

TEST REPORT

Applicant Name: Whirlpool Microwave Products Development Limited.
Address: 17th Fl, Elite Centre, 22 Hung To Rd, Kwun Tong, Hong Kong
Report Number: 2501Z00975E-EM-00A2
FCC ID: PR4RED519X

Test Standard (s)

FCC PART 18

Sample Description

Product Type: Microwave Oven
Model No.: WMH78519
Multiple Model(s) No.: KMHC319
Trade Mark: Whirlpool, KitchenAid
Date Received: 2025/11/21
Issue Date: 2025/12/17

Test Result:	Pass [▲]
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▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Joson Xiao

Joson Xiao
EMC Engineer

Approved By:

Moon Liu

Moon Liu
EMC Supervisor

Note: The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.
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Bay Area Compliance Laboratories Corp. (Shenzhen)

5F(B-West), 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, Futian Free Trade Zone, Shenzhen, China
Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2501Z00975E-EM-00A2	Original Report	2025/12/17

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Microwave Oven
Tested Model	WMH78519
Multiple Model(s)	KMHC319
Voltage Range	AC 120V/60Hz
Highest operating frequency [#]	2450MHz±50MHz
Microwave Output power [#]	1200W
Microwave Input power [#]	1800W
Sample serial number	3DAL-1 (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	N/A
Note: The Multiple models are electrically identical with the test model except for the key screen prints on the control panel, the coverage area of the stainless steel sheet on the appearance, with or without handle. Please refer to the declaration letter [#] for more detail, which was provided by manufacturer.	

Objective

This report is in accordance with Part 2-Subpart J, and Part 18-Subparts A, B and C of the Federal Communication Commissions rules and regulations.

The objective of the manufacturer is to determine compliance with FCC Part 18 limits.

Measurement Uncertainty

Item	Frequency Range		Expanded Measurement uncertainty
Conducted Emissions	AC Mains	150kHz ~30MHz	3.66dB(k=2, 95% level of confidence)
Radiated Emissions	0.009MHz~30MHz	/	3.60dB(k=2, 95% level of confidence)
	30MHz~200MHz	Horizontal	5.32dB(k=2, 95% level of confidence)
	30MHz~200MHz	Vertical	5.43dB(k=2, 95% level of confidence)
	200MHz~1000MHz	Horizontal	5.77dB(k=2, 95% level of confidence)
	200MHz~1000MHz	Vertical	5.73dB(k=2, 95% level of confidence)
	1GHz~6GHz	/	5.34dB(k=2, 95% level of confidence)
	6GHz~18GHz	/	5.40dB(k=2, 95% level of confidence)
	18GHz~40GHz	/	5.64dB(k=2, 95% level of confidence)
Nerve Simulation	H-Field		0.74dB(k=2, 95% level of confidence)
	E-Field		1.14dB(k=2, 95% level of confidence)

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West), 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 715558, the FCC Designation No. : CN5045.

Each test item follows test standards and with no deviation.

OPERATING CONDITION/TEST CONFIGURATION

Description of Test Configuration

The EUT was operated at maximum (continuous) RF output power. The loads consisted of water in a glass beaker in the amounts specified in the test procedure.

Test Mode: Microwave

EUT Exercise Software

No exercise software was used.

Special Accessories

No special accessory was used.

Equipment Modifications

No modifications were made to the EUT tested.

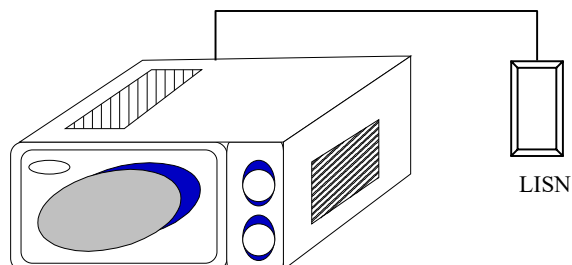
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
WEIY	Glass Beaker	GG-17 1000ml	/

External Cable List and Details

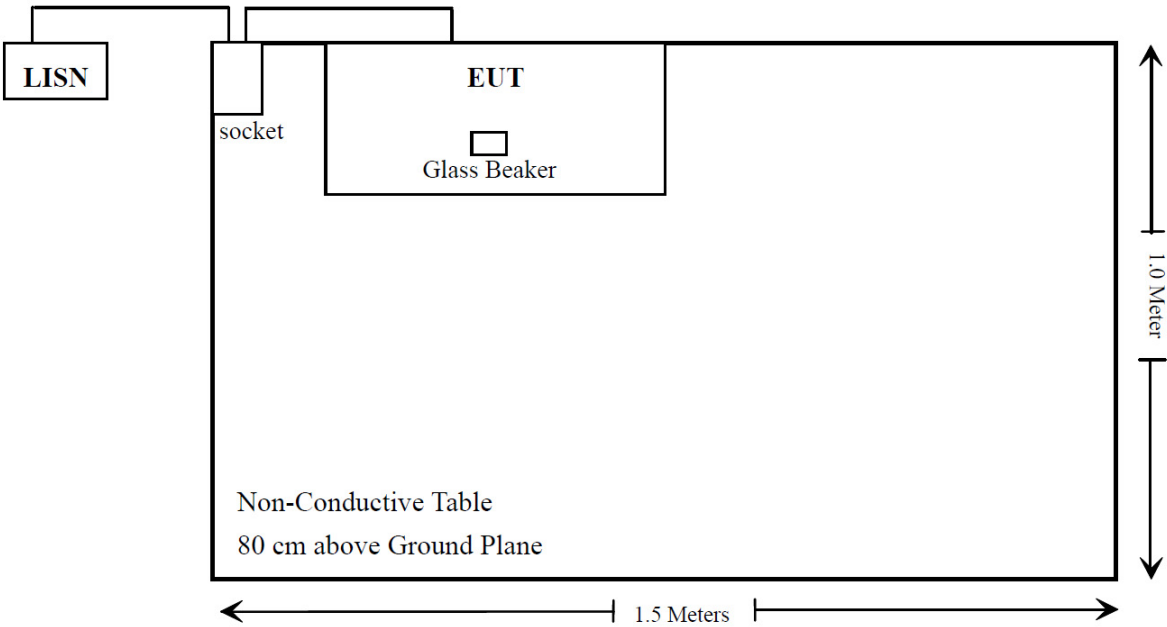
Cable Description	Length (m)	From/Port	To
Un-Shielding Un-Detachable AC Cable	1.0	Socket	LISN/Mains
Un-Shielding Un-Detachable AC Cable	1.0	Socket	EUT

