**Shenzhen Most Technology Service Co., Ltd.**
East A, 1 Floor of New Aolin Factory Building, Langshan Erlu North District, Hi-Tech Industry Park, Nanshan, Shenzhen, Guangdong, People's Republic of China

# TEST REPORT

**FCC Rules Part 15.231e**

| | |
|---|---|
| **Report Reference No.....** : | **MTEB24010004 -H** |
| **FCC ID..... :** | **2A9G9-HD963** |
| Compiled by ( position+printed name+signature).. : | File administrators Alisa Luo |
| Supervised by ( position+printed name+signature).. : | Test Engineer Sunny Deng |
| Approved by ( position+printed name+signature).. : | Manager Yvette Zhou |
| Date of issue.....: | **Jan. 02,2024** |
| **Representative Laboratory Name. :** | **Shenzhen Most Technology Service Co., Ltd.** |
| Address..... : | East A, 1 Floor of New Aolin Factory Building, Langshan Erlu North District, Hi-Tech Industry Park, Nanshan, Shenzhen, Guangdong, People's Republic of China |
| **Applicant's name**.....: | **Thin Air Brands, LLC** |
| Address..... : | 5332 Talavero Place, Parker, CO 80134, USA |
| **Test specification/** Standard.....**:** | **47 CFR Part 1.1307**<br>**47 CFR Part 2.1093** |
| TRF Originator.....: | Shenzhen Most Technology Service Co., Ltd. |



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|---|---|
| **Test item description.....:** | Hyper Drive Green Light Up Stunt Dino |
| Trade Mark.....: | N/A |
| Model/Type reference..... : | HD963 |
| Listed Models ..... : | N/A |
| Modulation Type..... : | ASK |
| Operation Frequency..... : | 40.68MHz |
| Hardware Version..... | V1.0 |
| Software Version..... | V1.0 |
| Rating.....: | DC 3V by Batteries |
| Result.....: | **PASS** |

# TEST REPORT

| | | |
|---|---|---|
| Equipment under Test | : | Hyper Drive Green Light Up Stunt Dino |
| Model /Type | : | HD963 |
| Listed Models | | N/A |
| Remark | | N/A |
| Applicant | : | **Thin Air Brands, LLC** |
| Address | : | 5332 Talavero Place, Parker, CO 80134, USA |
| Manufacturer | : | ***/*** |
| Address | : | / |

| | |
|---|---|
| **Test Result**: | **PASS** |

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

# Contents

## 1. Revision History

| Revision | Issue Date | Revisions | Revised By |
|---|---|---|---|
| 00 | 2024-01-02 | Initial Issue | Alisa Luo |
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| | | | |

## 2.1 RF Exposure Compliance Requirement

### 2.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06
4.3.1. Standalone SAR test exclusion considerations
Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

### 2.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where
f(GHz) is the RF channel transmit frequency in GHz
Power and distance are rounded to the nearest mW and mm before calculation[17]
The result is rounded to one decimal place for comparison
The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

2.1.3 EUT RF Exposure

EIRP =PT*GT= $(E \times D)^2 /30$
where:
PT = transmitter output power in watts,
GT = numeric gain of the transmitting antenna (unitless),
E = electric field strength in V/m, ---$10^{(dB\mu V/m)/20)}/10^6$ ,
D = measurement distance in meters (m)---3m,
So PT = $(E \times D)^2 /30$ / GT

The worst case (refer to report MTEB24010004-R) is below:

| Antenna polarization: Horizontal | | |
|---|---|---|
| Frequency (MHz) | Level (dBuV/m) | Polarization |
| 40.68 | 75.21 | Peak |
| 40.68 | 59.04 | Average |

| Antenna polarization: Vertical | | |
|---|---|---|
| Frequency (MHz) | Level (dBuV/m) | Polarization |
| 40.68 | 76.07 | Peak |
| 40.68 | 60.03 | Average |

For 40.68MHz wireless:
Field strength=76.07dBuV/m
Ant gain:0dBi;so Ant numeric gain=1

EIRP = PT*GT = $(E \times D)^2 /30=(10^{(dB\mu V/m)/20)}/10^6*3)^2/30=0.000012W$
So PT= EIRP/GT=0.000012W/1*1000=0.012mW
So(0.012mW/5mm)* √2.407GHz=0.00049

exclusion=0.00049<3.0 for 1-g SAR

So the SAR report is not required.