

S20NS LED STRIP

3 CCT SELECTABLE

OPTIONAL EMERGENCY REMOTE



The S20NS Series is a great option for retrofitting your traditional fluorescent linear luminaires to balance performance, aesthetics, and cost. These high-quality LED strip lights are equipped with a frosted lens that diffuses the light comfortably, and are ideal for a wide range of commercial and industrial applications.

FEATURES & SPECIFICATIONS

CONSTRUCTION

Physical Characteristics

- Sleek and compact design ideal for installation in tight spaces
- 24 gauge white powder painted steel
- Frosted PMMA lens
- CCT Selectable switch placed discretely inside the housing

Mounting

- Surface, suspended or row mounted (see accessories)
- V-Hooks, canopy plate for octagonal junction box and mounting brackets are included

PERFORMANCE DATA

- Available in both 3 500 K and 4 000 K single color temperatures, or 3 500/4 000/5 000 K selectable color temperature
- 80+ CRI
- Electrical ratings: 120 - 347 V, 120 - 277 V and 347 V
- Estimated life of over 162 000 hours to L70
- 0 - 10 V dimming standard
- 2.5 kV surge protection
- Operating temperature: -20 °C to 50 °C [-4 °F to 122 °F]
- Operating temperature with BRIDGE: -20 °C to 25 °C [-4 °F to 77 °F]

OPTIONAL EMERGENCY LIGHTING

BRIDGE Normally ON Emergency Remote LED Strip














- Consuming 11 W, 12 - 24 VDC
 - 200 mA constant current
 - Delivers 1 216 - 1 298 lumens in emergency mode
 - Ease of maintenance when used with AimLite emergency lighting battery units complete with auto test function
 - Complements AimLite's normally ON LED Strip family.
 - Patent pending
- Please view the BRIDGE specification section for more details on this technology**

EMERGENCY LIGHTING COMPLIANCES

- CSA certified as a C22.2 C141-15 emergency lighting luminaire
- Meets ICES-005 requirements

GENERAL LIGHTING COMPLIANCES

- cULus listed for damp locations
- DLC Premium and Standard
- Meets requirements of ICES-005 issue 5 class A for use in commercial applications

OVERVIEW			
LIGHT SOURCE	LED	COLOR TEMPERATURE (K)	3 500, 4 000, 5 000
WATTS (W)	20 - 75	CRI	80+
LUMEN OUTPUT (LM)	2 640 - 9 750	WEIGHT (LBS)	24": 2.20, 48": 4.52, 96": 9.04
EFFICACY (LM/W)	130 - 134		
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¹ 5 year warranty for the BRIDGE module.

Not all products are qualified on the DLC QPL. To view our DLC qualified products, please consult the DLC Qualified Products List at www.designlights.org/search.

QUICK SHIP AND TECHNICAL SPECIFICATION TABLE



PART NUMBER	WATTS	VOLTS	COLOR TEMP	LUMEN OUTPUT	EFFICACY	CRI	LIFE L70	TESTED HOURS LM-80	DIMMING	POWER FACTOR	THD	CASE QTY
	[W]	[V AC]	[K] ¹	[LM] ²	[LM/W]		[HRS] ⁴	[HRS] ⁴	[YES/NO]		[%]	[MASTER]
24" CCT SELECTABLE WITH EMERGENCY REMOTE FEATURE												
S20NS-24LA1-3C/EL	20 ⁵	120-347	3 500/4 000/5 000	2 640 ³	132	80+	190 000	9 000	YES	0.90	10	6
48"												
S20NS-48LA3-32/40K	35	120-347	4 000	4 585	131	80+	162 000	9 000	YES	0.90	10	6
48" WITH EMERGENCY REMOTE FEATURE												
S20NS-48LA3-40K/EL	35 ⁵	120-347	4 000	4 585	131	80+	162 000	9 000	YES	0.90	10	6
96"												
S20NS-96LA2-2/35K	75	120-277	3 500	9 750	130	80+	162 000	9 000	YES	0.90	10	1
S20NS-96LA2-8/35K	75	347	3 500	9 750	130	80+	162 000	9 000	YES	0.90	10	1

¹ Typical color temperature range: +/- 5 %.

² Lumen values are derived from photometric testing. Initial lumens range: +/- 10 %.

