[1] # TYPE EXAMINATION CERTIFICATE

[2] **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. 1**

[4] Product: **LED Luminaires, Models L1319C Series – Models THTH1319C, THTH1319E, THTH1319D and THTH1319F 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/ExTR21.0038/01.**

[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
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Certification Body UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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[15] 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 2 feet 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
B = COB type

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

8 – Designates voltage of luminaire
4 = 100 Vac (For 20W/30W/40W/50W/60W/70W/80W/90W/100W/120W/150W only)
1 = 110 Vac (For 20W/30W/40W/50W/60W/70W/80W/90W/100W/120W/150W only)
6 = 120 Vac (For 20W/30W/40W/50W/60W/70W/80W/90W/100W/120W/150W only)
5 = 200 Vac (For 20W/30W/40W/50W/60W/70W/80W/90W/100W/120W/150W only)
2 = 220 Vac (For 20W/30W/40W/50W/60W/70W/80W/90W/100W/120W/150W only)
D = 230 Vac (For 20W/30W/40W/50W/60W/70W/80W/90W/100W/120W/150W only)
9 = 277 Vac (For 20W/30W/40W/50W/60W/70W/80W/90W/100W/120W/150W only)
F = 347 Vac (For 20W/40W/80W only)
C = 480 Vac (For 20W/40W/80W only)
H = 100~277 Vac (For 30W/40W/50W/60W/70W/80W/90W/100W/110W/120W/130W/140W/150W/160W only)
L = 125 Vdc (For 30W/35W/40W/45W/50W/55W/60W only)

9 – Designates wattage of luminaire
B0 = 20W (For 100V/110V/120V/200V/220V/230V/277V/347V/480V only)
C0 = 30W (For 100V/110V/120V/200V/220V/230V/277V/100~277V/125Vdc only)
C5 = 35W (For 125Vdc only)
D0 = 40W (For 100V/110V/120V/200V/220V/230V/277V/347V/480V/100~277V/125Vdc only)
D5 = 45W (For 125Vdc only)
E0 = 50W (For 100V/110V/120V/200V/220V/230V/277V/100~277V/125Vdc only)
E5 = 55W (For 125Vdc only)
F0 = 60W (For 100V/110V/120V/200V/220V/230V/277V/100~277V/125Vdc only)
G0 = 70W (For 100V/110V/120V/200V/220V/230V/277V/100~277V only)
H0 = 80W (For 100V/110V/120V/200V/220V/230V/277V/347V/480V/100~277V only)
I0 = 90W (For 100V/110V/120V/200V/220V/230V/277V/100~277V only)
J0 = 100W (For 100V/110V/120V/200V/220V/230V/277V/100~277V only)
K0 = 110W (For 100~277V only)
L0 = 120W (For 100V/110V/120V/200V/220V/230V/277V/100~277V only)
M0 = 130W (For 100~277V only)
N0 = 140W (For 100~277V only)
P0 = 150W (For 100V/110V/120V/200V/220V/230V/277V/100~277V only)
Q0 = 160W (For 100~277V only)

Models covered are as follows:

Models	Ambient Temperature range	'nR' Temperature Code
THTH1319vwHxyz	-20°C to +40°C	T5
	-20°C to +60°C	T4
THTH1319vwBxfn	-20°C to +40°C	T4
	-20°C to +45°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, C, H or L; z can be B0, C0, C5, D0, D5, E0, E5, F0, G0, H0, I0, J0, K0, L0, M0, N0, P0 or Q0; f can be 1, 6, 2, D or 9; n can be D0, F0, H0, J0 or L0		

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The complete 4 feet 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

