
1195.50	52.87	---	74.00	21.13	1000.00	199.0	V	167.00	-15
1533.38	47.24	---	74.00	26.76	1000.00	101.0	H	128.00	-14
1535.50	---	27.44	54.00	26.56	1000.00	100.0	H	113.00	-14
3184.50	47.77	---	74.00	26.23	1000.00	101.0	V	138.00	-8
3190.88	---	28.92	54.00	25.08	1000.00	100.0	V	138.00	-8
3968.63	---	28.03	54.00	25.97	1000.00	100.0	V	356.00	-4
3992.00	49.62	---	74.00	24.38	1000.00	101.0	V	211.00	-5
6372.00	---	32.09	54.00	21.92	1000.00	100.0	V	280.00	1
6378.38	54.21	---	74.00	19.79	1000.00	101.0	V	319.00	1
11030.00	---	37.69	54.00	16.31	1000.00	100.0	V	356.00	7
11100.13	50.97	---	74.00	23.03	1000.00	101.0	V	347.00	7

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit – MaxPeak / Average

3.2 Conducted Emission

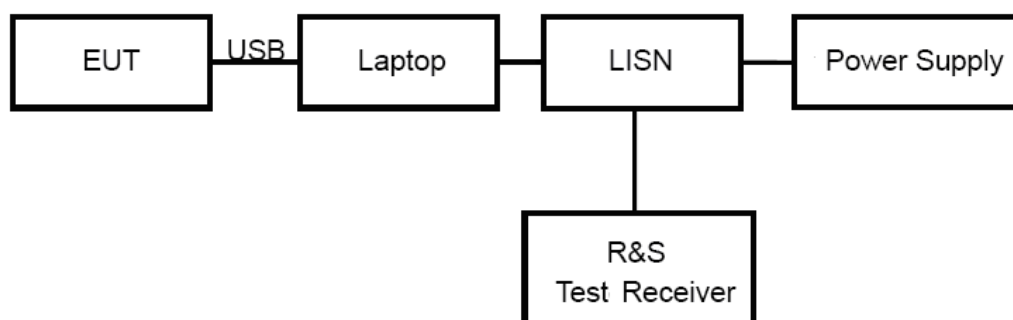
Ambient Condition

Temperature	Relative humidity
15°C ~ 35°C	30% ~ 60%

Methods of Measurement

The EUT is placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.4-2014. Connect the AC power line of the EUT to the L.I.S.N. Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9 kHz, VBW is set to 30kHz. The measurement result should include both L line and N line.

Test Setup



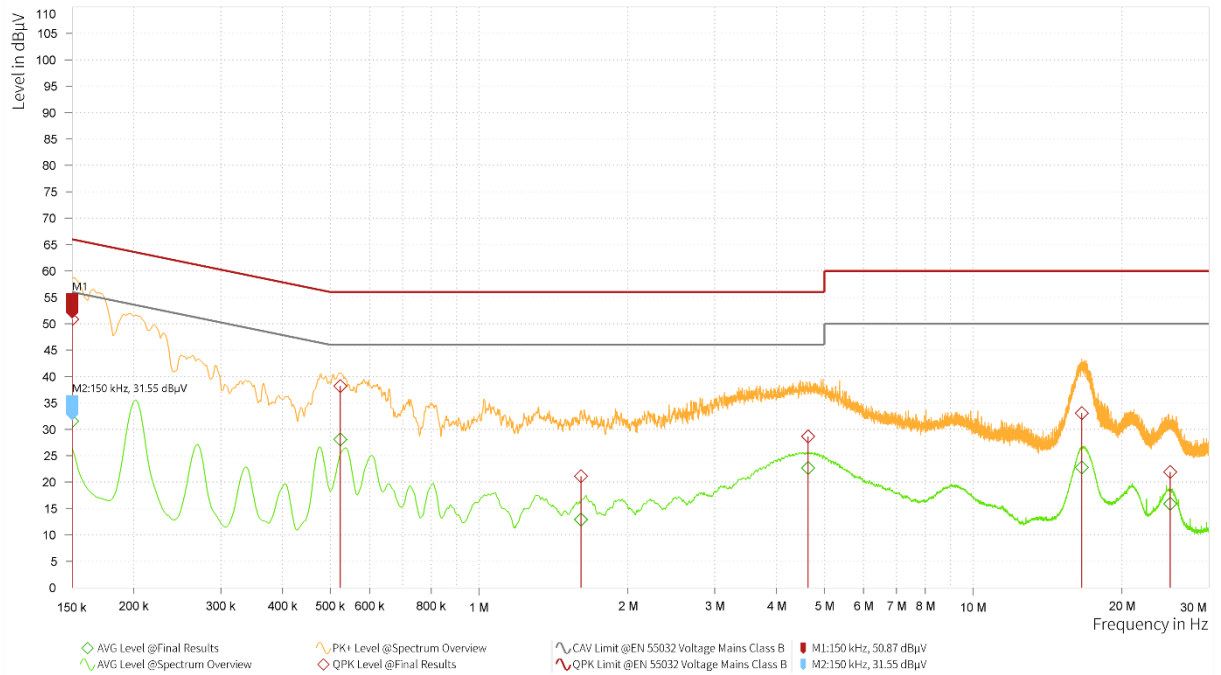
Note: Power Supply is AC Power source and it is used to change the voltage 120V/60Hz.