Configuration of Test Setup

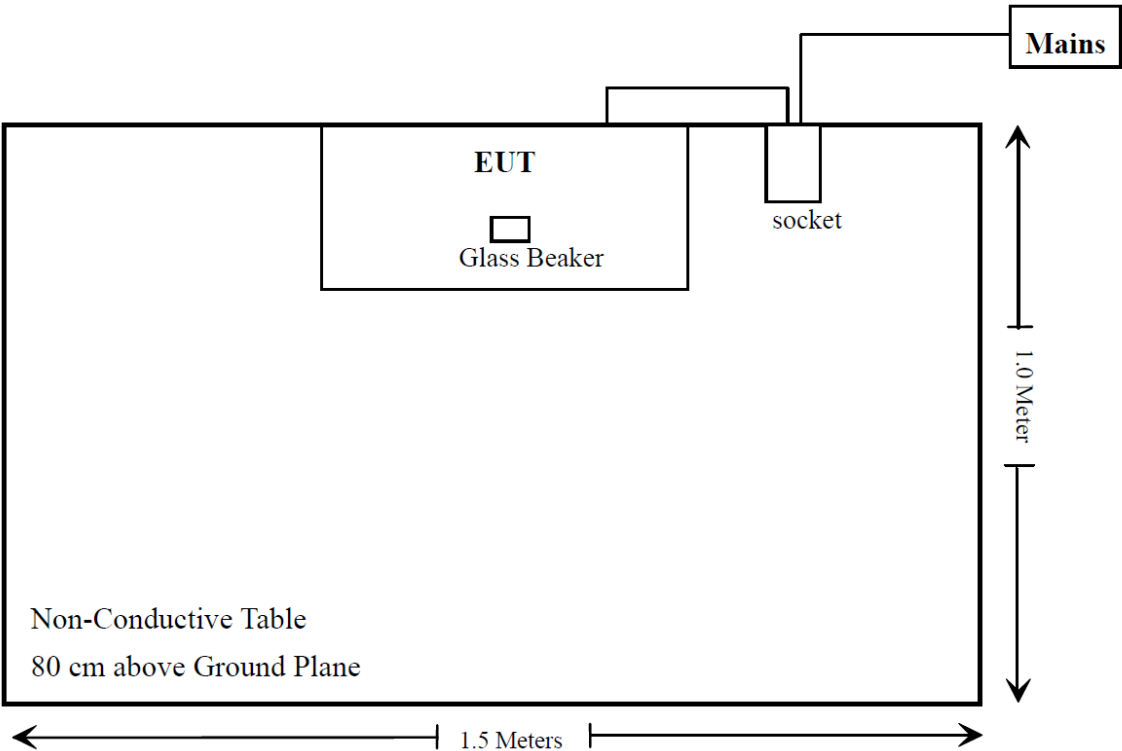


Block Diagram of Test Setup

For Conducted Emission



For Radiated Emission



SUMMARY OF TEST RESULT

FCC Rules	Description of Test	Results
§18.307	AC Line Conducted Emissions	Compliant
FCC/OST MP-5 FCC §18.301	Radiation Hazard Measurement	Compliant
§18.305	Field Strength	Compliant
FCC §18.313, §2.1091; §1.1310	Maximum Permissible Exposure	Compliant

Note:

1. This is a CIIPC application based on FCC ID: PR4RED519X, Grant on 06/21/2022. the differences between the original device and the current device are as follows:

- (1) Adding the model number “KMHC319” with Brand KitchenAid.
- (2) Changing the Magnetron, transformer and HV capacitor.
- (3) Adding the magnetron and transformer supplier.

Based on the above differences, it will affect all the test items, all the test items were performed, and we will updated the EUT photos also.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
AC Line Conducted Emissions					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2025/09/01	2026/08/31
Rohde & Schwarz	LISN	ENV216	101613	2025/09/18	2026/09/17
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2025/09/18	2026/09/17
Unknown	CE Cable	Unknown	UF A210B-1-0720-504504	2025/09/18	2026/09/17
Audix	EMI Test software	E3	191218 V9(c)	NCR	NCR
Radiation Hazard Measurement					
LKM	Thermometer	DTM3000	n/a	2024/12/10	2025/12/9
YOKOGAWA	Power meter	253503	25BW3075	2025/11/5	2026/11/04

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Field Strength					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2025/09/01	2026/08/31
Sonoma instrument	Pre-amplifier	310 N	186238	2025/09/08	2026/09/07
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Chamber A Cable	Cable A1	Cable A1	2025/09/08	2026/09/07
Unknown	Chamber A Cable	Cable A2	Cable A2	2025/09/08	2026/09/07
BACL	Active Loop Antenna	1313-1A	4031911	2024/05/14	2027/05/13
Unknown	Chamber A Cable	Cable A3	Cable A3	2025/09/08	2026/09/07
Unknown	Chamber A Cable	Cable A4	Cable A4	2025/09/08	2026/09/07
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
TDK	Chamber	Chamber A	2#	2023/07/12	2026/07/11
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2025/09/01	2026/08/31
A.H.System	Preamplifier	PAM-0118P	489	2025/09/08	2026/09/07
Schwarzbeck	Horn Antenna	BBHA9120D(1201)	1143	2023/07/26	2026/07/25
Unknown	Chamber B Cable	Cable B1	Cable B1	2025/09/08	2026/09/07
Unknown	Chamber B Cable	Cable B2	Cable B2	2025/09/08	2026/09/07
Unknown	Chamber B Cable	Cable B3	Cable B3	2025/09/08	2026/09/07
JD	Filter Switch Unit	DT7220FSU	DS79906	2025/08/12	2026/08/11
JD	Multiplex Switch Test Control Set	DT7220SCU	DS79903	2025/08/12	2026/08/11
Audix	EMI Test software	E3	191218 V9(c)	NCR	NCR
TDK	Chamber	Chamber B	1#	2023/07/14	2026/07/13
A.H.System	Pre-amplifier	PAM-1840VH	190	2025/09/08	2026/09/07
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
Operating Frequency Measurement					
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2025/09/01	2026/08/31
Schwarzbeck	Horn Antenna	BBHA9120D(1201)	1143	2023/07/26	2026/07/25
Unknown	Chamber B Cable	Cable B1	Cable B1	2025/09/08	2026/09/07
Unknown	Chamber B Cable	Cable B2	Cable B2	2025/09/08	2026/09/07

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Maximum Permissible Exposure					
ETS	microwave survey meter	HI-1501	3640274	2025/10/10	2028/10/09

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §18.313, §1.1310, §2.1091- MAXIMUM PERMISSIBLE EXPOSURE

Applicable Standard

According to §1.1310, radio frequency devices shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

Table 1 to § 1.1310(e)(1)—Limits for Maximum Permissible Exposure (MPE)

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.

Calculation formula:

Prediction of power density at the distance of the applicable MPE limit

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Measurement

Environmental Conditions

Temperature:	24.5 °C
Relative Humidity:	40 %
ATM Pressure:	101 kPa

The testing was performed by Alex Yan on 2025-11-21.

Radiation leakage was measured in the as-received condition with the oven door closed using a microwave leakage meter.

A 275 mL water load was placed in the center of the oven and the oven was operated at maximum output power.

☒ There was no microwave leakage exceeding a power level of 0.3mW/cm² observed at any point 5 cm or more from the external surface of the oven.

A maximum of 1.0 mW/cm² is allowed in accordance with the applicable Federal Standards. Hence, microwave leakage in the as-received condition with the oven door closed was below the maximum allowed.

