RF Exposure Evaluation Report

Product	:	HOVER-1 – H1 HOVERBOARD
Trade mark	:	HOVER-1
Model/Type reference	:	Refer to section 4.2
Serial Number	:	N/A
Report Number	:	EED32Q80105302
FCC ID	:	2AANZHYH1
Date of Issue	:	Feb. 22, 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.

2045 Lincoln Highway, 3rd floor, Edison, NJ 08817

Prepared by:

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Check No.:8914230124

2 Version

Version No.	Date	Description
00	Feb. 22, 2024	Original

3 Contents

4 General Information

4.1 Client Information

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

4.2 General Description of EUT

Product Name:	HOVER-1 – H1 HOVERBOARD
Model No.(EUT):	HY-H1,HY-H1-BLK,HY-H1-RED,HY-H1-BLU,HY-H1-WHT,HY-H1-IRD,HY-H1-XXX, HY-H1-BLK-M,HY-EU-H1,HY-EU-H1-BLK,HY-EU-H1-IRD,HY-EU-H1-XXX,HY-EU-UK-H1,HY-EU-UK-H1-BLK,HY-EU-UK-H1-IRD,HY-EU-UK-H1-XXX
Test Model No.:	HY-H1
Trade Mark:	HOVER-1

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz	
Modulation Type:	GFSK, π/4DQPSK	
Test Software:	FCC_assist (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:	1.50dBi	
Power Supply:	Adapter:	Model:FY0634201500 Input:100-240V~50/60Hz,1.8A Output:DC 42V,1.5A
	Battery:	DC 36V
Test Voltage:	DC 36V	
Sample Received Date:	Jan. 23, 2024	
Sample tested Date:	Jan. 23, 2024 to Feb. 05, 2024	

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

Model No.:HY-H1,HY-H1-BLK,HY-H1-RED,HY-H1-BLU,HY-H1-WHT,HY-H1-IRD, HY-H1-XXX,HY-H1-BLK-M,HY-EU-H1,HY-EU-H1-BLK,HY-EU-H1-IRD, HY-EU-H1-XXX,HY-EU-UK-H1,HY-EU-UK-H1-BLK,HY-EU-UK-H1-IRD,HY-EU-UK-H1-XXX
Only the model HY-H1 was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with difference being model name,colour and sales regions.

4.4 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

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 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.

5.1.2 Test Procedure

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

5.1.3 EUT RF Exposure Evaluation

For Stand alone:

For Bluetooth Classic:

Frequency (MHz)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2480	1.56	1.50	0.91	1.2331	≤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 EED32Q80105301 and only the worst case data was recorded in the report.

*** End of Report ***