



## FCC 47 CFR PART 18

### TEST REPORT

*For*

**Microwave oven**

**MODEL NUMBER: ES9P032TC-S0RD, RV-955BKAF,  
RV-955SSAF, ES9P03##-S0RD, ES9P03\*\*\*-S0RD (#, \*, express 0~9, A~Z)**

**FCC ID: VG8ES9P03YYY1**

**REPORT NUMBER: 4791829898-1**

**ISSUE DATE: July 17, 2025**

*Prepared for*

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*Prepared by*

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## Revision History

Rev.	Issue Date	Revisions	Revised By
V0	July 17, 2025	Initial Issue	

## Summary of Test Results

<b>Emission</b>			
<b>Standard</b>	<b>Test Item</b>	<b>Limit</b>	<b>Result</b>
FCC 47 CFR PART 18	Conducted Emissions	FCC Part 18.307(b)	Pass
	Radiated Emissions (30MHz~1000MHz)	FCC Part 18.305(b)	Pass
	Radiated Emissions (1GHz~25GHz)	FCC Part 18.305(b)	Pass
	Operating Frequency	FCC Part 18.301	Pass
	Input Power	FCC / OST MP-5 (1986) Clause 4.3	Pass
	Output Power	FCC / OST MP-5 (1986) Clause 4.3	Pass
	Radiation Hazard	FCC / OST MP-5 (1986) Clause 3.1	Pass

\*This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

\*The measurement result for the sample received is <Pass> according to <FCC 47 CFR PART 18> when <Simple Acceptance> decision rule is applied.

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## 1. ATTESTATION OF TEST RESULTS

### Applicant Information

Company Name: Guangdong Midea Kitchen Appliances Manufacturing Co., Ltd  
Address: No.6, Yong An Road, Beijiao, Shunde, Foshan, Guangdong, China

### Manufacturer Information

Company Name: Guangdong Midea Kitchen Appliances Manufacturing Co., Ltd  
Address: No.6, Yong An Road, Beijiao, Shunde, Foshan, Guangdong, China

### EUT Information

EUT Name: Microwave oven  
Model: ES9P032TC-S0RD  
Series Model: ES9P03##-S0RD, RV-955BKAF, RV-955SSAF, ES9P03\*\*\*-S0RD (#, \*, express 0~9, A~Z)  
Sample Received Date: June 16, 2025  
Sample Status: Normal  
Sample ID: 8593377  
Date of Tested: June 25, 2025 to July 17, 2025

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47 CFR PART 18	Pass

Prepared By:



Karl Wu

Engineer Project Associate

Checked By:



Kebo Zhang

Senior Project Engineer

Approved By:



Stephen Guo

Operations Manager

## 2. TEST METHODOLOGY

All tests were performed in accordance with the standard FCC 47 CFR PART 18 and FCC/OET MP-5

## 3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p><b>A2LA (Certificate No.: 4102.01)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p><b>FCC (FCC Designation No.: CN1187)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.</p> <p><b>ISED (Company No.: 21320)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046.</p>
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Note:

All tests measurement facilities use to collect the measurement data are located at Room 101, Building 2, No.4, Information Road, Songshan Lake, Dongguan, Guangdong, China.

## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

### 4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Measurement Frequency Range	K	U(dB)
Conducted Emissions	0.009 MHz-0.15 MHz	2	4.00
	0.15 MHz-30 MHz	2	3.63
Radiated Emissions (30 MHz~1000 MHz)	9 kHz-30 MHz	2	2.20
	30 MHz-1 GHz	2	4.13
Radiated Emissions (1 GHz~25 GHz)	1 GHz-18 GHz	2	5.64
	18 GHz-26 GHz	2	5.23

Note1: This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level using a coverage factor of k=2.

Note 2: According to the standard CISPR 16-4-2, the MU for the Conducted emissions from the AC mains power ports using AMN should not exceed 3.8 in range of 9kHz to 150kHz and 3.4 in range of 150kHz to 30MHz. We have considered the test results containing the value of U<sub>lab</sub> (in dB) for the measurement instrumentation actually used for the measurements.

## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

EUT Name	Microwave oven
Model	ES9P032TC-S0RD
Series Model	ES9P03##-S0RD, RV-955BKAF, RV-955SSAF, ES9P03***-S0RD (#, *, express 0~9, A~Z)
Model Difference	All types of electronic circuit of the same, the difference are model name and color. Different appearance code represent different model number and different appearance color. Therefore, conducted emissions, radiated emissions, output power, input power and radiation hazard tests were performed on ES9P032TC-S0RD.
Operating Frequency	2450MHz
Rated Input Power (Microwave)	1450W
Rated Output Power (Microwave)	900W
Rated Voltage	120V~, 60Hz, Single Phase

### 5.2. TEST MODE

Test Mode	Description
M01	Maximum power + 1000mL water load + beaker located in the center of the oven
M02	Maximum power + 700mL water load + beaker located in the center of the oven
M03	Maximum power + 700mL water load + beaker located in the right front corner of the oven
M04	Maximum power + 300mL water load + beaker located in the center of the oven
M05	Maximum power + 300mL water load + beaker located in the right front corner of the oven

### 5.3. EUT ACCESSORY

Cable	
Description:	AC Plug Cable
Cable Type:	Unshielded without ferrite
Length:	1 Meter

## 5.4. LOAD FOR MICROWAVE OVENS

For all measurements the energy developed by the oven is absorbed by a dummy load consisting of a quantity of tap water in a beaker. A polypropylene beaker or any other low-loss material shall be used as the container. If the oven is provided with a shelf or other utensil support, test shall be made with this support in its initial normal position. For ovens rated at 1000 watts or less power output, the beaker shall contain quantities of water as listed in the following subparagraphs. For ovens rated at more than 1000 watts output, each quantity shall be increased by 50% for each 500 watts or fraction thereof in excess of 1000 watts. Additional beakers are used if necessary.

- 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

## 5.5. SUPPORT UNITS FOR SYSTEM TEST

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.

Item	Equipment	Mfr./Brand	Model/Type No.	Specification	Note
1	Glass Beaker	N/A	N/A	1000ML	UL Support

## 6. MEASURING EQUIPMENT AND SOFTWARE USED

Test Equipment of Conducted Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
EMI Test Receiver	ROHDE & SCHWARZ	ESR3	101961	Sep. 28, 2024	Sep. 27, 2025
Two-Line V-Network	ROHDE & SCHWARZ	ENV216	101983	Sep. 28, 2024	Sep. 27, 2025
Test Software for Conducted Emission	Farad	EZ-EMC	Ver.UL-3A1	N/A	N/A

Test Equipment of Radiated Emissions (30 MHz~1000 MHz)					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Jun. 28, 2024	Jun. 27, 2027
MXE EMI Receiver	KEYSIGHT	N9038A	MY56400036	Sep. 28, 2024	Sep. 27, 2025
Amplifier	HP	8447F	2944A03683	Sep. 28, 2024	Sep. 27, 2025
Test Software for Radiated Emission	Farad	EZ-EMC	Ver.UL-3A1	N/A	N/A

Test Equipment of Radiated Emissions (1 GHz~25 GHz)					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
EMI Measurement Receiver	ROHDE & SCHWARZ	FSV	101696	Dec. 27, 2024	Dec. 26, 2025
Preamplifier	TDK	PA-02-0118	TRS-305-00067	Jun. 6, 2025	Jun. 5, 2026
Preamplifier	TDK	PA-02-2	TRS-307-00002	Jun. 6, 2025	Jun. 5, 2026
Horn Antenna	TDK	HRN-0118	130940	Dec. 12, 2024	Dec. 11, 2027
High Gain Horn Antenna	Schwarzbeck	BBHA-9170	697	Jun. 30, 2024	Jun. 29, 2027
Test Software for Radiated Emission	Tonscend	JS32-RE	5.0.0	N/A	N/A

Test Equipment of Operating Frequency					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
EMI Measurement Receiver	ROHDE & SCHWARZ	ESR26	101377	Sep. 28, 2024	Sep. 27, 2025
Preamplifier	TDK	PA-02-0118	TRS-305-00067	Jun. 6, 2025	Jun. 5, 2026
Horn Antenna	TDK	HRN-0118	130940	Dec. 12, 2024	Dec. 11, 2027
Test Software for Radiated Emission	Tonscend	JS32-RE	5.0.0	N/A	N/A

Test Equipment of Input Power					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Signal Conditioning Unit	TESEQ	CCN 1000-1	1544A00611	Oct. 08, 2024	Oct. 07, 2025
5K VA AC Power Source	TESEQ	NSG 1007	1616A00637	Sep. 28, 2024	Sep. 27, 2025

Radiation Hazard					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Electric Field	LTLUTRON	EMF-819/EP-05H	I.508502	Dec. 31, 2024	Dec. 30, 2025

Output Power Measurement					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Probe Thermometer	Control Company	4242	150709653	Jun. 6, 2024	Jun. 5, 2026

Other Instrument					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Temperature humidity probe	OMEGA	ITHX-SD-5	18470007	Oct.8, 2024	Oct.7, 2025
Barometer	Yiyi	Baro	N/A	Oct.10, 2024	Oct.9, 2025
Attenuator	Agilent	8495B	2814a12853	Sep.28, 2024	Sep.27, 2025

