



EMC TEST REPORT

Product Name: Household Microwave Oven

Model Name: TMO30H, VMS100-SS, TSO3001-VE, TSO3001-B,
SPPS76TM-1EL

FCC ID: 2BF2DTMO30H

Issued For : Guangdong Hyxion Smart Kitchen Co., Ltd

NO.1, 2, Haixin Road, Hongmei Town, Dongguan city,
Guangdong 523166 , China

Issued By : Shenzhen LGT Test Service Co., Ltd.

Room 205, Building 13, Zone B, Zhenxiong Industrial Park,
No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan
District, Shenzhen, Guangdong, China

Report Number: LGT24A180RF01

Sample Received Date: Jan. 22, 2024

Date of Test: Jan. 23, 2024 ~ Mar.01, 2024

Date of Issue: May 08, 2024

The test report is effective only with both signature and specialized stamp. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report only apply to the tested sample.



TEST REPORT CERTIFICATION

Applicant: Guangdong Hyxion Smart Kitchen Co., Ltd
Address: NO.1, 2, Haixin Road, Hongmei Town, Dongguan city, Guangdong 523166, China

Manufacturer: Guangdong Hyxion Smart Kitchen Co., Ltd
Address: NO.1, 2, Haixin Road, Hongmei Town, Dongguan city, Guangdong 523166, China

Product Name: Household Microwave Oven
TMO30H: THOR
VMS100-SS: VEZENI
Trademark: TSO3001-VE: Hyxion
TSO3001-B: BONTE
SPPS76TM-1EL: Porter & Charles

Model Name: TMO30H, VMS100-SS, TSO3001-VE, TSO3001-B, SPPS76TM-1EL

Series Model: N/A

Sample Status: Normal

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC CFR 47 Part 18	PASS

Prepared by:

Terry Zhao

Terry Zhao
Engineer

Approved by:

Vita Li

Vita Li
Technical Director





Table of Contents

1. TEST SUMMARY	5
1.1 TEST LABORATORY	6
1.2 MEASUREMENT UNCERTAINTY	6
2. GENERAL INFORMATION	7
2.1 GENERAL DESCRIPTION OF THE EUT	7
2.2 DESCRIPTION OF THE TEST MODES	8
2.3 DESCRIPTION OF THE SUPPORT UNITS	8
2.4 MEASUREMENT INSTRUMENTS LIST	9
3. EMISSION TEST	10
3.1 CONDUCTED EMISSION MEASUREMENT	10
3.2 RADIATED EMISSION MEASUREMENT	14
3.3 RADIATED HAZARD	24
3.4 OPERATING FREQUENCY MEASUREMENT	25
3.5 RF OUT POWER MEASUREMENT	26
APPENDIX I - TEST SETUP	27
APPENDIX II - External Photographs of EUT Constructional Details	30



Revision History

Rev.	Issue Date	Revisions
00	May 08, 2024	Initial Issue



1. TEST SUMMARY

EMC Emission				
Standard	Test Item	Test Method	Class / Severity	Result
FCC CFR 47 Part 18	Conducted Emission (150 kHz to 30 MHz)	FCC OST/ MP-5:1986	18.307(b)	PASS
	Radiated Emission (9 kHz to 30 MHz)	FCC OST/ MP-5:1986	18.305(b)	PASS
	Radiated Emission (30 MHz to 1 GHz)	FCC OST/ MP-5:1986	18.305(b)	PASS
	Radiation Hazard	FCC OST/ MP-5:1986	Clause 3.1	PASS
	Operating Frequency	FCC OST/ MP-5:1986	Clause 4.5	PASS
	Output Power Measurement	FCC OST/ MP-5:1986	Clause 4.3	PASS

Note:

- 1 “N/A” denotes test is not applicable in this Test Report



1.1 TEST LABORATORY

Company Name:	Shenzhen LGT Test Service Co., Ltd.
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China
Accreditation Certificate	A2LA Certificate No.: 6727.01
	FCC Registration No.: 746540
	CAB ID: CN0136

1.2 MEASUREMENT UNCERTAINTY

Test Item	Measurement Frequency Range MHz	Uncertainty dB
Conducted Emissions at AC mains power port	0.009 ~ 30	2.80
Radiated Emissions	0.009 ~ 30	2.16
Radiated Emissions	30 ~ 1000	4.40
Radiated Emissions	1000 ~ 6000	5.10
Radiated Emissions	6000 ~ 18000	5.49

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2. The measurement uncertainty is not included in the test result.



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name:	Household Microwave Oven
Model Name:	TMO30H
Series Model:	VMS100-SS, TSO3001-VE, TSO3001-B, SPPS76TM-1EL
Model Difference:	Only the model, trademark and appearance are different.
Frequency range:	2400-2500MHz
Rating:	AC 120V/60Hz
Test voltage:	AC 120V/60Hz
Hardware Version:	N/A
Software Version:	N/A
Connecting I/O Port(s):	Please refer to the Note 1.

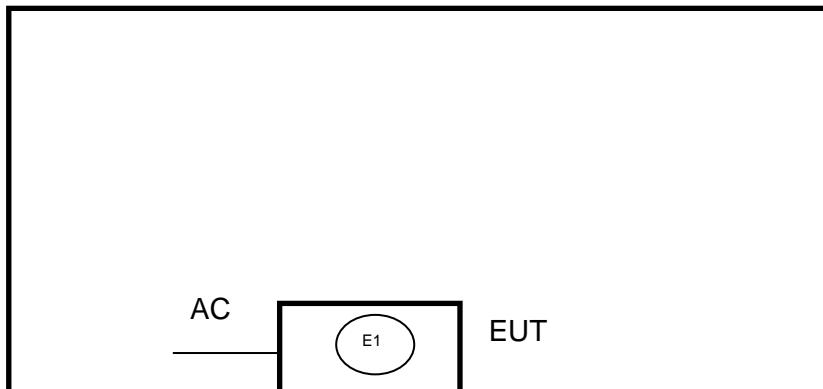
Note: For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.



2.2 DESCRIPTION OF THE TEST MODES

Test Mode	Description
Mode 1	Maximum microwave power (AC 120V/60Hz)

Note: The EUT has been tested independently.



The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Note: For radiated emission test, test mode 1 was the worst case and only this mode was presented in this report.

2.3 DESCRIPTION OF THE SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Accessories Equipment

Description	Manufacturer	Model	S/N	Rating

Auxiliary Equipment

Item	Equipment	Mfr/Brand	Model/Type No.	Specification	Series No.
E1	Glassware	--	--	Diameter 1900mm height 900mm	005

Load for power output measurement :1000 milliliters of water in the beaker located in the center of the oven;

Load for frequency measurement :1000 milliliters of water in the beaker located in the center of the oven;

Load for measurement of radiation on second and third harmonic; Two loads, one of 700 and the other of 300 milliliters, of water are used. Each load is tested both with the beaker located in the center of the oven and with it in the right front corner.

Load for all other measurements: 700 milliliters of water, with the beaker located in the center of the oven.

Item	Type of cable	Shielded Type	Ferrite Core	Length
--	--	--	--	--

Note:

- (1) For detachable type I/O cable should be specified the length in cm in «Length» column.



2.4 MEASUREMENT INSTRUMENTS LIST

Conducted Emission					
Equipment	Manufacture r	Model No.	Serial No.	Cal. Date	Cal. Until
EMI Test Receiver	R&S	ESU	100372	2023.04.13	2024.04.12
LISN	SCHWARZBECK	NNLK 8121	00847	2023.04.07	2024.04.06
CE Cable	N.A	C01	N.A	2023.05.06	2024.05.05
Transient Limiter	CYBERTEK	EM5010A	E2250100049	2023.04.07	2024.04.06
Temperature & Humidity	KTJ	TA218B	N.A	2023.05.06	2024.05.05
Testing Software	EMC-I_V1.4.0.3_SKET				
Radiated Emission					
Equipment	Manufacture r	Model No.	Serial No.	Cal. Date	Cal. Until
EMI Test Receiver	R&S	ESU	100372	2023.04.13	2024.04.12
Active loop Antenna	ETS	6502	00049544	2023.10.13	2025.10.12
Spectrum Analyzer	Keysight	N9020A	MY50530994	2023.10.12	2024.10.11
Bilog Antenna	SCHWARZBECK	VULB 9168	01447	2022.12.12	2025.12.11
Horn Antenna	SCHWARZBECK	3115	10SL0060	2022.06.02	2024.06.01
Pre-amplifier(0.1M-3GHz)	HP	8447D	2727A05655	2023.04.07	2024.04.06
Pre-amplifier(1-26.5G)	Agilent	8449B	3008A4722	2023.04.07	2024.04.06
RE Cable (9K-1G)	N.A	R01	N.A	2023.04.07	2024.04.06
RE Cable (1-26G)	N.A	R02	N.A	2023.04.07	2024.04.06
Temperature & Humidity	KTJ	TA218B	N.A	2023.05.06	2024.05.05
Testing Software	EMC-I_V1.4.0.3_SKET				



3. EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 LIMITS

FREQUENCY (MHz)	Conducted Emission Limits (dBuV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 - 56 *	56 - 46 *
0.5 ~ 5	56.00	46.00
5 ~ 30	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- (3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor
Margin Level = Measurement Value - Limit Value

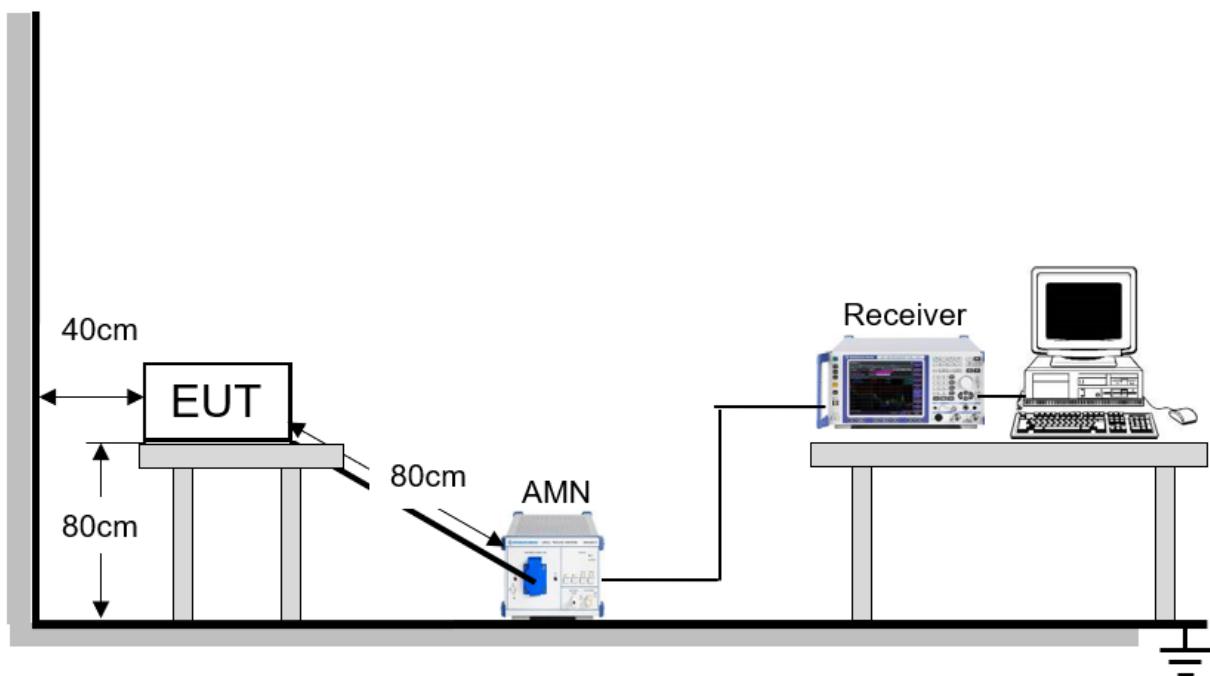
The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

3.1.2 TEST PROCEDURE

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item - EUT Test Photos.

3.1.3 TEST SETUP

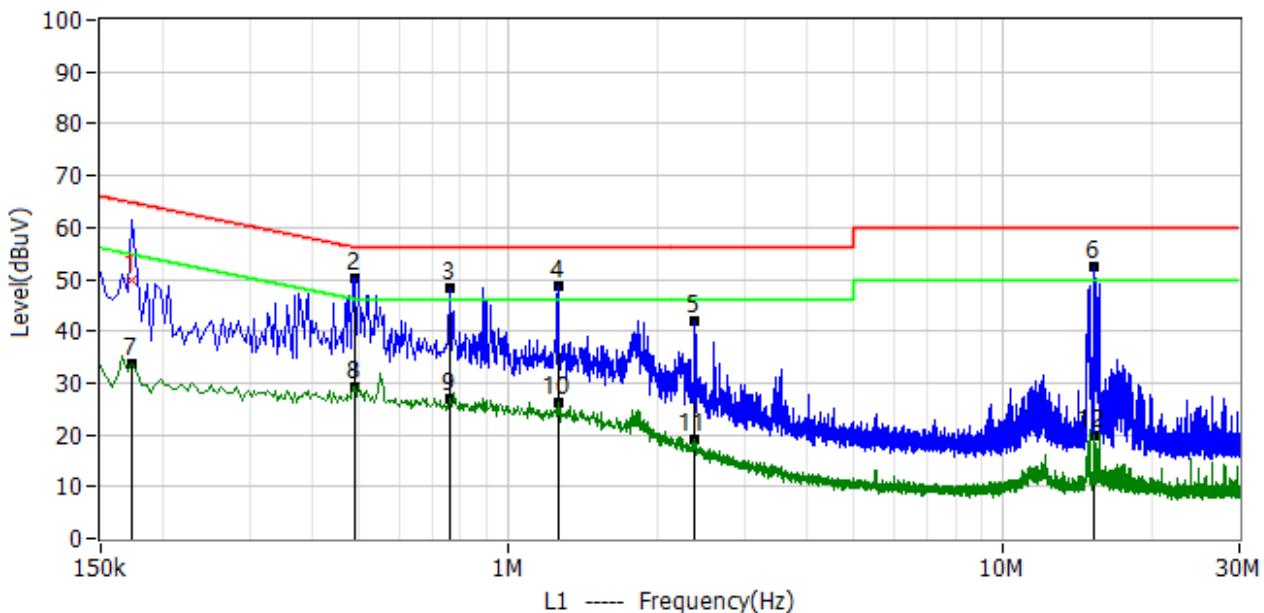


Note: According to pre-test results, the final test mode is each independent function's worst case and only shown in the report.