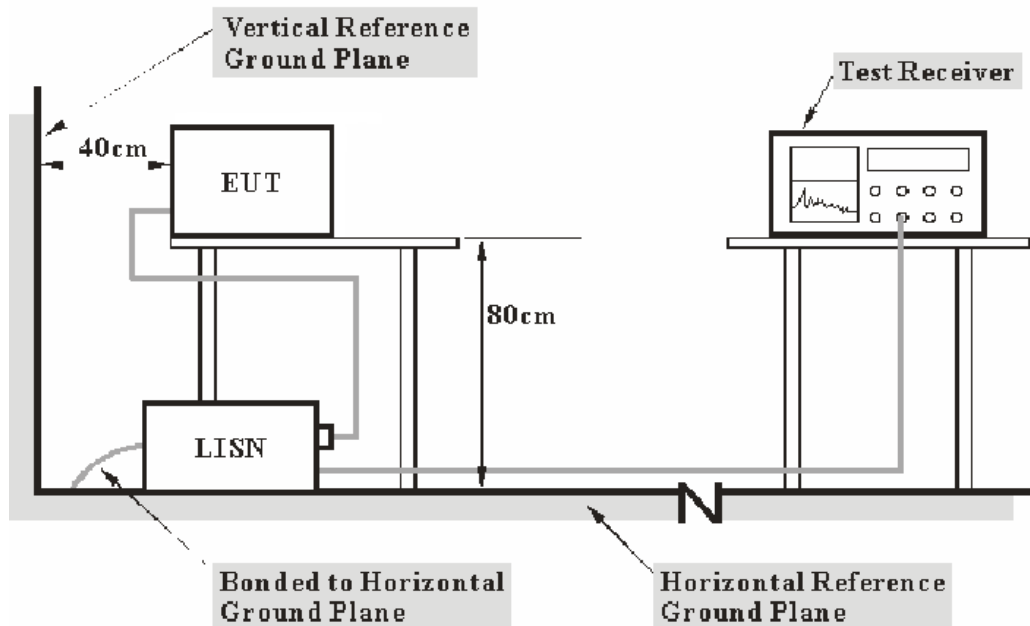
Result: Complied.

CONDUCTED EMISSIONS

Applicable Standard

FCC §18.307

EUT Setup



- Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with MP-5: 1986 measurement procedure. Specification used was with the FCC Part 18.

The socket was connected to a 120 V_{AC}/ 60Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW
150 kHz – 30 MHz	9 kHz

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

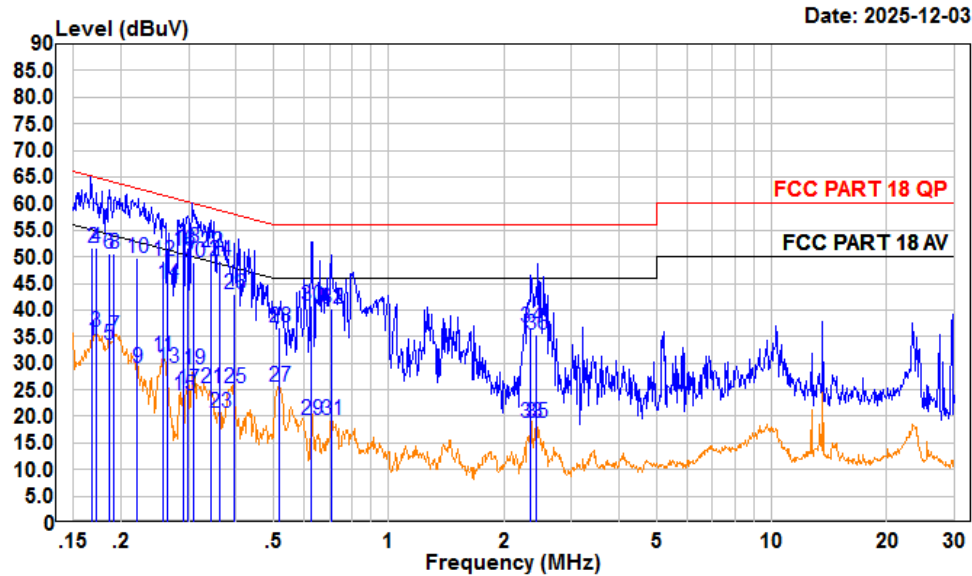
Test Data**Environmental Conditions**

Temperature:	26 °C
Relative Humidity:	39 %
ATM Pressure:	101.3 kPa

The testing was performed by Alex Yan on 2025-12-03.

Test Mode: Microwave

AC 120V/60 Hz, Line



Condition: Line

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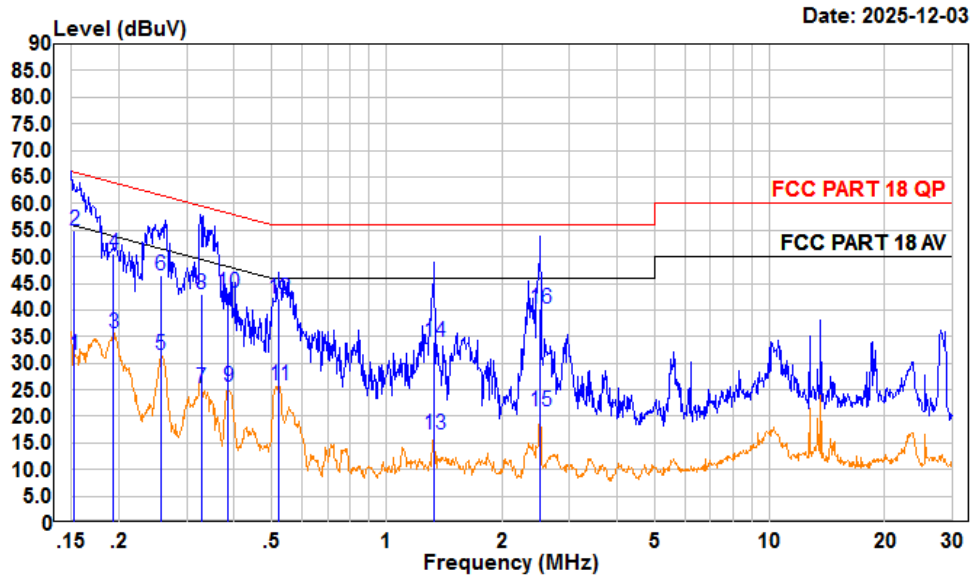
test Mode: Microwave

tester : Alex Yan Setting: RBW: 9kHz

	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.168	14.57	34.39	9.80	10.02	55.05	-20.66	Average
2	0.168	31.76	51.58	9.80	10.02	65.05	-13.47	QP
3	0.172	16.01	35.83	9.80	10.02	54.87	-19.04	Average
4	0.172	31.88	51.70	9.80	10.02	64.87	-13.17	QP
5	0.186	13.73	33.56	9.80	10.03	54.21	-20.65	Average
6	0.186	30.79	50.62	9.80	10.03	64.21	-13.59	QP
7	0.192	15.37	35.20	9.80	10.03	53.95	-18.75	Average
8	0.192	30.75	50.58	9.80	10.03	63.95	-13.37	QP
9	0.220	9.26	29.09	9.80	10.03	52.80	-23.71	Average
10	0.220	29.84	49.67	9.80	10.03	62.80	-13.13	QP
11	0.257	11.42	31.25	9.80	10.03	51.53	-20.28	Average
12	0.257	29.30	49.13	9.80	10.03	61.53	-12.40	QP
13	0.263	9.29	29.12	9.80	10.03	51.33	-22.21	Average
14	0.263	25.14	44.97	9.80	10.03	61.33	-16.36	QP
15	0.290	4.01	23.84	9.80	10.03	50.54	-26.70	Average
16	0.290	31.34	51.17	9.80	10.03	60.54	-9.37	QP