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

6 – Designates type of LED module
H = SMD type
B = COB type

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

8 – Designates voltage of luminaire
4 = 100 Vac (For 40W/60W/80W/100W/120W/140W/160W/180W/210W/240W/300W only)
1 = 110 Vac (For 40W/60W/80W/100W/120W/140W/160W/180W/200W/210W/240W/300W only)
6 = 120 Vac (For 40W/60W/80W/100W/120W/140W/160W/180W/200W/210W/240W/300W only)
5 = 200 Vac (For 40W/60W/80W/100W/120W/140W/160W/180W/210W/240W/300W only)
2 = 220 Vac (For 40W/60W/80W/100W/120W/140W/160W/180W/200W/210W/240W/300W only)
D = 230 Vac (For 40W/60W/80W/100W/120W/140W/160W/180W/200W/210W/240W/300W only)
9 = 277 Vac (For 40W/60W/80W/100W/120W/140W/160W/180W/200W/210W/240W/300W only)
F = 347 Vac (For 40W/80W/160W only)
C = 480 Vac (For 40W/80W/160W only)
H = 100~277 Vac (For 120W/150W/160W/170W/180W/190W/200W/210W/220W/230W/240W/250W/260W/270W/280W/290W/300W only)

9 – Designates wattage of luminaire
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 100V/110V/120V/200V/220V/230V/277V/347V/480V only)
J0 = 100W (For 100V/110V/120V/200V/220V/230V/277V only)
L0 = 120W (For 100V/110V/120V/200V/220V/230V/277V/100~277V only)
N0 = 140W (For 100V/110V/120V/200V/220V/230V/277V only)
P0 = 150W (For 100~277V only)
Q0 = 160W (For 100V/110V/120V/200V/220V/230V/277V/347V/480V/100~277V only)
R0 = 170W (For 100~277V only)
S0 = 180W (For 100V/110V/120V/200V/220V/230V/277V/100~277V only)
T0 = 190W (For 100~277V only)
U0 = 200W (For 110V/120V/220V/230V/277V/100~277V only)
V0 = 210W (For 100V/110V/120V/200V/220V/230V/277V/100~277V only)
W0 = 220W (For 100~277V only)
X0 = 230W (For 100~277V only)
Y0 = 240W (For 100V/110V/120V/200V/220V/230V/277V/100~277V only)
25 = 250W (For 100~277V only)
26= 260W (For 100~277V only)
27= 270W (For 100~277V only)
28= 280W (For 100~277V only)
29= 290W (For 100~277V only)
30 = 300W (For 100V/110V/120V/200V/220V/230V/277V/100~277V only)

Models covered are as follows:

Models	Ambient Temperature range	'nR' Temperature Code
THTH1319uCHxyyzz	-20°C to +40°C	T5
	-20°C to +60°C	T4
THTH1319uCBxfp	-20°C to +40°C	T4
	-20°C to +45°C	T4
u can be D or F; x can be C or W; yy can be 4, 1, 6, 5, 2, D, 9, F, C or H; zz can be D0, F0, H0, J0, L0, N0, P0, Q0, R0, S0, T0, U0, V0, W0, X0, Y0, 25, 26, 27, 28, 29 or 30; f can be 1, 6, 2, D or 9; p can be H0, L0, Q0, U0 or Y0		

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.

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Electrical data:

Models	Length	Voltage (Vac)	Frequency (Hz)	Wattage (W)
THTH1319vwHxaB0	2ft	100/110/120/200/220/230/277/347/480	50/60	20
THTH1319vwHxbB0		100/110/120/200/220/230/277	50/60	20
THTH1319vwHxdC0		100/110/120/200/220/230/277/100~277/125Vdc	50/60	30
THTH1319vwHxeC5		125Vdc	50/60	35
THTH1319vwHxaD0		100/110/120/200/220/230/277/347/480	50/60	40
THTH1319vwBxfD0		110/120/220/230/277	50/60	40
THTH1319vwHxdD0		100/110/120/200/220/230/277/100~277/125Vdc	50/60	40
THTH1319vwHxeD5		125Vdc	50/60	45
THTH1319vwHxdE0		100/110/120/200/220/230/277/100~277/125Vdc	50/60	50
THTH1319vwHxeE5		125Vdc	50/60	55
THTH1319vwHxbF0		100/110/120/200/220/230/277	50/60	60
THTH1319vwBxfF0		110/120/220/230/277	50/60	60
THTH1319vwHxdF0		100/110/120/200/220/230/277/100~277/125Vdc	50/60	60
THTH1319vwHxgG0		100/110/120/200/220/230/277/100~277	50/60	70
THTH1319vwHxcH0		120/277/347/480	50/60	80
THTH1319vwBxfH0		110/120/220/230/277	50/60	80
THTH1319vwHxgH0		100/110/120/200/220/230/277/100~277	50/60	80
THTH1319vwHxgI0		100/110/120/200/220/230/277/100~277	50/60	90
THTH1319vwBxfJ0		110/120/220/230/277	50/60	100
THTH1319vwHxgJ0		100/110/120/200/220/230/277/100~277	50/60	100
THTH1319vwHxhK0		100~277	50/60	110
THTH1319vwHxbL0		100/110/120/200/220/230/277	50/60	120
THTH1319vwBxfL0		110/120/220/230/277	50/60	120
THTH1319vwHxhL0		100~277	50/60	120
THTH1319vwHxhM0		100~277	50/60	130
THTH1319vwHxhN0		100~277	50/60	140
THTH1319vwHxbP0		100/110/120/200/220/230/277	50/60	150
THTH1319vwHxhP0		100~277	50/60	150
THTH1319vwHxhQ0		100~277	50/60	160
THTH1319uCHxaD0	4ft	100/110/120/200/220/230/277/347/480	50/60	40
THTH1319uCHxbD0		100/110/120/200/220/230/277	50/60	40
THTH1319uCHxbF0		100/110/120/200/220/230/277	50/60	60
THTH1319uCHxaH0		100/110/120/200/220/230/277/347/480	50/60	80
THTH1319uCBxfH0		110/120/220/230/277	50/60	80
THTH1319uCHxbH0		100/110/120/200/220/230/277	50/60	80
THTH1319uCHxbJ0		100/110/120/200/220/230/277	50/60	100
THTH1319uCHxbL0		100/110/120/200/220/230/277	50/60	120
THTH1319uCBxfL0		110/120/220/230/277	50/60	120
THTH1319uCHxgL0		100/110/120/200/220/230/277/100~277	50/60	120
THTH1319uCHxbN0		100/110/120/200/220/230/277	50/60	140
THTH1319uCHxhP0		100~277	50/60	150
THTH1319uCHxcQ0		120/277/347/480	50/60	160
THTH1319uCBxfQ0		110/120/220/230/277	50/60	160
THTH1319uCHxgQ0		100/110/120/200/220/230/277/100~277	50/60	160
THTH1319uCHxhR0		100~277	50/60	170
THTH1319uCHxgS0		100/110/120/200/220/230/277/100~277	50/60	180
THTH1319uCHxhT0		100~277	50/60	190
THTH1319uCBxfU0		110/120/220/230/277	50/60	200
THTH1319uCHxhU0		100~277	50/60	200
THTH1319uCHxgV0		100/110/120/200/220/230/277/100~277	50/60	210
THTH1319uCHxhW0		100~277	50/60	220
THTH1319uCHxhX0		100~277	50/60	230
THTH1319uCHxbY0		100/110/120/200/220/230/277	50/60	240
THTH1319uCBxfY0		110/120/220/230/277	50/60	240
THTH1319uCHxhY0		100~277	50/60	240
THTH1319uCHxh25		100~277	50/60	250
THTH1319uCHxh26		100~277	50/60	260
THTH1319uCHxh27		100~277	50/60	270
THTH1319uCHxh28		100~277	50/60	280
THTH1319uCHxh29		100~277	50/60	290
THTH1319uCHxb30		100/110/120/200/220/230/277	50/60	300
THTH1319uCHxh30		100~277	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; d can be 4, 1, 6, 5, 2, D, 9, F, C, H or L; e can be L; f can be 1, 6, 2 , D or 9; g can be 4, 1, 6, 5, 2, D, 9 or H; h can be H				

Routine tests:
Routine dielectric strength testing according to clause 12.1 of EN IEC 60079-15 is required.
Routine restricted breathing testing according to clause 12.2.2.1.2 of EN IEC 60079-15 is required.

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

[17] 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.

[18] 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 IP66 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.