3.1.4 TEST RESULTS

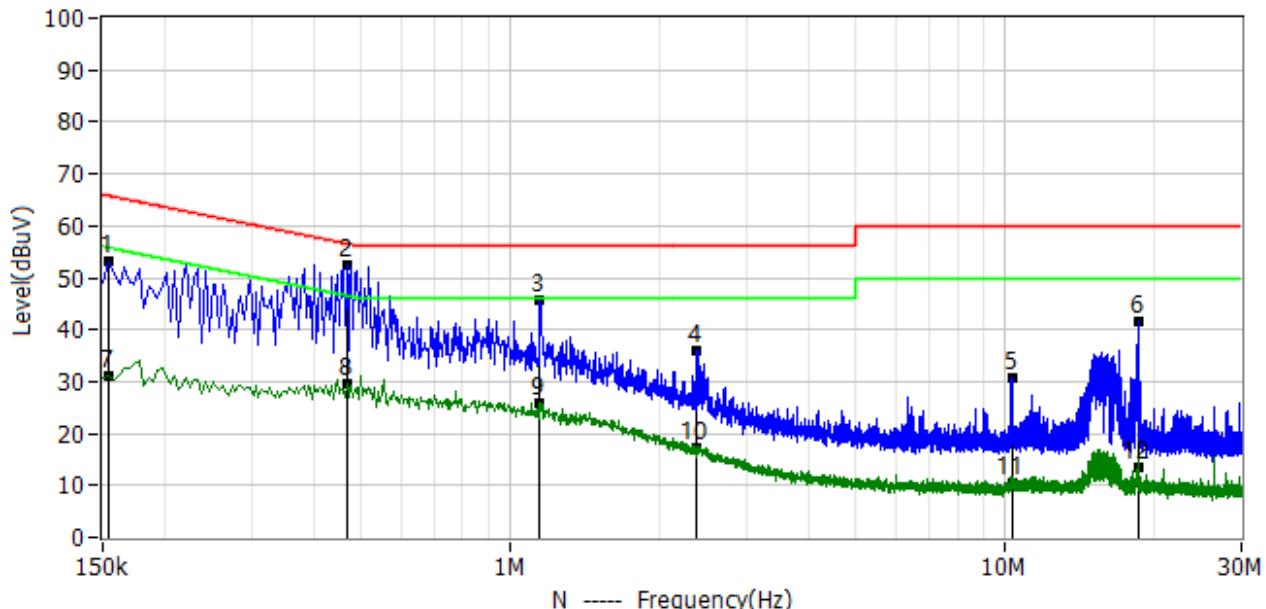
Project: LGT24A180	Test Engineer: LiuH
EUT: Household Microwave Oven	Temperature: 16.5°C
M/N: TMO30H	Humidity: 39%RH
Test Voltage: AC 120V/60Hz	Test Data: 2024-01-23
Test Mode: Mode1	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1	0.174	39.48	10.50	49.98	64.77	-14.79	QP	L1
2*	0.490	39.81	10.50	50.31	56.17	-5.85	QP	L1
3*	0.762	37.94	10.51	48.45	56.00	-7.55	QP	L1
4*	1.262	38.13	10.57	48.70	56.00	-7.30	QP	L1
5*	2.382	31.26	10.73	41.99	56.00	-14.01	QP	L1
6*	15.278	41.56	11.04	52.60	60.00	-7.40	QP	L1
7*	0.174	23.11	10.49	33.60	54.80	-21.10	AV	L1
8*	0.490	18.70	10.50	29.20	46.20	-17.00	AV	L1
9*	0.762	16.59	10.51	27.10	46.00	-18.90	AV	L1
10*	1.262	15.73	10.57	26.30	46.00	-19.70	AV	L1
11*	2.382	8.37	10.73	19.10	46.00	-26.90	AV	L1
12*	15.278	8.96	11.04	20.00	50.00	-30.00	AV	L1



Project: LGT24A180	Test Engineer: LiuH
EUT: Household Microwave Oven	Temperature: 16.5°C
M/N: TMO30H	Humidity: 39%RH
Test Voltage: AC 120V/60Hz	Test Data: 2024-01-23
Test Mode: Mode1	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	0.154	42.60	10.49	53.09	65.78	-12.69	QP	N
2*	0.466	42.09	10.50	52.59	56.58	-4.00	QP	N
3*	1.146	35.16	10.55	45.71	56.00	-10.29	QP	N
4*	2.382	25.38	10.73	36.11	56.00	-19.89	QP	N
5*	10.306	19.81	10.98	30.79	60.00	-29.21	QP	N
6*	18.626	30.41	11.18	41.59	60.00	-18.41	QP	N
7*	0.154	20.61	10.49	31.10	55.80	-24.70	AV	N
8*	0.466	19.00	10.50	29.50	46.60	-17.10	AV	N
9*	1.146	15.25	10.55	25.80	46.00	-20.20	AV	N
10*	2.382	6.47	10.73	17.20	46.00	-28.80	AV	N
11*	10.306	-0.38	10.98	10.60	50.00	-39.40	AV	N
12*	18.626	2.42	11.18	13.60	50.00	-36.40	AV	N



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 LIMITS

Field strength limits

(1) ISM equipment operating on a frequency specified in §18.301 is permitted unlimited radiated energy in the band specified for that frequency.

(2) The field strength levels of emissions which lie outside the bands specified in §18.301, unless otherwise indicated, shall not exceed the following:

Equipment	Operating frequency	RF Power generated by equipment (watts)	Field strength limit (uV/m)	Distance (meters)
Any type unless otherwise specified (miscellaneous)	Any ISM frequency	Below 500 500 or more	25 25 × SQRT(power/500)	300 1300

Power = 1394.76W according to 7.3 calculated value

Limit = $20\lg(25 \times \text{SQRT}(\text{power}/500)) + 20\lg(300/3)$ @ 3m distance.

NOTE:

- (1) The limit for radiated test was performed according to;
- (2) The tighter limit applies at the band edges;
- (3) Emission level (dB_{uV/m}) = 20log Emission level (uV/m),
3m Emission level = 30m Emission level + 20log(30m/3m);

The following table is the setting of the receiver

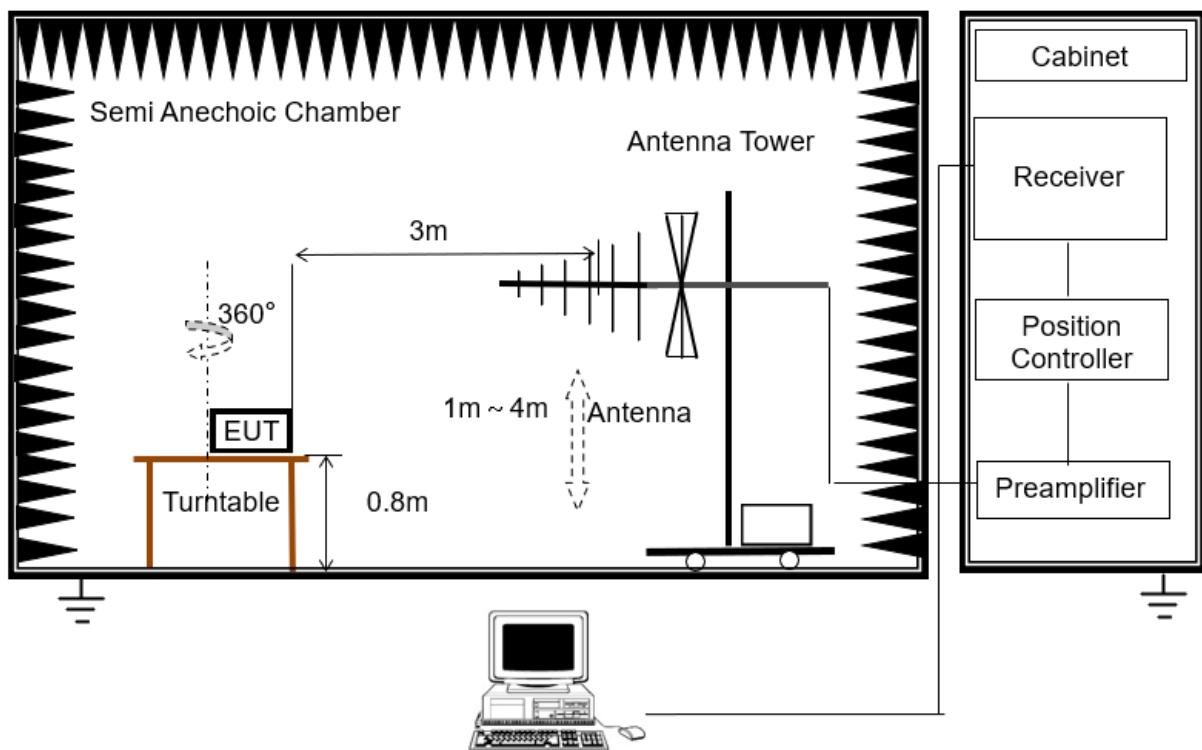
Receiver Parameters	Setting
Attenuation	-- dB
Start Frequency	0.009 MHz
Stop Frequency	25GHz
IF Bandwidth	200Hz, 9 kHz, 120 kHz, 1MHz

3.2.2 TEST PROCEDURE

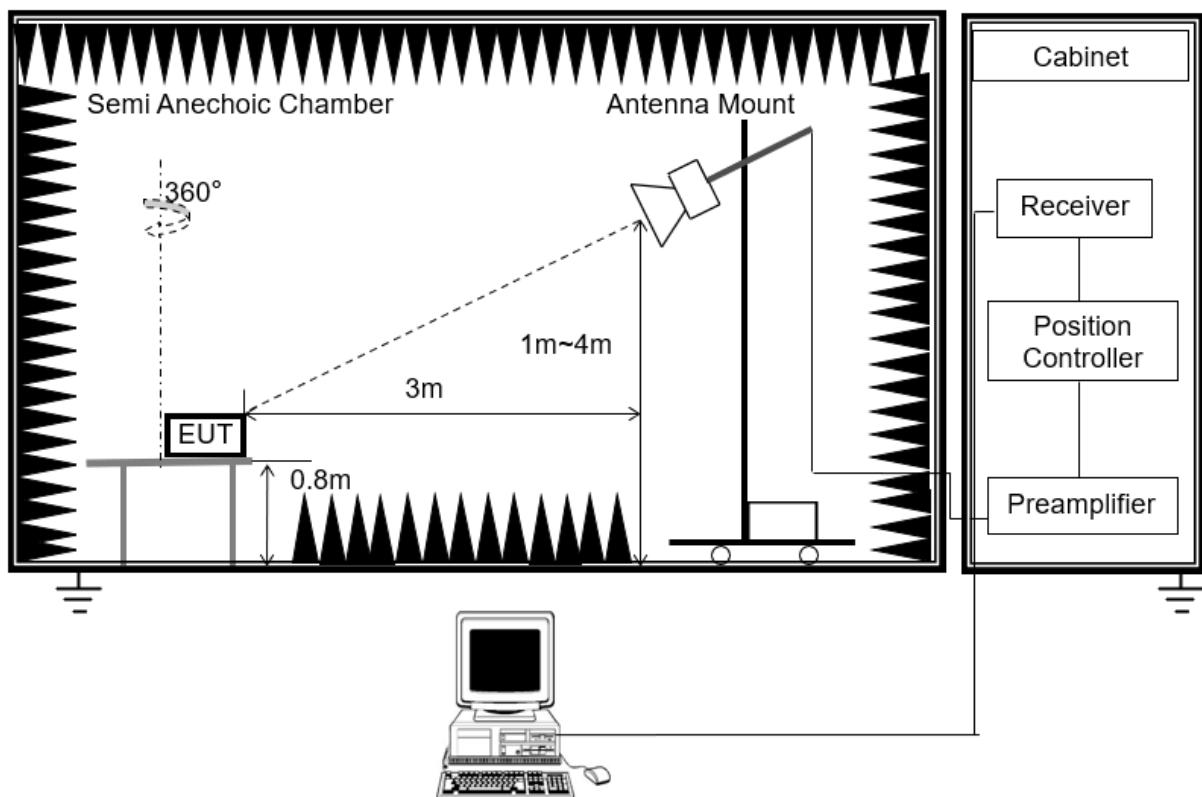
- a. The measuring distance of at 3m shall be used for measurements at frequency up to 1GHz.
- b. The EUT was placed on the top of a rotating table 1.0 meters above the ground at a 3 meter chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For the actual test configuration, please refer to the related Item: EUT Test Photos.