Limits

Frequency (MHz)	Class A (dBμV)		Class B (dBμV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 to 56 *	56 to 46*
0.5 - 5	73	60	56	46
5 - 30	73	60	60	50
*: Decreases with the logarithm of the frequency.				

Note: The EUT should meet CLASS B limit.

Test Results

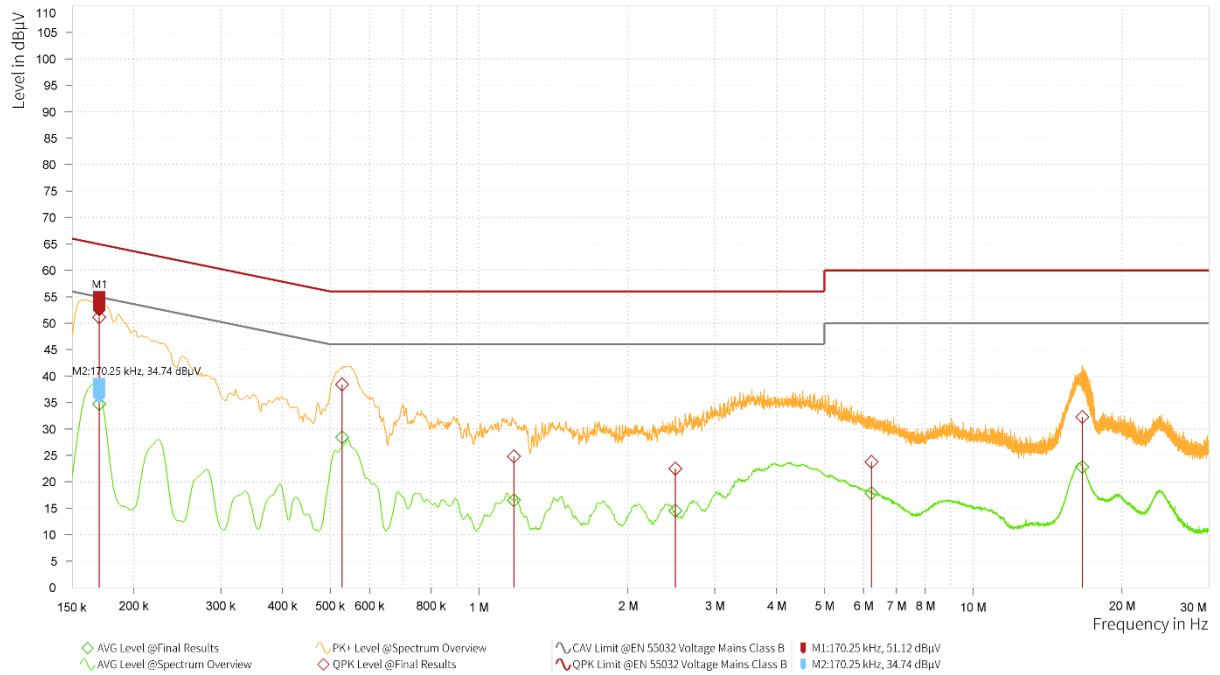


Frequency [MHz]	QPK Level [dBμV]	QPK Limit [dBμV]	QPK Margin [dB]	AVG Level [dBμV]	AVG: CAV Limit [dBμV]	AVG Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]	Meas. Time [s]
0.150	50.87	66.00	15.13	31.55	56.00	24.45	20.90	L1	9.000	1.000
0.524	38.17	56.00	17.83	28.07	46.00	17.93	20.75	L1	9.000	1.000
1.608	21.10	56.00	34.90	12.92	46.00	33.08	19.79	L1	9.000	1.000
4.637	28.65	56.00	27.35	22.67	46.00	23.33	19.41	L1	9.000	1.000
16.598	33.04	60.00	26.96	22.79	50.00	27.21	19.55	L1	9.000	1.000
25.053	21.91	60.00	38.09	15.88	50.00	34.12	19.81	L1	9.000	1.000

Remark: Correct factor=cable loss + LISN factor

L line

Conducted Emission from 150 kHz to 30 MHz



Frequency [MHz]	QPK Level [dBμV]	QPK Limit [dBμV]	QPK Margin [dB]	AVG Level [dBμV]	AVG: CAV Limit [dBμV]	AVG Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]	Meas. Time [s]
0.170	51.12	64.95	13.83	34.74	54.95	20.20	20.90	N	9.000	1.000
0.528	38.42	56.00	17.58	28.41	46.00	17.59	20.76	N	9.000	1.000
1.176	24.81	56.00	31.19	16.52	46.00	29.48	20.04	N	9.000	1.000
2.497	22.47	56.00	33.53	14.52	46.00	31.48	19.56	N	9.000	1.000