## 7. EMISSION TEST

### 7.1. CONDUCTED EMISSIONS

#### LIMITS

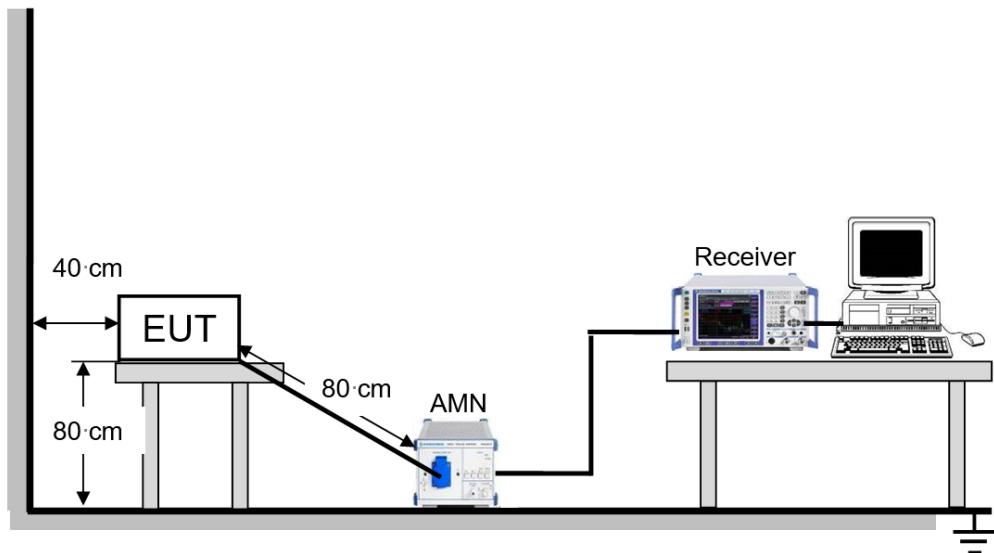
Frequency of emission (MHz)	Conducted limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

Note: \*Decreases with the logarithm of the frequency.

#### TEST PROCEDURE

- 1) The testing follows the guideline in FCC / OST MP-5.
- 2) The EUT was placed on a 0.8m insulating material from the horizontal ground plane with EUT being connected to the power mains through a Line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 3) Excess I/O cables shall be bundled in the center. If bundling is not possible, bundling shall not exceed 30 to 40 cm in length.
- 4) Excess power cords shall be bundled in the center or shortened to appropriate length.
- 5) LISN at least 80 cm from nearest part of EUT.
- 6) For ovens rated at 1000 watts or less power output, the beaker shall contain quantities of water as listed in the following subparagraphs. For ovens rated at more than 1000 watts output, each quantity shall be increased by 50% for each 500 watts or fraction thereof in excess of 1000 watts,  
A 700 milliliters of water in the beaker located in the center of the oven.
- 7) Conducted emissions from the EUT measured in the frequency range between 0.15MHz and 30MHz using CISPR Quasi-Peak and average detector mode, Resolution bandwidth set 9kHz.

### TEST SETUP



### TEST ENVIRONMENT

Temperature	22.9°C	Relative Humidity	53.6%
Atmosphere Pressure	101kPa		

### TEST DATE / ENGINEER

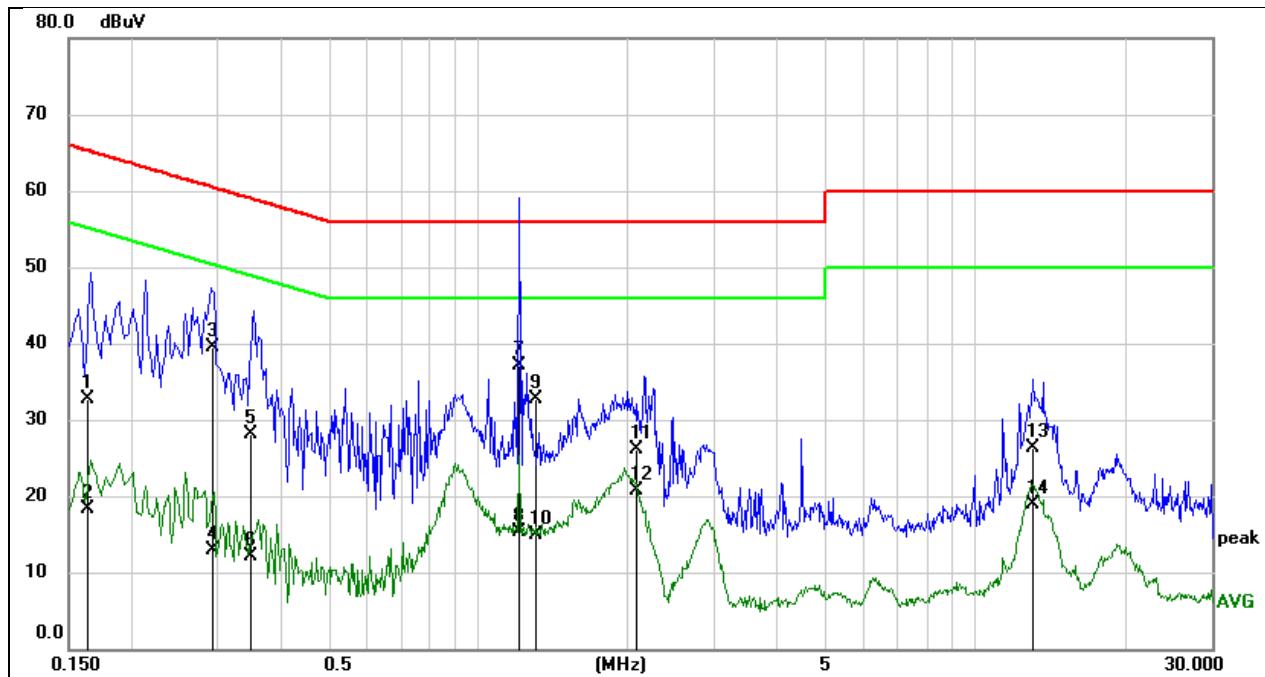
Test Date	July 17, 2025	Test By	Deacon Tan
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### TEST MODE

Pre-test Mode:	M02
Final Test Mode:	M02

**TEST RESULTS**

Test Mode:	M02	Line:	Neutral
Test Voltage:	AC 120V_60Hz		



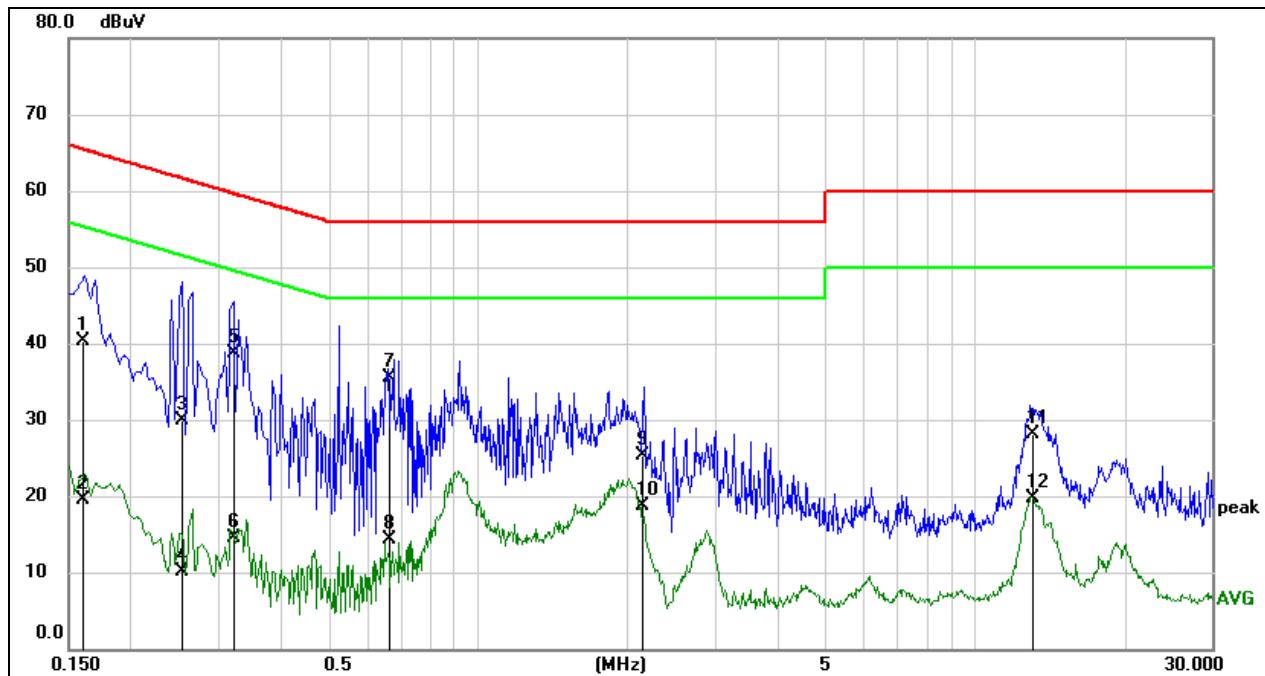
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1631	22.90	9.71	32.61	65.30	-32.69	QP
2	0.1631	8.53	9.71	18.24	55.30	-37.06	AVG
3	0.2936	29.92	9.64	39.56	60.42	-20.86	QP
4	0.2936	3.20	9.64	12.84	50.42	-37.58	AVG
5	0.3496	18.43	9.64	28.07	58.97	-30.90	QP
6	0.3496	2.45	9.64	12.09	48.97	-36.88	AVG
7	1.2100	27.52	9.65	37.17	56.00	-18.83	QP
8	1.2100	5.68	9.65	15.33	46.00	-30.67	AVG
9	1.3071	23.13	9.66	32.79	56.00	-23.21	QP
10	1.3071	5.17	9.66	14.83	46.00	-31.17	AVG
11	2.0751	16.35	9.74	26.09	56.00	-29.91	QP
12	2.0751	11.04	9.74	20.78	46.00	-25.22	AVG
13	13.0859	16.60	9.74	26.34	60.00	-33.66	QP
14	13.0859	9.20	9.74	18.94	50.00	-31.06	AVG