	Freq	Read Level	Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
17	0.298	5.30	25.13	9.80	10.03	50.29	-25.16	Average
18	0.298	31.93	51.76	9.80	10.03	60.29	-8.53	QP
19	0.310	8.95	28.78	9.80	10.03	49.96	-21.18	Average
20	0.310	29.13	48.96	9.80	10.03	59.96	-11.00	QP
21	0.343	5.59	25.42	9.80	10.03	49.13	-23.71	Average
22	0.343	30.90	50.73	9.80	10.03	59.13	-8.40	QP
23	0.361	0.82	20.65	9.80	10.03	48.71	-28.06	Average
24	0.361	29.51	49.34	9.80	10.03	58.71	-9.37	QP
25	0.394	5.60	25.43	9.80	10.03	47.97	-22.54	Average
26	0.394	23.24	43.07	9.80	10.03	57.97	-14.90	QP
27	0.516	5.65	25.49	9.80	10.04	46.00	-20.51	Average
28	0.516	16.85	36.69	9.80	10.04	56.00	-19.31	QP
29	0.627	-0.59	19.25	9.80	10.04	46.00	-26.75	Average
30	0.627	20.87	40.71	9.80	10.04	56.00	-15.29	QP
31	0.707	-0.46	19.38	9.80	10.04	46.00	-26.62	Average
32	0.707	20.54	40.38	9.80	10.04	56.00	-15.62	QP
33	2.350	-1.25	18.90	9.95	10.20	46.00	-27.10	Average
34	2.350	16.60	36.75	9.95	10.20	56.00	-19.25	QP
35	2.430	-1.45	18.71	9.96	10.20	46.00	-27.29	Average
36	2.430	15.23	35.39	9.96	10.20	56.00	-20.61	QP

AC 120V/60 Hz, Neutral



Condition: neutral

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test Mode: Microwave

tester : Alex Yan Setting:RBW:9kHz

	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.153	11.73	31.55	9.80	10.02	55.85	-24.30	Average
2	0.153	35.10	54.92	9.80	10.02	65.85	-10.93	QP
3	0.193	15.87	35.70	9.80	10.03	53.89	-18.19	Average
4	0.193	30.82	50.65	9.80	10.03	63.89	-13.24	QP
5	0.257	11.85	31.68	9.80	10.03	51.54	-19.86	Average
6	0.257	26.72	46.55	9.80	10.03	61.54	-14.99	QP
7	0.328	5.51	25.34	9.80	10.03	49.51	-24.17	Average
8	0.328	23.05	42.88	9.80	10.03	59.51	-16.63	QP
9	0.385	5.63	25.46	9.80	10.03	48.17	-22.71	Average
10	0.385	23.54	43.37	9.80	10.03	58.17	-14.80	QP
11	0.524	6.09	25.93	9.80	10.04	46.00	-20.07	Average
12	0.524	22.19	42.03	9.80	10.04	56.00	-13.97	QP
13	1.330	-3.57	16.54	9.90	10.21	46.00	-29.46	Average
14	1.330	13.82	33.93	9.90	10.21	56.00	-22.07	QP
15	2.520	0.82	20.99	9.97	10.20	46.00	-25.01	Average
16	2.520	20.10	40.27	9.97	10.20	56.00	-15.73	QP

RADIATION HAZARD MEASUREMENT

Applicable Standard

FCC §18.301 & FCC/OST MP-5

Environmental Conditions

Temperature:	22.3~24.5 °C
Relative Humidity:	40~50 %
ATM Pressure:	101~101.7 kPa

The testing was performed by Wing K Ji on 2025-11-29.

Input Power

Input power and current was measured using a power analyzer. A 1000 mL water load was placed in the center of the oven and the oven was operated at maximum output power. A 1000mL water load was chosen for its compatibility with the procedure commonly used by manufacturers to determine their input ratings.

Input Voltage (V _{AC})	Input Current (Amps)	Measured Input Power (Watts)	Rated Input Power (Watts)
119.1	14.5	1727	1800

☒ Based on the measured input power, the EUT was found to be operating within the intended specifications.

Load for Microwave ovens

For all measurements, the energy developed by the oven was absorbed by a dummy load consisting of a quantity of tap water in a beaker. If the oven was provided with a shelf or other utensil support, this support was in its initial normal position. For ovens rated at 1000 watts or less power output, the beaker contained quantities of water as listed in the following subparagraphs. For ovens rated at more than 1000 watts output, each quantity was increased by 50% for each 500watts or fraction thereof in excess of 1000 watts. Additional beakers were 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.

RF Output Power Measurement

A cylindrical container of borosilicate glass is used for the test. It has a maximum thickness of 3 mm, an external diameter of approximately 190 mm and a height of approximately 90 mm. The mass of the container is determined.

At the start of the test, the oven and the empty container are at ambient temperature. Water having an initial temperature is used for the test. The water temperature is measured immediately before it is poured into the container.

A quantity of $1000 \text{ g} \pm 5 \text{ g}$ of water is added to the container and its actual mass obtained. The container is then immediately placed in the centre of the oven shelf, which is in its lowest normal position. The oven is operated and the time for the water temperature to attain is measured. The oven is then switched off and the final water temperature is measured within 60 s.

m_w (g)	m_c (g)	T_0 (°C)	T_1 (°C)	T_2 (°C)	t (s)
1000	377.0	24.5	9.8	20.0	45

$$p = \frac{4.187 * m_w (T_2 - T_1) + 0.55 * m_c (T_2 - T_0)}{t}$$

- 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.

☐ The measurement output power was found to be less than 500 watts. Therefore, in accordance with Section 18.305 of Subpart-C, the measured out-of-band emissions were compared to the limit of 25µV/meter at a 300-meter measurement distance.

☒ The measured output power was found to exceed 500 watts. Therefore, in accordance with Section 18.305 of Subpart-C, the measured out-of-band emissions were compared with the limit calculated as following:

$$\text{LFS} = 25 * \text{SQRT} (\text{Power Output}/500)$$

$$\text{LFS} = 25 * \text{SQRT} (928.32/500)$$

$$\text{LFS} = 34.06$$

Where: LFS is the maximum allowable field strength for out-of-band emissions in $\mu\text{V}/\text{meter}$ at a 300-meter measurement distance. Power Output is the measured output power in watts.

LFS $\mu\text{V}/\text{m}@300\text{m}$	$\text{dB}\mu\text{V}/\text{m}@300\text{m}$	$\text{dB}\mu\text{V}/\text{m}@3\text{m}$
34.06	30.65	70.65

Note: Limit ($\text{dB}\mu\text{V}/\text{m}@3\text{m}$) = Limit ($\text{dB}\mu\text{V}/\text{m}@300\text{m}$) + 40(dB)