³ Lumen values are derived from DLC reported data at 3 500 K. Please refer to the LUMEN SPECIFICATION TABLE for more details on other color temperatures.

⁴ Life hours are derived from IESNA LM-80-08 testing report and projected per IESNA TM-21-11 extrapolations.

⁵ For wattage and lumen consumption in Emergency Mode, please see the BRIDGE TECHNICAL SPECIFICATION TABLE on page 3.

For emergency lighting spacing, please see page 5.

LUMEN SPECIFICATION TABLE

PART NUMBER	WATTS [W]	3 500 K		4 000 K		5 000 K	
		LUMEN OUTPUT [LM]	EFFICACY [LM/W]	LUMEN OUTPUT [LM]	EFFICACY [LM/W]	LUMEN OUTPUT [LM]	EFFICACY [LM/W]
S20NS-24LA1-3C/EL	20	2 640	132	2 660	133	2 680	134

DEFAULT PROGRAMMING

S20NS-24LA1-3C/EL: 4 000 K

DLC UNIQUE ID TABLE

PART NUMBER	DLC PREMIUM UNIQUE ID ¹	DLC STANDARD UNIQUE ID ²
S20NS-48LA3-32/40K	S-0B8NPA	S-TZGKN8
S20NS-96LA2-2/35K	S-UWMF09	S-XFCAND
S20NS-96LA2-8/35K	S-MLD1PN	S-F5Z109

¹ Primary Use Designation: Stairwell And Passageway Luminaires

² Primary Use Designation: Direct Linear Ambient Luminaires

ORDERING GUIDE

S20NS		L				
SERIES	SIZE	LAMP TYPE	LUMEN PACKAGE ¹	VOLTS [V]	COLOR TEMP. [K]	OPTIONS
S20NS	48" - 48"	L - LED	A3 - 4 585 LUMENS (35 W)	32 - 120-347	40K - 4 000	EL - BRIDGE NORMALLY ON EMERGENCY REMOTE ²

¹See IES files for details.

²When in emergency mode, luminaire only consumes 11 W.

For emergency lighting spacing, please see page 5.

ACCESSORIES (ORDER SEPARATELY)

PART NUMBER	TYPE
BKT347-A	SUSPENSION KIT - 2 CHAINS (1 METER)
KIT-STRIPS-AC10	10' AVIATION CABLE KIT WITH CANOPY, POWER CORD & DIMMING WIRES
BKT813-A	CONTINUOUS ROW MOUNTING CONNECTOR
LEN376-2-A	REPLACEMENT LENS 24"
LEN376-4-A	REPLACEMENT LENS 48"
LEN376-8-A	REPLACEMENT LENS 96"
WGD907-4FT-H	WIREGUARD KIT 48"
WGD076-8-H-A	WIREGUARD KIT 96"
OSI-EFS01RE	EXTERNAL MOUNT PIR MOTION SENSOR (120-277 V ONLY)
OSI-RM51	REMOTE CONTROL FOR PIR MOTION SENSOR

BRIDGE TECHNICAL SPECIFICATION TABLE

SIZE	LUMEN PACKAGE	WATTS [W]	BRIDGE WATTS [W]	BRIDGE LUMEN OUTPUT [LM]
24"	LA1	20	11	1 298
48"	LA3	35		1 216

COMPATIBLE DIMMERS¹

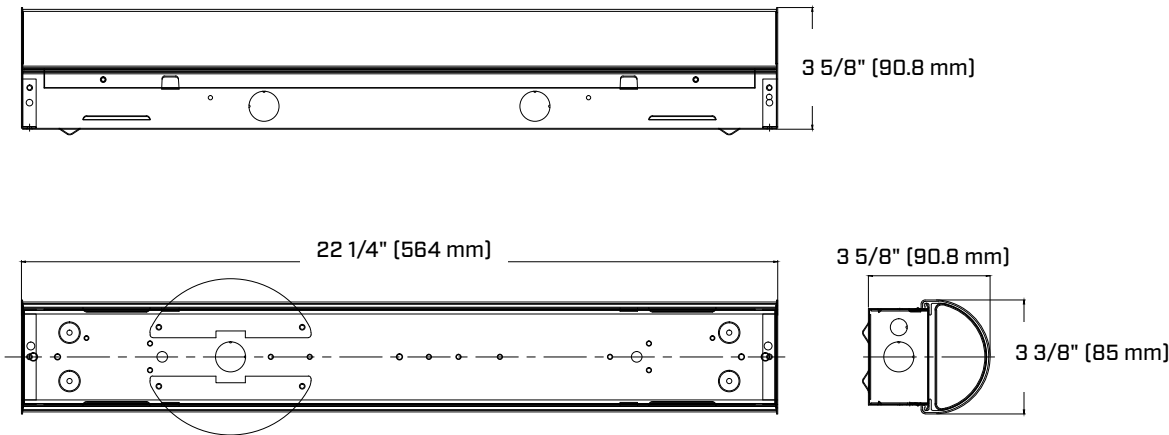
BRAND	MODEL
Leviton	ILLUMATECH IP710-LFZ
Lutron	DIVADVSTV
	Maestro MS-Z101
	Nova T NTSTV
Philips	Sunrise SR1200ZTUNV

