FCC RF EXPOSURE REPORT

For

XAG APC2 AutoPilot Console

MODEL NUMBER: XAPC2AHBD-2.5RD

REPORT NUMBER: 4791318657-1-RF-6

ISSUE DATE: March 19, 2024

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Prepared for

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Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	03/20/2024	Initial Issue	\

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	Guangzhou Xaircraft Technology CO., LTD
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Manufacturer Information1

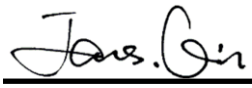
Company Name:	Guangzhou Xaircraft Technology CO., LTD
Address:	Block C, No.115, Gaopu Road, Tianhe District, GuangzhouCity, Guangdong, P.R. 510663 China

EUT Information

EUT Name:	XAG APC2 AutoPilot Console
Model:	XAPC2AHBD-2.5RD
Sample Received Date:	February 28, 2024
Sample Status:	Normal
Sample ID:	7208081
Date of Tested:	February 28, 2024 to March 19, 2024

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

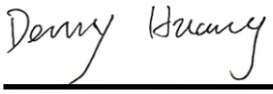
Prepared By:



James Qin

Project Engineer

Checked By:



Denny Huang

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	1.78	32.0	0.5938	5.4933	Pass
GSM850-GPRS 2TS	824	1.78	31.0	0.9433	5.4933	Pass
GSM850-GPRS 3TS	824	1.78	30.0	1.1240	5.4933	Pass
GSM850-GPRS 4TS	824	1.78	29.0	1.1904	5.4933	Pass
GSM1900-GPRS 1TS	1850	2.14	30.0	0.4070	10.0000	Pass
GSM1900-GPRS 2TS	1850	2.14	29.0	3.8799	10.0000	Pass
GSM1900-GPRS 3TS	1850	2.14	27.0	0.6120	10.0000	Pass
GSM1900-GPRS 4TS	1850	2.14	26.0	0.6482	10.0000	Pass
WCDMA B2	1850	2.14	22.0	0.5161	10.0000	Pass
WCDMA B4	1710	2.44	23.0	0.6962	10.0000	Pass
LTE B2	1850	2.14	22.0	0.5161	10.0000	Pass
LTE B4	1710	2.44	23.0	0.6962	10.0000	Pass
LTE B5	824	1.78	24.0	0.7529	5.4933	Pass
LTE B7	2500	3.21	22.0	0.6603	10.0000	Pass
LTE B25	1850	2.14	23.0	0.6497	10.0000	Pass
LTE B26(FCC)	814	1.78	24.0	0.7529	5.4267	Pass
LTE B38	2570	3.21	22.0	0.6603	10.0000	Pass
LTE B41(FCC)	2496	3.21	23.0	0.8312	10.0000	Pass
BT	2402	2.89	8.0	0.0244	10.0000	Pass
BLE	2402	2.89	5.0	0.0122	10.0000	Pass
2.4GHz WiFi	2402	2.89	16.0	0.1541	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 & BT/BLE can't transmit simultaneously.
2. WWAN (worst) + 2.4 GHz WiFi = 3.8799/10 + 0.1541/10 = 0.4034
3. WWAN (worst) + BT/BLE(worst) = 3.8799/10 + 0.0244/10 =0.39043

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