Operating Frequency Measurement

Variation in Operating Frequency with Time

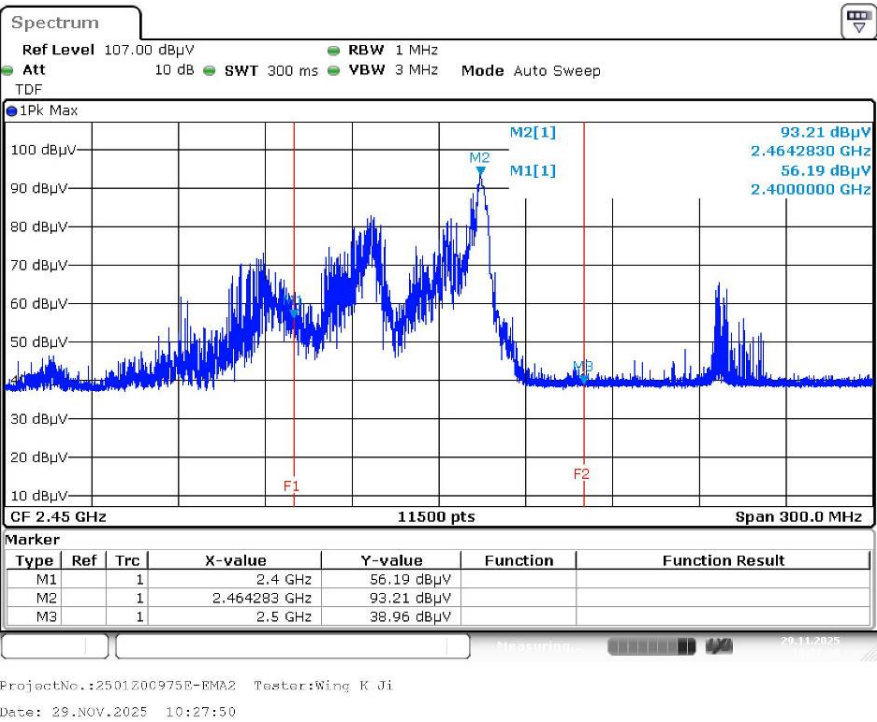
The operating frequency was measured using a spectrum analyzer. Starting with the EUT at room temperature, a 1000mL water load was placed in the center of the oven and the oven was operated at maximum output power. The fundamental operating frequency was monitored until the water load was reduced to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

The results of this test are as follows:

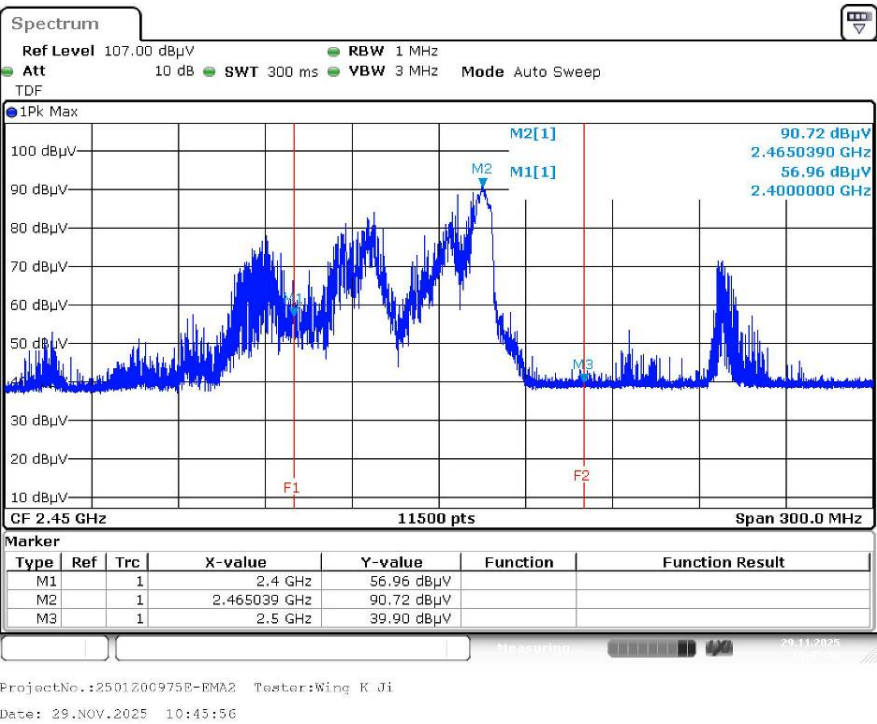
Frequency at Start time (MHz)	Frequency at End time (MHz)
2464.28	2465.04

Refer to data pages for details of the variation in operating frequency with time measurement.

Start time:



End time:



Variation in Operating Frequency with 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.

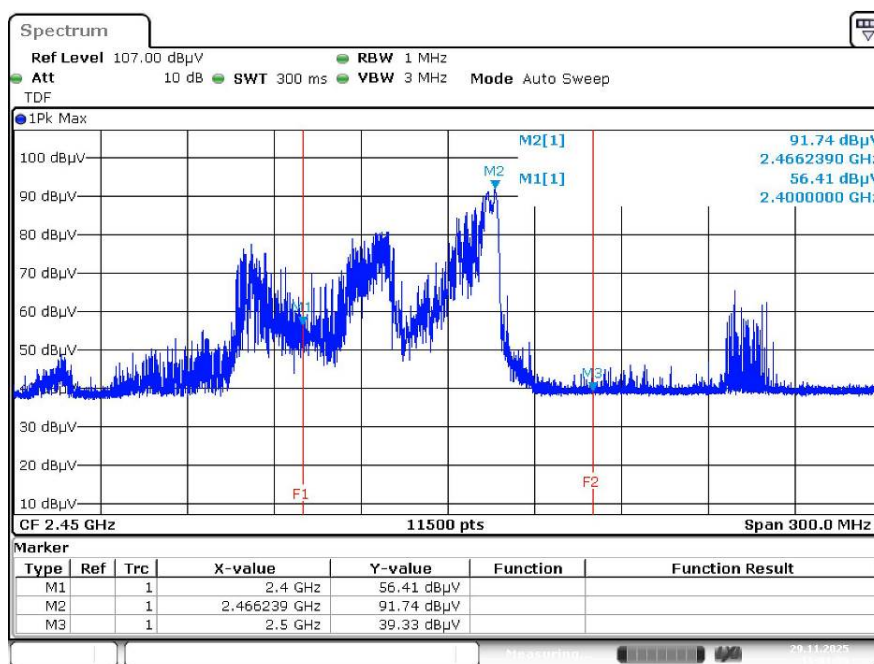
The results of this test are as follows:

Line voltage varied from 96 V_{AC} to 150 V_{AC}.

(Low voltage) Frequency (MHz)	(High voltage) Frequency (MHz)
2466.24	2466.21

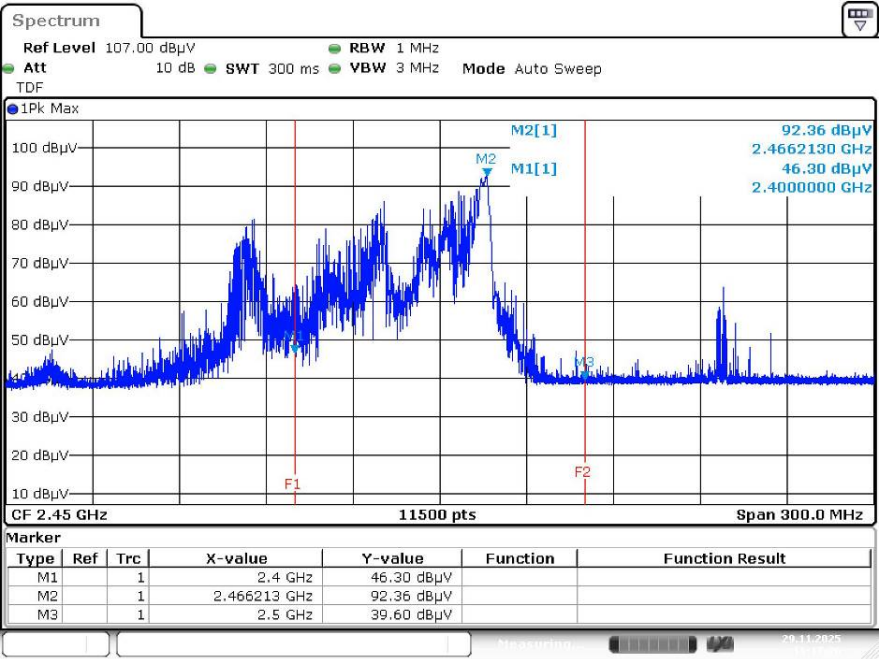
Please refer to following pages for details of the variation in operating frequency with line voltage measurement.

