

#### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx UL 21.0007X	Page 1 of 3	Certificate history:
Status:	Current	Issue No: 0	
Date of Issue:	2021-10-25		
Applicant:	Banner Engineering Corp. 9714 10th Avenue N Minneapolis, MN 55441 United States of America		
Equipment:	LED Luminaires, Model HLS28		
Optional accessory:			
Type of Protection:	Increased Safety "ec"		
Marking:	Ex ec IIC T4 Gc		
	-20°C $\leq$ Ta $\leq$ +60°C for models with motion sensor		
	-20°C ≤ Ta ≤ +70°C for all other models		

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature: (for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.

- This certificate is not transferable and remains the property of the issuing body.
  The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

**UL LLC** 333 Pfingsten Road Northbrook IL 60062-2096 **United States of America** 



Katy A. Holdredge

Senior Staff Engineer

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Certificate No.:	IECEx UL 21.0007X	Page 2 of 3	
Date of issue:	2021-10-25	Issue No: 0	
Manufacturer:	Banner Engineering Corp. 9714 10th Avenue N Minneapolis, MN 55441 United States of America		
Additional manufacturing locations:			
This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended			
STANDARDS : The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards			
IEC 60079-0:2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements		
IEC 60079-7:2017 Edition:5.1	Explosive atmospheres - Part 7: Equipment protection by increas	ed safety "e"	
	This Certificate <b>does not</b> indicate compliance with safety and other than those expressly included in the Standa		

#### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

US/UL/ExTR21.0007/00

#### Quality Assessment Report:

GB/FME/QAR13.0015/07



Certificate No .:

IECEx UL 21.0007X

Date of issue:

2021-10-25

Page 3 of 3

Issue No: 0

#### EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Luminaire models HLS28 Series are linear LED luminaires intended for adjustable wall or ceiling mounting. The luminaires are provided in different lengths and different LED colors. Mounting brackets are provided for proper installation.

Please see Annex for additional information.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

- Must be installed within an enclosure only accessible with a tool, such as a key, and appropriately rated for the application and the • environment.
- The luminaires shall be installed in an enclosure that provides a degree of protection not less than IP54 in accordance with IEC 60079-0. •

#### Annex:

Annex to IECEx UL 21.0007X Issue 0\_1.pdf



Certificate No .:

IECEx UL 21.0007X

Issue No.: 0 Page 1 of 3

### **TYPE DESIGNATION:**

Luminaire models HLS28 Series are linear LED luminaires intended for adjustable wall or ceiling mounting. The luminaires are provided in different lengths and different LED colors. Mounting brackets are provided for proper installation.

Nomenclature:

Single Color Models

· ·			
Ι.	Series Designation:		
	HLS28 – Basic series designation for single color		
	<b>°</b>		
Ш.	luminaires Cascadable		
11.	Cascadable		
	C - Cascadable		
.	X – Non-cascadable LED Color		
111.			
	W = Cool White		
	WW = Warm White		
	R = Red		
	G = Green		
	B = Blue		
	Y = Yellow		
IV.	Luminaire Length		
	Ŭ		
	145 = 145mm		
	285 = 285mm		
	430 = 430mm		
	570 = 570mm		
	710 = 710mm		
	850 = 850mm		
	990 = 990mm		
	1130 = 1130mm		
V.	Window		
	Blank = Clear plastic		
\/I	D = Diffused plastic		
VI.	Construction		
	X = Not sealed		
	S = Sealed		
VII.	Control		
V II.			
	Blank = None		
	M = Motion switch		
VIII.	Connector		



Certificate No .:

IECEx UL 21.0007X

Issue No.: 0 Page 2 of 3

Blank = 2m integral cable<br/>Q = Integral 4-pin M12 QD<br/>W/XX = cabled unit with length XX feetIX-xxxxxx = All models may have prefixes and/or suffixes<br/>of up to seven alphanumeric characters not impacting<br/>hardware or emission profile, or product safety approval.

Three to five color models

I.	Series Designation:
	HLS28 – Basic series designation for three to five color luminaires
II.	Cascadable
	C - Cascadable
	X – Non-cascadable
III.	LED Color 1-5 and Control
	WGRXX3 = White, Green, and Red with override control
	GYRXX3 = Green, Yellow, and Red with override control
	WYRXX3 = White, Yellow, and Red with override control
	WGRYB5 = White, Green, Red, Yellow, and Blue with binary control
	WGRXX6 = White, Green, and Red with I/O Block control
	WYRXX6 = White, Yellow, and Red with I/O Block control
	GYRXX6 = Green, Yellow, and Red with I/O Block control
IV.	Luminaire Length
	0285 = 285mm
	0570 = 570mm
	0850 = 850mm
	1130 = 1130mm
V.	Window
	Blank = Clear plastic
	D = Diffused plastic
VI.	Construction
	X = Not sealed
	S = Sealed



Certificate No .:

IECEx UL 21.0007X

Issue No.: 0 Page 3 of 3

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VII.	Voltage
	24 = 24V
VIII.	Connector
	Blank = 2m integral cable
	Q = Integral 4-pin M12/Euro-style quick disconnect
	W/XX = cabled unit with length XX feet
IX	-xxxxxx = All models may have prefixes and/or suffixes of up to seven alphanumeric characters not impacting hardware or emission profile, or product safety approval.

The relation between the ambient temperature and the assigned temperature class is as follows:

Ambient temperature range	Temperature Class
-20 °C $\leq$ Ta $\leq$ +60 °C (for models with motion sensor)	T4
-20 °C $\leq$ Ta $\leq$ +70 °C (for all other models)	T4

#### MARKING

Marking has to be readable and indelible; it has to include the following indications:



 $-XX^{\circ}C \le Ta \le +XX^{\circ}C$ II 3 G Ex ec IIC T4 Gc (Group IIC Zone 2) IECEx UL 21.0007X : UL 21 ATEX 2508X



-XX°C ≤ Ta ≤ +XX°C Class I Zone 2 IIC T4 / Class I SZUO, E467619 Division 2 Groups ABCD T4