Dimming range: 10%-100%

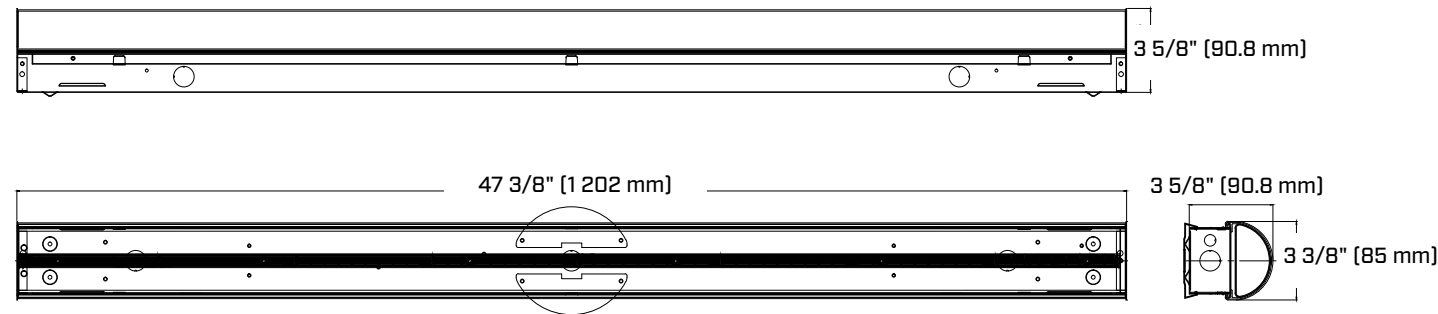
¹This table shows dimmers that have been tested and have demonstrated proper operation under normal conditions. Each installation being unique, various factors such as load, common neutrals or other electrical products on the circuit can, in certain instances, cause variance in system performance. Read and comply to the dimmer installation instructions. Consult dimming system manufacturer for additional support in operation. Some dimmers may require more than one product for stable operation. AimLite recommends to use dimmers designed to work with LED products. Older dimmers designed for incandescent products may cause erratic operation.

DIMENSIONS

24"



48"



96"



BRIDGE

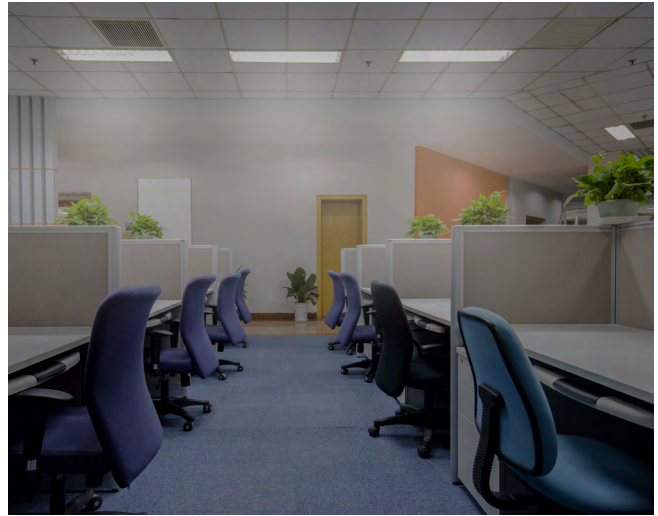
NORMALLY ON EMERGENCY REMOTE LUMINAIRE

This luminaire can be used with an emergency backup powered by either a 12 V or 24 V DC AimLite battery unit, complete with or without auto test.

