Metalux

DESCRIPTION

The Steeler LED is designed for a wide variety of applications and mounting heights. Precision designed optics, multiple distributions, lumen outputs and color temperatures make the Steeler LED ideal for industrial, commercial, manufacturing, gymnasium[9] and other applications that utilize traditional HID and linear fluorescent high bays. The proprietary discrete, low-brightness LED module assembly offers exceptional optical performance with the enhanced benefits of LED lighting, including energy savings, extended system life, a reduced carbon footprint.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Diecast aluminum lower housing provides added protection for LED components and optimal performance. Upper driver housing consist of heavy gauge CRS for durability and thermal control.

Electrical
Long-life LED system coupled with electrical driver to deliver optimal performance. LED's available in 3500K, 4000K and 5000K with a CRI ≥ 80. cULus listed. Electronic drivers are available for 120-277V, 347V and 480V applications. Standard 0-10V dimming. Or, specify the Digital Addressable Lighting Interface (DALI) drivers for use with Fifth Light controls.

Finish
Standard white polyester powder coat finish painted after fabrication for increased durability and rust inhibition.

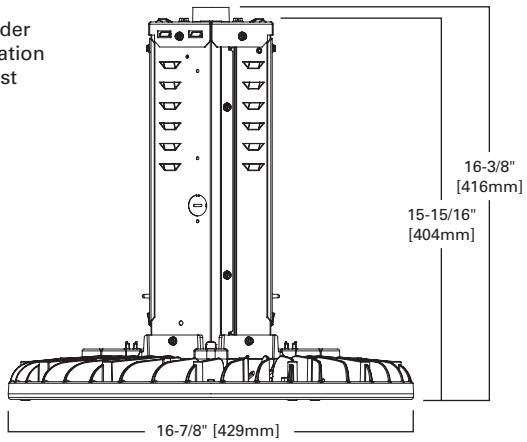
Optics
Precision designed, high-impact polycarbonate optics deliver even illumination. Narrow, medium and wide distribution ensures superior performance to key areas within an application. Additional performance options include a low profile optical shroud and uplight reflector. IP65 rated optics.

Options
Integral Occupancy Sensor available and provides 1200 sq. ft. of coverage in a maximum mounting height of 30'.

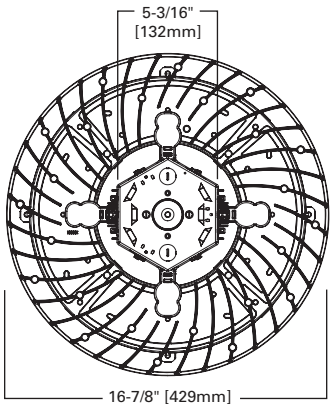
Mounting
The SSLED series is ideally suited for suspension mounting with various mounting options.

Compliance
Luminaires are cULus listed for damp locations -40°C - 55°C ambient environments with 0-10V drivers (see chart). RoHS compliant, and LED modules comply with IESNA LM-79 and LM-80 standards. DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.

Warranty
Five-year warranty.



DIMENSION TOP VIEW



SS
LED

LED Round High Bay

Connected Systems
CLICK HERE

ENERGY DATA

Input Watts:
9 (9,000 lumens)=64W
12 (12,000 lumens)=85W
15 (15,000 lumens)=111W
18 (18,000 lumens)=134W
24 (24,000 lumens)=190W
30 (30,000 lumens)=266W
36 (36,000 lumens)=334W

