RF Exposure Evaluation Report

Product	:	HOVER-1 - TITAN HOVERBOARD
Trade mark	:	HOVER-1
Model/Type reference	:	HY-TTN-BLU, HY-TTN, HY-TTN-GMT, HY-TTN-PNK, HY-TTN-RSE, HY-TTN-BLK, HY-TTN-XXX, EU-UK-TTN, EU-UK-TTN-BLU, EU-UK-TTN-GMT, EU-UK-TTN-PNK, EU-UK-TTN-RSE, EU-UK-TTN-BLK, EU-UK-TTN-XXX
Serial Number	:	N/A
Report Number	:	EED32Q80304303
FCC ID	:	2AANZTTN
Date of Issue	:	Jun. 27, 2024
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 1.1310 47 CFR Part 2.1091(mobile devices) 47 CFR Part 2.1093(portable devices) KDB 447498 D04 Interim General RF Exposure Guidance v01
Test result	:	PASS

Prepared for:

DGL Group, Ltd.

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Prepared by:

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1 Version

Version No.	Date	Description
00	Jun. 27, 2024	Original

2 Contents

Page

1 VERSION 2
2 CONTENTS 3
3 GENERAL INFORMATION 4
3.1 CLIENT INFORMATION 4
3.2 GENERAL DESCRIPTION OF EUT 4
3.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD 4
3.4 TEST LOCATION 5
3.5 DEVIATION FROM STANDARDS 5
3.6 ABNORMALITIES FROM STANDARD CONDITIONS 5
3.7 OTHER INFORMATION REQUESTED BY THE CUSTOMER 5
4 SAR EVALUATION 6
4.1 RF EXPOSURE COMPLIANCE REQUIREMENT 6
4.1.1 Limits *6*
4.1.2 Test Procedure *6*
4.1.3 EUT RF Exposure Evaluation *7*

3 General Information

3.1 Client Information

Applicant:	DGL Group, Ltd.
Address of Applicant:	2045 Lincoln Highway, 3rd floor, Edison, New Jersey 08817
Manufacturer:	DGL Group, Ltd.
Address of Manufacturer:	2045 Lincoln Highway, 3rd floor, Edison, New Jersey 08817

3.2 General Description of EUT

Product Name:	HOVER-1 - TITAN HOVERBOARD
Model No.(EUT):	HY-TTN-BLU, HY-TTN, HY-TTN-GMT, HY-TTN-PNK, HY-TTN-RSE, HY-TTN-BLK, HY-TTN-XXX, EU-UK-TTN, EU-UK-TTN-BLU, EU-UK-TTN-GMT, EU-UK-TTN-PNK, EU-UK-TTN-RSE, EU-UK-TTN-BLK, EU-UK-TTN-XXX
Test Model No.:	HY-TTN-BLU
Trade Mark:	HOVER-1

3.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz	
Modulation Type:	Bluetooth LE:GFSK, Bluetooth Classic:GFSK, π/4DQPSK, 8DPSK	
Test Power Grade:	Default	
Software:	FCC_Assist 1.0.2.2 (manufacturer declare)	
EUT Power Grade:	Default (Power level is built-in set parameters and cannot be changed and selected)	
Antenna Type:	PCB antenna	
Antenna Gain:	4.24dBi	
Power Supply:	Adapter:	Model:GA20-4201500T Input:100-240V~50/60Hz 1.8A MAX Output:42V1.5A
	Battery:	DC 36V
Sample Received Date:	Mar. 20, 2024	
Sample tested Date:	Mar. 20, 2024 to Mar. 25, 2024	

Remark:
Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.

Model No.: HY-TTN-BLU, HY-TTN, HY-TTN-GMT, HY-TTN-PNK, HY-TTN-RSE, HY-TTN-BLK, HY-TTN-XXX, EU-UK-TTN, EU-UK-TTN-BLU, EU-UK-TTN-GMT, EU-UK-TTN-PNK, EU-UK-TTN-RSE, EU-UK-TTN-BLK, EU-UK-TTN-XXX
Only the model HY-TTN-BLU was tested. They have same electrical, PCB and BOM. Only the model's names and colour are different.

3.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd
Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China
Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385
No tests were sub-contracted.
FCC Designation No.: CN1164

3.5 Deviation from Standards

None.

3.6 Abnormalities from Standard Conditions

None.

3.7 Other Information Requested by the Customer

None.

4 SAR Evaluation

4.1 RF Exposure Compliance Requirement

4.1.1 Limits

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold Pth (mW).
This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by Formula

$$P_{\text{th}}\,(\text{mW}) = \begin{cases} ERP_{20\text{ cm}}(d/20\text{ cm})^{x} & d \le 20\text{ cm} \\ ERP_{20\text{ cm}} & 20\text{ cm} < d \le 40\text{ cm} \end{cases}$$

where

$$x = -\log_{10}\left(\frac{60}{ERP_{20\text{ cm}}\sqrt{f}}\right)$$

and f is in GHz, d is the separation distance (cm), and ERP20cm is per Formula (B.1).

$$P_{\text{th}}\,(\text{mW}) = ERP_{20\text{ cm}}\,(\text{mW}) = \begin{cases} 2040f & 0.3\text{ GHz} \le f < 1.5\text{ GHz} \\ 3060 & 1.5\text{ GHz} \le f \le 6\text{ GHz} \end{cases} \qquad (\text{B.1})$$

The 1 mW Blanket Exemption of § 1.1307(b)(3)(i)(A) applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power of no more than 1 mW, regardless of separation distance.

4.1.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

4.1.3 EUT RF Exposure Evaluation

For Stand alone:

For Bluetooth LE:

Frequency (MHz)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2480	1.01	4.24	3.10	2.04	2.7172	PASS

For Bluetooth Classic:

Frequency (MHz)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2480	1.52	4.24	3.61	2.30	2.7172	PASS

Note：

①EIRP=conducted power+antenna gain；

②ERP=EIRP-2.15;

③EIRP(dBm) = Field strength of the fundamental signal(dBuV/m@3m) – 95.23;

④ERP(mW) = 10^(ERP (dBm)/10);

⑤The estimation distance is 0.5cm;

⑥The test data please refer to the report of EED32Q80304301 and EED32Q80304302 and only the worst case data was recorded in the report.

*** End of Report ***