Remark:

Result = Reading +Correct (Insertion Loss + Cable Loss + Attenuator Factor)

Margin = Result - Limit

Test Mode:	M02	Line:	Line
Test Voltage:	AC 120V_60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1603	30.63	9.64	40.27	65.45	-25.18	QP
2	0.1603	9.84	9.64	19.48	55.45	-35.97	AVG
3	0.2544	20.19	9.64	29.83	61.61	-31.78	QP
4	0.2544	0.40	9.64	10.04	51.61	-41.57	AVG
5	0.3252	29.02	9.64	38.66	59.57	-20.91	QP
6	0.3252	4.84	9.64	14.48	49.57	-35.09	AVG
7	0.6646	25.92	9.63	35.55	56.00	-20.45	QP
8	0.6646	4.63	9.63	14.26	46.00	-31.74	AVG
9	2.1392	15.76	9.64	25.40	56.00	-30.60	QP
10	2.1392	8.99	9.64	18.63	46.00	-27.37	AVG
11	13.0159	18.28	9.74	28.02	60.00	-31.98	QP
12	13.0159	9.95	9.74	19.69	50.00	-30.31	AVG

**Remark:**

Result = Reading +Correct (Insertion Loss + Cable Loss + Attenuator Factor)

Margin = Result - Limit

## 7.2. RADIATED EMISSIONS (30 MHZ~1000 MHZ)

### LIMITS

- a) ISM equipment operating on a frequency specified in §18.301 is permitted unlimited radiated energy in the band specified for that frequency.
- b) 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	25	300
		500 or more	$25 \times \text{SQRT}(\text{power}/500)$	1300*

<sup>1</sup>Field strength may not exceed 10  $\mu$ V/m at 1600 meters. Consumer equipment operating below 1000 MHz is not permitted the increase in field strength otherwise permitted here for power over 500 watts.

Note: (1). dBuV/m = 20log(uV/m)

(2). dBuV/m @3m = dBuV/m @300m + 20log(300m/3m)

- c) Frequency range for field strength measurements:

Frequency band in which device operates (MHz)	Range of frequency measurements	
	Lowest frequency	Highest frequency
Below 1.705	Lowest frequency generated in the device, but not lower than 9 kHz	30 MHz.
1.705 to 30	Lowest frequency generated in the device, but not lower than 9 kHz	400 MHz.
30 to 500	Lowest frequency generated in the device or 25 MHz, whichever is lower	Tenth harmonic or 1,000 MHz, whichever is higher.
500 to 1,000	Lowest frequency generated in the device or 100 MHz, whichever is lower	Tenth harmonic.
Above 1,000	.....do	Tenth harmonic or highest detectable emission.

### TEST PROCEDURE

- 1) The testing follows the guidelines in FCC / OST MP-5.
- 2) The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 3) The EUT was placed on a turntable with 1m meter above ground.
- 4) The EUT was set 3 meters from the interference receiving antenna, test antenna mast is remotely controlled and can be varied in height form 1m to 4m.
- 5) 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.
- 6) 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.

7) For ovens rated at 1000 watts or less power output, the beaker shall contain quantities of water as listed in the following subparagraphs. For ovens rated at more than 1000 watts output, each quantity shall be increased by 50% for each 500 watts or fraction thereof in excess of 1000 watts,

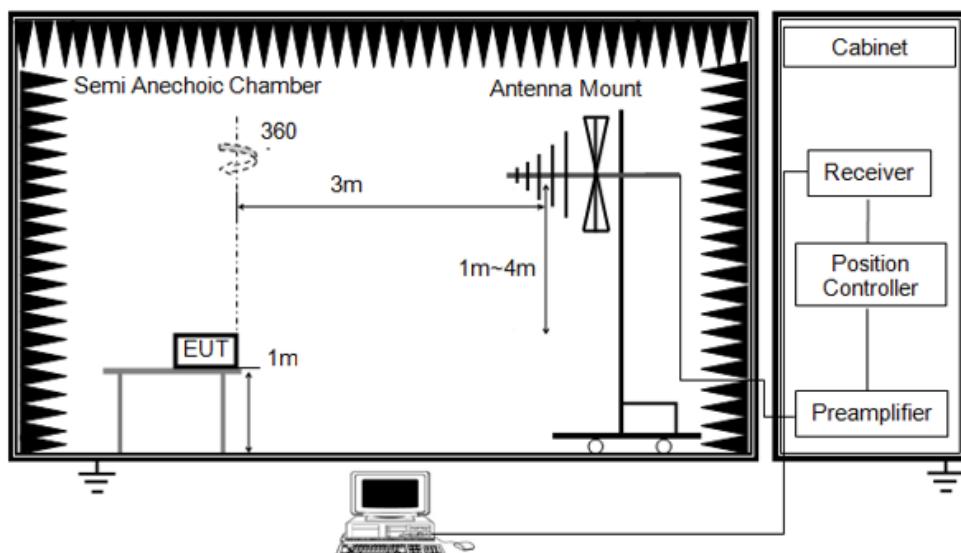
- Load for measurement of radiation on second and third harmonic; Two loads, one of 700ml and the other of 300ml, of water are used. Each load is tested both with the beaker located in the center of the oven and with it in the right front corner.
- All other emissions were measured while a 700ml water load was placed in the center of the oven.

8) The setting of the spectrum analyser

RBW	100kHz
VBW	300kHz
Detector	Peak / Average <sup>#</sup>

Note: # Peak for pre-scan, average for the final result.

### TEST SETUP



### TEST ENVIRONMENT

Temperature	22.3°C	Relative Humidity	59%
Atmosphere Pressure	101kPa		

### TEST DATE / ENGINEER

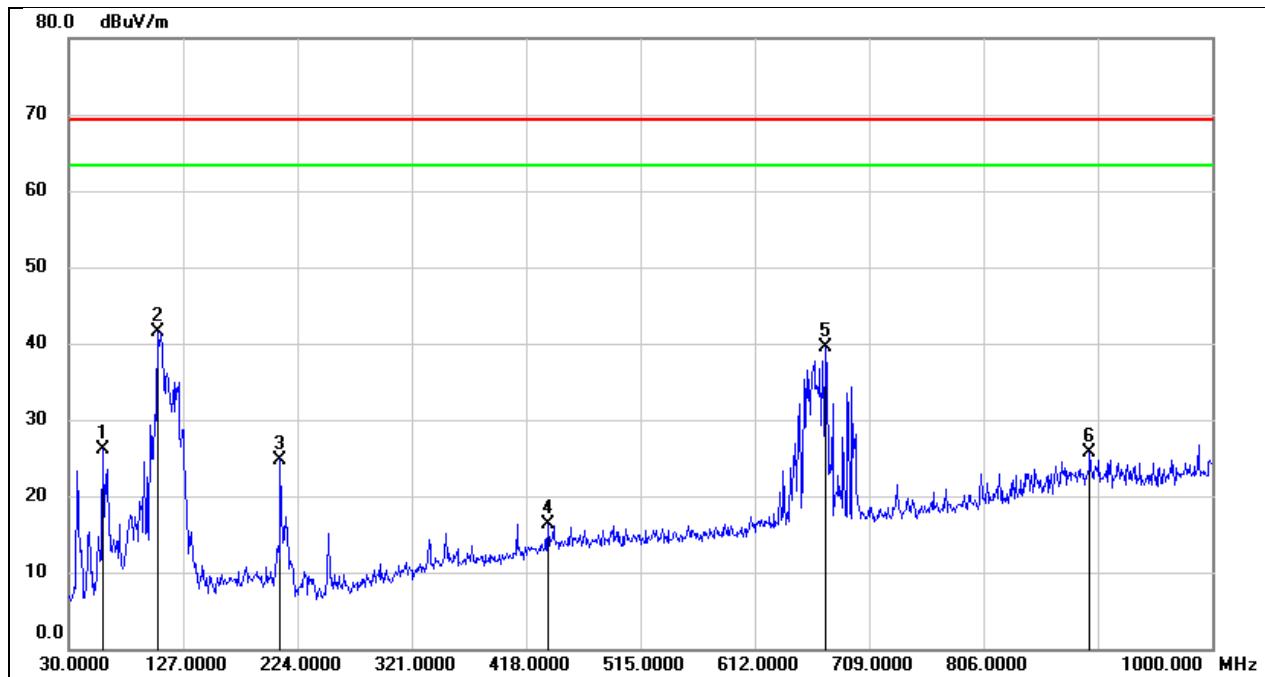
Test Date	June 26, 2025	Test By	Stipe Zheng
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### TEST MODE