LINEAR DISCONNECT
Safe and convenient means of disconnecting power

Powering Business Worldwide

ENERGY AND PERFORMANCE DATA BY CATALOG NUMBER

Catalog Number	Description	Performance		
		Delivered Lumens	Watts	Efficacy (lm/W)
Narrow				
SSLED-LD5-9-N-UNV-L850-CD1-U	Steeler LED 9,000 Lumen, Narrow Dist, 5000K, 0-10V	9,576	64	149
SSLED-LD5-12-N-UNV-L850-CD1-U	Steeler LED 12,000 Lumen, Narrow Dist, 5000K, 0-10V	12,769	85	150
SSLED-LD5-15-N-UNV-L850-CD1-U	Steeler LED 15,000 Lumen, Narrow Dist, 5000K, 0-10V	15,829	111	143
SSLED-LD5-18-N-UNV-L850-CD1-U	Steeler LED 18,000 Lumen, Narrow Dist, 5000K, 0-10V	18,596	134	139
SSLED-LD5-24-N-UNV-L850-CD2-U	Steeler LED 24,000 Lumen, Narrow Dist, 5000K, 0-10V	24,918	191	131
SSLED-LD5-30-N-UNV-L850-CD2-U	Steeler LED 30,000 Lumen, Narrow Dist, 5000K, 0-10V	31,531	266	118
SSLED-LD5-36-N-UNV-L850-CD2-U	Steeler LED 36,000 Lumen, Narrow Dist, 5000K, 0-10V	36,789	334	110
Medium				
SSLED-LD5-9-M-UNV-L850-CD1-U	Steeler LED 9,000 Lumen, Medium Dist, 5000K, 0-10V	9,743	64	152
SSLED-LD5-12-M-UNV-L850-CD1-U	Steeler LED 12,000 Lumen, Medium Dist, 5000K, 0-10V	12,993	85	152
SSLED-LD5-15-M-UNV-L850-CD1-U	Steeler LED 15,000 Lumen, Medium Dist, 5000K, 0-10V	16,106	111	145
SSLED-LD5-18-M-UNV-L850-CD1-U	Steeler LED 18,000 Lumen, Medium Dist, 5000K, 0-10V	18,921	134	141
SSLED-LD5-24-M-UNV-L850-CD2-U	Steeler LED 24,000 Lumen, Medium Dist, 5000K, 0-10V	25,353	191	133
SSLED-LD5-30-M-UNV-L850-CD2-U	Steeler LED 30,000 Lumen, Medium Dist, 5000K, 0-10V	32,082	266	120
SSLED-LD5-36-M-UNV-L850-CD2-U	Steeler LED 36,000 Lumen, Medium Dist, 5000K, 0-10V	37,432	334	112
Wide				
SSLED-LD5-9-W-UNV-L850-CD1-U	Steeler LED 9,000 Lumen, Wide Dist, 5000K, 0-10V	9,640	64	150
SSLED-LD5-12-W-UNV-L850-CD1-U	Steeler LED 12,000 Lumen, Wide Dist, 5000K, 0-10V	12,855	85	151
SSLED-LD5-15-W-UNV-L850-CD1-U	Steeler LED 15,000 Lumen, Wide Dist, 5000K, 0-10V	15,935	111	144
SSLED-LD5-18-W-UNV-L850-CD1-U	Steeler LED 18,000 Lumen, Wide Dist, 5000K, 0-10V	18,721	134	140
SSLED-LD5-24-W-UNV-L850-CD2-U	Steeler LED 24,000 Lumen, Wide Dist, 5000K, 0-10V	25,085	191	132
SSLED-LD5-30-W-UNV-L850-CD2-U	Steeler LED 30,000 Lumen, Wide Dist, 5000K, 0-10V	31,742	266	119
SSLED-LD5-36-W-UNV-L850-CD2-U	Steeler LED 36,000 Lumen, Wide Dist, 5000K, 0-10V	37,035	334	111

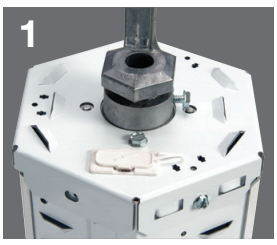
LUMEN MAINTENANCE

Lumens	Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (hours)
24,000 lumen	25°C	> 88%	> 167,000
30,000 lumen	25°C	> 73%	> 68,500
36,000 lumen	25°C	> 68%	> 55,000