NORMAL MODE



EMERGENCY MODE



TYPICAL SPECIFICATION

Supply and install AimLite BRIDGE ____ft, LED strip, Model number: _____ remote normally ON emergency luminaire, CSA C22.2 141-15 certified and meet the requirements prescribed by ICES-005. Normally ON when AC is present and when connected to a AimLite battery unit complete with or without auto test, the luminaire shall act as an emergency lighting remote and consume 11 W of DC power in ____ V producing 1 216 - 1 298 lumens in emergency mode.

The remote normally ON emergency luminaire shall be powered by a AimLite emergency lighting battery unit as described herein and shown on the drawings. The AimLite auto diagnostic micro-controller board shall supply the rated load for a minimum of a 1/2 hour to 87.5% of the rated battery voltage. The unit shall be rated 120 V, 277 V or 347 V, 60 Hz and be CSA listed. The unit shall have an output of: ____V and ____W.

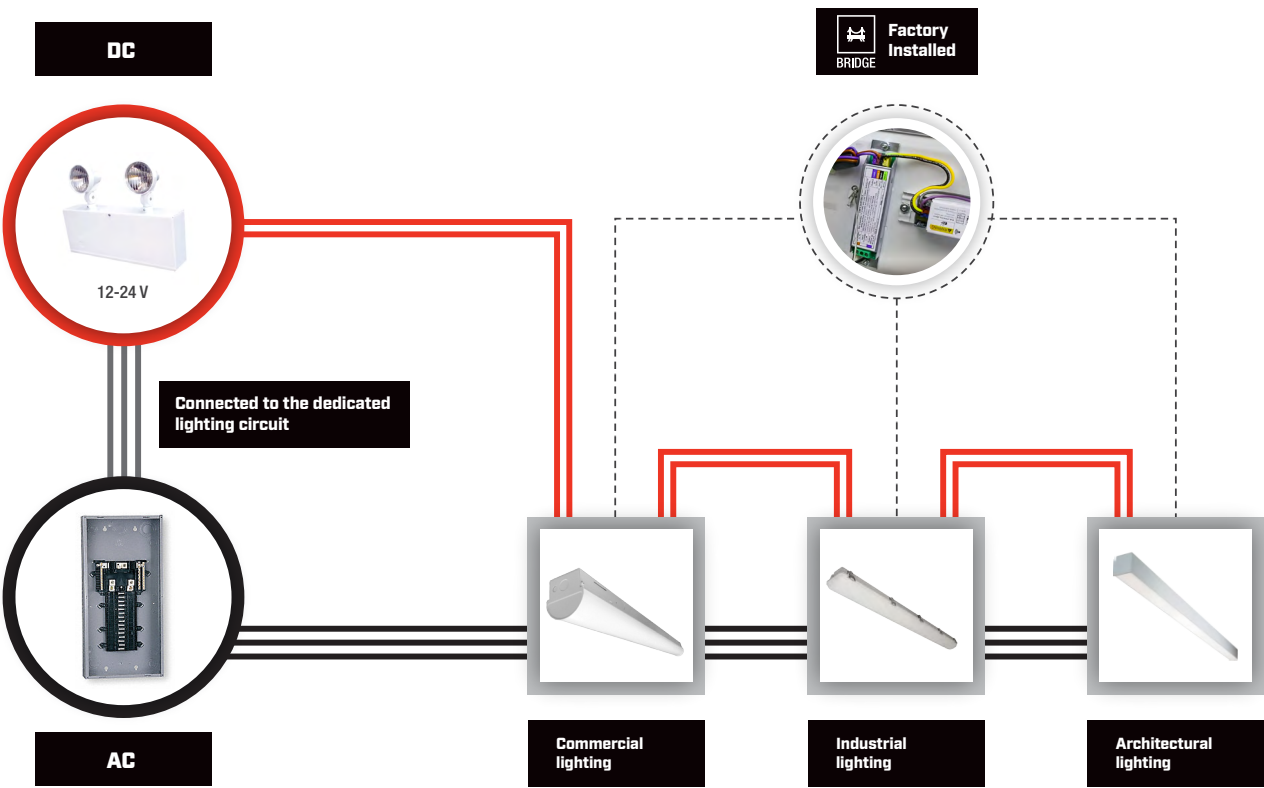
The charge voltage factory set to $\pm 1\%$ tolerance. High efficiency, rapid recovery, precision control charging system shall be employed to promote long battery life and reduce the potential for grid corrosion. The charger shall provide a continuous high charge to recharge the battery, when the battery is at full capacity, the charger will shut-off. Periodically the charger shall provide a pulse of energy to keep the battery topped off. The pulse charger shall be precisely regulated and shall charge the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit proof and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit, which will connect the battery when the AC circuit is activated, and an electronic brownout circuit, which will activate the emergency lights when utility power dips below 75% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the load when the battery reaches the end of discharge.

