

TYPE EXAMINATION CERTIFICATE



Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

Type Examination Certificate Number: **UL 21 ATEX 2500X Rev. 0**

Product: **LED Luminaires, Models L2004 Series**

Manufacturer: **Top Hi-Tech Co., Ltd.**

Address: **9F, No. 1, Zhongshan Rd., Tucheng District, New Taipei City 236, Taiwan (R.O.C)**

This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

UL International Demko A/S certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential report no. **US/UL/ExTR21.0001/00.**

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN IEC 60079-15: 2019

except in respect of those requirements listed at item 18 of the Schedule.

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

This Type examination certificate relates only to the design of the specified product, and not to specific items of product subsequently manufactured.

The marking of the product shall include the following:

II 3 G Ex nR IIC T5...T6 Gc

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2021-08-23

Certification Body

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Description of Product:

The Model L2004 Series of LED luminaires is suitable for use in hazardous location classified as Zone 2. This luminaire consists of "nR" LED array chamber.

Nomenclature for Luminaires:

The complete luminaire catalogue number example is as follows:

Cat.	THT	H	2004	F	N	H	C	9	F0	03
No.	1	2	3	4	5	6	7	8	9	10

1 – Brand name

THT = Top Hi-Tech Co., Ltd.

2 – Category of product

H = HazLoc LED luminaire

3 – Model name

2004 = Model L2004 Series

4 – Designates length of LED luminaire

E = Middle size (2ft) (For 20W and 40W only)

F = Long size (4ft) (For 40W and 60W only)

5 – Designates type of Top Cover

N = No Top Cover exist

6 – Designates type of LED module

H = SMD type

7 – Designates CCT of LED

C = Cool white

W = Warm white

Y = Yellow light

G = Green light

8 – Designates voltage of luminaire

4 = 100 Vac

1 = 110 Vac

5 = 200 Vac

2 = 220 Vac

9 = 277 Vac

9 – Designates wattage of luminaire

B0 = 20W (For 2ft only)

D0 = 40W (For 2ft and 4ft)

F0 = 60W (For 4ft only)

10 – Designates number of PC tube

03 = Single PC tube

04 = Dual PC tube

Models covered are as follows:

Models	Ambient Temperature Range	'nR' Temperature Code
THTH2004ENHwxyz	-25°C to +40°C	T5
	-25°C to +55°C	T5
THTH2004FNHwxyz	-25°C to +40°C	T6
	-25°C to +55°C	T5

w can be C, W, Y or G; x can be 4, 1, 5, 2 or 9; y can be B0, D0 or F0; z can be 03 or 04

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 2) to the scope of EN 60079-28:2015.

Electrical data:

Models	Length	Voltage (Vac)	Frequency (Hz)	Wattage (W)
THTH2004ENHwxB0z	2ft	100/110/200/220/277	50/60	20
THTH2004ENHwxD0z		100/110/200/220/277	50/60	40
THTH2004FNHwxD0z	4ft	100/110/200/220/277	50/60	40
THTH2004FNHwxF0z		100/110/200/220/277	50/60	60

w can be C, W, Y or G; x can be 4, 1, 5, 2 or 9; z can be 03 or 04



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Routine tests:

Routine dielectric strength testing according to clause 12.1 of EN 60079-15 is required.

Routine restricted breathing testing according to clause 12.2.2.1.2 of EN 60079-15 is required.

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Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

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Special Conditions of Use:

- The luminaire shall not be opened.
- Potential electrostatic charging hazard – see instructions.
- The luminaire does not have a test port fitted.
- The gasket not to be replaced in the field.

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Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The Models L2004 Series has in addition passed the tests for Ingress Protection to IP67 in accordance with EN60529:1991+A1:2000+A2:2013.

The trademark **THT-EX** or **THT-EX** will be used as the company identifier on the marking label.