Pre-test Mode:	M02
Final Test Mode:	M02

**TEST RESULTS**

Test Mode:	M02	Polarity:	Horizontal
Test Voltage:	AC 120V_60Hz		

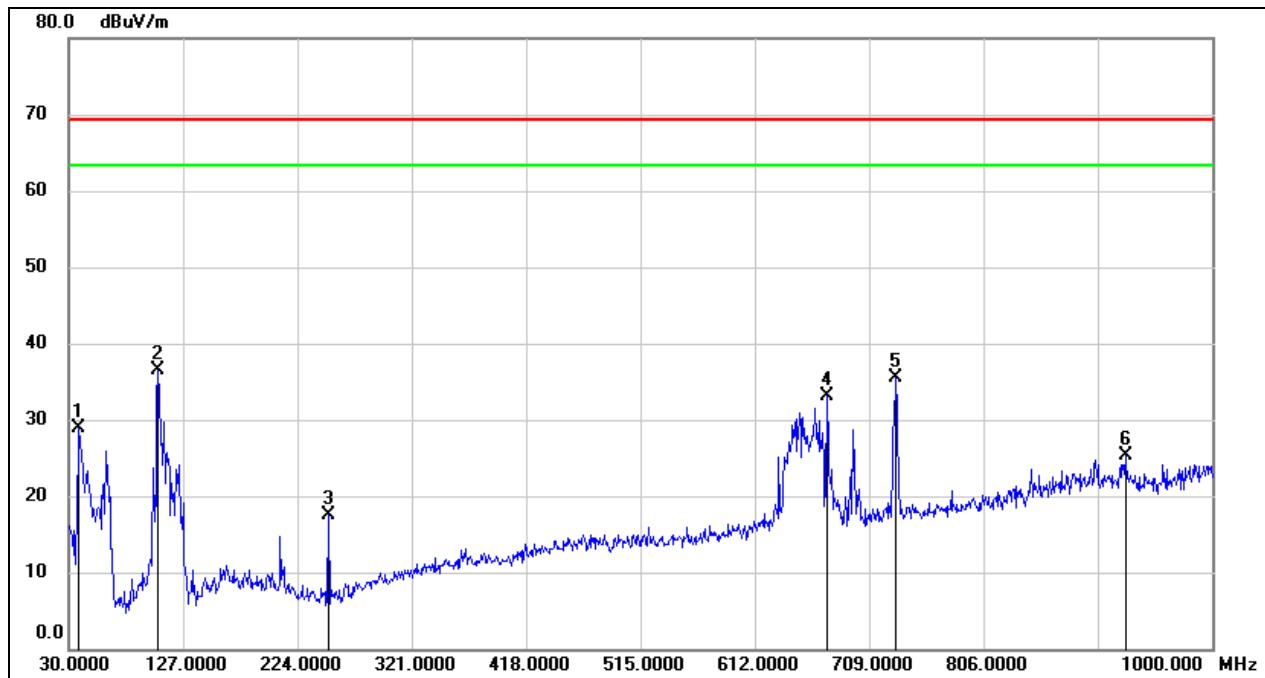


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	59.1000	41.46	-15.41	26.05	69.22	-43.17	peak
2	105.6600	57.90	-16.36	41.54	69.22	-27.68	peak
3	209.4500	38.39	-13.59	24.80	69.22	-44.42	peak
4	436.4300	26.22	-9.84	16.38	69.22	-52.84	peak
5	672.1400	46.17	-6.62	39.55	69.22	-29.67	peak
6	896.2100	28.10	-2.36	25.74	69.22	-43.48	peak

**Remark:**

1. Result = Reading +Correct (Amplifier Factor + Cable Loss + Antenna Factor)
2. Margin = Result - Limit
3. If the peak values are less than the average limit, the peak result is deemed to comply with average limit.

Test Mode:	M02	Polarity:	Vertical
Test Voltage:	AC 120V_60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	38.7300	44.02	-15.03	28.99	69.22	-40.23	peak
2	105.6600	52.92	-16.36	36.56	69.22	-32.66	peak
3	250.1900	32.97	-15.53	17.44	69.22	-51.78	peak
4	673.1100	39.76	-6.60	33.16	69.22	-36.06	peak
5	731.3100	40.89	-5.46	35.43	69.22	-33.79	peak
6	926.2800	27.91	-2.54	25.37	69.22	-43.85	peak

**Remark:**

1. Result = Reading +Correct (Amplifier Factor + Cable Loss + Antenna Factor)
2. Margin = Result - Limit
3. If the peak values are less than the average limit, the peak result is deemed to comply with average limit.

### 7.3. RADIATED EMISSIONS (1 GHZ~25 GHZ)

#### LIMITS

- a) ISM equipment operating on a frequency specified in §18.301 is permitted unlimited radiated energy in the band specified for that frequency.
- b) 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	25	300
		500 or more	$25 \times \text{SQRT}(\text{power}/500)$	1300*

<sup>1</sup>Field strength may not exceed 10  $\mu$ V/m at 1600 meters. Consumer equipment operating below 1000 MHz is not permitted the increase in field strength otherwise permitted here for power over 500 watts.

Note: (1). dBuV/m =  $20\log(\mu\text{V}/\text{m})$

(2). dBuV/m @3m = dBuV/m @300m +  $20\log(300\text{m}/3\text{m})$

- c) Frequency range for field strength measurements:

Frequency band in which device operates (MHz)	Range of frequency measurements	
	Lowest frequency	Highest frequency
Below 1.705	Lowest frequency generated in the device, but not lower than 9 kHz	30 MHz.
1.705 to 30	Lowest frequency generated in the device, but not lower than 9 kHz	400 MHz.
30 to 500	Lowest frequency generated in the device or 25 MHz, whichever is lower	Tenth harmonic or 1,000 MHz, whichever is higher.
500 to 1,000	Lowest frequency generated in the device or 100 MHz, whichever is lower	Tenth harmonic.
Above 1,000	.....do	Tenth harmonic or highest detectable emission.

#### TEST PROCEDURE

- 1) The testing follows the guidelines in FCC / OST MP-5.
- 2) The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 3) The EUT was placed on a turntable with 1m meter above ground.
- 4) The EUT was set 3 meters from the interference receiving antenna, test antenna mast is remotely controlled and can be varied in height form 1m to 4m.
- 5) 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.
- 6) 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.

7) For ovens rated at 1000 watts or less power output, the beaker shall contain quantities of water as listed in the following subparagraphs. For ovens rated at more than 1000 watts output, each quantity shall be increased by 50% for each 500 watts or fraction thereof in excess of 1000 watts,

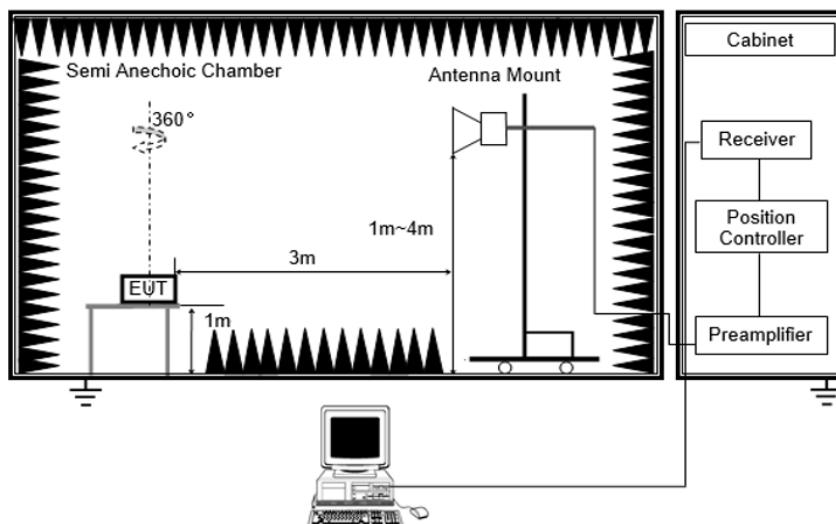
- Load for measurement of radiation on second and third harmonic; Two loads, one of 700ml and the other of 300ml, of water are used. Each load is tested both with the beaker located in the center of the oven and with it in the right front corner.
- All other emissions were measured while a 700ml water load was placed in the center of the oven.

8) The setting of the spectrum analyser

RBW	1MHz
VBW	3MHz
Detector	Peak / Average <sup>#</sup>

Note: # Peak for pre-scan, average for the final result.

