



F2 Labs
16740 Peters Road
Middlefield, Ohio 44062
United States of America
www.f2labs.com

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



Evaluation Conducted by:

Julius Chiller, Senior Wireless Project Engineer

Report Reviewed by:

Ken Littell, Vice President of Operations

F2 Labs
26501 Ridge Road
Damascus, MD 20872
Ph 301.253.4500

F2 Labs
16740 Peters Road
Middlefield, OH 44062
Ph 440.632.5541

F2 Labs
8583 Zionsville Road
Indianapolis, IN 46268
Ph 317.610.0611

This test report may be reproduced in full; partial reproduction only may be made with the written consent of F2 Labs. The results in this report apply only to the equipment tested.



TABLE OF CONTENTS

Section	Title	Page
1	ADMINISTRATIVE INFORMATION	4
2	SUMMARY OF TEST RESULTS/MODIFICATIONS	5
3	ENGINEERING STATEMENT	6
4	EUT INFORMATION AND DATA	7
5	RF EXPOSURE FOR DEVICE >20cm FROM HUMAN	8



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



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



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.



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

**5. RF EXPOSURE FOR DEVICE >20cm FROM HUMAN****5.1 Requirements: Distance used is 20cm****Limit:** 1mW/cm²**Antenna Gain Used for
Calculation of E.I.R.P.:** 3dB**Formula used for result:** $\frac{E.I.R.P.}{4 \pi R^2}$ **Results:** E.I.R.P. = 19.58mW

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

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