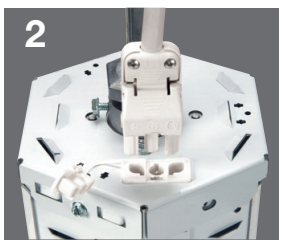
LUMEN PACKAGES AND AMBIENT TEMPERATURE

Lumen Package	Ambient	Driver		Reflector		EM
		CD	5LTD	Open	Lensed	
SSLED-LD5-9	55C	55C	40C	55C	55C	40C
SSLED-LD5-12	55C	55C	40C	55C	55C	40C
SSLED-LD5-15	55C	55C	40C	55C	55C	40C
SSLED-LD5-18	40C	40C	40C	40C	40C	40C
SSLED-LD5-18HT	55C	55C	N/A	55C	55C	N/A
SSLED-LD5-24	40C	40C	40C	40C	40C	40C
SSLED-LD5-24HT	50C	50C	N/A	50C	50C	N/A
SSLED-LD5-30	40C	40C	40C	40C	40C	40C
SSLED-LD5-36	40C	40C	40C	40C	35C	40C

Modular Power Supply Option



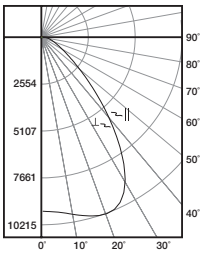
1. Modular Power Supply Receptacle supplied mounted into fixture Access Plate.



2. Modular Power Cord & Plugs in 120, 277, 347, & 480V configurations for easy plug & power into existing supply.

Eaton's Modular Power Supply option is available for use with the SSLED. The modular power supply allows external fixture access for safe and easy servicing. Access to the individual fixture's power supply allows servicing without turning off all the fixtures disrupting occupants. Eaton's Modular Power Supply is a time saver in installation – ***simply plug & power.***

PHOTOMETRICS



SSLED-LD5-18-M-UNV-L840-CD1-U

Electronic Driver
Linear LED 4000K
Spacing criterion: (II) 1.3 x mounting height, (⊥) 1.3 x mounting height
Lumens: 18,341
Input Watts: 133.8W
Efficacy: 137.1 lm/W
Test Report: SSLED-LD5-18-M-UNV-L840-CD1-U.IES

Candlepower

Angle	Along II	Flux
0	9478	
5	9562	920
10	9804	
15	10076	2856
20	10215	
25	9927	4516
30	8939	
35	7299	4512
40	5407	
45	3669	2877
50	2379	
55	1553	1436
60	1048	
65	728	738
70	509	
75	346	372
80	216	
85	102	114
90	0	

Coefficients of Utilization

Effective floor cavity reflectance 20%

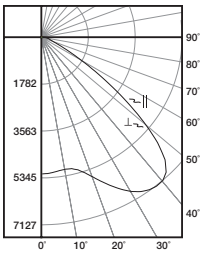
rc	80%				70%				50%			30%			10%			0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71
4	90	81	73	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	64	60	69	63	59	67	62	59	57
6	79	67	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	43
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36

Zonal Lumen Summary

Zone	Lumens	% Fixture
0-30	8293	45.2
0-40	12805	69.8
0-60	17117	93.3
0-90	18341	100.0
0-180	18341	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm
45	35766
55	18659
65	11878
75	9221
85	8068



SSLED-LD5-18-W-UNV-L840-CD1-U

Electronic Driver
Linear LED 4000K
Spacing criterion: (II) 1.3 x mounting height, (⊥) 1.3 x mounting height
Lumens: 18,341
Input Watts: 133.8W
Efficacy: 137.1 lm/W
Test Report: SSLED-LD5-18-W-UNV-L840-CD1-U.IES

Candlepower

Degree	Along II	Flux
0	5192	
5	5142	489
10	5090	
15	5217	1505
20	5663	
25	6241	2899
30	6767	
35	7075	4416
40	7109	
45	6580	4923
50	5041	
55	3077	2802
60	1514	
65	664	753
70	352	
75	247	266
80	171	
85	86	93
90	0	