### TEST SETUP



### TEST ENVIRONMENT

Temperature	25.4 °C	Relative Humidity	61.5%
Atmosphere Pressure	101kPa		

### TEST DATE / ENGINEER

Test Date	July 14, 2025	Test By	Rex Huang
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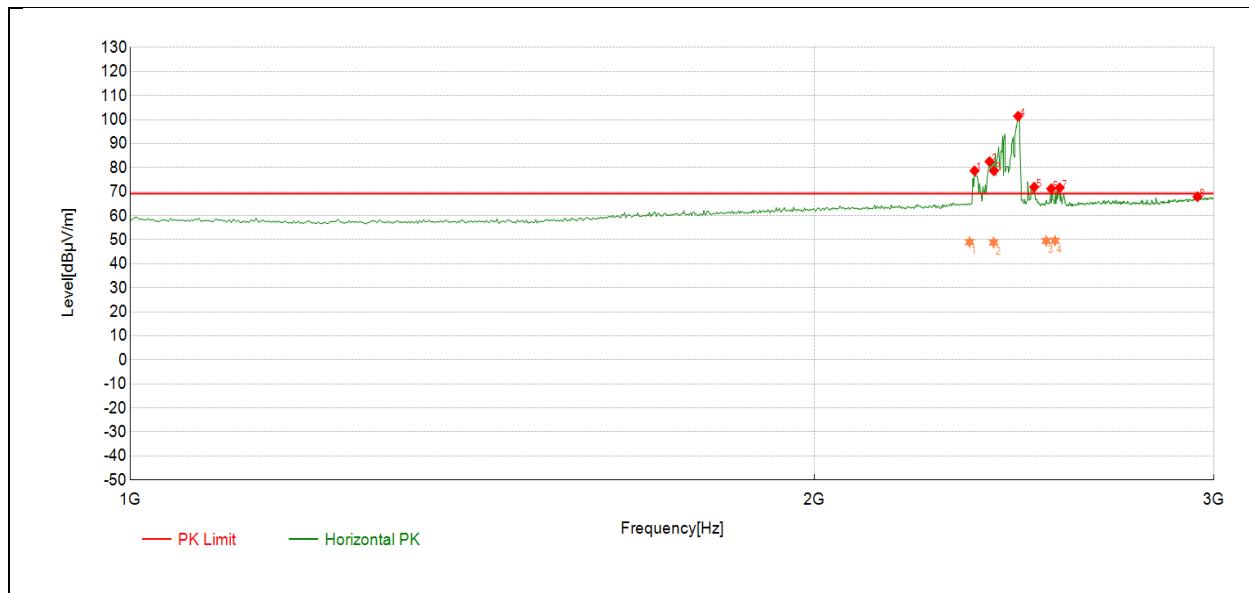
### TEST MODE

Pre-test Mode:	M02 ~ M05
Final Test Mode:	M02, M04

Note: All test modes had been tested, but only the worst data recorded in the report.

**TEST RESULTS**

Test Mode:	M02	Polarity:	Horizontal
Test Voltage:	AC 120V_60Hz		

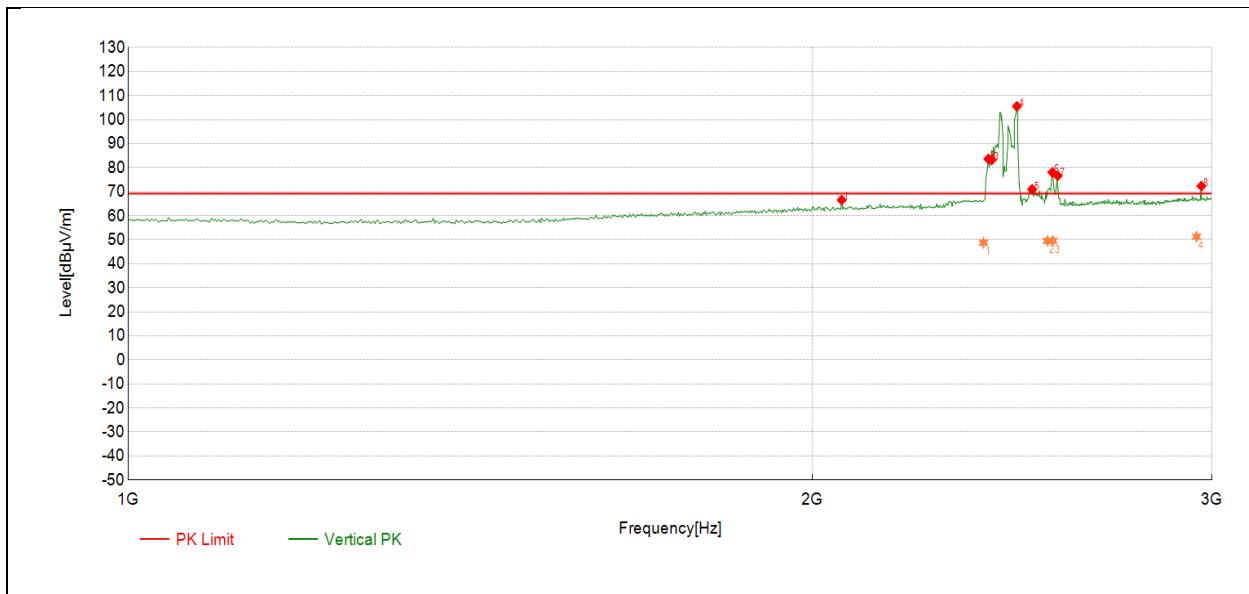


NO.	Freq. [MHz]	Reading [dB $\mu$ V]	Level [dB $\mu$ V/m]	Factor [dB/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Angle [°]	Detector
1	2341.76	13.56	49.05	35.49	69.22	20.17	328	AVG
2	2399.22	13.29	48.88	35.59	69.22	20.34	334	AVG
3	2400.00	43.08	/	/	/	/	/	exempted frequency band
4	2459.46	65.54	/	/	/	/	/	exempted frequency band
5	2500.00	35.78	/	/	/	/	/	exempted frequency band
6	2530.86	13.26	49.52	36.26	69.22	19.70	318	AVG
7	2553.34	13.31	49.60	36.29	69.22	19.62	217	AVG
8	2949.95	30.29	67.93	37.64	69.22	1.29	360	Peak

**Remark:**

- (1) Level = Reading + Factor
- (2) Margin = Limit - Level
- (3) If the peak values are less than the average limit, the peak result is deemed to comply with average limit.

Test Mode:	M02	Polarity:	Vertical
Test Voltage:	AC 120V_60Hz		

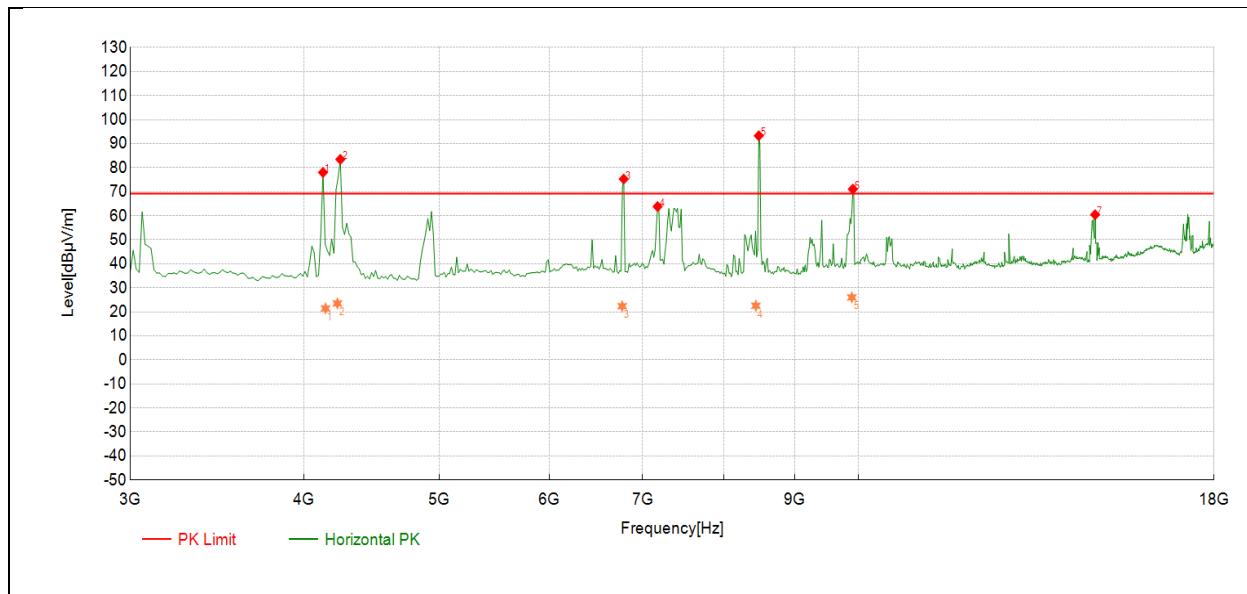


NO.	Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector
1	2061.06	31.59	66.56	34.97	69.22	2.66	0	Peak
2	2400.00	47.68	/	/	/	/	/	exempted frequency band
3	2461.46	69.58	/	/	/	/	/	exempted frequency band
4	2500.00	34.85	/	/	/	/	/	exempted frequency band
5	2379.61	13.17	48.77	35.60	69.22	20.45	36	AVG
6	2538.93	13.26	49.53	36.27	69.22	19.69	52	AVG
7	2552.90	13.30	49.59	36.29	69.22	19.63	42	AVG
8	2953.26	13.61	51.32	37.71	69.22	17.90	86	AVG

**Remark:**

- (1) Level = Reading + Factor
- (2) Margin = Limit - Level
- (3) If the peak values are less than the average limit, the peak result is deemed to comply with average limit.