3.2.3 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



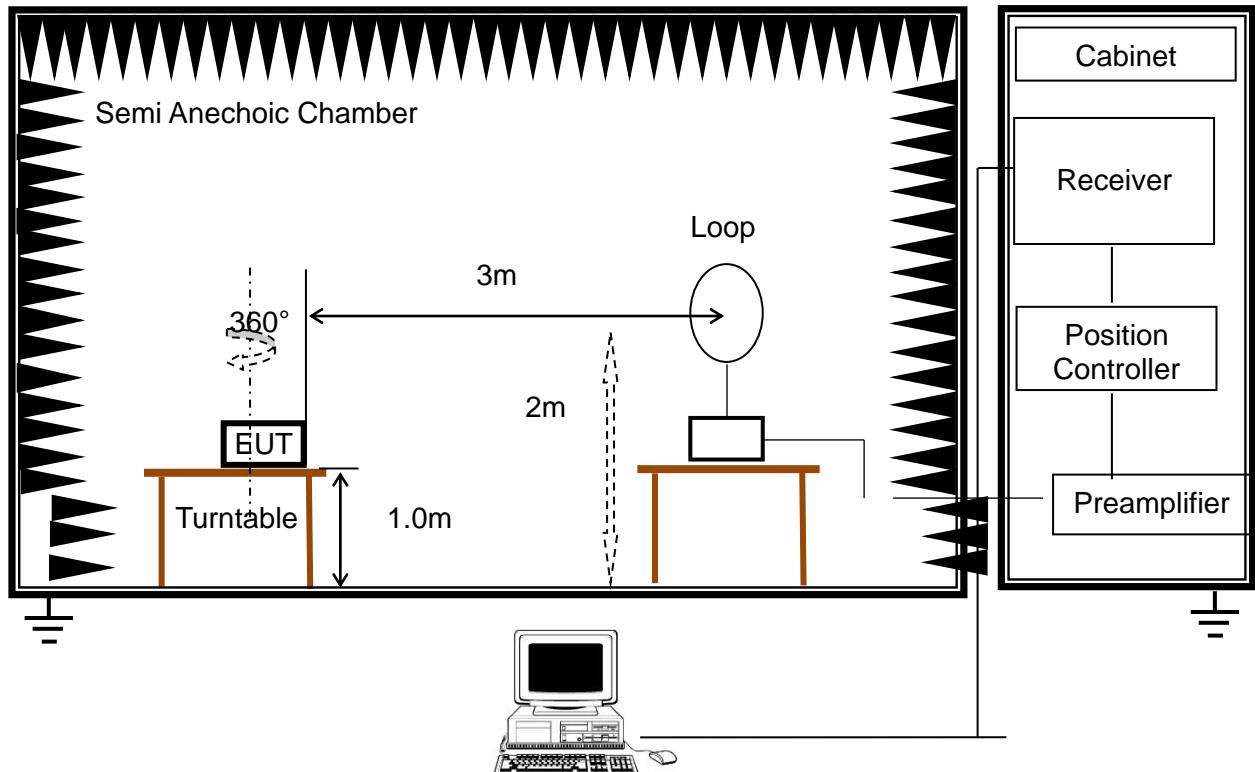
(B) Radiated Emission Test Set-Up Frequency Above 1GHz



For the actual test configuration, please refer to Appendix I: Photographs of the Test Configuration



(C) Radiated Disturbance Test Set-Up Frequency 9KHz-30MHz



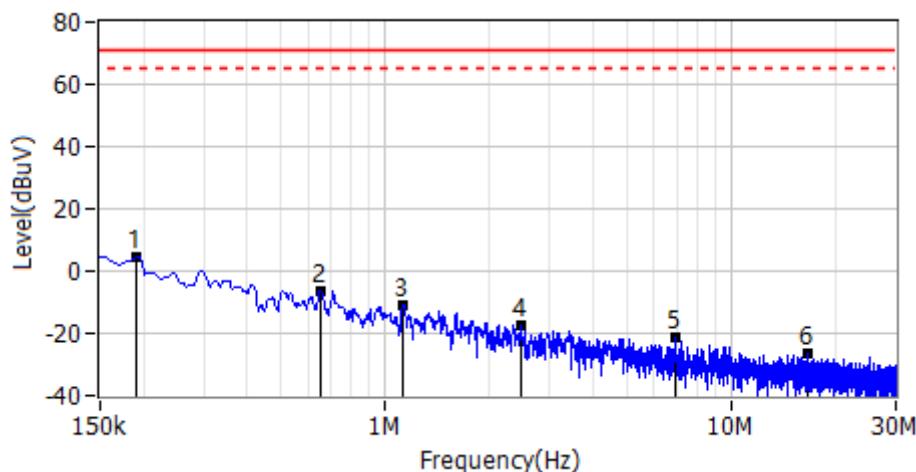
For the actual test configuration, please refer to Appendix I: Photographs of the Test Configuration.
Note: According to pre-test results, the final test mode is each independent function's worst case and only shown in the report.



3.2.4 TEST RESULTS

0.15~30MHz

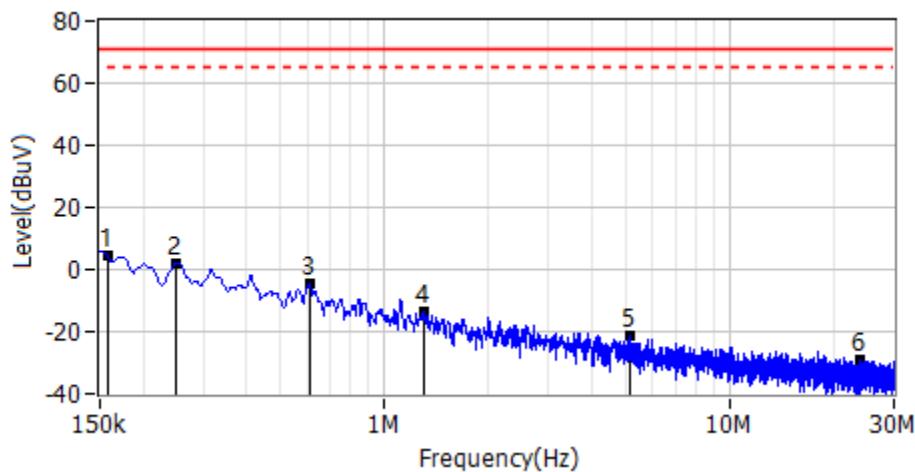
Project: LGT24A180	Test Engineer: Xiangdong Ma
EUT: Household Microwave Oven	Temperature: 21.4°C
M/N: TMO30H	Humidity: 61%RH
Test Voltage: AC 120V/60Hz	Test Data: 2024-03-01
Test Mode: Mode 1	
Note: X	



No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector
1*	191.0438kHz	43.85	-39.50	4.35	71.18	-66.83	PK
2*	649.9875kHz	33.34	-39.50	-6.16	71.18	-77.34	PK
3*	1.1313MHz	28.56	-39.50	-10.94	71.18	-82.12	PK
4*	2.4708MHz	22.09	-39.50	-17.41	71.18	-88.59	PK
5*	6.8961MHz	18.24	-39.50	-21.26	71.18	-92.44	PK
6*	16.6869MHz	14.16	-40.50	-26.34	71.18	-97.52	PK



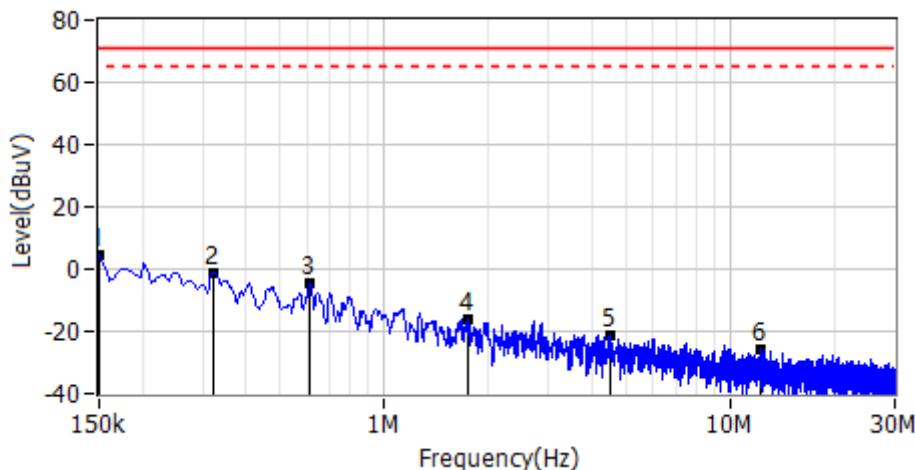
Project: LGT24A180	Test Engineer: Xiangdong Ma
EUT: Household Microwave Oven	Temperature: 21.4°C
M/N: TMO30H	Humidity: 61%RH
Test Voltage: AC 120V/60Hz	Test Data: 2024-03-01
Test Mode: Mode 1	
Note: Y	



No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector
1*	157.4625kHz	44.06	-39.50	4.56	71.18	-66.62	PK
2*	250.7438kHz	41.72	-39.50	2.22	71.18	-68.96	PK
3*	605.2125kHz	34.86	-39.50	-4.64	71.18	-75.82	PK
4*	1.2992MHz	26.22	-39.50	-13.28	71.18	-84.46	PK
5*	5.1275MHz	18.20	-39.50	-21.30	71.18	-92.48	PK
6*	23.8546MHz	12.71	-41.71	-29.00	71.18	-100.18	PK



Project: LGT24A180	Test Engineer: Xiangdong Ma
EUT: Household Microwave Oven	Temperature: 21.4°C
M/N: TMO30H	Humidity: 61%RH
Test Voltage: AC 120V/60Hz	Test Data: 2024-03-01
Test Mode: Mode 1	
Note: Z	

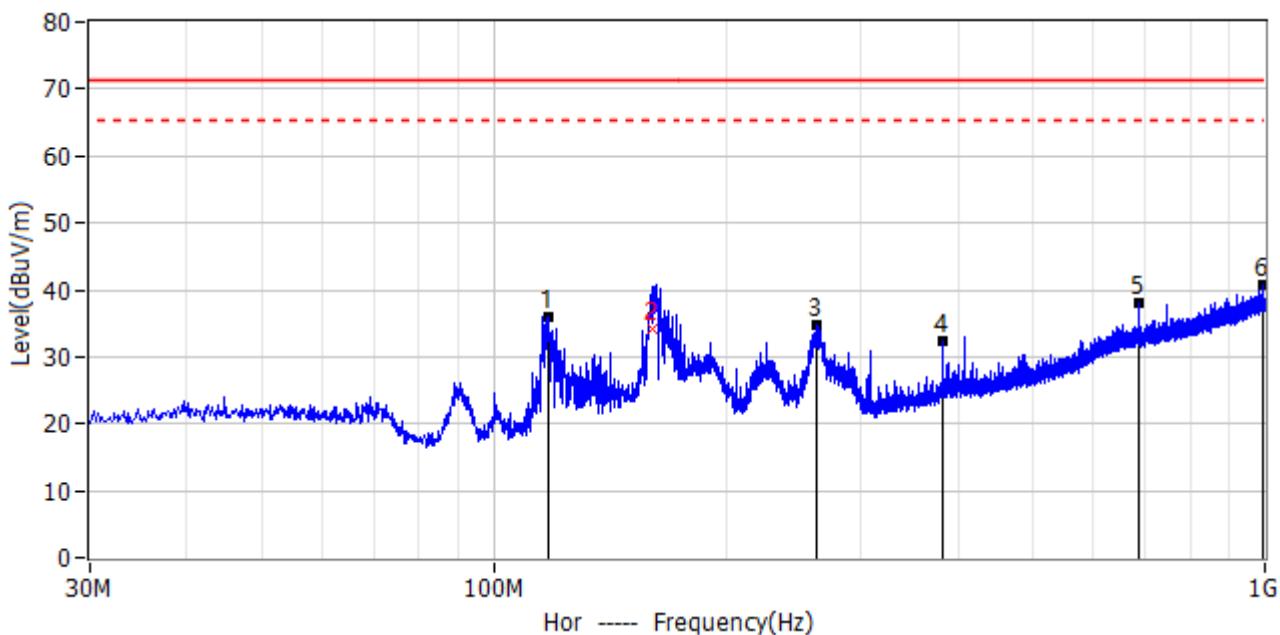


No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector
1*	150.0000kHz	43.89	-39.50	4.39	71.18	-66.79	PK
2*	321.6375kHz	38.49	-39.50	-1.01	71.18	-72.19	PK
3*	608.9438kHz	35.00	-39.50	-4.50	71.18	-75.68	PK
4*	1.7507MHz	23.65	-39.50	-15.85	71.18	-87.03	PK
5*	4.5305MHz	18.28	-39.50	-21.22	71.18	-92.40	PK
6*	12.3325MHz	14.44	-40.50	-26.06	71.18	-97.24	PK



Below 1 GHz(30~1000MHz)

