

FCC RF EXPOSURE REPORT

For

LTE MODULE

MODEL NUMBER: EG25-G

REPORT NUMBER: 4791318657-1-RF-6

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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 | \ |



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: | LTE MODULE |
|-----------------------|-------------------------------------|
| Model: | EG25-G |
| 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:

Checked By:

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Sume

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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

| | 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) | | | | |
| Accreditation | UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. | | | | |
| Certificate | 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

| 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/4mR² 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 |



<u>Simultaneous Analysis:</u> Co-location of this module with other transmitters that operate simultaneously are required to be evaluated using the FCC multi-transmitter procedures.

Note:

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

END OF REPORT