



RF EXPOSURE REPORT

Report No.: 20240817G15615X-W7

Product Name: HOVER Air X1 PRO, HOVER Air X1 PROMAX

Main Model No.: ZZ-H-1-003

Series Model No.: ZZ-H-1-004

FCC ID: 2AIDW-ZZ-H-1-004

Applicant: Shenzhen Zero Infinity Technology Co., Ltd.

Address: 4F Qianhai Yidu Tower Building, Shenzhen China

Dates of Testing: 08/13/2024 - 09/18/2024

Issued by: CCIC Southern Testing Co., Ltd.

Electronic Testing Building, No.43, Shahe Road, Xili Street,

Lab Location: Nanshan District, Shenzhen, Guangdong, China

Tel: 86-755-26627338 **E-Mail:** manager@ccic-set.com

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Test Report

Product: HOVER Air X1 PRO

Trade Name ZERO ZERO ROBOTICS

Applicant...... Shenzhen Zero Zero Infinity Technology Co., Ltd.

Applicant Address...... 4F Qianhai Yidu Tower Building, Shenzhen China

Manufacturer: Shenzhen Zero Zero Infinity Technology Co., Ltd.

Manufacturer Address: 4F Qianhai Yidu Tower Building, Shenzhen China

Test Standards 47 CFR Part 2.1091

Test Result: Pass

Tested bykim Li 2024.09.18

Kim Li, Test Engineer

Reviewed by Sun Jiaohui 2024.09.18

Sun Jiaohui, Senior Engineer

Approved by:: 2024.09.18

Chris You, Manager

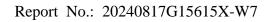
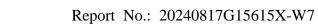




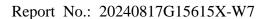
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Change History					
Issue	Date	Reason for change			
1.0 2024.09.18		First edition			





1. GENERAL INFORMATION

1.1. EUT Description

Product Name	HOVER Air X1 PRO			
Model No.	ZZ-H-1-003			
Hardware Version	H141_MB_V20			
Software Version	ZZ_IMG_H141A_V7	7.1.35/7.0.98		
	Bluetooth/ Bluetooth LE			
F	WLAN 2.4GHz 802.11b/g/n(HT20/HT40)			
Frequency Range	WLAN 5.0GHz 802.11a/n(HT20/HT40)/ac(VHT20/VHT40/VHT80)/			
	ax(HE20/HE 40/HE 80)			
Modulation Type	DSSS (802.11b), OFDM (802.11a/g/n/ac), OFDMA (802.11ax)			
Antenna Type	Internal Antenna			
	BT/BLE	Antenna 1: 1.8dBi		
	2.4G WIFI	Antenna 1: 1.8dBi		
	2.4G WIFI	Antenna 2: -1.3dBi		
Antenna Gain	5.0G WIFI: UNII-1	Antenna 1: 4.1dBi		
	5.00 WIFI. UNII-I	Antenna 2: 3.3dBi		
	5.0G WIFI: UNII-3	Antenna 1: 3.1dBi		
	5.00 WIFT. UNIT-3	Antenna 2: 4.4dBi		

Note 1: The information of antenna gain and cable loss is provided by the manufacturer and our lab is not responsible for the accuracy of the antenna gain and cable loss information.

Note 2: The product name HOVER Air X1 PRO corresponds to model ZZ-H-1-003, and the product name HOVER Air X1 PROMAX corresponds to model ZZ-H-1-004. The ZZ-H-1-003 and ZZ-H-1-004 models are electrically identical, including the same software parameters and hardware design (i.e. circuit design, RF module/circuit, antenna type and antenna position), as well as the same mechanical structure and design (including product casing, materials, etc.), the only difference is the Product name, model name, with Tail Canera or not and CPU is different.



1.2. EUT Description

EUT has been tested according to the following standards.

No.	Identity	Document Title		
1	47 CFR Part 1	Practice and Procedure		
2	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General		
2	4/ CFR Part 2	Rules and Regulations		
2	KDB 447498 D01 General	RF Exposure Procedures and Equipment Authorization		
3	RF Exposure Guidance v06	uidance v06 Policies for Mobile and Portable Devices		
1	OET Bulletin 65	Evaluating Compliance with FCC Guidelines for Human		
4	Edition 97-01	Exposure to Radiofrequency Electromagnetic Fields		

1.3. Laboratory Facilities

FCC-Registration No.: CN1283

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until Jun. 30th, 2025.

ISED Registration: 11185A

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A on Aug. 04, 2016, valid time is until Jun. 30th, 2025.

CAB number: CN0064

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

1.4. Laboratory Location

Company Name:	CCIC Southern Testing Co., Ltd.
Address:	Electronic Testing Building, No.43, Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China



2. Technical Requirements Specification in CFR Title 47 Part 2.1091

2.1. Evaluation method

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b).

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

Frequency Range (MHz) Electric Field Magnetic Field Strength (V/m) (V/m) (A/m)		Strength	Power Density (mW/cm2)	Averaging Time (minutes)				
	(i) Limits for Occupational/Controlled Exposure							
0.3-3.0	614	1.63	*(100)	< 6				
3.0-30	1824/f	4.89/f	$*(900/f^2)$	< 6				
30-300	30-300 61.4 0.163 1.0		1.0	< 6				
300-1500	/	/	f/300	< 6				
1500-100,000	/	/	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				
300-1500		/	f/1500	< 30				
1500-100,000	/	/	1.0	< 30				
Note: f = frequency in MHz. * = Plane-wave equivalent power density.								

2.2. Predication of MPE limit at a given distance

Refer to formulas on page 19 of OET Bulletin 65, Edition 97-01.

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

Where:

S = power density (in appropriate units, e.g. mW/cm²)

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

 $G = numeric \ gain \ of \ the \ antenna \ in \ the \ direction \ of \ interest \ relative \ to \ an \ isotropic \ radiator$

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



2.3. Evaluation Results

Worst-Case mode Conducted Output Power Results for WLAN/BT

Operation Frequency		Maximum Output power	Max Tune up power	Max Tune up power
Mode (MHz)		(dBm)	(dBm)	(mW)
WIFI 802.11b 2462		20.57	20 ± 1	125.89
WIFI 802.11a 5745		19.08	19±1	100.00
BT	2441	6.96	6±1	5.01
BLE	2480	7.32	7±1	6.31

Calculation results: Worst-Case mode

Operation	Antenna Gain	Antenna Gain	Distance	Result	Power Density	Ratio	
Mode	(dBi)	(numeric)	(cm)	(mW/cm2)	(mW/cm2)	Katio	
WIFI 802.11b	1.80	1.51	20	0.038	1.00	0.038	
WIFI 802.11a	4.40	2.75	20	0.055	1.00	0.055	
BT	1.80	1.51	20	0.002	1.00	0.002	
BLE	1.80	1.51	20	0.002	1.00	0.002	

Simultaneous Transmission Calculation (Worst-case mode)

No.	Transmitter Combinations	Scenario Supported or not
1	BT + 2.4G WLAN	Yes
2	BT + 5G WLAN	Yes

Max Simultaneous Transmission Calculation (Worst-case mode)

No.	Worst Mode	MPE Ratio	Limit	Results
1	BT + 5G WIFI	0.057	≤ 1.0	Pass

2.4. Conclusion

According to the KDB 447498 D01 General RF Exposure Guidance v06 section 7.2 determine the device is exclusion from SAR test.

** END OF REPORT **