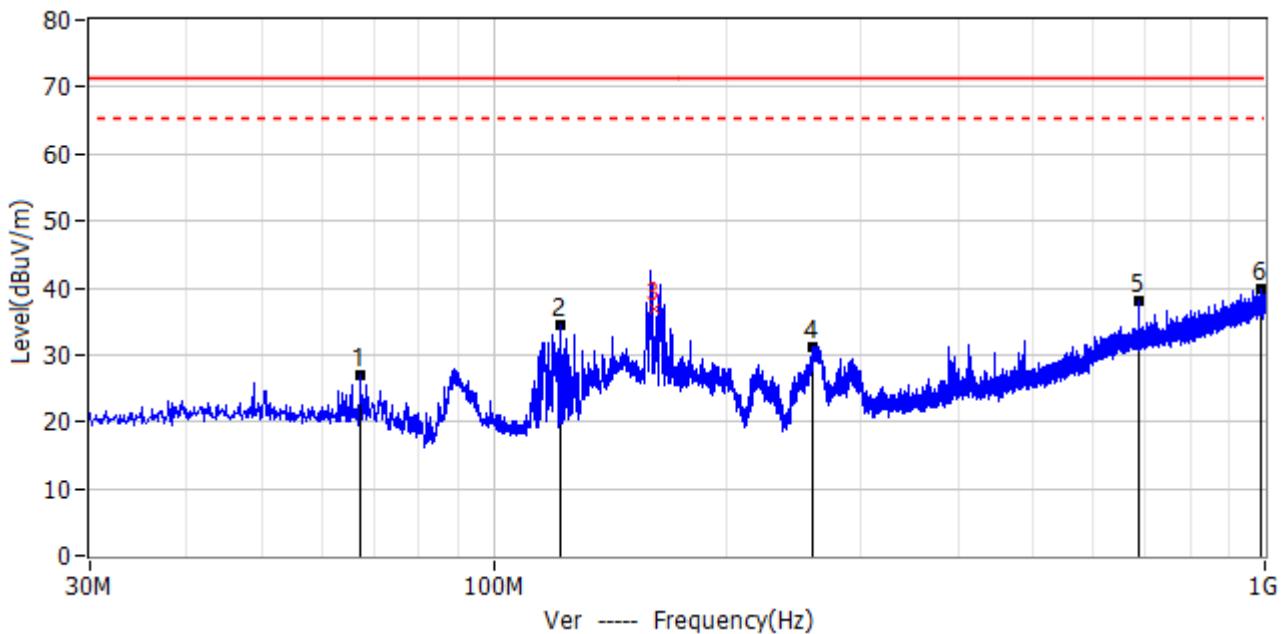
Project: LGT24A180	Test Engineer: Xiangdong Ma
EUT: Household Microwave Oven	Temperature: 29.4°C
M/N: TMO30H	Humidity: 45%RH
Test Voltage: AC 120V/60Hz	Test Data: 2024-02-28
Test Mode: Mode 1	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	117.785	18.65	17.45	36.1	71.18	-35.08	PK	Hor
2	160.846	14.43	19.80	34.23	71.18	-36.95	QP	Hor
3*	261.588	15.89	18.78	34.67	71.18	-36.51	PK	Hor
4*	382.110	10.09	22.29	32.38	71.18	-38.80	PK	Hor
5*	687.539	8.33	29.69	38.02	71.18	-33.16	PK	Hor
6*	995.999	6.13	34.55	40.68	71.18	-30.50	PK	Hor



Project: LGT24A180	Test Engineer: Xiangdong Ma
EUT: Household Microwave Oven	Temperature: 29.4°C
M/N: TMO30H	Humidity: 45%RH
Test Voltage: AC 120V/60Hz	Test Data: 2024-02-28
Test Mode: Mode 1	
Note:	

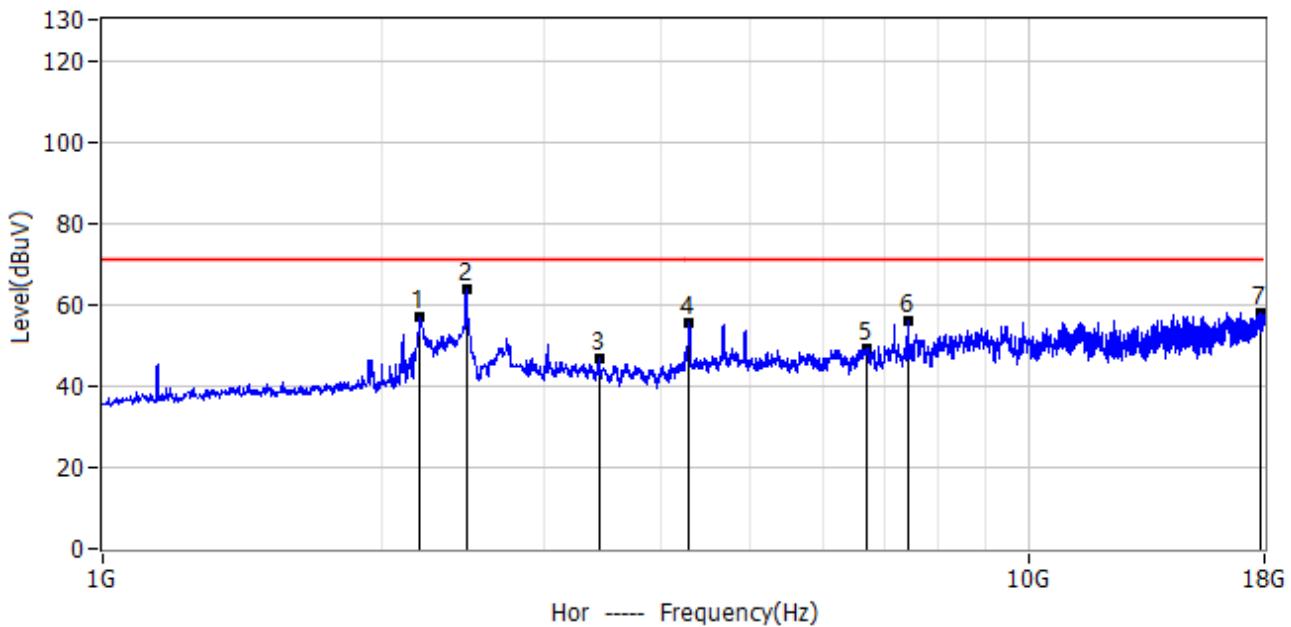


No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	67.224	8.69	18.19	26.88	71.18	-44.30	PK	Ver
2*	122.029	16.77	17.81	34.58	71.18	-36.60	PK	Ver
3	161.468	16.94	19.80	36.74	71.18	-34.44	QP	Ver
4*	259.041	12.58	18.66	31.24	71.18	-39.94	PK	Ver
5*	687.539	8.50	29.69	38.19	71.18	-32.99	PK	Ver
6*	990.179	5.19	34.53	39.72	71.18	-31.46	PK	Ver



Above 1GHz

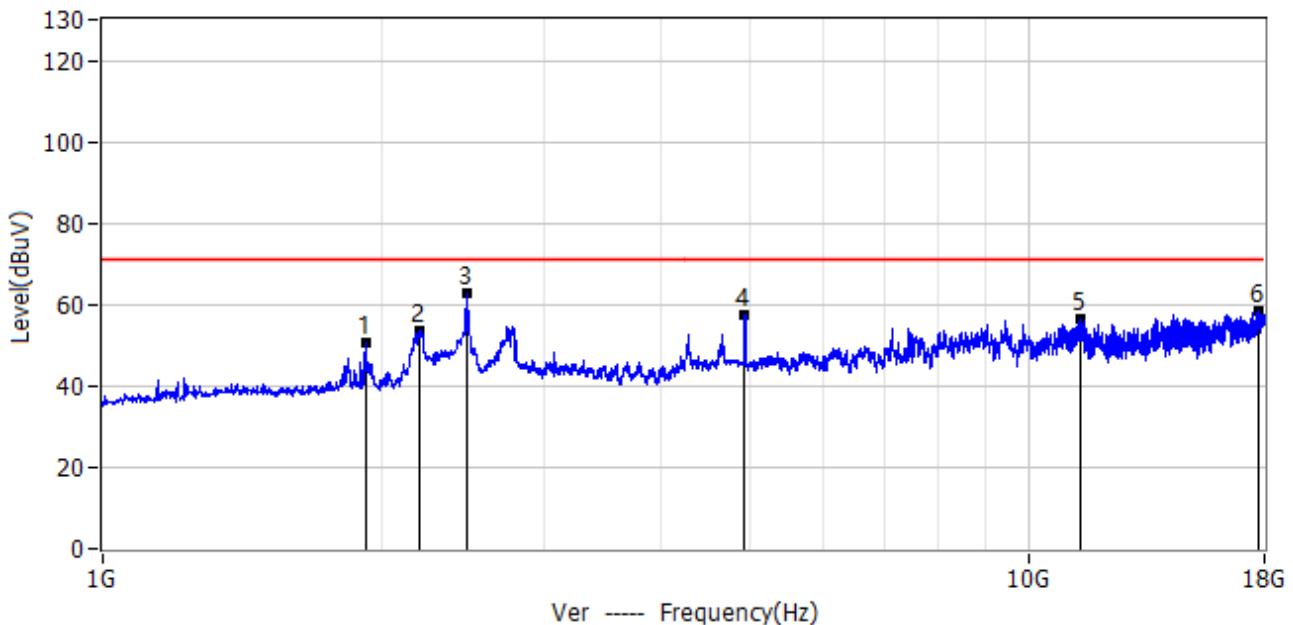
Project: LGT24A180	Test Engineer: Dylan.shi
EUT: Household Microwave Oven	Temperature: 28.3°C
M/N: TMO30H	Humidity: 42%RH
Test Voltage: 120V/60Hz	Test Data: 2024-02-29
Test Mode: Mode 1	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	2202.7000	70.94	-14.10	56.84	71.18	-14.34	PK	Hor
2*	2472.6000	74.89	-11.27	63.62	71.18	-7.56	PK	Hor
3*	3435.2000	55.30	-8.48	46.82	71.18	-24.36	PK	Hor
4*	4298.0000	62.35	-6.61	55.74	71.18	-15.44	PK	Hor
5*	6701.4000	55.29	-6.21	49.08	71.18	-22.10	PK	Hor
6*	7417.5000	60.64	-4.53	56.11	71.18	-15.07	PK	Hor
7*	17857.6000	49.76	8.42	58.18	71.18	-13.00	PK	Hor



Project: LGT24A180	Test Engineer: Dylan.shi
EUT: Household Microwave Oven	Temperature: 28.3°C
M/N: TMO30H	Humidity: 42%RH
Test Voltage: 120V/60Hz	Test Data: 2024-02-29
Test Mode: Mode 1	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	1922.2000	67.63	-17.02	50.61	71.18	-20.57	PK	Ver
2*	2196.4000	67.94	-14.17	53.77	71.18	-17.41	PK	Ver
3*	2470.5000	74.22	-11.29	62.93	71.18	-8.25	PK	Ver
4*	4941.9000	63.59	-6.10	57.49	71.18	-13.69	PK	Ver
5*	11376.4000	54.59	1.85	56.44	71.18	-14.74	PK	Ver
6*	17742.9000	49.93	8.34	58.27	71.18	-12.91	PK	Ver



3.3 RADIATED HAZARD

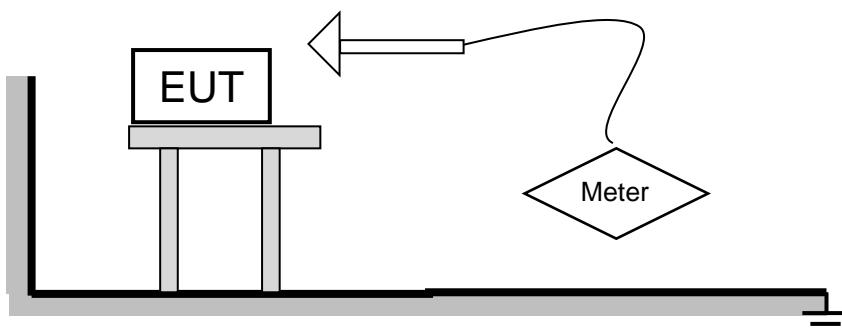
3.3.1 LIMITS

Maximum Emission, mW/cm ²
1.00

3.3.2 TEST PROCEDURE

The EUT was set-up according to the FCC MP-5 and FCC Part 18 for Radiation Hazard Measurement. The measurement was using a microwave leakage meter to measure the Radiation leakage in the as-received condition with the oven door closed. A 1000ml water load in a beaker was located in the center of the oven and the Household Microwave Oven was set to maximum power. While the oven operating, the microwave meter will check the leakage and then record the maximum leakage.

3.3.3 TEST SETUP



For the actual test configuration, please refer to Appendix I: Photographs of the Test Configuration.

3.3.4 TEST RESULTS

Condition	Maximum Emission, mW/cm ²
A	0.74
B	0.88
C	0.60
D	0.47
E	0.30
F	0.71
G	--
M. UNCERTAINTY:	0.0002



3.4 OPERATING FREQUENCY MEASUREMENT

3.4.1 LIMITS

ISM equipment may be operated on any frequency above 9 kHz. And the frequency band 2400-2500MHz is allocated for use by ISM equipment. (§18.301)

ISM frequency	Tolerance
6.78 MHz	±15.0 kHz
13.56 MHz	±7.0 kHz
27.12 MHz	±163.0 kHz
40.68 MHz	±20.0 kHz
915 MHz	±13.0 MHz
2,450 MHz	±50.0 MHz
5,800 MHz	±75.0 MHz
24,125 MHz	±125.0 MHz
61.25 GHz	±250.0 MHz
122.50 GHz	±500.0 MHz
245.00 GHz	±1.0 GHz

3.4.2 TEST PROCEDURE

a. FREQUENCY FOR NORMAL VOLTAGE

The operating frequency was measured using a spectrum analyzer. Starting with the EUT at room temperature, a 1000mL water load was placed in the center of the oven and the oven was operated at maximum output power. The fundamental operating frequency was monitored until the water load was reduced to 20 percent of the original load.

b. FREQUENCY FOR LINE VOLTAGE

The EUT was operated / warmed by at least 10 minutes of use with a 1000 mL water load at room temperature at the beginning of the test. Then the operating frequency was monitored as the input voltage was varied between 80 and 125 percent of the nominal rating.

