

FEATURES & SPECIFICATIONS

INTENDED USE — Provides a minimum of 90 minutes illumination for the rated wattage upon loss of AC power to meet and exceed code required emergency lighting. Ideal for light, heavy and demanding industrial applications requiring LEDs with quick installation and unparalleled performance for mounting heights from 7.5' to 40'. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate.** [Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.](#)

CONSTRUCTION — The housing is gray thermoplastic, design to perform in a wide variety of industrial applications. It is 5VA flame rated, impact-resistant, scratch-resistant and corrosion proof. The UV-stable resin resists discoloration from natural and man-made light sources. There is a low-profile, integrated and back-lit test switch with an easily visible multi-color LED status indicator. The back-plate contains a universal j-box mounting pattern to facilitate ease of installation on a wide variety of j-boxes and the front housing allows tool-less access for ease of maintenance. The lamp heads have a unique track-and-swivel arrangement permitting full range of direction of optical aiming.

OPTICS — The SP640L features four high-performance LEDs rated at 6.6 watts and delivers a total of 640 lumens in a spot pattern.

The SP1100L features six high-performance LEDs rated at 10.6 watts and delivers a total of 1,100 lumens in a spot pattern.

The SP2200L features twelve high-performance LEDs rated at 22 watts and delivers a total of 2,200 lumens in a spot pattern.

The typical life of an LED is 10 years. The LED light sources typically never need to be replaced under normal conditions for normal off applications.

CCT: 5000K.

ELECTRICAL — UVOLT (120 thru 347V, 50/60hz). Current-limiting charger maximizes battery life and minimizes energy consumption to provide low operating costs. Small battery chargers Certified in the CA Title 20 Appliance Efficiency Database.

Short-circuit protection — current-limiting charger circuitry protects printed circuit board from shorts. Regulated charge voltage maintains a stable charge voltage over a wide range of line voltages.

Prevents over/undercharging that shortens battery life and reduces capacity. Filtered charger input minimizes charge voltage ripple and extends battery life.

BATTERY: Lithium Iron Phosphate battery. Optional High-Output (HO option) and Extra High Output (EHO option), LTP battery type only, provides a wide variety of remote capacities and/or extended run time.

SELF-DIAGNOSTICS AND REMOTE TEST (SDRT OPTION): Automatic 24-hour recharge after a 90-minute discharge. Advanced electrical design provides constant light output throughout the entire discharge period. Brownout protection is automatically switched to emergency mode when supply voltage drops below approximately 80 percent nominal of 120, 220, 277 or 347. Other input voltages may vary. AC/LVD reset allows battery connection before AC power is applied and prevents battery damage from deep discharge.

Self-Diagnostics: Continuously monitors AC functionality. Standard derangement monitoring will indicate disconnected battery, charger failure and displays green flashing indicator light while in emergency mode. Single multi-chromatic LED indicator to display two-state charging, test activation and three-state self-diagnostics.

Self-diagnostic testing: Five minutes every 30 days and 90 minutes annually. Diagnostic evaluation of lamps, AC to DC transfer, battery charging and condition of microprocessor. Automatic test is easily postponed for eight hours by activating manual test switch or use of remote tester (RTKITHLP accessory).

Manual testing: Test switch and remote tester (RTKITHLP accessory) provides manual activation of 60-second diagnostic testing for on-demand visual inspection.

INSTALLATION — Wall mount standard (ceiling mount capable, no additional hardware required). Steel mounting bracket ensures easy installation and safe maintenance. 7/8" entrance provision at top of unit for standard 1/2" conduit entry. Tool-less removal of front cover from back-plate for ease of installation and maintenance.

LISTINGS — DSL3 is UL wet location listed standard; the DSL46 is NEMA 4X, IP66 and NSF listed at 32-122°F (0-50°C). Meets or exceeds all applicable requirements for UL 924, NFPA 101 (current Life Safety code), NFPA 70 (NEC), NOM (Norma Oficial Mexicana), California Energy Commission Title 20 section 1605.3 (W)(4), FCC Title 47, Part 15, Subpart B and OSHA. List and labeled to comply with Canadian Standards C22.2 No. 141-10.

WARRANTY — 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

† Small Battery Chargers Certified in the CA Title 20 Appliance Efficiency Database.



Catalog Number
Notes
Type

Industrial LED Emergency Lights



DSL3
DESOTO™
Wet Location



DSL46
DESOTO™
NEMA 4X



MOUNTING

All dimensions are inches (centimeters) unless otherwise indicated.