Test Mode:	M02	Polarity:	Horizontal
Test Voltage:	AC 120V_60Hz		

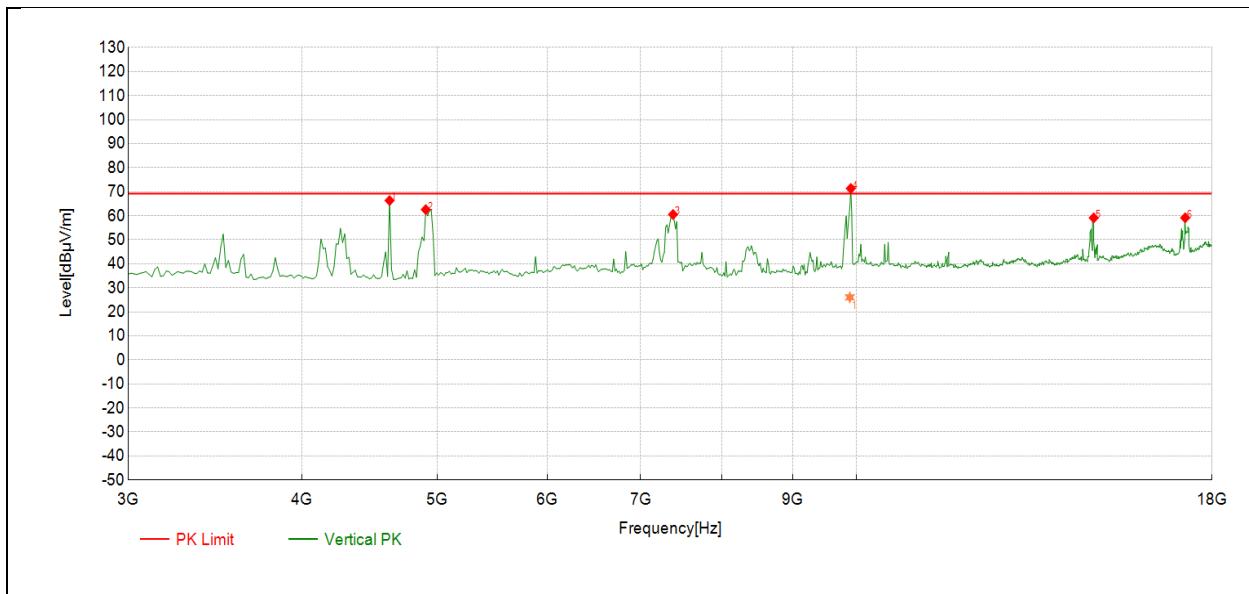


NO.	Freq. [MHz]	Reading [dB $\mu$ V]	Level [dB $\mu$ V/m]	Factor [dB/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Angle [°]	Detector
1	4143.73	23.06	21.44	-1.62	69.22	47.78	131	AVG
2	4225.46	25.22	23.52	-1.70	69.22	45.70	0	AVG
3	6766.43	19.48	22.36	2.88	69.22	46.86	126	AVG
4	7174.17	55.50	63.83	8.33	69.22	5.39	250	Peak
5	8439.56	17.60	22.56	4.96	69.22	46.66	0	AVG
6	9890.58	16.96	26.02	9.06	69.22	43.20	91	AVG
7	14786.79	48.23	60.45	12.22	69.22	8.77	203	Peak

**Remark:**

- (1) Level = Reading + Factor
- (2) Margin = Limit - Level
- (3) If the peak values are less than the average limit, the peak result is deemed to comply with average limit.

Test Mode:	M02	Polarity:	Vertical
Test Voltage:	AC 120V_60Hz		

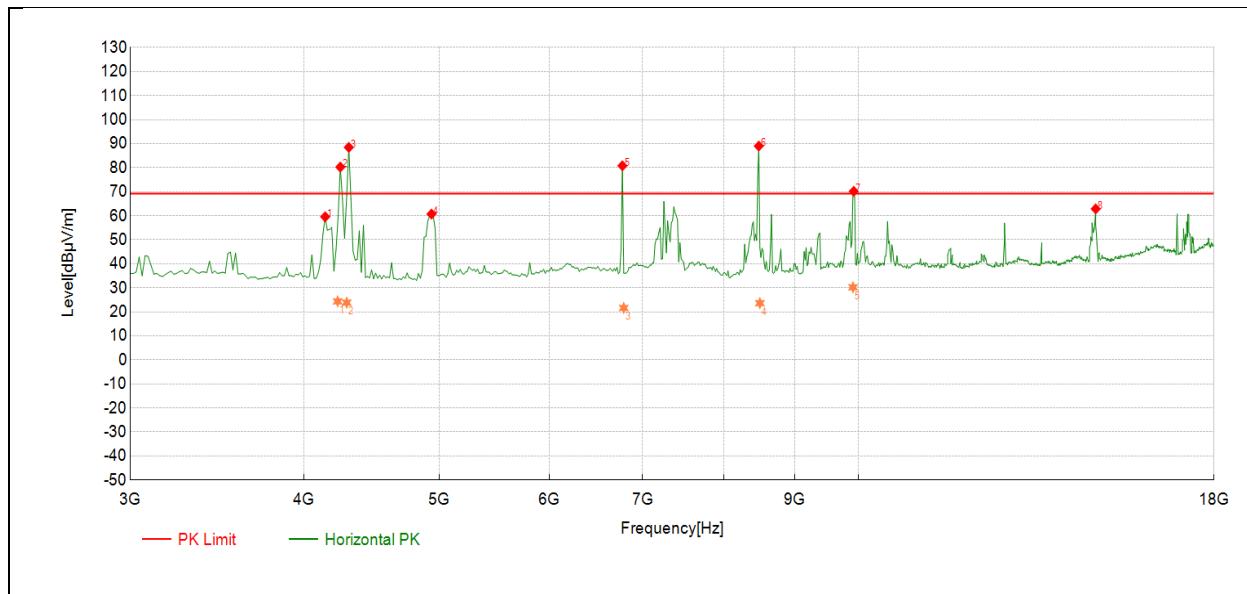


NO.	Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector
1	4621.62	67.39	66.34	-1.05	69.22	2.88	272	Peak
2	4906.91	63.40	62.57	-0.83	69.22	6.65	286	Peak
3	7384.38	52.89	60.52	7.63	69.22	8.70	354	Peak
4	9890.68	16.99	26.05	9.06	69.22	43.17	311	AVG
5	14801.80	46.94	59.13	12.19	69.22	10.09	346	Peak
6	17219.22	42.24	59.15	16.91	69.22	10.07	354	Peak

**Remark:**

- (1) Level = Reading + Factor
- (2) Margin = Limit - Level
- (3) If the peak values are less than the average limit, the peak result is deemed to comply with average limit.

Test Mode:	M04	Polarity:	Horizontal
Test Voltage:	AC 120V_60Hz		

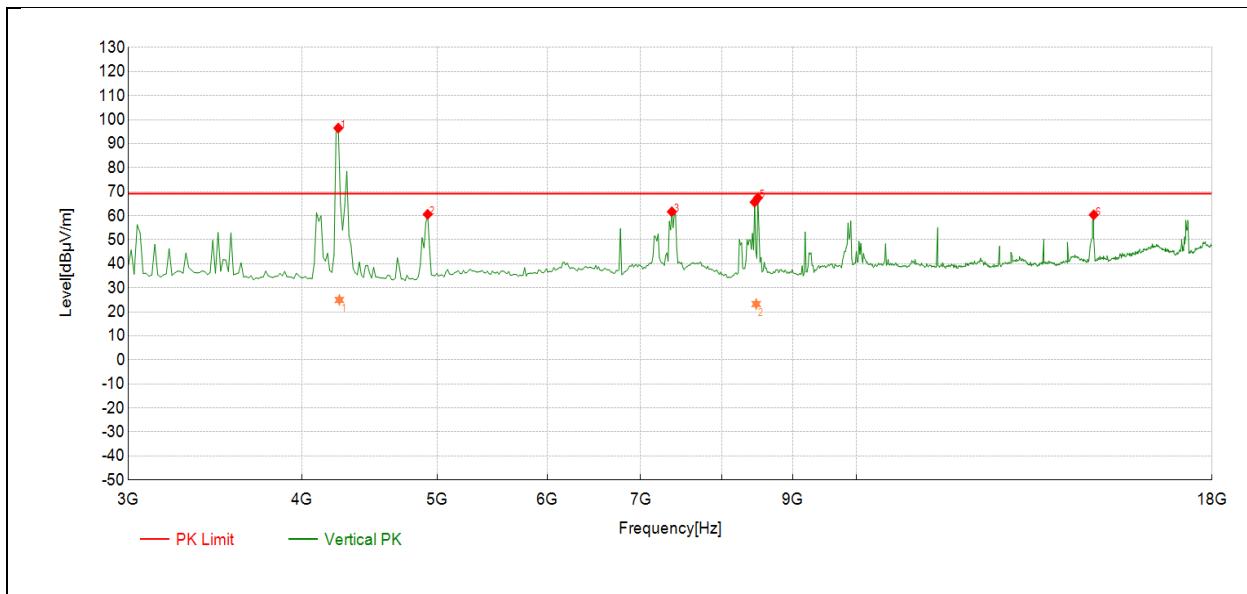


NO.	Freq. [MHz]	Reading [dB $\mu$ V]	Level [dB $\mu$ V/m]	Factor [dB/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Angle [°]	Detector
1	4141.14	61.24	59.57	-1.67	69.22	9.65	165	Peak
2	4227.58	26.08	24.38	-1.70	69.22	44.84	332	AVG
3	4291.16	25.38	23.84	-1.54	69.22	45.38	332	AVG
4	4936.94	61.27	60.72	-0.55	69.22	8.50	360	Peak
5	6783.44	18.65	21.64	2.99	69.22	47.58	332	AVG
6	8495.65	18.66	23.62	4.96	69.22	45.60	169	AVG
7	9910.03	21.11	30.23	9.12	69.22	38.99	260	AVG
8	14801.80	50.68	62.87	12.19	69.22	6.35	251	Peak

**Remark:**

- (1) Level = Reading + Factor
- (2) Margin = Limit - Level
- (3) If the peak values are less than the average limit, the peak result is deemed to comply with average limit.