3.4.3 TEST RESULTS

Item	Minimum Frequency (MHz)	Maximum Frequency (MHz)	Detector
FREQUENCY FOR NORMAL VOLTAGE	2457	2465	PK
FREQUENCY FOR LINE VOLTAGE	2458	2472	PK



3.5 RF OUT POWER MEASUREMENT

3.5.1 TEST PROCEDURE

Formula :

$$P = \frac{4.2 \times m_w (T_2 - T_1) + 0.5 \times m_c (T_2 - T_0)}{t}$$

NOTE :

P is the microwave power output, in watts

m_w is the mass of the water, in grams

m_c is the mass of the container, in grams

T_0 is the ambient temperature, in degrees Celsius

T_1 is the initial temperature of the water, in degrees Celsius

T_2 is the final temperature of the water, in degrees Celsius

t is the heating time, in seconds, excluding the magnetron filament heating-up time.

3.5.2 TEST SETUP

The EUT in microwave mode with full power.

3.4.2 TEST RESULTS

Mass of water(g)	Mass of the container(g)	Ambient temperature(°C)	Initial temperature(°C)	Final temperature(°C)	Heating time(S)	Power output(watts)
1000	495	21.5	10	39	120	1049.6

APPENDIX I - TEST SETUP

1. Conducted Disturbance - Mode 1: Maximum microwave power



2. Magnetic Emission - Mode 1: Maximum microwave power





3. Radiated Disturbance below 1GHz – Mode 1: Maximum microwave power



4. Radiated Disturbance Above 1GHz – Mode 1: Maximum microwave power





5. Radiation Hazard – Mode 1: Maximum microwave power



6. Radiation Hazard – Mode 1: Maximum microwave power





APPENDIX II - External Photographs of EUT Constructional Details