Coefficients of Utilization

Effective floor cavity reflectance 20%

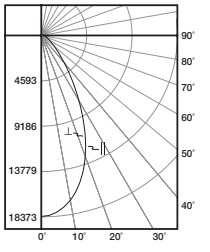
rc	80%				70%				50%			30%			10%			0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	101	99	100	98	95	97	95	93	93	91	90	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	77	72	92	83	76	71	80	74	70	77	73	69	75	71	67	65
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	63	59	57
5	79	67	59	53	77	66	59	53	64	57	52	62	56	52	61	55	51	49
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	46	41	66	54	46	40	52	45	40	51	45	40	50	44	40	38
8	63	50	41	36	61	49	41	36	48	41	36	46	40	35	45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	30
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	26

Zonal Lumen Summary

Zone	Lumens	% Fixture
0-30	4893	27.0
0-40	9309	51.3
0-60	17034	93.9
0-90	18147	100.0
0-180	18147	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm
45	64151
55	36979
65	10834
75	6565
85	6770



SSLED-LD5-18-N-UNV-L840-CD1-U

Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 0.83 x mounting height, (⊥) 0.83 x mounting height
Lumens: 18,026
Input Watts: 133.8W
Efficacy: 134.7 lm/W
Test Report: SSLED-LD5-18-N-UNV-L840-CD1-U.IES

Candlepower

Angle	Along II	Flux
0	18373	
5	18002	###
10	16980	
15	15293	4248
20	13027	
25	10320	4698
30	7566	
35	5255	3317
40	3510	
45	2356	1867
50	1626	
55	1151	1054
60	842	
65	634	637
70	479	
75	355	378
80	245	
85	134	141
90	0	

Coefficients of Utilization

Effective floor cavity reflectance 20%

rc	80%				70%				50%			30%			10%			0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	101	102	100	98	99	97	95	95	94	92	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	99	91	85	81	97	90	84	80	87	83	79	85	81	77	82	79	76	75
4	93	84	78	73	91	83	77	72	81	76	72	79	74	71	77	73	70	68
5	88	78	71	66	86	77	71	66	75	70	65	73	69	65	72	68	64	63
6	83	73	66	61	81	72	65	61	70	65	60	69	64	60	67	63	59	58
7	78	68	61	56	77	67	61	56	66	60	56	65	59	56	63	59	55	54
8	74	64	57	52	73	63	57	52	62	56	52	61	55	52	60	55	51	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	46	66	56	50	46	55	49	45	54	49	45	53	49	45	44

Zonal Lumen Summary

Zone	Lumens	% Fixture
0-30	10633	59.0
0-40	13950	77.4
0-60	16870	93.6
0-90	18026	100.0
0-180	18026	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm
45	22968
55	13827
65	10337
75	9461
85	10599

ORDERING INFORMATION

SAMPLE NUMBER: SSLED-LD5-24-M-UNV-L840-CD2-U

Series [14]
SSLED=LED High Bay

LED Type
LD5=LED 5.0

LED Lumen Output
9=9,000 Lumens
12=12,000 Lumens
15=15,000 Lumens
18=18,000 Lumens
24=24,000 Lumens
30=30,000 Lumens
36=36,000 Lumens

Ambient Rating
[Blank]=Standard Ambient
HT=High Ambient (18, 24 only)

Distribution
N=Narrow
M=Medium
W=Wide

Voltage
UNV=Universal Voltage 120-277
UNC=Universal Voltage 347/480 [4]

CCT
L835=3500K
L840=4000K
L850=5000K

Options
Emergency
EL20W-REM=Emergency Installed, Remote, 20 Watts [2], [3], [4], [5]

Driver Type
CD=0-10V Dimming Driver
5LTD=Fifth Light DALI [5]

Number of Drivers
1=1 Driver (9, 12, 15, 18)
2=2 Drivers (18HT, 24, 24HT, 30, 36)

Color
[Blank]=White
GRY=Gray
BLK=Black

Mounting Type [1], [9]
[Blank]=3/4" Threaded Hub
SHK=Fixture Hook [8]
TCB=Top Connector Box [3], [9]
TCB/SHK=Top Connector Box with Die-cast Aluminum Fixture Hook
TCB/FL-1=Top Connector Box with Fixture Loop
MP=Modular Plug (1 Circuit) [11]
MP/SHK=Modular Plug with Fixture Hook (supplied)
MP/FL-1=Modular Plug with Fixture Loop (supplied)