Test Mode:	M04	Polarity:	Vertical
Test Voltage:	AC 120V_60Hz		

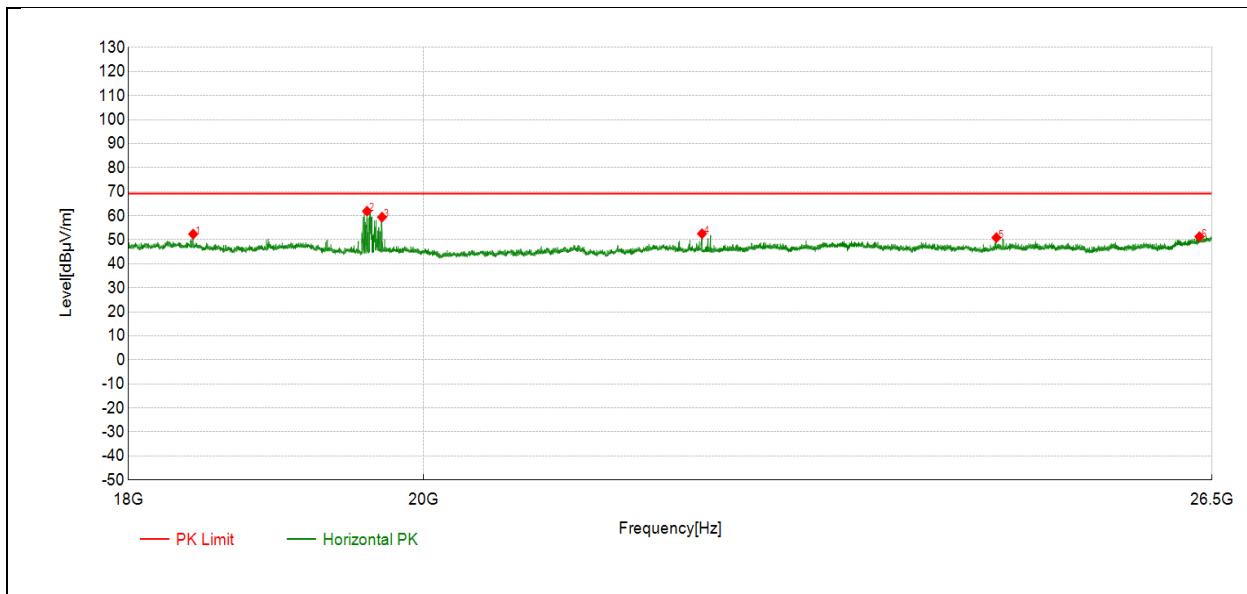


NO.	Freq. [MHz]	Reading [dB $\mu$ V]	Level [dB $\mu$ V/m]	Factor [dB/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Angle [°]	Detector
1	4253.33	-1.70	26.68	24.98	69.22	44.24	2	AVG
2	4921.92	61.29	60.59	-0.70	69.22	8.63	318	Peak
3	7369.37	54.36	61.69	7.33	69.22	7.53	0	Peak
4	8450.45	60.55	65.68	5.13	69.22	3.54	2	Peak
5	8472.16	18.38	23.26	4.88	69.22	45.96	156	AVG
6	8495.50	62.55	67.43	4.88	69.22	1.79	156	Peak
7	14801.80	48.19	60.38	12.19	69.22	8.84	142	Peak

**Remark:**

- (1) Level = Reading + Factor
- (2) Margin = Limit - Level
- (3) If the peak values are less than the average limit, the peak result is deemed to comply with average limit.

Test Mode:	M02	Polarity:	Horizontal
Test Voltage:	AC 120V_60Hz		

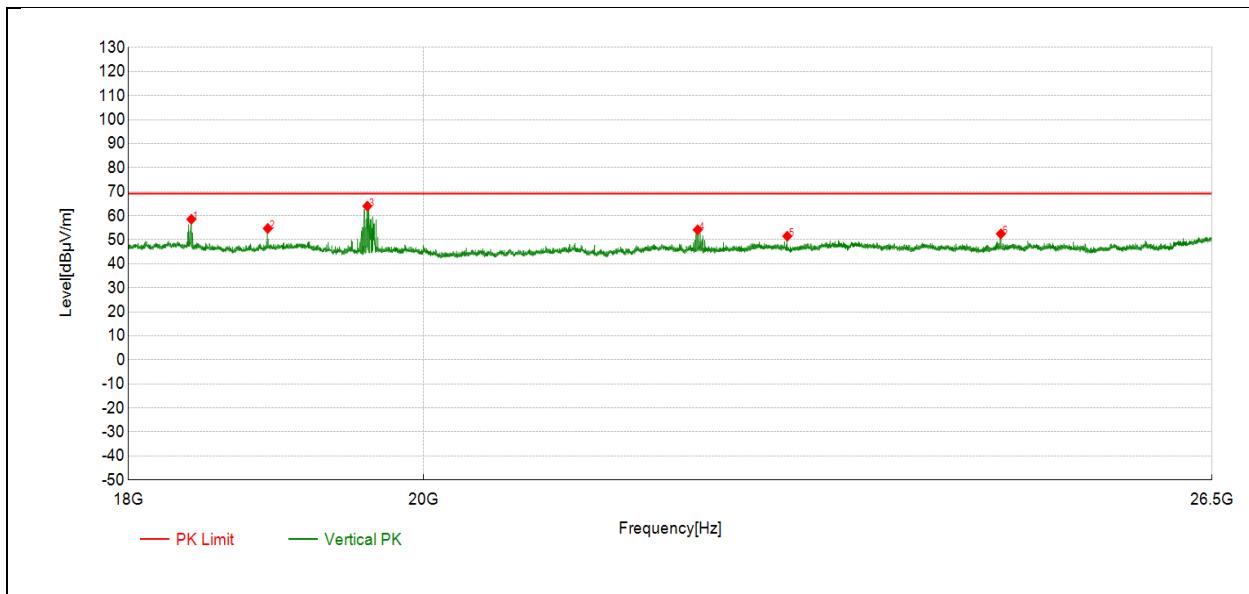


NO.	Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector
1	18422.45	57.44	52.37	-5.07	69.22	16.85	146	Peak
2	19601.40	68.46	61.92	-6.54	69.22	7.30	358	Peak
3	19706.80	65.47	59.43	-6.04	69.22	9.79	350	Peak
4	22090.20	59.22	52.53	-6.69	69.22	16.69	26	Peak
5	24537.35	55.51	50.89	-4.62	69.22	18.33	3	Peak
6	26381.00	53.64	51.28	-2.36	69.22	17.94	360	Peak

**Remark:**

- (1) Level = Reading + Factor
- (2) Margin = Limit - Level
- (3) If the peak values are less than the average limit, the peak result is deemed to comply with average limit.

Test Mode:	M02	Polarity:	Vertical
Test Voltage:	AC 120V_60Hz		



NO.	Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector
1	18410.55	63.62	58.54	-5.08	69.22	10.68	1	Peak
2	18919.70	59.83	54.71	-5.12	69.22	14.51	35	Peak
3	19603.95	70.55	64.02	-6.53	69.22	5.20	28	Peak
4	22056.20	60.82	54.17	-6.65	69.22	15.05	317	Peak
5	22772.75	57.17	51.50	-5.67	69.22	17.72	51	Peak
6	24576.45	57.00	52.48	-4.52	69.22	16.74	28	Peak

**Remark:**

- (1) Level = Reading + Factor
- (2) Margin = Limit - Level
- (3) If the peak values are less than the average limit, the peak result is deemed to comply with average limit.

## 7.4. OPERATING FREQUENCY

### LIMITS

2400MHz~2500MHz

### TEST PROCEDURE

The EUT was setup inside the Fully Anechoic chamber, and a double ridge horn antenna and spectrum analyzer were used to measure the fundamental frequency of the EUT.