Low Voltage:



ProjectNo.:2501Z00975E-EMA2 Tester:Wing K Ji
Date: 29.NOV.2025 11:01:03

High Voltage:



ProjectNo.:2501Z00975E-EMA2 Tester:Wing K Ji

Date: 29.NOV.2025 11:17:26

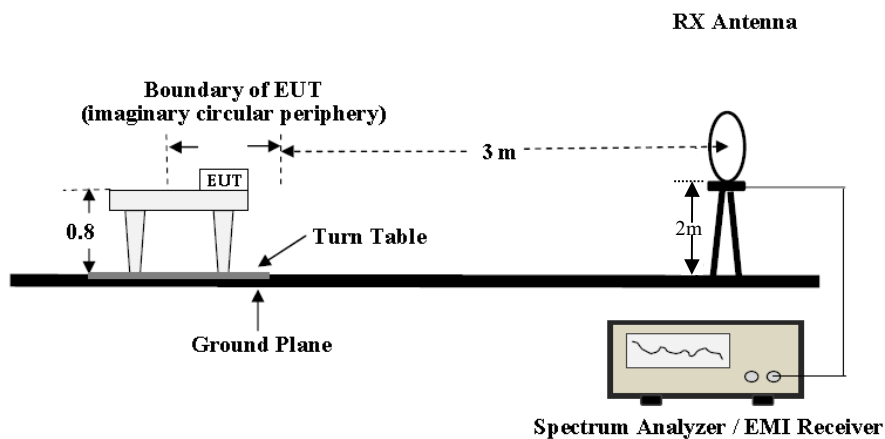
RADIATED EMISSIONS

Applicable Standard

FCC §18.305 and FCC §18.309

EUT Setup

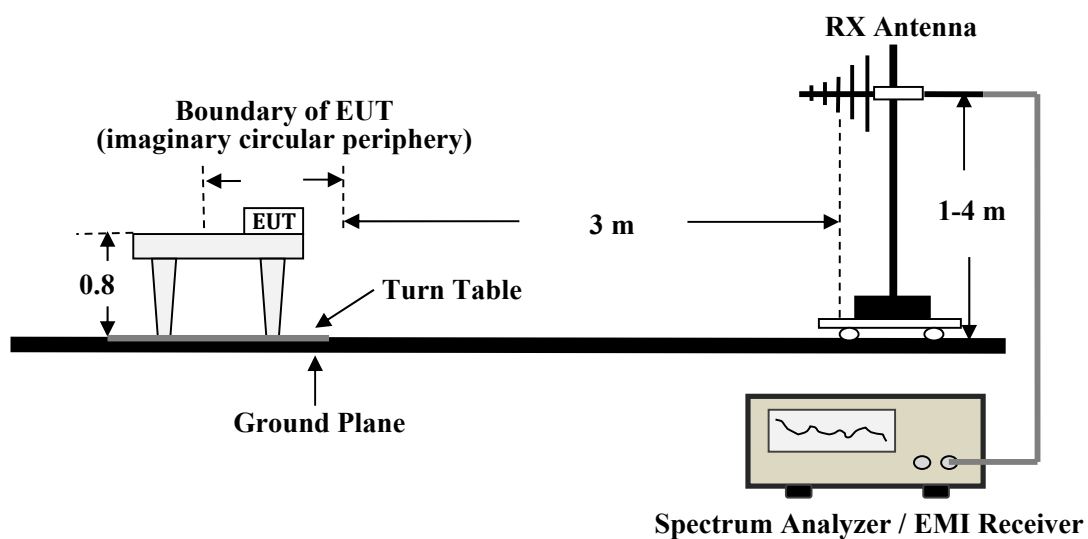
Below 30MHz for Radiated Emissions



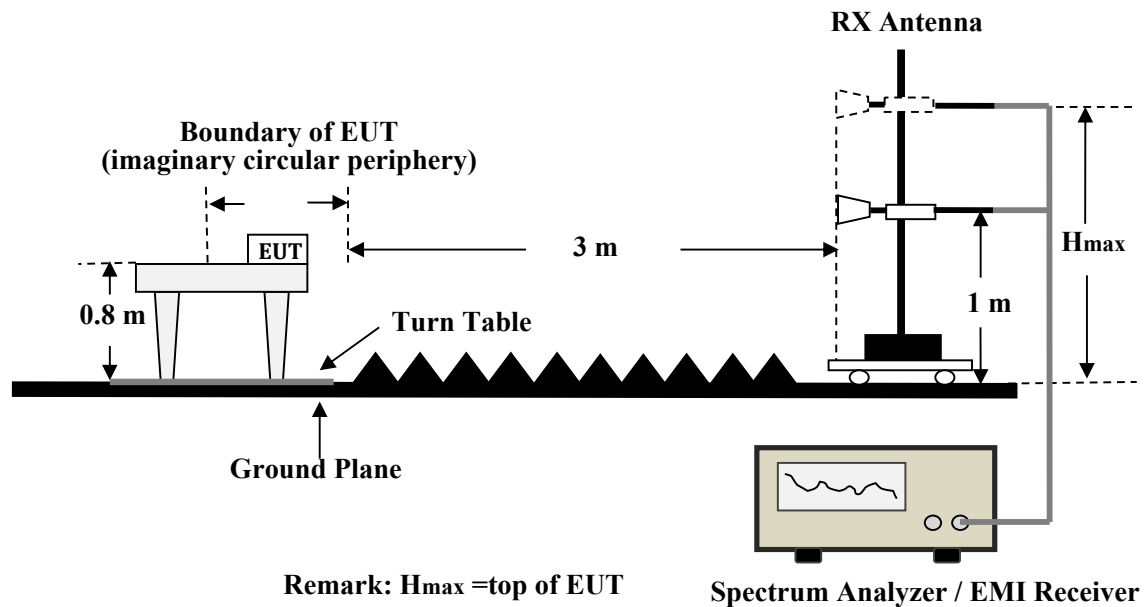
The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the FCC OST MP-5(1986). The related limit was specified in Part 18.305.

The distance from the loop antenna bracket to the ground is 2 meters.

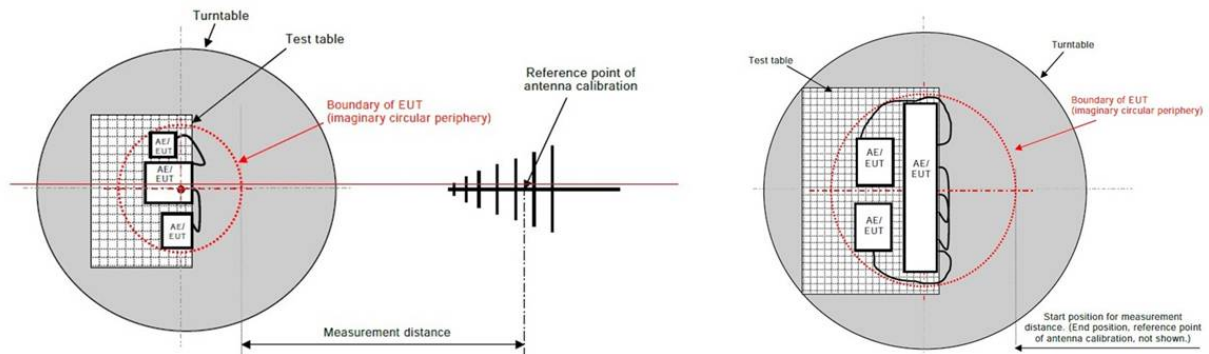
Below 1GHz for Radiated Emissions



Above 1GHz for Radiated Emissions



Radiated Emissions Setup Configuration



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the FCC MP - 5. The specification used was the FCC part 18 limits.