Wiring
C3 (1)=1 Circuit, 3' Cord with no Plug
C3 (2)=2 Circuits, 3' Cord with no Plug
C6 (1)=1 Circuit, 6' Cord with no Plug
C6 (2)=2 Circuits, 6' Cord with no Plug
PC3/120=(NEMA L5-15P) 3' Cord with NEMA Plug [8]
PC3/277=(NEMA L7-15P) 3' Cord with NEMA Plug [8]
PC3/347=(NEMA L24-20P) 3' Cord with NEMA Plug [8]
PC3/480=(NEMA L8-20P) 3' Cord with NEMA Plug [8]
PC6/120=(NEMA L5-15P) 6' Cord with NEMA Plug [8]
PC6/277=(NEMA L7-15P) 6' Cord with NEMA Plug [8]
PC6/347=(NEMA L24-20P) 6' Cord with NEMA Plug [8]
PC6/480=(NEMA L8-20P) 6' Cord with NEMA Plug [8]

Options
SVPD3=Integrated Occupancy and Daylight Sensor, 1200 sq. ft. Coverage [7], [13]
LWR=LumaWatt Wireless Sensor system

Packaging
U=Unit Pack

Accessories(order separately)
LOOP-10=Ten Foot Loop Hanger, #2 Cable [12]
LOOP-30=Thirty Foot Loop Hanger, #2 Cable [12]
SSLED-SA23-U=Aluminum Shroud [10], [13]
SSLED-WG17-U=Wireguard [10]
WG22=Wireguard for use with SA23 [10]
SSLED-CLR22-U=Clear Reflector [5], [13]
SSLED-FRR22-U=Frosted Reflector [5], [13]
SSLED-CLDL22=Clear Drop Lens [5], [13]
SSLED-CLCDL22=Clear Conical Drop Lens [5], [13]
SSLED-FRDL22=Frosted Drop Lens [5], [13]
SSLED-FRCDL22=Frosted Conical Drop Lens [5], [13]
SHK=Fixture Hook
FL-1=Fixture Loop
MPC3=3' Modular Power Cord & Plug (Specify Voltage)
MPC6=6' Modular Power Cord & Plug (Specify Voltage)
MC3=3' Modular Power Cord
MC6=6' Modular Power Cord
SSLED-DECO-U=Round Deco Kit [6]
SSLED-UPL-U=Uplight Kit [10]
ISHH-01=Programming Remote for Integrated Sensor
ISHH-02=Personal Control Remote for Integrated Sensor

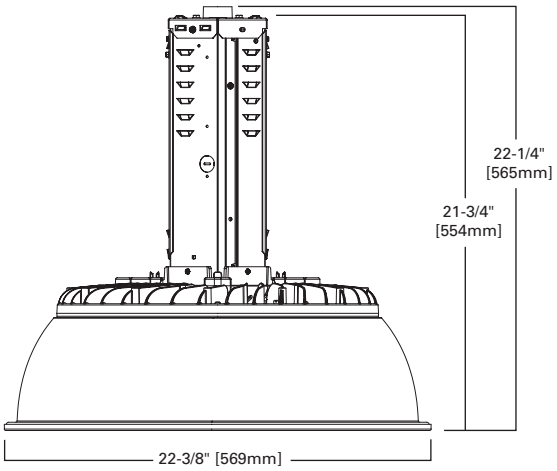
NOTES: [1] TCB and MP cannot be ordered at the same time. [2] Battery pack must be remote mounted 1 ft. off-center from fixture to building structure or an electrical enclosure. [3] No EL with TCB. [4] No EL with UNC drivers. [5] Refer to ambient ratings chart for specific ambient limits per lumen package and options. [6] Deco shield can be used up to 24,000 lumens (40°C temp.) [7] Eaton sensor SVPD3 available in UNV only. [8] SHK or FL-1 must be ordered factory installed for PC option. [9] Rigid mount not for use in gymnasiums. [10] Uplight Kit not compatible with SA23 Shroud, WG17 or WG22 wireguards. [11] MP option to be paired with MPC and MC power cord accessory. [12] The accessory Loop Hanger shall be utilized only as a secondary safety and not the primary means of mounting. [13] Reflectors not compatible with sensor options. [14] DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.