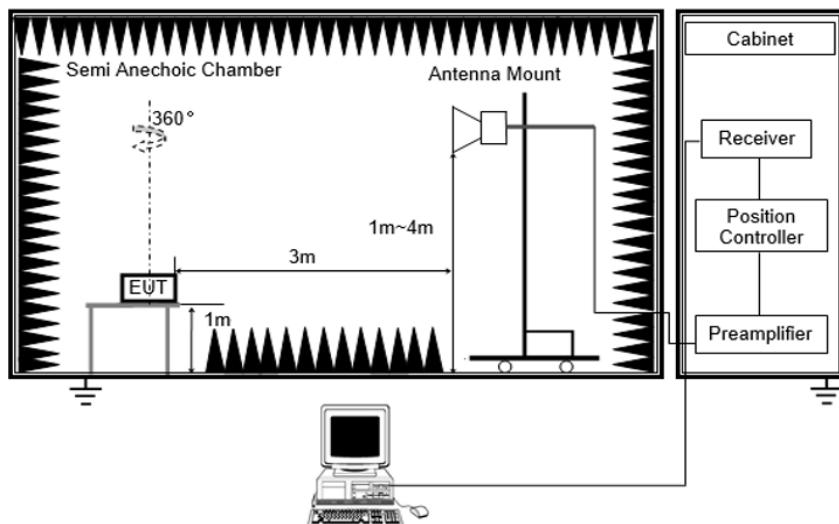
#### 1) FREQUENCY FOR NORMAL VOLTAGE

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. This test is made with nominal rated ac supply voltage.

#### 2) 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% of the nominal rating.

### TEST SETUP



**TEST ENVIRONMENT**

Temperature	25.4°C	Relative Humidity	61.5%
Atmosphere Pressure	101kPa		

**TEST DATE / ENGINEER**

Test Date	July 14, 2025	Test By	Rex Huang
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**TEST MODE**

Pre-test Mode:	M01
Final Test Mode:	M01

**TEST RESULTS**
**(a) Frequency of Normal Voltage (After EUT Warm-up time 10 minutes):**

Time (Minutes)	Polar	Operating Frequency (MHz)	Limit (MHz)
0 (Water 100%)	Horizontal	2465.47	Lower: 2400MHz Upper: 2500MHz
	Vertical	2465.47	
16 (Water 70%)	Horizontal	2459.46	Lower: 2400MHz Upper: 2500MHz
	Vertical	2461.46	
28 (Water 50%)	Horizontal	2464.47	Lower: 2400MHz Upper: 2500MHz
	Vertical	2463.46	
49 (Water 20%)	Horizontal	2457.46	Lower: 2400MHz Upper: 2500MHz
	Vertical	2459.46	
Remak: Only the worst volume of water was recorded in the report.			

**(b) Frequency of Line Voltage (After EUT Warm-up time 10 minutes):**

Input Voltage (Vac)	Polar	Operating Frequency (MHz)	Limit (MHz)
96 (Voltage 80%)	Horizontal	2461.46	Lower: 2400MHz Upper: 2500MHz
	Vertical	2457.46	
108 (Voltage 90%)	Horizontal	2454.46	Lower: 2400MHz Upper: 2500MHz
	Vertical	2457.45	
120 (Voltage 100%)	Horizontal	2465.47	Lower: 2400MHz Upper: 2500MHz
	Vertical	2465.47	
132 (Voltage 110%)	Horizontal	2469.47	Lower: 2400MHz Upper: 2500MHz
	Vertical	2455.46	
150 (Voltage 125%)	Horizontal	(See remark 1)	Lower: 2400MHz Upper: 2500MHz
	Vertical	(See remark 1)	
Remak: 1. According to the declaration of the manufacturer, the EUT support maximum operating voltage of nominal supply voltage multiplier 1.1. 2. Only the worst rated voltage was recorded in the report.			

## 7.5. INPUT POWER

### TEST PROCEDURE

- 1) The input power and current was measured using a power source.
- 2) For ovens rated at 1000 watts or less power output, the beaker shall contain quantities of water as listed in the following subparagraphs. For ovens rated at more than 1000 watts output, each quantity shall be increased by 50% for each 500 watts or fraction thereof in excess of 1000 watts,  
A 700ml water load in a beaker was located in the center of the microwave oven and the microwave oven was set to full power.

### TEST ENVIRONMENT

Temperature	23.6°C	Relative Humidity	58.7%
Atmosphere Pressure	101kPa		

### TEST DATE / ENGINEER

Test Date	July 1, 2025	Test By	Karl Wu
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### TEST MODE

Pre-test Mode:	M01
Final Test Mode:	M01

### TEST RESULTS

#### **Input Power**

Input Voltage (Vac)	Input Current (A)	Power Factor	Measured Input Power (W)	Rated Input Power (W)
120V	13.63	0.93	1514	1450

## 7.6. OUTPUT POWER

### TEST PROCEDURE

- 1) The calorific method was used to determine full output power.
- 2) For ovens rated at 1000 watts or less power output, the beaker shall contain quantities of water as listed in the following subparagraphs. for ovens rated at more than 1000 watts output, each quantity shall be increased by 50% for each 500 watts or fraction thereof in excess of 1000 watts,  
Load for power output measurement: 1000 milliliters of water in the beaker located in the center of the oven
- 3) The Microwave Oven was set to maximum power and operation 120 seconds, Then measure and record the temperature of the water.
- 4) According to the calculated formula:

$$P=4.187 \times m_{\text{water}} \times (T_2 - T_1) / \text{Time}$$

P: the microwave power output(W)

$m_{\text{water}}$ : the mass of the water(g)

$T_1$ : the initial temperature of the water( $^{\circ}\text{C}$ )

$T_2$ : the final temperature of the water( $^{\circ}\text{C}$ )

Time: the heating time (second)

### TEST ENVIRONMENT

Temperature	22.4 $^{\circ}\text{C}$	Relative Humidity	53.8%
Atmosphere Pressure	101kPa		

### TEST DATE / ENGINEER

Test Date	June 25, 2025	Test By	Karl Wu
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### TEST MODE

Pre-test Mode:	M01
Final Test Mode:	M01

**TEST RESULTS**
**Output Power**

m <sub>water</sub> (g)	T <sub>1</sub> (°C)	T <sub>2</sub> (°C)	Time (second)	P (W)
1000	21.57	40.74	120	668.87

**Field strength limit**

P (W)	Field strength limit 25 x SQRT (power/500)		
	(uV/m) @300m	dBuV/m@300m	dBuV/m@3m
668.87	28.92	29.22	69.22

$$\text{dBuV/m} = 20\log(\text{uV/m})$$

$$\text{dBuV/m @3m} = \text{dBuV/m @300m} + 20\log(300m/3m)$$

## 7.7. RADIATION HAZARD

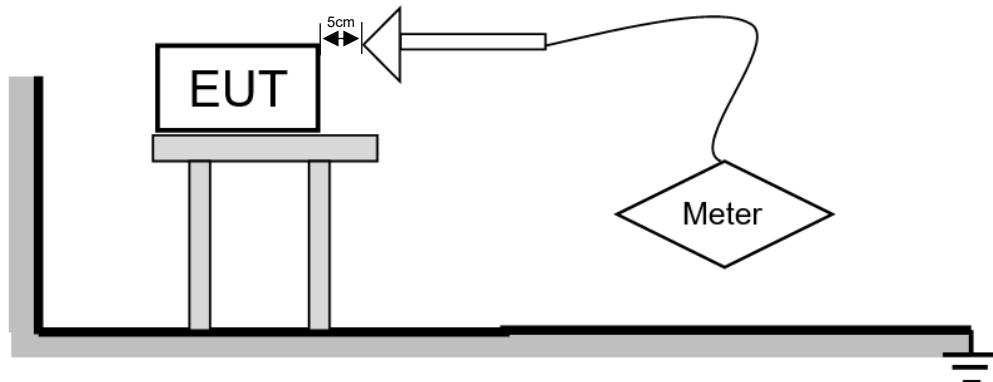
### LIMITS

Maximum Emission (mW/cm <sup>2</sup> )
1.00

### TEST PROCEDURE

- 1) The EUT was set-up according to the FCC MP-5 and Part 18 for Radiation Hazard Measurement.
- 2) The measurement was using a microwave leakage meter to measure the Radiation leakage in the as-received condition with the oven door closed.
- 3) For ovens rated at 1000 watts or less power output, the beaker shall contain quantities of water as listed in the following subparagraphs. for ovens rated at more than 1000 watts output, each quantity shall be increased by 50% for each 500 watts or fraction thereof in excess of 1000 watts,  
A 700ml water load in a beaker was located in the center of the oven and the Household Microwave Combi Oven was set to maximum power.
- 4) While the oven operating, the microwave survey meter probe was moved slowly around the door seams the check for maximum leakage.

### TEST SETUP



### TEST ENVIRONMENT

Temperature	23.1°C	Relative Humidity	52.8%
Atmosphere Pressure	101kPa		

### TEST DATE / ENGINEER

Test Date	July 17, 2025	Test By	Karl Wu
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### TEST MODE

Pre-test Mode:	M02
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Final Test Mode:

M02

**TEST RESULTS****Radiation Hazard**

Maximum expose value (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Result
0.1109	1.00	Pass

**END OF REPORT**