

TYPE EXAMINATION CERTIFICATE



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

[3] Type Examination Certificate Number: **UL 21 ATEX 2398X Rev. 0**

[4] Product: **LED Luminaires, Models L1319C Series**

[5] Manufacturer: **Top Hi-Tech Co. Ltd.**

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

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

[8] 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/ExTR21.0038/00.**

[9] 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.

[10] 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.

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

[12] The marking of the product shall include the following:

II 3 G Ex nR IIC T4...T5 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: 2021-04-20

Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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Description of Product:

The Model L1319C 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	1319	C	N	H	C	C	P0
No.	1	2	3	4	5	6	7	8	9

1 – Brand name

THT = Top Hi-Tech Co., Ltd.

2 – Category of product

H = HazLoc LED luminaire

3 – Model name

1319 = Model L1319C Series

4 – Designates series type and length of LED luminaire

C = 2ft length with clear glass

E = 2ft length with matted glass

5 – Designates type of Top Cover

N = Without Top Cover

C = With Top Cover

6 – Designates type of LED module

H = SMD type

7 – Designates CCT of LED

C = Cool white

W = Warm white

8 – Designates voltage of luminaire

4 = 100 Vac (For 20W/40W/60W/120W/150W only)

1 = 110 Vac (For 20W/40W/60W/120W/150W only)

6 = 120 Vac (For 20W/40W/60W/80W/120W/150W only)

5 = 200 Vac (For 20W/40W/60W/120W/150W only)

2 = 220 Vac (For 20W/40W/60W/120W/150W only)

D = 230 Vac (For 20W/40W/60W/120W/150W only)

9 = 277 Vac (For 20W/40W/60W/80W/120W/150W only)

F = 347 Vac (For 20W/40W/80W only)

C = 480 Vac (For 20W/40W/80W only)

9 – Designates wattage of luminaire

B0 = 20W (For 100V/110V/120V/200V/220V/230V/277V/347V/480V only)

D0 = 40W (For 100V/110V/120V/200V/220V/230V/277V/347V/480V only)

F0 = 60W (For 100V/110V/120V/200V/220V/230V/277V only)

H0 = 80W (For 120V/277V/347V/480V only)

L0 = 120W (For 100V/110V/120V/200V/220V/230V/277V only)

P0 = 150W (For 100V/110V/120V/200V/220V/230V/277V only)

Models covered are as follows:

Models	Ambient Temperature range	'nR' Temperature Code
THTH1319vwHxyz	-20°C to +40°C	T5
	-20°C to +65°C	T4
v can be C or E; w can be N or C; x can be C or W; y can be 4, 1, 6, 5, 2, D, 9, F or C; z can be B0, D0, F0, H0, L0 or P0		

The complete luminaire catalogue number example is as follows:

Cat.	THT	H	1319	D	C	H	C	C	30
No.	1	2	3	4	5	6	7	8	9

1 – Brand name

THT = Top Hi-Tech Co., Ltd.

2 – Category of product

H = HazLoc LED luminaire

3 – Model name

1319 = Model L1319C Series

4 – Designates series type and length of LED luminaire

D = 4ft length with clear glass

F = 4ft length with matted glass

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5 – Designates type of Top Cover
C = With Top Cover

6 – Designates type of LED module
H = SMD type

7 – Designates CCT of LED
C = Cool white
W = Warm white

8 – Designates voltage of luminaire
4 = 100 Vac (For 40W/80W/120W/240W/300W only)
1 = 110 Vac (For 40W/80W/120W/240W/300W only)
6 = 120 Vac (For 40W/80W/120W/160W/240W/300W only)
5 = 200 Vac (For 40W/80W/120W/240W/300W only)
2 = 220 Vac (For 40W/80W/120W/240W/300W only)
D = 230 Vac (For 40W/80W/120W/240W/300W only)
9 = 277 Vac (For 40W/80W/120W/160W/240W/300W only)
F = 347 Vac (For 40W/80W/160W only)
C = 480 Vac (For 40W/80W/160W only)

9 – Designates wattage of luminaire
D0 = 40W (For 100V/110V/120V/200V/220V/230V/277V/347V/480V only)
H0 = 80W (For 100V/110V/120V/200V/220V/230V/277V/347V/480V only)
L0 = 120W (For 100V/110V/120V/200V/220V/230V/277V only)
Q0 = 160W (For 120V/277V/347V/480V only)
Y0 = 240W (For 100V/110V/120V/200V/220V/230V/277V only)
30 = 300W (For 100V/110V/120V/200V/220V/230V/277V only)

Models covered are as follows:

Models	Ambient Temperature range	'nR' Temperature Code
THTH1319uCHxyzz	-20°C to +40°C	T5
	-20°C to +65°C	T4

u can be D or F; x can be C or W; y can be 4, 1, 6, 5, 2, D, 9, F or C; zz can be D0, H0, L0, Q0, Y0 or 30

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)
THTH1319vwHxaB0	2ft	100/110/120/200/220/230/277/347/480	50/60	20
THTH1319vwHxaD0		100/110/120/200/220/230/277/347/480	50/60	40
THTH1319vwHxbF0		100/110/120/200/220/230/277	50/60	60
THTH1319vwHxcH0		120/277/347/480	50/60	80
THTH1319vwHxbL0		100/110/120/200/220/230/277	50/60	120
THTH1319vwHxbP0		100/110/120/200/220/230/277	50/60	150
THTH1319uCHxaD0	4ft	100/110/120/200/220/230/277/347/480	50/60	40
THTH1319uCHxaH0		100/110/120/200/220/230/277/347/480	50/60	80
THTH1319uCHxbL0		100/110/120/200/220/230/277	50/60	120
THTH1319uCHxcQ0		120/277/347/480	50/60	160
THTH1319uCHxbY0		100/110/120/200/220/230/277	50/60	240
THTH1319uCHxb30		100/110/120/200/220/230/277	50/60	300

v can be C or E; u can be D or F; w can be N or C; x can be C or W; a can be 4, 1, 6, 5, 2, D, 9, F or C; b can be 4, 1, 6, 5, 2, D or 9; c can be 6, 9, F or C

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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Schedule

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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 L1319C 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.