RF Exposure Evaluation Report

Product	:	OVAL HOME Adaptive Spinal Protection Flex
Trade mark	:	N/A
Model/Type reference	:	See section 3.2
Serial Number	:	N/A
Report Number	:	EED32Q81151102
FCC ID	:	2BF3EF1SER
Date of Issue	:	Mar. 21, 2025
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 1.1310 47 CFR Part 2.1091 47 CFR Part 2.1093 KDB 447498 D04 Interim General RF Exposure Guidance v01
Test result	:	PASS

Prepared for:

ACADEMY FOR FUTURE HEALTH LTD
SUIT A 6 HONDURAS STREET LONDON UNITED KINGDOM EC1Y 0TH

Prepared by:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
Shenzhen, Guangdong, China
TEL: +86-755-3368 3668
FAX: +86-755-3368 3385

Compiled by: Zhenxia Wen — Zhenxia Wen

Reviewed by: Frazer. Li — Frazer Li

Approved by: Aaron Ma — Aaron Ma

Date: Feb. 01, 2024

Check No.: 9840020824

1 Version

Version No.	Date	Description
00	Mar. 21, 2025	Original

2 Contents

3 General Information

3.1 Client Information

Applicant:	ACADEMY FOR FUTURE HEALTH LTD
Address of Applicant:	SUIT A 6 HONDURAS STREET LONDON UNITED KINGDOM EC1Y 0TH
Manufacturer:	ACADEMY FOR FUTURE HEALTH LTD
Address of Manufacturer:	SUIT A 6 HONDURAS STREET LONDON UNITED KINGDOM EC1Y 0TH

3.2 General Description of EUT

Product Name:	OVAL HOME Adaptive Spinal Protection Flex
Model No.(EUT):	F1, F1 PRO, F1 Ultra, F1 Advanced, F1 Premium, F1 signature, FT1, FT1 PRO, FT1 Ultra, FT1 Advanced, FT1 Premium, FT1 signature
Test Model No.:	F1
Trade Mark:	N/A

3.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz	
Modulation Type:	GFSK	
Test Power Grade:	Default	
Test Software of EUT:	RFTest_0421_disableRTSDTR_boxed	
Antenna Type:	PCB antenna	
Antenna Gain:	1.5dBi	
Power Supply:	Adapter:	Model: PS180A24OY7500H Input: 100-240V 50/60Hz Output: 24V/7.5A
Sample Received Date:	Aug. 15, 2024	
Sample tested Date:	Aug. 15, 2024 to Mar. 21, 2025	

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.: F1, F1 PRO, F1 Ultra, F1 Advanced, F1 Premium, F1 signature, FT1, FT1 PRO, FT1 Ultra, FT1 Advanced, FT1 Premium, FT1 signature
Only the model F1 was tested. Their electrical circuit design, layout, components used and internal wiring are identical. Only the size, color and spine protection structure are different：

F1	Suitable for Full-Cal King size mattress, basic spine protection structure, suitable for single people.
F1 PRO	Suitable for Full-Cal King size mattress, advanced spine protection structure, suitable for single people.
F1 Ultra	Suitable for Full-Cal King size mattress, customized spine protection structure, suitable for single people.
F1 Advanced	Suitable for Full-Cal King size mattress, basic spine protection structure, suitable for two people.
F1 Premium	Suitable for Full-Cal King size mattress, advanced spine protection structure,

	suitable for two people.
F1 signature	Suitable for Full-Cal King size mattress, customized spine protection structure, suitable for two people.
FT1	Suitable for Single-Twin XL size mattress, basic spine protection structure, suitable for children.
FT1 PRO	Suitable for Single-Twin XL size mattress, advanced spine protection structure, suitable for children.
FT1 Ultra	Suitable for Single-Twin XL size mattress, customized, spine protection structure, suitable for children.
FT1 Advanced	Suitable for Small Single-Twin XL size mattress, basic spine protection structure, suitable for teenagers.
FT1 Premium	Suitable for Small Single-Twin XL size mattress, advanced spine protection structure, suitable for teenagers.
FT1 signature	Suitable for Small Single-Twin XL size mattress, customized spine protection structure, suitable for teenagers.

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:

Frequency (MHz)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (mW)	MPE ratio	Result
@2.4GHz	0.88	1.5000	0.23	1.0544	3060	0.0003	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 20cm;

⑥The test data please refer to the report of EED32Q81151101 and only the worst case data was recorded in the report.

Statement

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;

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

3. The result(s) shown in this report refer(s) only to the sample(s) tested;

4. Unless otherwise stated,the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule stated in ILAC-G8:09/2019/CNAS-GL015:2022;

5. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***