

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
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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.**2045 Lincoln Highway, 3rd floor, Edison, New Jersey 08817**

Prepared by:

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Jun. 27, 2024

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1 Version

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

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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, $\pi/4$ DQPSK, 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

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

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).

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

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) = $10^{(ERP \text{ (dBm)}/10)}$;
- 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.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***