



F2 Labs
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MPE TEST REPORT

Manufacturer: LTA Research and Exploration, LLC
642 North Pastoria Avenue
Sunnyvale, California 94085 USA

Applicant: Same as Above

Product Name: Freeballooning Wireless Module

Model: A4832_01

FCC ID: 2A9X4A4832-01

Testing Commenced: 2022-12-01

Testing Ended: 2023-07-18

Test Results: In Compliance

The EUT complies with the EMC requirements when manufactured identically as the unit tested in this report, including any required modifications. Any changes to the design or build of this unit subsequent to this testing may deem it non-compliant.

Standards:

- KDB447498



Order No(s): F2P28874A, F2P28874A-C1

Applicant: LTA Research and Exploration, LLC

Model: A4832_01

Evaluation Conducted by:

Julius Chiller, Senior Wireless Project Engineer

Report Reviewed by:

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Applicant: LTA Research and Exploration, LLC

Model: A4832_01

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1 ADMINISTRATIVE INFORMATION

1.1 Measurement Location:

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

1.2 Measurement Procedure:

All measurements were performed according to KDB558074.

1.4 Document History

Document Number	Description	Issue Date	Approved By
F2P28874A-C1-03E	First Issue	2023-07-18	K. Littell



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2 SUMMARY OF TEST RESULTS

Test Name	Standard(s)	Results
RF Exposure for Device >20cm from Human	KDB447498	Complies

Modifications Made to the Equipment
None



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3 ENGINEERING STATEMENT

This report has been prepared on behalf of LTA Research and Exploration, LLC to provide documentation for the testing described herein. This equipment has been tested and found to comply with KDB447498. The test results found in this test report relate only to the item(s) tested.



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Model: A4832_01

4 EUT INFORMATION AND DATA

4.1 Equipment Under Test:

Product: Freeballooning Wireless Module
Model: A4832_01
Serial No.: 20419-0012
FCC ID: 2A9X4A4832-01

4.2 Trade Name:

LTA Research and Exploration, LLC

4.3 Power Supply:

3.6VDC

4.4 Applicable Rules:

KDB447498

4.5 Equipment Category:

Radio Transmitter-FHSS

4.6 Antenna:

Laird model TRAM8903NP, s/n 09

4.7 Accessories:

N/A



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5. RF EXPOSURE FOR DEVICE >20cm FROM HUMAN

5.1 Requirements: **Distance used is 20cm**

Limit: 1mW/cm^2

Antenna Gain Used for Calculation of E.I.R.P.: 3dB

Formula used for result:
$$\frac{\text{E.I.R.P.}}{4 \pi R^2}$$

Results: $\text{E.I.R.P.} = 19.58\text{mW}$

19.58mW at the 915.89 MHz Mid Channel in FHSS mode, which is the highest of all operating modes.

$$\frac{19.58\text{mW}}{4 \pi R^2} = \frac{19.58\text{mW}}{5026.55} = 0.0039 \text{ mW/cm}^2$$