The automated testing performed by the AimLite auto test system has been designed to comply with all of the requirements of the National Fire Code. Every month, a 5 minute discharge and diagnostic test checks the operational status of the unit. Every 12 months, this test is extended to the full 30 minute, code required duration. This ensures that the battery charger is recharging the battery in accordance with code requirements.

The unit shall be AimLite model: EBST _____

BRIDGE
NORMALLY ON EMERGENCY REMOTE LUMINAIRE

BRIDGE WIRING DIAGRAM



LEGEND

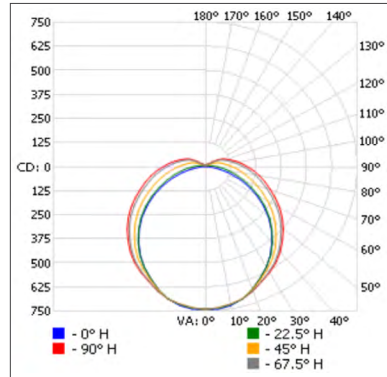
- AC wires
- Connected to the dedicated lighting circuit
- DC wires
- BRIDGE Factory Installed

Emergency mode	Spacing
S20NS	Average spacing for 1 out of every 4 luminaires, normally ON in the path of egress, when at 8, 10, or 12 foot mounting heights.

GENERAL LIGHTING PHOTOMETRIC DATA¹

S20NS-24LA1-3C/EL • 4 000 K • 2 658.0 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	569.0	21.4%
0-40	932.7	35.1%
0-60	1 678.4	63.1%
60-90	701.3	26.4%
70-100	510.0	19.2%
90-120	234.3	8.8%
0-90	2 379.7	89.5%
90-180	278.3	10.5%
0-180	2 658.0	100%

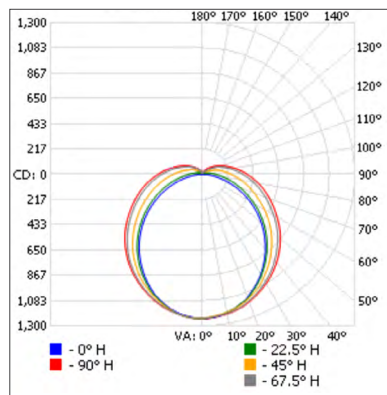
ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	256	4.5'	7.6'
3.3'	68.0	8.8'	14.7'
5.0'	29.6	13.3'	22.3'
6.7'	18.5	17.8'	29.9'
8.3'	10.8	21.1'	37.0'
10.0'	7.41	26.6'	44.6'

■ Vert. Spread: 106.27° ■ Hor. Spread: 131.7°

S20NS-48LA3-32/40K • 4 584.1 LM

POLAR CANDELA DISTRIBUTION



ZONAL LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0-30	951.2	20.7%
0-40	1 563.3	34.1%
0-60	2 829.3	61.7%
60-90	1 250.4	27.3%
70-100	930.1	20.3%
90-120	430.1	9.4%
0-90	4 079.7	89%
90-180	504.4	11%
0-180	4 584.1	100%

ILLUMINANCE AT A DISTANCE

CENTER BEAM FC		BEAM WIDTH	
1.7'	423	4.5'	9.2'
3.3'	112	8.7'	17.9'
5.0'	48.9	13.2'	27.1'
6.7'	27.3	17.7'	36.3'
8.3'	17.8	21.9'	45.0'
10.0'	12.2	26.4'	54.2'

■ Vert. Spread: 105.7° ■ Hor. Spread: 139.5°

¹Complete IES files available on our website