



中认信通

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



RF EXPOSURE EVALUATION REPORT

Applicant: Whirlpool Microwave Products Development Limited.

Address: 17th Fl, Elite Centre, 22 Hung To Rd, Kwun Tong, Hong Kong

FCC ID: PR4FLUSHP2X

Product Name: Microwave Oven

Standard(s): 47 CFR §1.1310

The above device has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: CR230849087-00B

Date Of Issue: 2023/10/31

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Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, 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. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR230849087-00B	Original Report	2023/10/31

1. RF EXPOSURE EVALUATION

1.1 Maximum Permissible Exposure (MPE)

1.1.1 Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

1.1.2 Limits

Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
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
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

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

According to §1.1310 and §2.1091 RF exposure is calculated.

1.1.3 Measurement

Serial Number:	2A9Z-1	Test Date:	2023/9/19
Test Site:	966-1	Test Mode:	Operation
Tester:	coco Tian	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.1	Relative Humidity: (%)	66	ATM Pressure: (kPa)	100.6
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
ETS	Microwave Survery Meter	1501	123654	2023/3/17	2024/3/16

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 0.1mW/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.

For BT/Wi-Fi Function:

Calculation formula:

$$S = \frac{PG}{4\pi R^2}$$

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);

Operation Modes	Frequency (MHz)	Antenna Gain		Conducted output power including Tune-up Tolerance		Evaluation Distance	Power Density	MPE Limit
		(dBi)	(numeric)	(dBm)	(mW)			
BLE	2402-2480	4.20	2.63	0	1.00	20	0.0005	1
Bluetooth	2402-2480	4.20	2.63	3	2.00	20	0.0010	1
Wi-Fi	2412-2462	4.20	2.63	22	158.49	20	0.0829	1

Note:

1. The device contains a certified Module, FCC ID: 2AC7Z-RIGEL.
2. The BLE/Bluetooth/Wi-Fi Conducted output power comes from module report.
3. The BLE/Bluetooth/Wi-Fi and Microwave can transmit simultaneously
4. Simultaneous transmitting was considerate to be compliant to the limit, since low power density for BLE/Bluetooth/Wi-Fi and Microwave Functions.

Result: The device meets FCC MPE at **20 cm** distance

===== END OF REPORT =====