6.230	23.74	60.00	36.26	17.83	50.00	32.17	19.41	N	9.000	1.000
16.629	32.24	60.00	27.76	22.82	50.00	27.18	19.59	N	9.000	1.000

Remark: Correct factor=cable loss + LISN factor

N line

Conducted Emission from 150 kHz to 30 MHz

4 Uncertainty Measurement

Case	Uncertainty	Factor k
Radiated Emission 30MHz – 200MHz	4.17 dB	1.96
Radiated Emission 200MHz – 1GHz	4.84 dB	1.96
Radiated Emission 1GHz – 18GHz	4.35 dB	1.96
Conducted Emission	2.57 dB	2

5 Main Test Instruments

Name of Equipment	Manufacturer	Type/Model	Serial Number/Version	Calibration Date	Expiration Time
Radiated Emission					
EMI Test Receiver	R&S	ESR	102389	2025-05-06	2026-05-05
Signal Analyzer	R&S	FSV40	101298	2025-05-07	2026-05-06
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	1023	2023-07-14	2026-07-13
Horn Antenna	R&S	HF 907	102723	2023-11-24	2026-11-23
Amplifier	R&S	SCU18	10034	2025-05-06	2026-05-05
Horn Antenna	R&S	BBHA 9170	101301	2023-09-16	2026-09-15
Amplifier	MicroWave	SCU40F1	100649	2025-12-01	2026-11-30
Software	R&S	EMC32	9.26.01	/	/
Conducted Emission					
Artificial main network	R&S	ENV216	102191	2025-11-24	2026-11-23
EMI Test Receiver	R&S	ESR	101667	2025-05-06	2026-05-05
Software	R&S	ELEKTRA	5.02.1	/	/

6 The EUT Appearance

Refer to *EUT Appearance*.

7 Test Setup Photos

Refer to *EMC Test Setup*.

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