

FCC RF EXPOSURE REPORT

FCC ID: A5UWICH1201

Test Report No.....: RF250305009-01-004

Product(s) Name.....: Indigo-2 WiFi Module

Model(s).....: WICH1201

Trade Mark.....: Whirlpool Corporation

Applicant.....: Whirlpool Corporation

Address.....: 2000 N M-63 Mail Drop 3005, Benton Harbor, MI, United States,
49022

Receipt Date.....: 2025.04.01

Test Date.....: 2025.04.02~2025.05.06

Issued Date.....: 2025.05.06

Standards.....: FCC Guidelines for Human Exposure IEEE C95.1
FCC Title 47 Part 2.1091
KDB 447498 D01 General RF Exposure Guidance v06

Testing Laboratory.....: Shenzhen Haiyun Standard Technical Co., Ltd.

Prepared By:	Checked By:	Approved By:	
Jason Huang	Black Ding	Tim Zhang	
<i>Jason Huang</i>	<i>Black Ding</i>	<i>Tim Zhang</i>	

History of this test report

Original Report Issue Date: 2025.05.06

- ☒ No additional attachment
- ☐ Additional attachments were issued following record

Attachment No.	Issue Date	Description
RF250305009-01-004	2025.05.06	Original Report

1.. MPE CALCULATION METHOD

Radio Frequency Exposure Limit

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)
300-1,500	--	--	f/1500
1,500-100,000	--	--	1.0

Calculation Method of RF Safety Distance:

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

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

For BT&BLE&2.4G Wifi

Antenna Information	Antenna type1: FPC antenna Model name: FXP830.07.0050C Antenna gain: 3.46 dBi
	Antenna type2: FPC antenna Model name: FXP831.07.0050C Antenna gain: 3.28 dBi
	Antenna type3: FPC antenna Model name: 2108792-2 Antenna gain: 4.9 dBi

2.. TEST RESULTS

Worst case as below

For Antenna type3(Model name: 2108792-2)

Operating Mode	Freq.	Maximum conducted output power	Directional Antenna Gain	Calculated maximum EIRP		MPE Limit	MPE Value
	(MHz)	(dBm)	(dBi)	(dBm)	(mW)	(mW/cm ²)	
BDR+EDR	2402-2480	5.12	4.9	10.02	10.05	1	0.002
BLE	2402-2480	5.05	4.9	9.95	9.89	1	0.002
2.4G Wifi	2412-2462	15.04	4.9	19.94	98.63	1	0.020

Note: 1. The calculated distance is 20 cm.

2. The Wifi function can transmit at the same time with the BT function.

Simultaneous transmitting consideration

The ratio= $MPE_{BDR+EDR}/limit + MPE_{2.4G\ Wifi}/limit = 0.002/1 + 0.020/1 = 0.022 < 1.0$

Result: Complies

Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Standard Technology Co., Ltd. (hereinafter referred to as the unit).
2. The report is invalid without the signature of the approver.
3. The report is invalid if altered arbitrarily.
4. The report shall not be partially copied without the written approval of the unit.
5. The reported test results are only valid for the tested samples.
6. If there is any objection to the test report, it shall be submitted to the test unit within 15 days from the date of receiving the report, and the overdue shall not be accepted.

Shenzhen Haiyun Standard Technology Co., Ltd.

Address: Room 110, 111, 112, 113, 115, 116, Block B, Jinyuan Business Building, No. 302, Xixiang Avenue, Labor Community, Xixiang Street, Baoan District, Shenzhen, China

Tel: 0755-26024411

Email: service@hy-lab.cn

(END OF REPORT)