

FCC RF EXPOSURE REPORT

FCC ID: 2BG8T-ICOMI-H-RBTHC

Test Report No.....: RF240524011-02-004

Product(s) Name.....: Touchscreen Computer

Model(s).....: iComi-H-RBTHC V3.5, iComi-H-RBTHC V3.5 Pro

Trade Mark.....: N/A

Applicant.....: SHANGHAI ZHIZHEN SPACEDOT INFORMATION TECHNOLOGY
CO., LTD.

Address.....: Room 601-602, Building 1, No. 958 Zhenbei Road, Putuo District,
Shanghai


Receipt Date.....: 2024.05.29

Test Date.....: 2024.06.01~2024.06.18

Issued Date.....: 2024.06.20

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:	
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<i>Black Ding</i>	<i>Tim.zhang</i>	<i>Misue Su</i>	

History of this test report

Original Report Issue Date: 2024.06.20

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

Attachment No.	Issue Date	Description

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)
0.3-1.34	614	1.63	*(100)
1.34-30	824/f	2.19/f	*(180/f ²)
30-300	27.5	0.073	0.2
300-1,500	--	--	f/1500
1,500-100,000	--	--	1.0

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

Calculation Method of RF Safety Distance:

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

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 2.4GHz_WiFi:

Antenna gain	Antenna Type
2.67dBi	FPC Antenna

For BLE:

Antenna gain	Antenna Type
2.67dBi	FPC Antenna

For NFC:

Antenna gain	Antenna Type
3.00dBi	FPC Antenna

2.. TEST RESULTS

Worst case as below

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)	
BLE	2402-2480	-2.34	2.67	0.33	1.08	1	0.0002
2.4G Wifi	2412-2472	13.20	2.67	15.87	38.64	1	0.008
NFC	13.56	/	/	-26.22	0.002	0.98	0.0000005

Note: 1. The calculated distance is 20 cm.
 2. The Wifi function can transmit at the same time with the BT function and NFC function.
 3. For NFC, the power of EUT: E Field@3m is 68.98dBμV/m= -26.22dBm; E[dBμV/m]= EIRP[dBm] + 95.2 for d= 3 m.

Simultaneous transmitting consideration

The ratio= $MPE_{BLE}/limit + MPE_{2.4G\ Wifi}/limit + MPE_{NFC}/limit = 0.0002/1 + 0.008/1 + 0.0000005/0.98 = 0.0082 < 1.0$

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.

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(END OF REPORT)