Photo 1

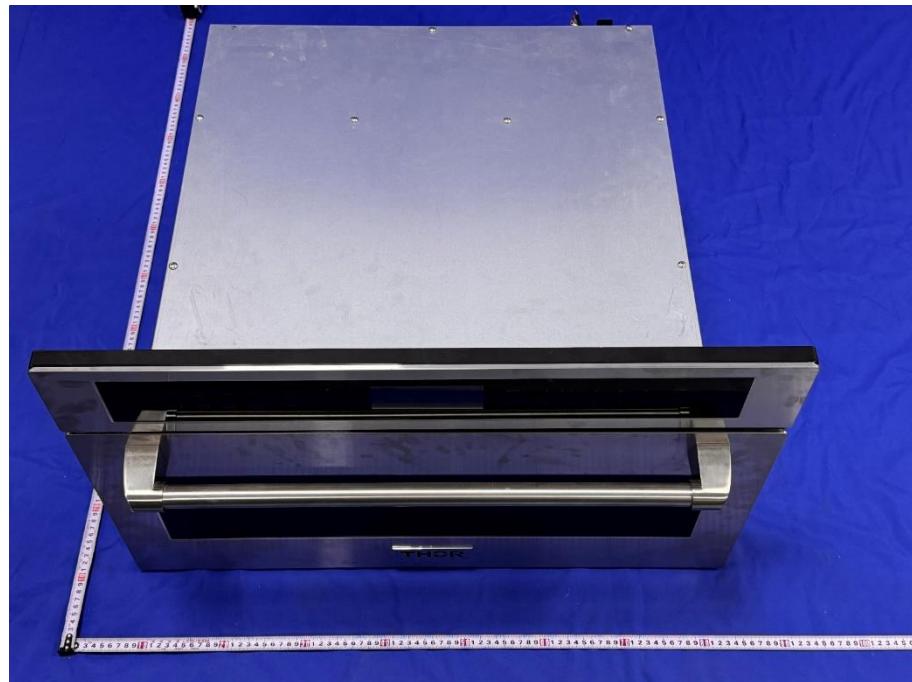


Photo 2





Photo 3

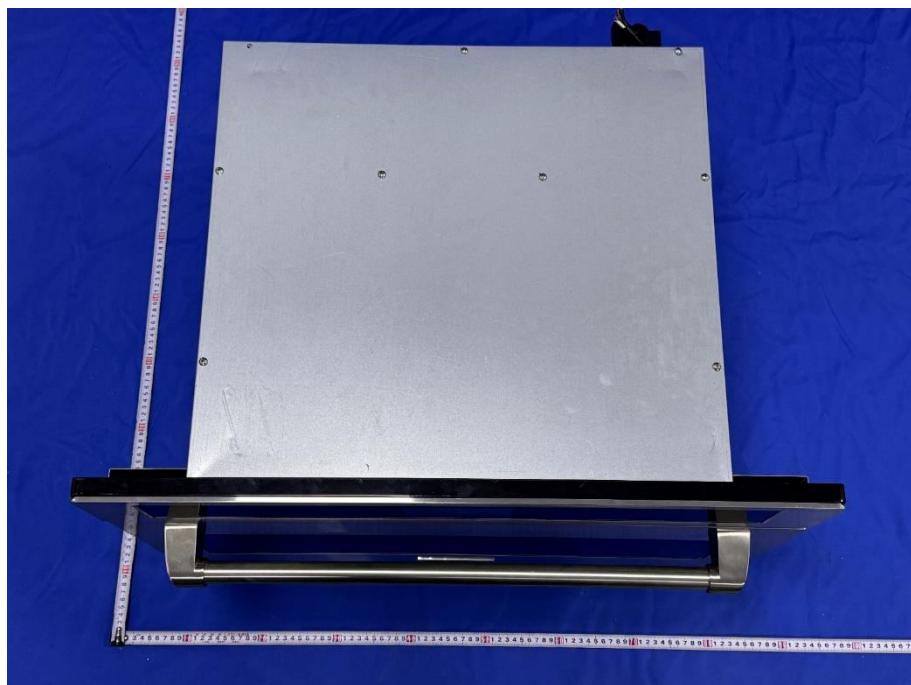


Photo 4

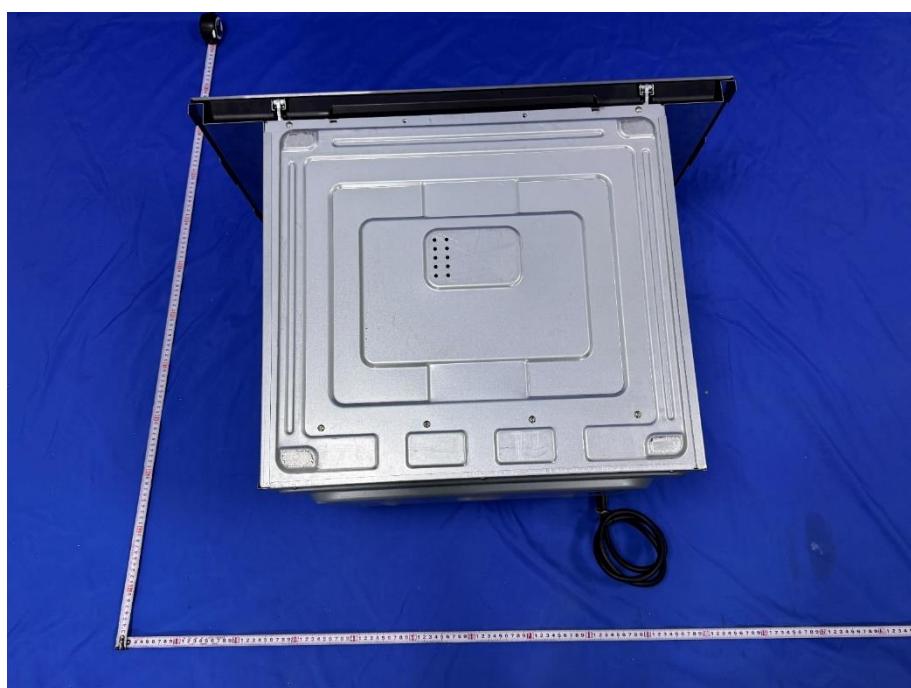




Photo 5

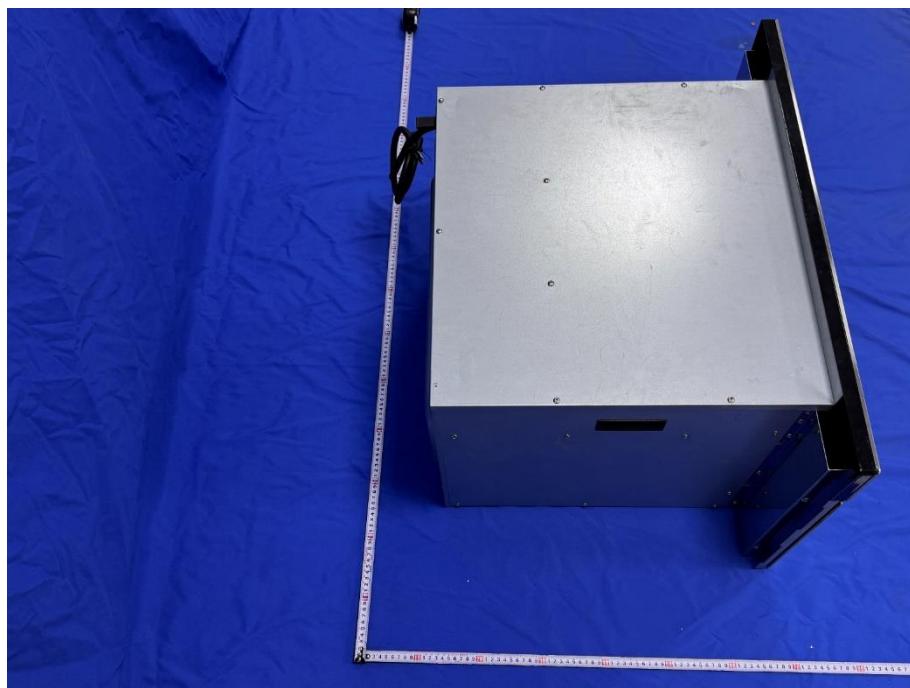


Photo 6

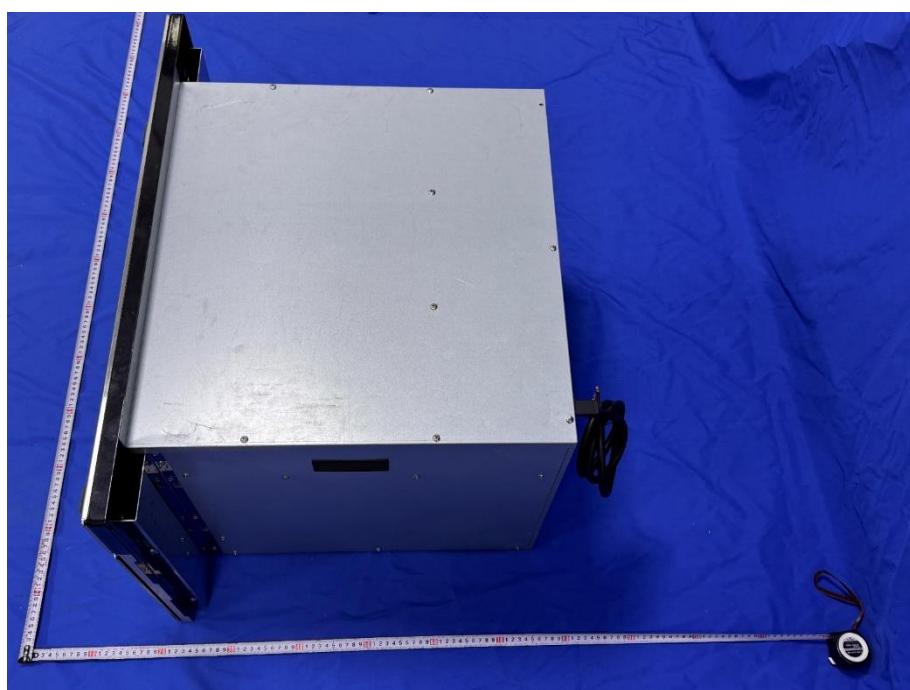




photo 7

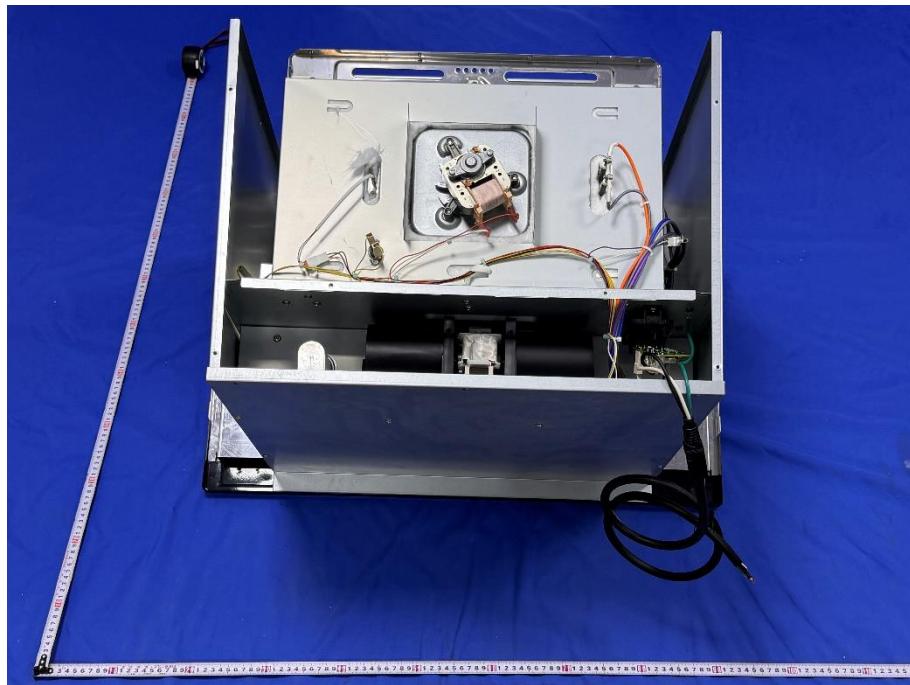


Photo 8

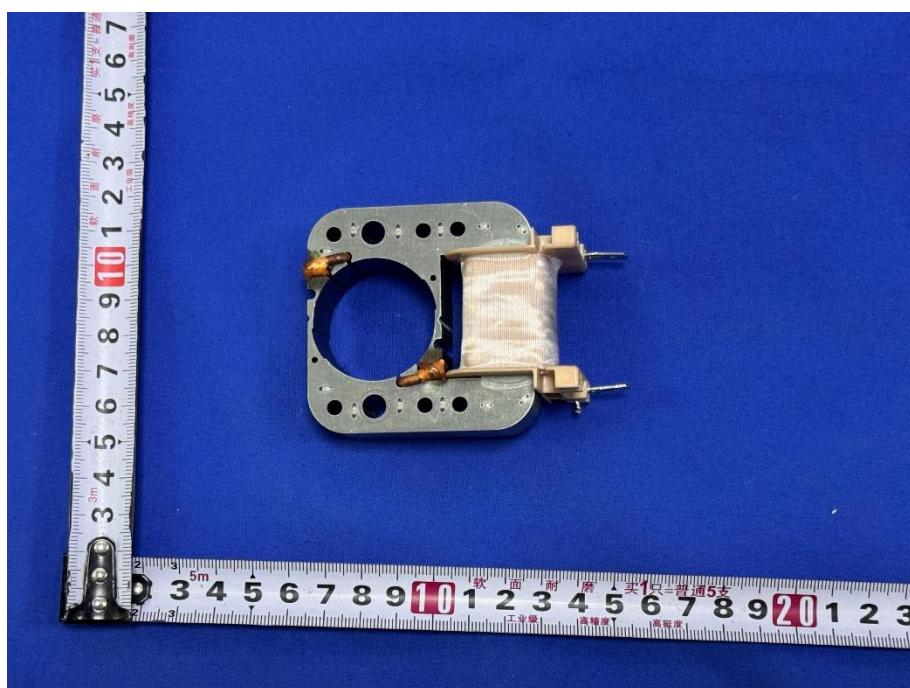




Photo 9

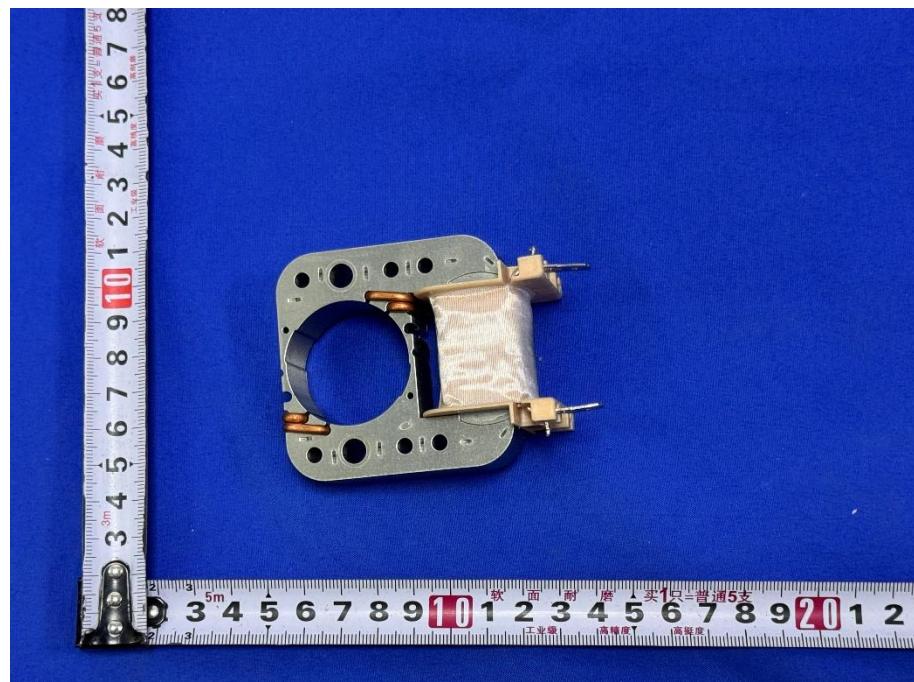


Photo 10

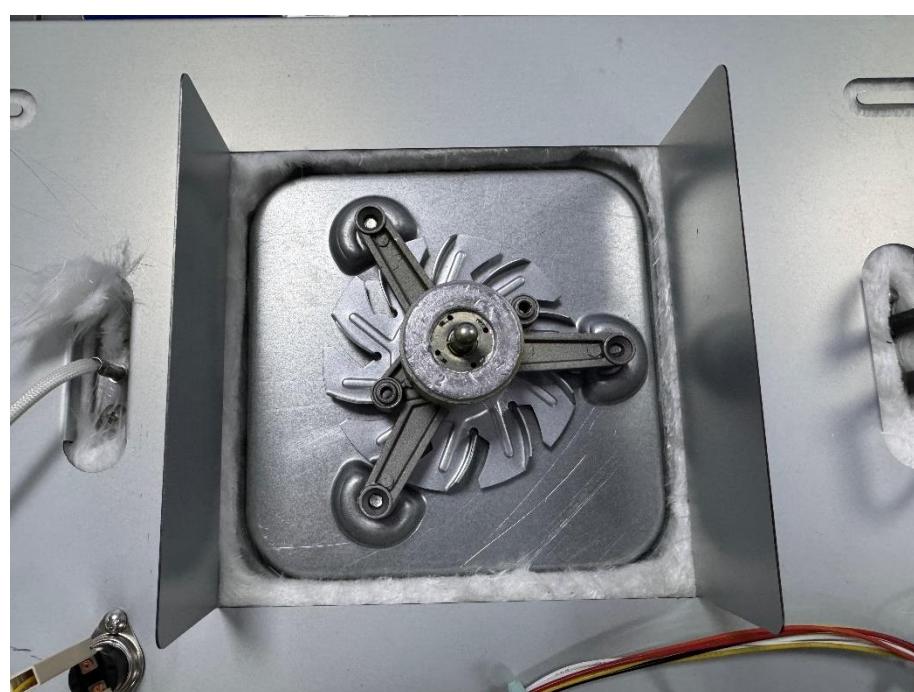




Photo 11

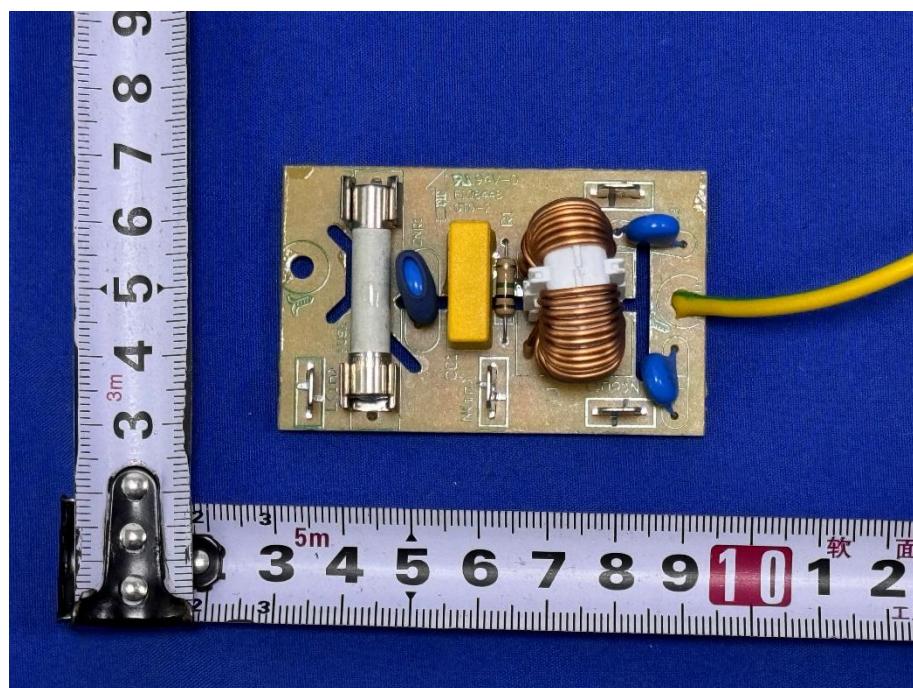


Photo 12

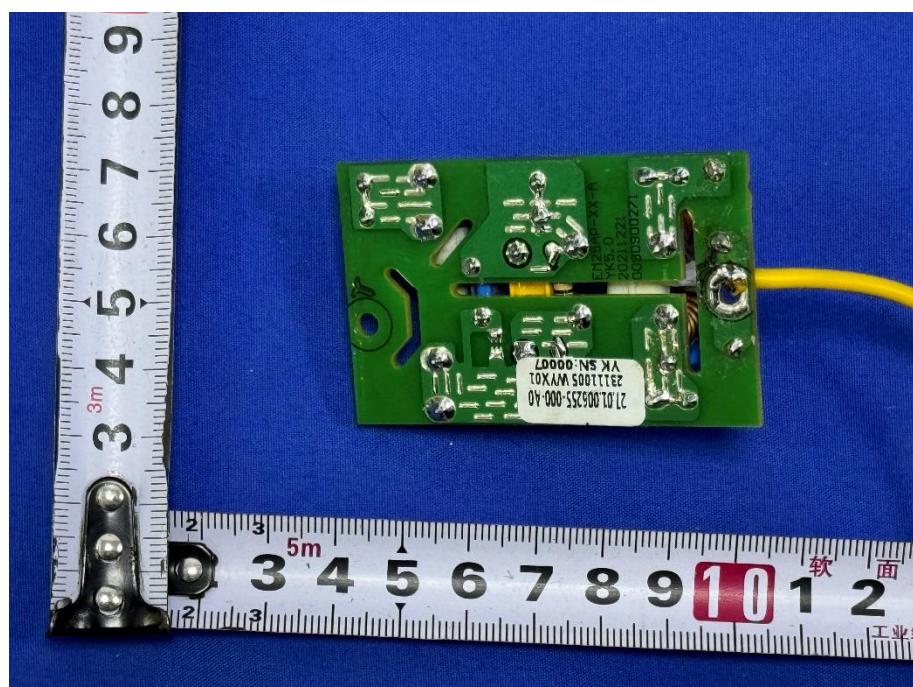




Photo 13

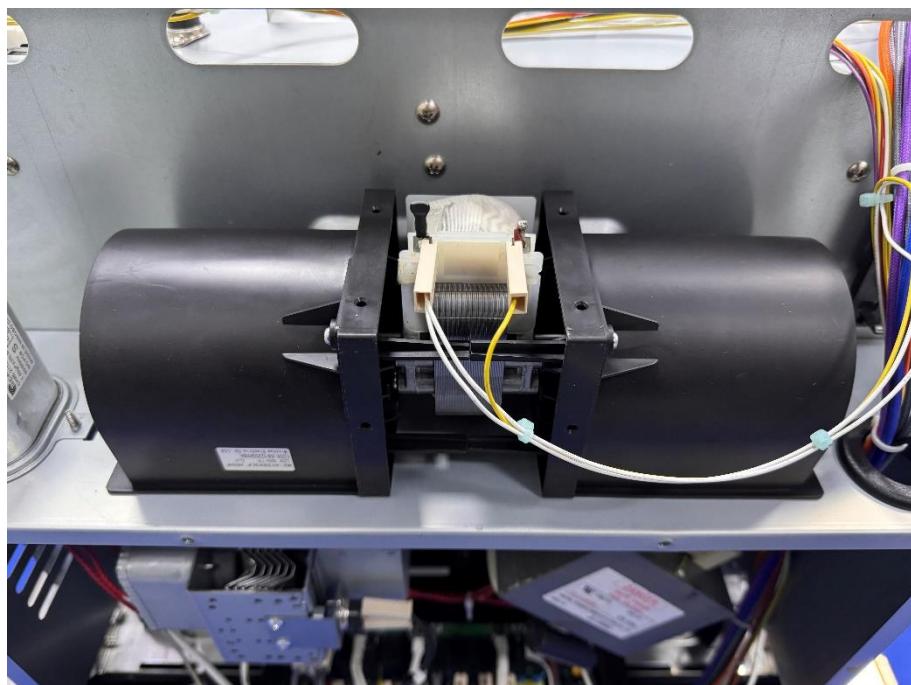


Photo 14

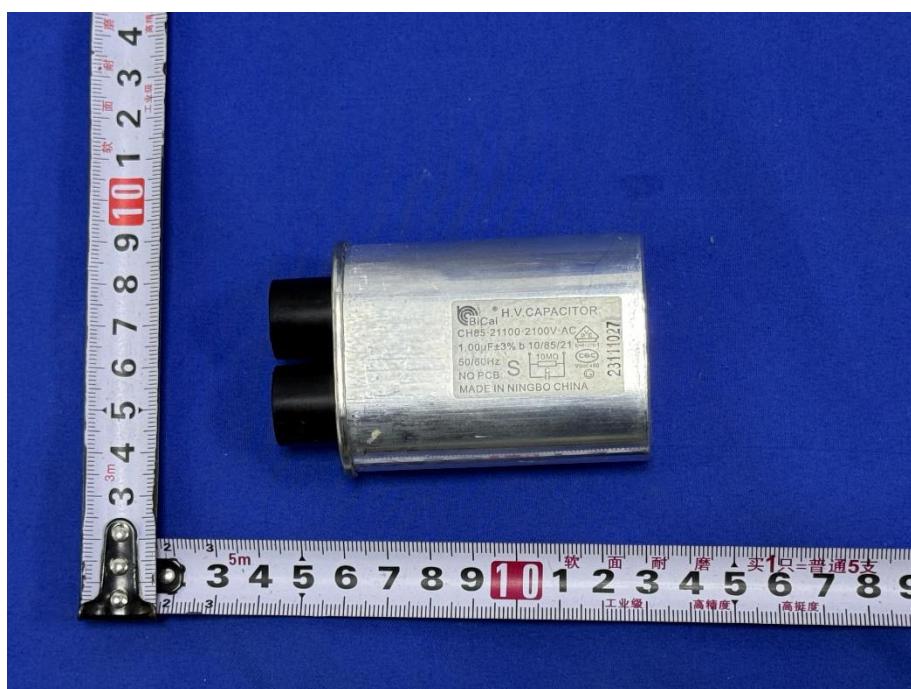