The socket was connected to 120 VAC/60 Hz power source.

EMI Test Receiver Setup and Spectrum Analyzer Setup

The system was investigated from 9kHz to 25 GHz.

During the radiated emission test, the EMI test receiver and Spectrum Analyzer were set with the following configurations:

9 kHz-1GHz:

Frequency Range	RBW	Video B/W	IF B/W	Measurement	Detector
9 kHz – 150 kHz	/	/	200 Hz	QP	QP
	300 Hz	1 kHz	/	PK	Peak
150 kHz – 30 MHz	/	/	9 kHz	QP	QP
	10 kHz	30 kHz	/	PK	Peak
30 MHz – 1000 MHz	/	/	120 kHz	QP	QP
	120 kHz	500 kHz	/	PK	Peak

1-25GHz:

Pre-scan

Measurement	Detector	RBW	Video B/W
PK	Peak	1MHz	3MHz

Final measurement for emission identified during pre-scan

Measurement	Detector	RBW	Video B/W
Ave.	Peak	1MHz	10Hz

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions to ensure that the EUT complied with all installation combinations.

The EUT was in the normal (naïve) operating mode during the final qualification test to represent the worst results.

Level & Over Limit Calculation

The Level is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Read Level. The basic equation is as follows:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

$$\text{Level} = \text{Read Level} + \text{Factor}$$

The “**Over Limit**” Column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit of -6 dB means the emission is 6 dB below the limit. The equation for margin calculation is as follows:

$$\text{Over limit} = \text{Level} - \text{Limit}$$

Test Data and Plots**Environmental Conditions**

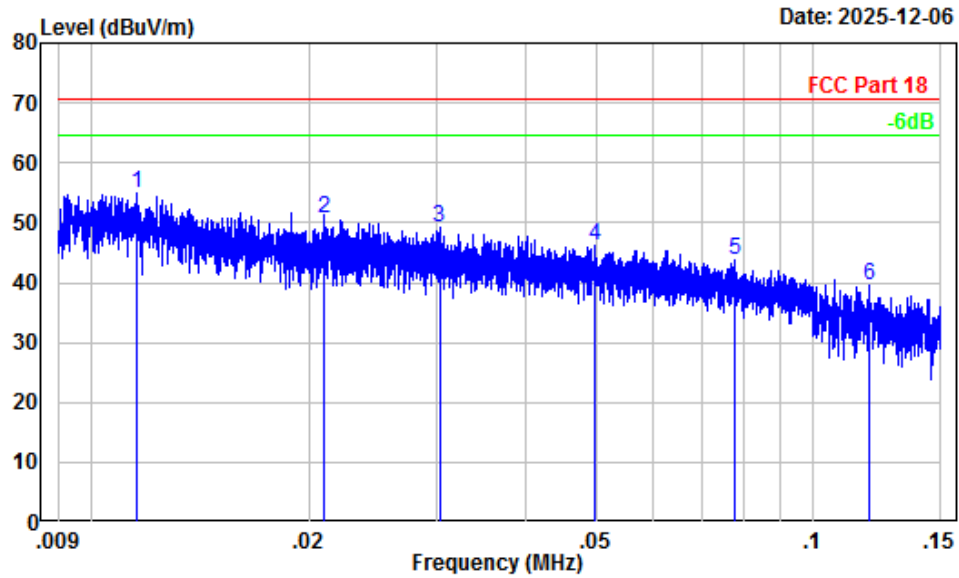
Temperature:	22.3~24.1 °C
Relative Humidity:	47~50 %
ATM Pressure:	100.6~101.7 kPa

The testing was performed by Anson Su on 2025-12-06 for below 1GHz and by Wing K Ji on 2025-11-29 for above 1GHz.

Test Mode: Microwave

Note: For the radiation emissions below 30 MHz, test the parallel/perpendicular/ground-parallel three planes of the loop antenna respectively, and only record the worst-case situation of the perpendicular.

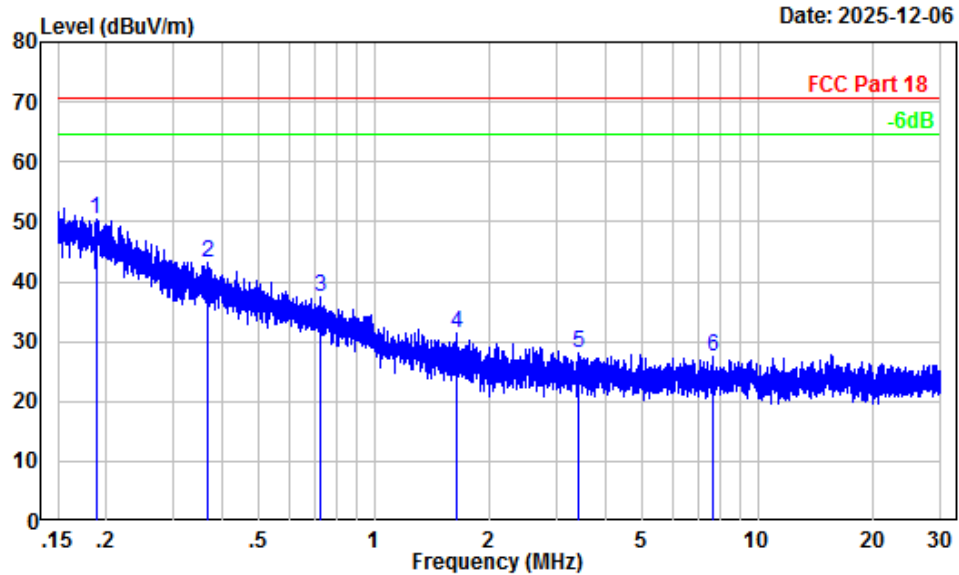
9 kHz-150kHz



Site : Chamber A
Condition : 3m
Project Number : 2501Z00975E-EMA2
Test Mode : Microwave
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.012	32.00	22.97	54.97	70.65	-15.68	Peak
2	0.021	30.22	20.58	50.80	70.65	-19.85	Peak
3	0.030	28.46	20.89	49.35	70.65	-21.30	Peak
4	0.050	26.42	19.85	46.27	70.65	-24.38	Peak
5	0.078	23.60	20.07	43.67	70.65	-26.98	Peak
6	0.119	20.86	18.78	39.64	70.65	-31.01	Peak

150 kHz-30MHz:

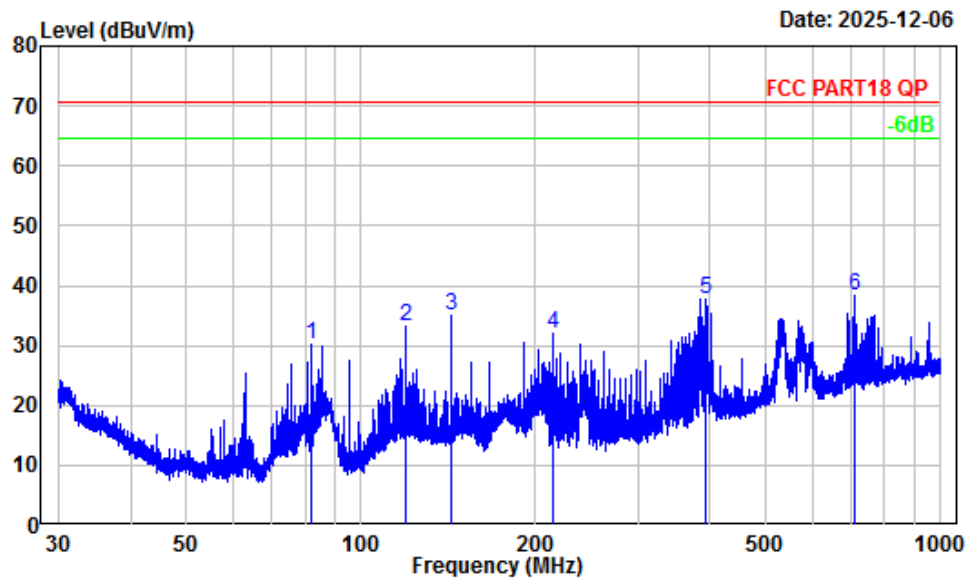


Site : Chamber A
Condition : 3m
Project Number : 2501Z00975E-EMA2
Test Mode : Microwave
Detector: Peak RBW/VBW: 10/30kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.188	16.79	33.64	50.43	70.65	-20.22	Peak
2	0.369	8.89	34.31	43.20	70.65	-27.45	Peak
3	0.722	3.67	33.70	37.37	70.65	-33.28	Peak
4	1.637	-0.58	31.92	31.34	70.65	-39.31	Peak
5	3.417	-2.38	30.55	28.17	70.65	-42.48	Peak
6	7.641	-2.98	30.39	27.41	70.65	-43.24	Peak

30 MHz – 1 GHz

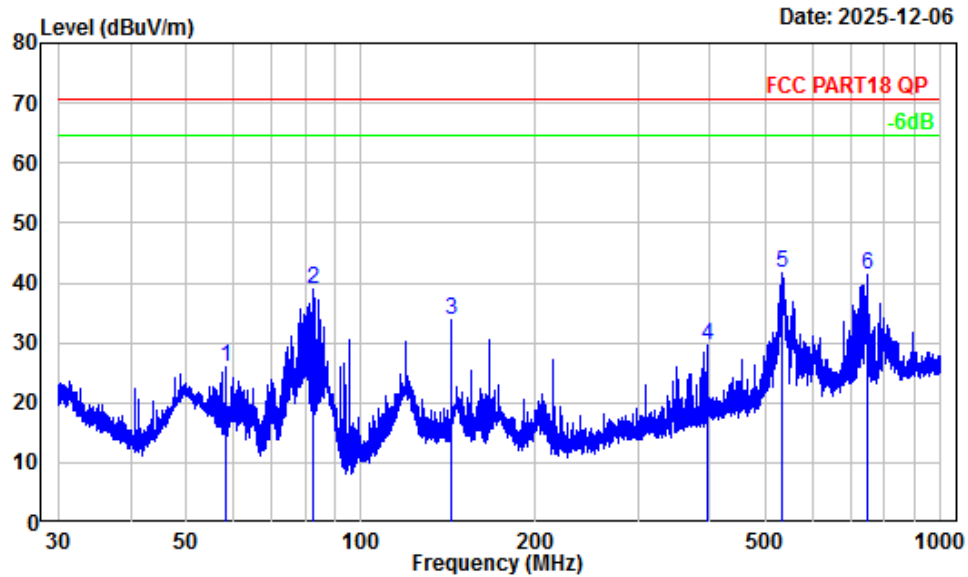
Horizontal



Site : Chamber A
 Condition : 3m Horizontal
 Project Number : 2501Z00975E-EMA2
 Test Mode : Microwave
 Detector: Peak RBW/VBW: 120/500kHz
 Tester : Anson Su

	Freq Factor		Read	Limit	Over	Remark
	MHz	dB/m	Level	Line	Limit	
			dBuV	dBuV/m	dBuV/m	
1	82.03	-18.00	48.21	30.21	70.65	-40.44 Peak
2	119.17	-11.54	44.87	33.33	70.65	-37.32 Peak
3	143.01	-12.08	47.09	35.01	70.65	-35.64 Peak
4	214.51	-14.19	46.27	32.08	70.65	-38.57 Peak
5	394.16	-8.68	46.50	37.82	70.65	-32.83 Peak
6	712.30	-3.36	41.63	38.27	70.65	-32.38 Peak

Vertical



Site : Chamber A
Condition : 3m Vertical
Project Number : 2501Z00975E-EMA2
Test Mode : Microwave
Detector: Peak RBW/VBW: 120/500kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	58.28	-18.22	44.07	25.85	70.65	-44.80	Peak
2	82.39	-18.03	57.11	39.08	70.65	-31.57	Peak
3	143.01	-12.08	46.01	33.93	70.65	-36.72	Peak
4	395.89	-8.60	38.07	29.47	70.65	-41.18	Peak
5	531.50	-5.77	47.38	41.61	70.65	-29.04	Peak
6	745.85	-2.88	44.27	41.39	70.65	-29.26	Peak

1-25 GHz:

For Band edge and spurious emissions:

Frequency (MHz)	Measurement		Turn-Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	FCC Part 18	
	Receiver Reading (dBμV)	Detector (PK/QP /AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
2056.12	38.58	AV	72	1.5	H	-11.62	26.96	70.65	43.69
2366.38	39.41	AV	77	1.6	V	-10.47	28.94	70.65	41.71
2363.32*	28.09	AV	301	1.3	H	31.33	59.42	70.65	11.23
2368.91*	28.45	AV	295	1.0	V	31.32	59.77	70.65	10.88
2521.37*	27.23	AV	189	1.3	H	31.55	58.78	70.65	11.87
2547.21*	27.98	AV	221	1.5	V	31.52	59.50	70.65	11.15
700ml water (Second and third harmonic)									
4933.75	51.26	AV	138	1.5	H	-6.27	44.99	70.65	25.66
4933.75	45.58	AV	138	1.5	V	-6.27	39.31	70.65	31.34
7402.75	43.33	AV	178	1.2	H	-0.40	42.93	70.65	27.72
7404.25	44.29	AV	169	1.4	V	-0.38	43.91	70.65	26.74
300ml water (Second and third harmonic)									
4934.25	52.08	AV	114	1.5	H	-6.27	45.81	70.65	24.84
4933.75	46.31	AV	116	1.7	V	-6.27	40.04	70.65	30.61
7403.30	43.51	AV	155	1.5	H	-0.39	43.12	70.65	27.53
7404.25	44.65	AV	160	1.6	V	-0.38	44.27	70.65	26.38

Note:

- 1) Corrected Amplitude = Meter Reading + Corrected Factor.
- 2) Correction Factor = Antenna Factor + Cable Loss - Amplifier Gain.
- 3) Margin = Limit – Corrected Amplitude.
- 4) The data below 20dB to the limit was not recorded.
- 5) *: The data no use Preamplifier.

EUT PHOTOGRAPHS

Please refer to the attachment 2501Z00975E-EMA2-EXP External photo and 2501Z00975E-EMA2-INP Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2501Z00975E-EMA2-TSP Test Setup photo.

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