Specifications & dimensions subject to change without notice. Consult your Eaton Representative for availability and ordering information.

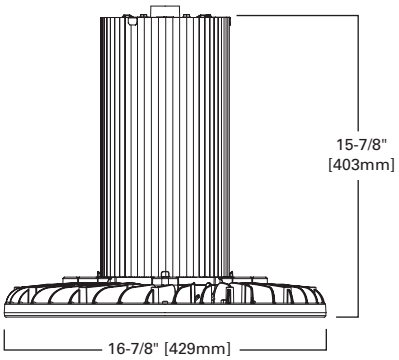
Connected Systems
CLICK HERE

ACCESSORIES

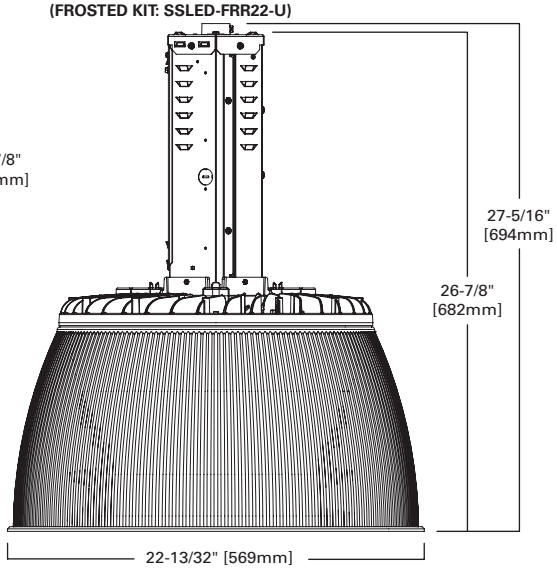
SSLED-W/ SHROUD ACCESSORY KIT (KIT: SSLED-SA23-U)



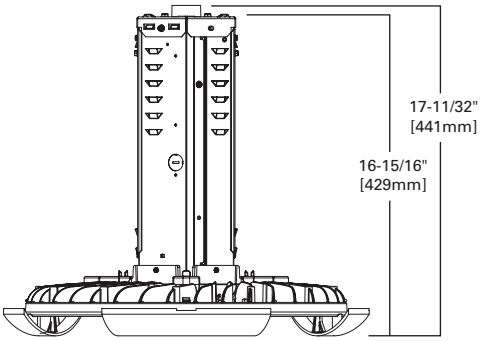
SSLED-W/ROUND DECO SHIELD (KIT: SSLED-DECO-U)



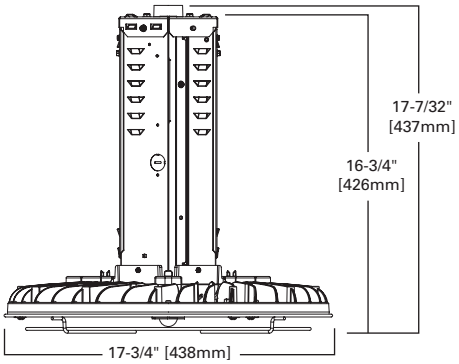
SSLED W/ REFLECTOR ACCESSORY KIT (CLEAR KIT: SSLED-CLR22-U) (FROSTED KIT: SSLED-FRR22-U)



SSLED-W/ UPLIGHT ACCESSORY KIT (KIT: SSLED-UPL-U)



SSLED-W/WIRE GUARD (KIT: SSLED-WGRD-U)