Photo 15

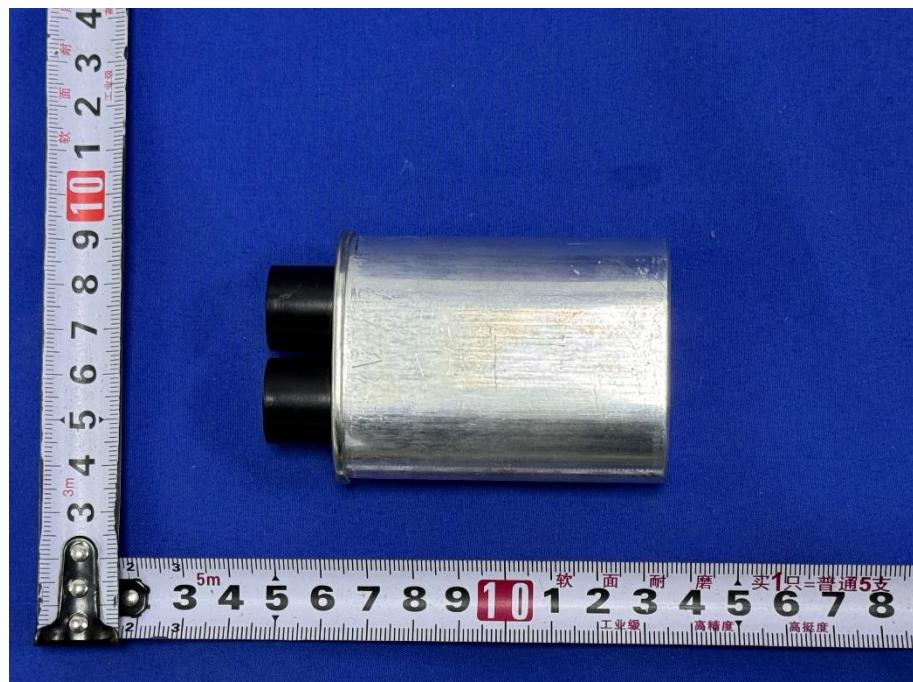


Photo 16

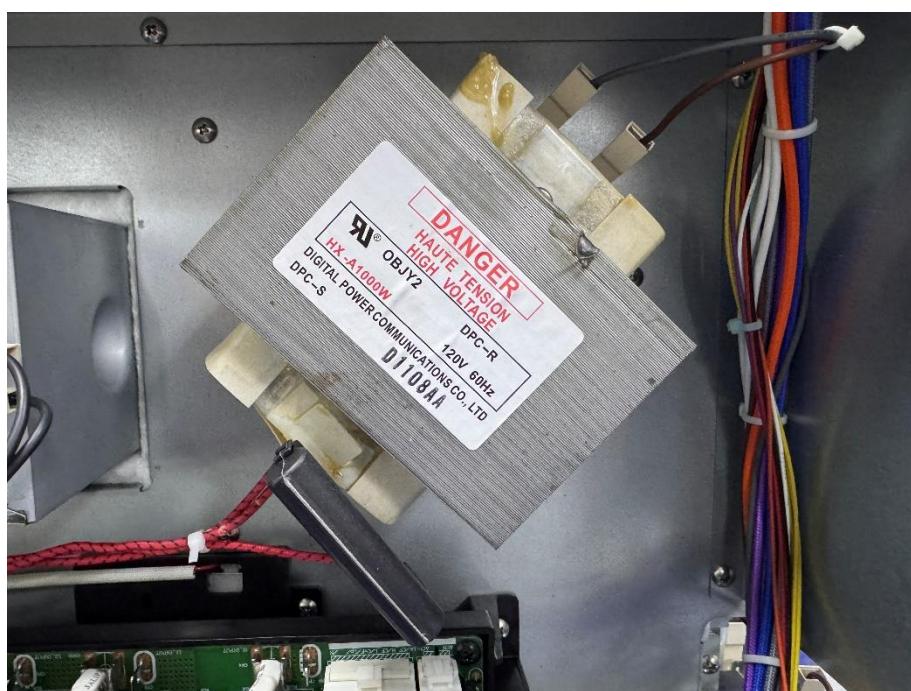




Photo 17

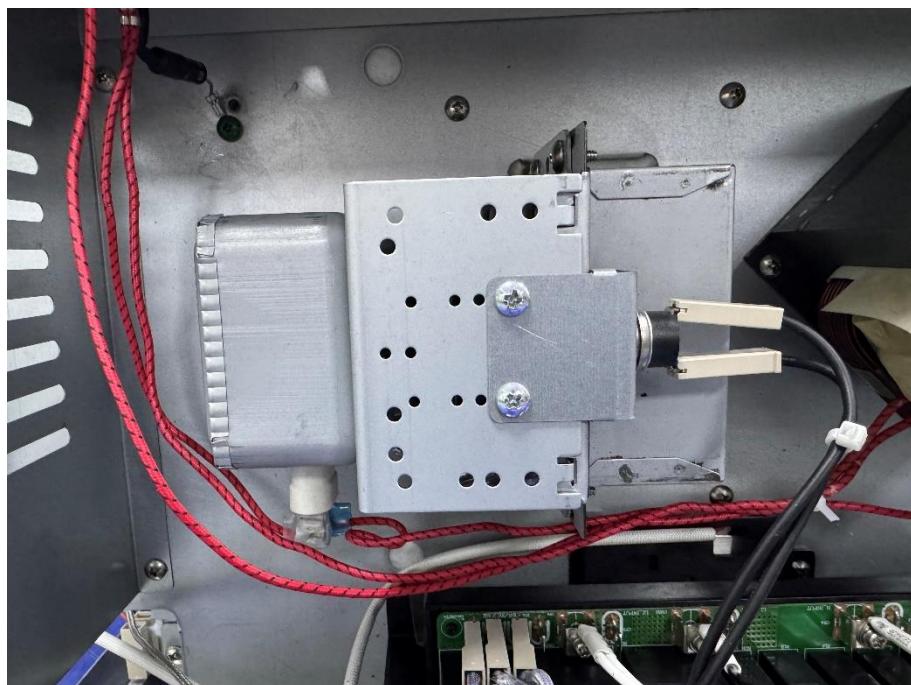


Photo 18

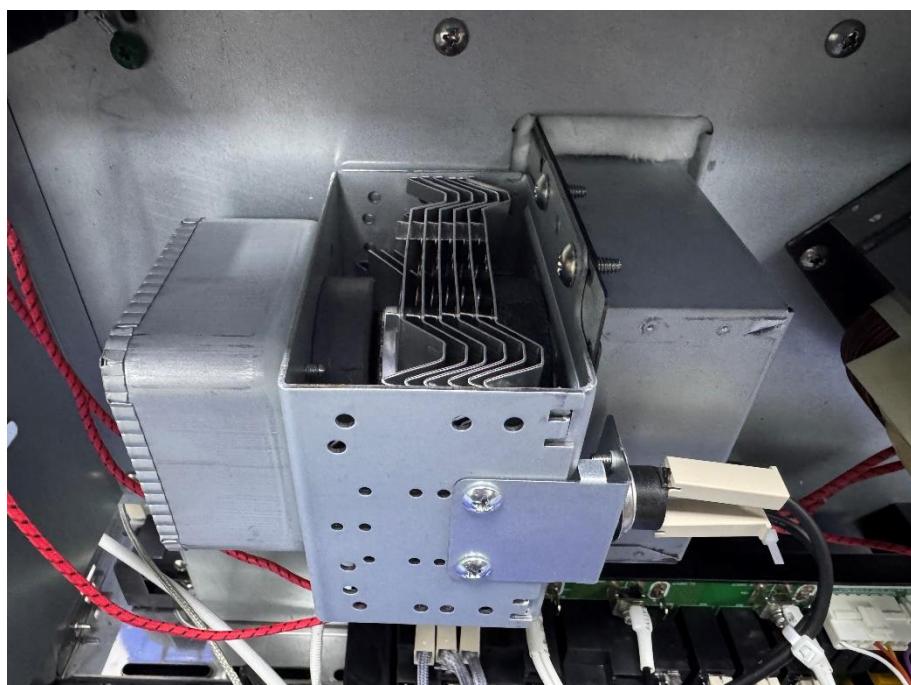




Photo 19

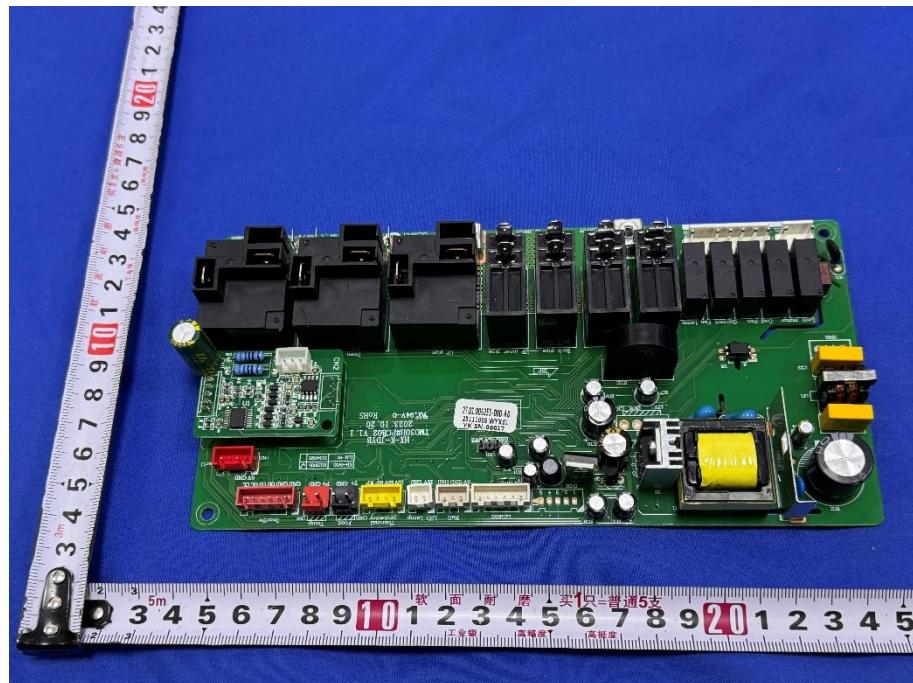


Photo 20

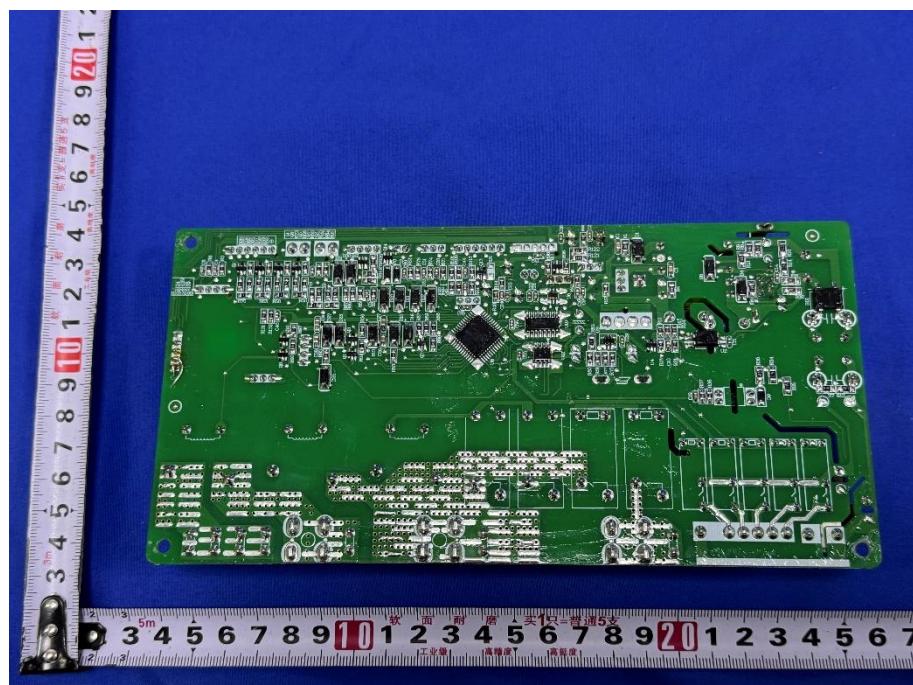


Photo 21

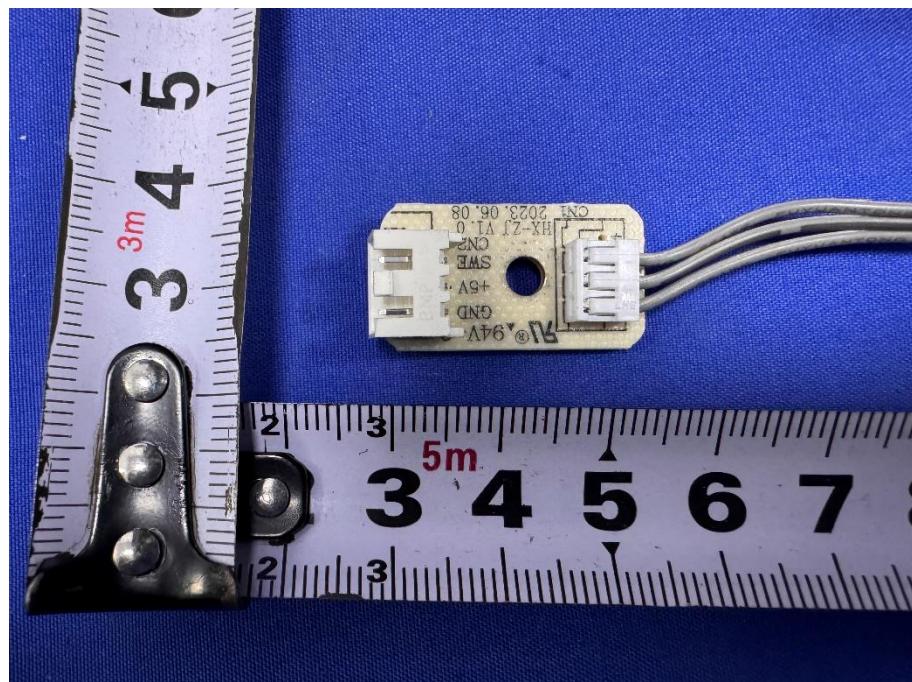


Photo 22

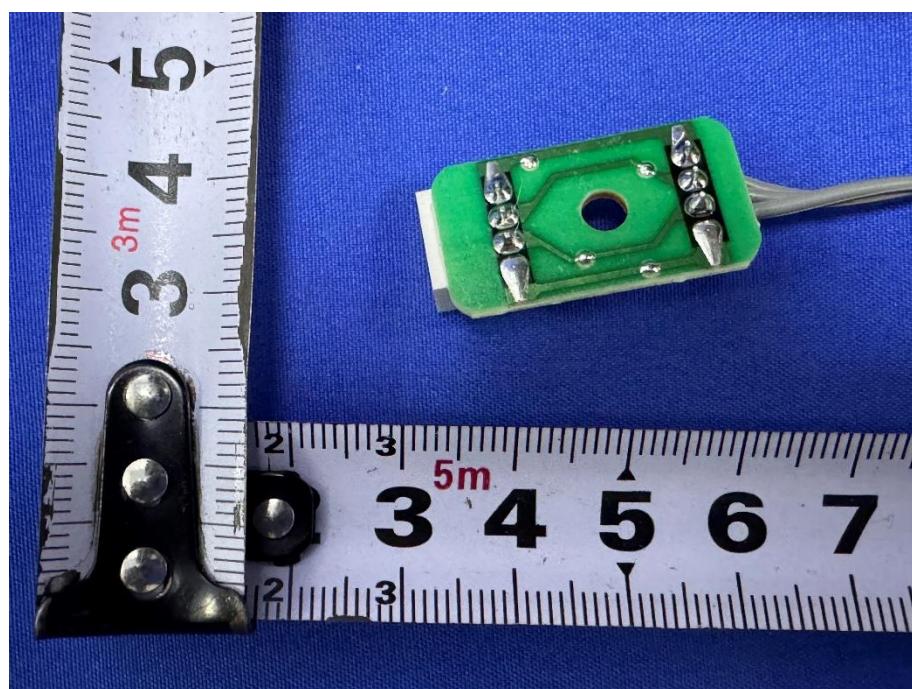




Photo 23

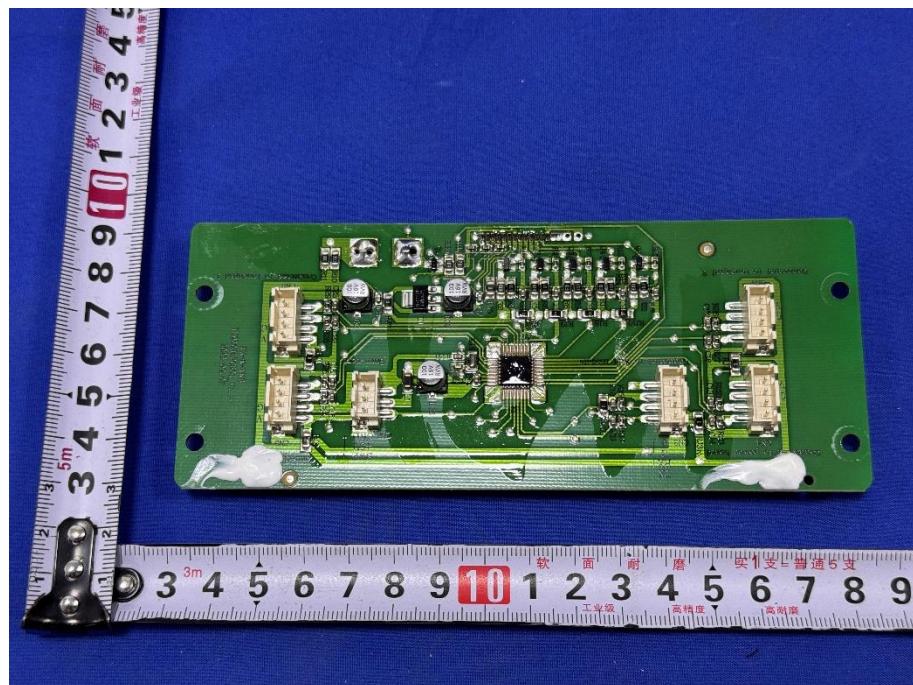


Photo 24





Photo 25



Photo 26

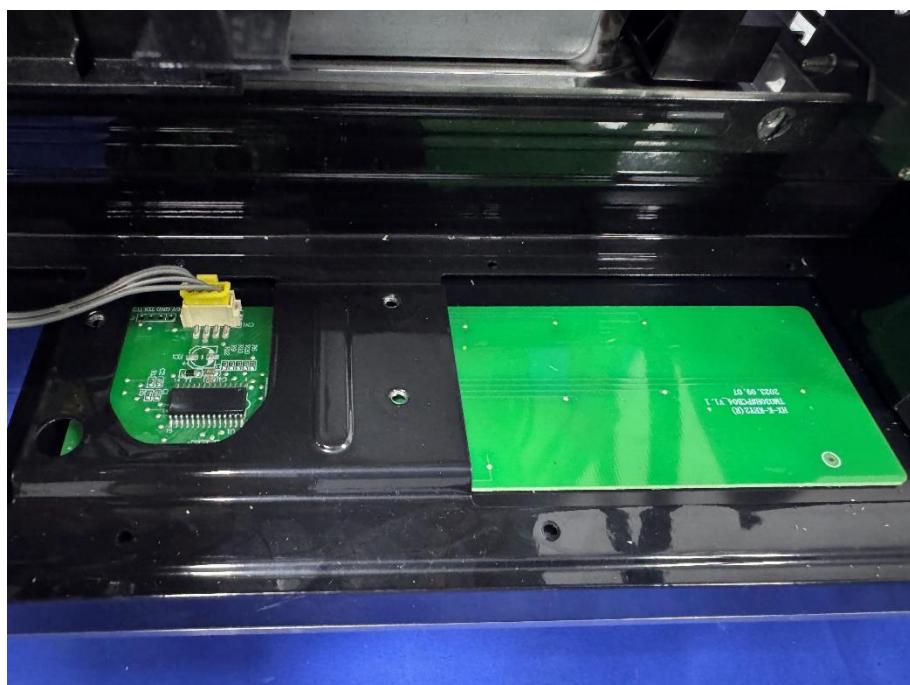




Photo 27

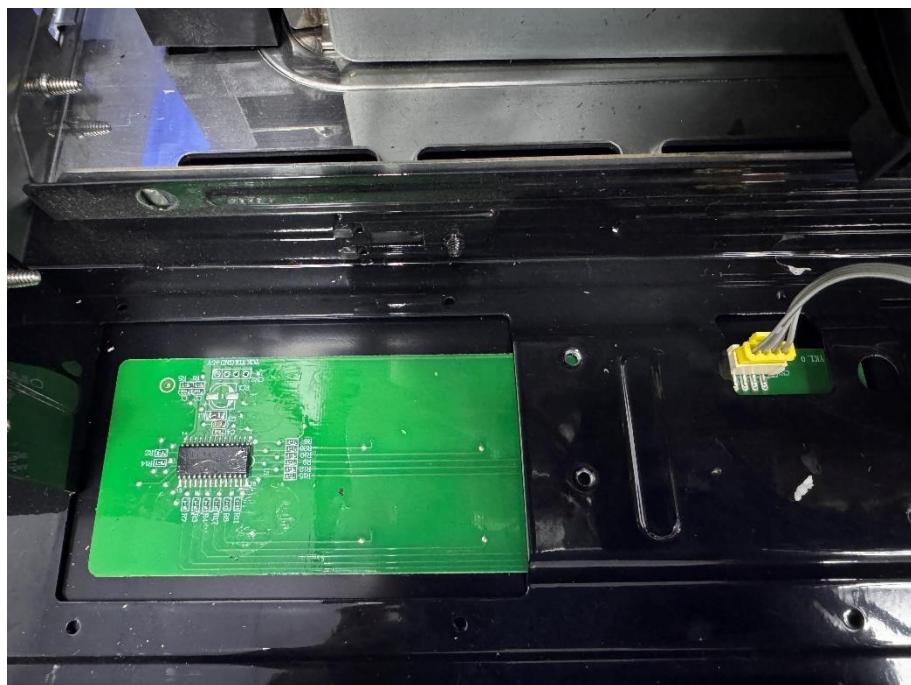
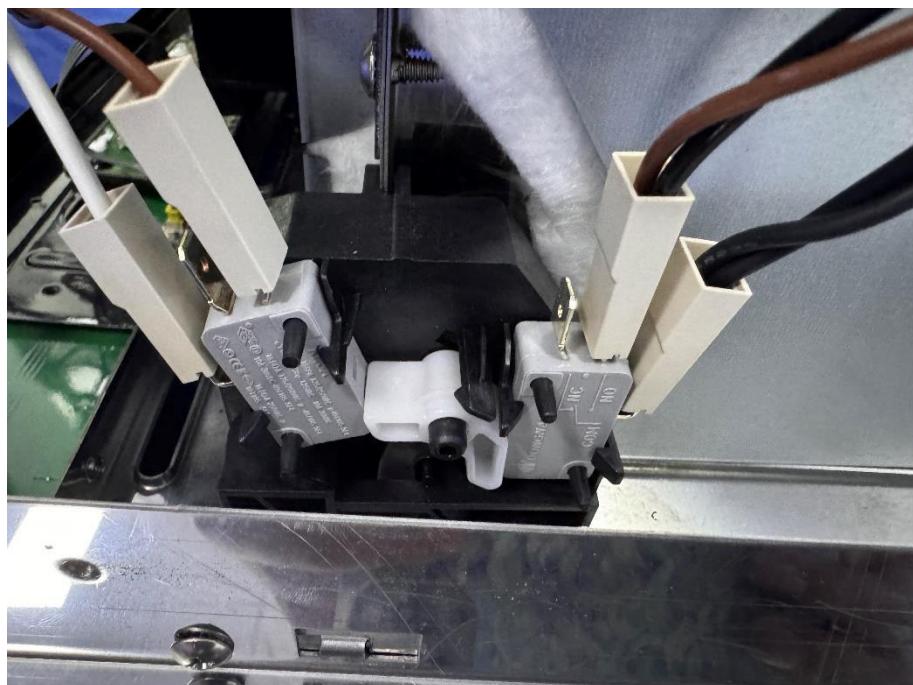


Photo 28





Photo 29



END OF THE REPORT