FCC RF EXPOSURE REPORT

For

Intelligent Control System

MODEL NUMBER: SuperX5 Pro

FCC ID:2A46G-SUPERX5PRO

REPORT NUMBER: 4791353869-1-RF-9

ISSUE DATE: September 5, 2024

Prepared for

Guangzhou Xaircraft Technology CO., LTD
Block C, No.115, Gaopu Road, Tianhe District, GuangzhouCity, Guangdong, P.R. 510663 China

Prepared by

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch
Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China

Tel: +86 769 22038881
Fax: +86 769 33244054
Website: www.ul.com

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	September 5, 2024	Initial Issue	\

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS 4

2. TEST METHODOLOGY 5

3. FACILITIES AND ACCREDITATION 5

4. REQUIREMENT 6

1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	Guangzhou Xaircraft Technology CO., LTD
Address:	Block C, No.115, Gaopu Road, Tianhe District, GuangzhouCity, Guangdong, P.R. 510663 China

Manufacturer Information1

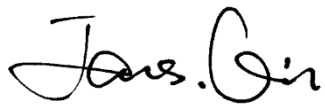
Company Name:	Guangzhou Xaircraft Technology CO., LTD
Address:	Block C, No.115, Gaopu Road, Tianhe District, GuangzhouCity, Guangdong, P.R. 510663 China

EUT Information

EUT Name:	Intelligent Control System
Model:	SuperX5 Pro
Sample Received Date:	June 4, 2024
Sample Status:	Normal
Sample ID:	7284012
Date of Tested:	June 26, 2024 to September 5, 2024

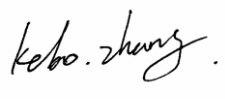
APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC 47CFR§2.1091	PASS
KDB 447498 D01	PASS

Prepared By:



James Qin
Project Engineer

Checked By:



Kebo Zhang
Senior Project Engineer

Approved By:

Stephen Guo
Operations Manager

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 and KDB447498 D01 v06.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	**A2LA (Certificate No.: 4102.01)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA. **FCC (FCC Designation No.: CN1187)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Delcaration of Conformity (DoC) and Certification rules **ISED (Company No.: 21320)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046. **VCCI (Registration No.: G-20192, C-20153, T-20155 and R-20202)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20192 and R-20202 Shielding Room B, the VCCI registration No. is C-20153 and T-20155

Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30MHz had been correlated to measurements performed on an OFS.

4. REQUIREMENT

LIMIT AND CALCULATION METHOD

Systems operating under the provisions of FCC 47 CFR 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.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

Limits for General Population/Uncontrolled Exposure

RF EXPOSURE LIMIT

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (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

CALCULATION METHOD

$S=PG/4\pi R^2$

Where:

S=power density

P=power input to 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

CALCULATED RESULTS

For Single RF Source

Operation Band	Frequency (MHz)	Antenna Gain (dBi)	Max Conducted Average Output Power (dBm)	Power Density at R = 20 cm (W/m^2)	FCC Limit (W/m^2)	FCC Conclusion
GSM850-GPRS 1TS	824	4.01	30.0	5.0088	5.4933	Pass
GSM850-GPRS 2TS	824	4.01	29.0	3.9786	5.4933	Pass
GSM850-GPRS 3TS	824	4.01	28.0	3.1603	5.4933	Pass
GSM850-GPRS 4TS	824	4.01	27.0	2.5103	5.4933	Pass
GSM1900-GPRS 1TS	1850	3.94	26.0	1.9621	10.0000	Pass
GSM1900-GPRS 2TS	1850	3.94	25.0	1.5586	10.0000	Pass
GSM1900-GPRS 3TS	1850	3.94	24.0	1.2380	10.0000	Pass
GSM1900-GPRS 4TS	1850	3.94	23.0	0.9834	10.0000	Pass
WCDMA B2	1850	3.94	22.0	0.7811	10.0000	Pass
WCDMA B4	1710	3.26	21.5	0.5953	10.0000	Pass
LTE B2	1850	3.94	21.5	0.6962	10.0000	Pass
LTE B4	1710	3.26	21.5	0.5953	10.0000	Pass
LTE B5	824	4.01	21.5	0.7075	5.4933	Pass
LTE B7	2500	3.40	20.5	0.4883	10.0000	Pass
LTE B12	1427.9	2.65	23.0	0.7307	9.5193	Pass
LTE B13	777	4.01	24.0	1.2581	5.1800	Pass
LTE B25	1850	3.94	21.0	0.6205	10.0000	Pass
LTE B26(FCC)	814	4.01	22.0	0.7938	5.4267	Pass
LTE B38	2570	3.44	21.0	0.5530	10.0000	Pass
LTE B41(FCC)	2496	3.44	21.5	0.6205	10.0000	Pass
2.4GHz WiFi	2402	2.73	20.0	0.3730	10.0000	Pass
U-NII-3	5735	3.99	22.0	0.7902	10.0000	Pass

Simultaneous Analysis:

Co-location of this EUT with other transmitters that operate simultaneously are required to be evaluated using the FCC multi-transmitter procedures.

1. 2.4 GHz WiFi & 5.8 GHz WiFi can't transmit simultaneously.
2. WWAN (worst) + 2.4 GHz WiFi = 5.0088/10 + 0.3730/10 = 0.53818
3. WWAN (worst) + 5.8 GHz WiFi = 5.0088/10 + 0.7902/10 = 0.5799

The maximum calculations of above situations are less than the limit (1.0), it is compliance.

Note:
1. The calculated distance is 20 cm.
2. The power comes from operation description.

END OF REPORT