SHIPPING DATA

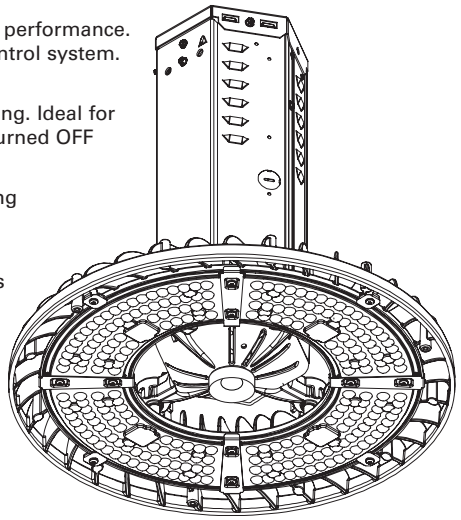
Catalog No.	Wt.
SSLED-LD5-9	19 lbs.
SSLED-LD5-12	19 lbs.
SSLED-LD5-15	19 lbs.
SSLED-LD5-18	19 lbs.
SSLED-LD5-24	19 lbs.
SSLED-LD5-30	19 lbs.
SSLED-LD5-36	19 lbs.

Powering Business Worldwide

Eaton
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

INTEGRATED SENSOR



The Steeler LED with Integrated Sensor technology provides automatic energy savings without sacrificing performance. Traditionally these types of energy savings required coordination between the luminaire and a lighting control system. The Steeler LED delivers superior lighting with integrated occupancy and daylighting controls.

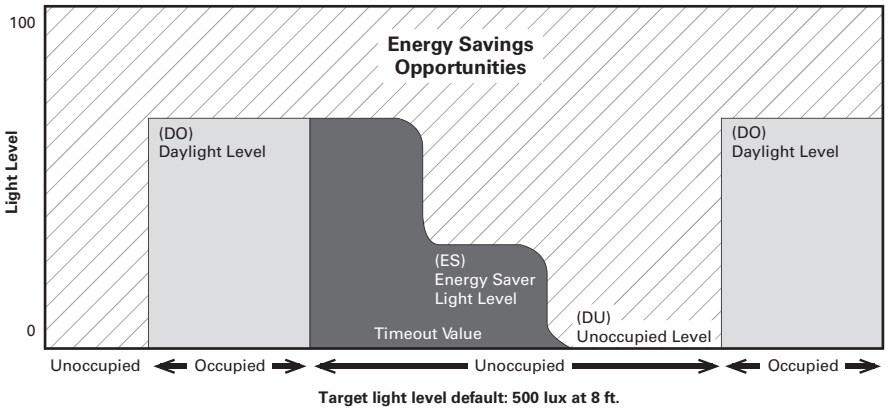
Capture the benefits of traditional lighting controls, without complicated coverage planning or special wiring. Ideal for new construction or retrofit the Steeler LED delivers automatic ON to an energy saving light level, while turned OFF when the space is unoccupied.

Occupied light levels and unoccupied light levels can be adjusted using the integrated sensor programming remote (Catalog Number: ISHH-01). The integrated sensor personal remote (Catalog Number: ISHH-02) provides code compliant manual raise, lower, ON, OFF control.

The Steeler LED with Integrated Sensor is easy to install with no special wiring and ensures energy savings out-of-the-box with default control settings.

How it works:

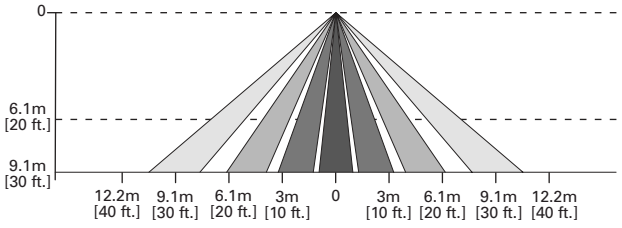
- As the user enters the space controlled by the integral sensor, the lighting turns ON to full light output. This can be changed using the optional remote.
- Lighting will remain at that the occupied level until the space is unoccupied. This will start the occupancy timeout period (default 20 minutes).
- If the space remains unoccupied for half of the timeout period, the lighting will automatically reduce to the Energy Saver light level. This adjustable light level is typically half of the occupied level.
- At the end of the timeout period the lighting will go to the unoccupied light level. This adjustable light level uses the OFF default setting.



Target light level default: 500 lux at 8 ft.

SVPD3 Coverage Pattern

Side View



Optional Remote Controls

ISHH-01 Remote

ISHH-02 Remote