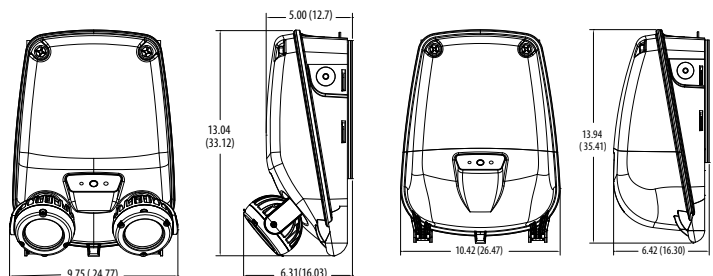
DSL3 SP640L/SP1100L/SP2200L
Specifications

Length: 9.75 (24.77)
Depth: 6.31 (16.03)
Height: 13.04 (33.12)
*Weight of SP640L / SP1100L: 6.25 lbs (2.83 kg)
*Weight of SP2200L EHO: 8.6 lbs (3.90 kg)

DSL46 SP640L/SP1100L/SP2200L
Specifications

Length: 10.42 (26.47)
Depth: 6.42 (16.85)
Height: 13.94 (35.41)
*Weight of SP640L / SP1100L: 7.35 lbs (3.33 kg)
*Weight of SP2200L EHO: 9.7 lbs (4.39 kg)

*Weight will vary based on battery and CW option



DSL3_DSL46 Industrial LED Emergency Lights

DESOTO™ WET LOCATION

ORDERING INFORMATION For shortest lead times, configure product using **bolded options**.

Example: DSL3 SP1100L UVOLT LTP SDRT

Series	Lamp Type	Housing Color	Voltage	Battery Type	Automatic Testing	Options
DSL3 DESOTO™ Wet location	SP640L 640 lumen, 6.6 watt, Spot distribution	(blank) Gray	UVOLT 120-347VAC, 50/60hz	LTP Lithium Iron Phosphate	SDRT Self-Diagnostics, Remote Testing	(blank) Not Required
	SP1100L 1100 lumen, 10.6 watt, Spot distribution					HO High-Output Battery
	SP2200L 2200 lumen, 22 watt, Spot distribution ¹					EHO Extra High-Output Battery CW Cold Weather (-30 - 50c) USPOM Assembled in the US

Notes

1 SP2200L lumen package only available with EHO option.

DESOTO™ WET LOCATION REMOTE

ORDERING INFORMATION For shortest lead times, configure product using **bolded options**.

Example: DSL3RE SP1100L T

Series	Lamp Type	Housing Color	Voltage	Number of Lamps
DSL3RE DESOTO™ WET location remote	SP640L 320 lumen, 3.3 watt, Spot distribution	(blank) Gray	(blank) Universal DC Voltage (7-30VDC)	SGL Single
	SP1100L 550 lumen, 5.3 watt, Spot distribution			T Twin ¹
	SP2200L 1100 lumen, 11 watt, Spot distribution			

Notes

1 For twin (T) remote, multiply lumens and watts by 2.

DESOTO™ NEMA 4X

ORDERING INFORMATION For shortest lead times, configure product using **bolded options**.

Example: DSL46 SP1100L UVOLT LTP SDRT

Series	Lamp Type	Housing Color	Voltage	Battery Type	Automatic Testing	Options
DSL46 DESOTO™ NEMA 4X	SP640L 640 lumen, 6.6 watt, Spot distribution	(blank) Gray	UVOLT 120-347VAC, 50/60hz	LTP Lithium Iron Phosphate	SDRT Self-Diagnostics, Remote Testing	(blank) Not Required
	SP1100L 1100 lumen, 10.6 watt, Spot distribution					HO High-Output Battery
	SP2200L 2200 lumen, 22 watt, Spot distribution ¹					EHO Extra High-Output Battery CW Cold Weather (-30 - 50c) USPOM Assembled in the US

Notes

1 SP2200L lumen package only available with EHO option.

DESOTO™ NEMA 4X REMOTE

ORDERING INFORMATION For shortest lead times, configure product using **bolded options**.

Example: DSL4XRE SP1100L SGL

Series	Lamp Type	Housing Color	Voltage	Number of Lamps
DSL4XRE DESOTO™ NEMA 4X Remote	SP640L 320 lumen, 3.3 watt, Spot distribution	(blank) Gray	(blank) Universal DC Voltage (7-30VDC)	SGL Single
	SP1100L 550 lumen, 5.3 watt, Spot distribution			T Twin ¹
	SP2200L 1100 lumen, 11 watt, Spot distribution			

Notes

1 For twin (T) remote, multiply lumens and watts by 2.

Accessories: Order as separate catalog number.

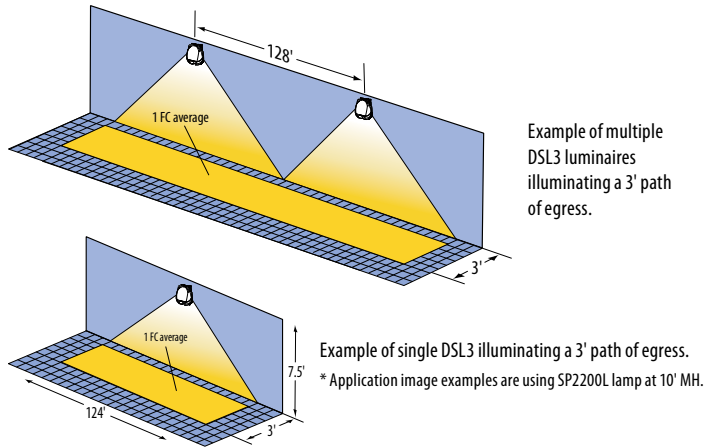
RTKITHLP Remote test kit, up to 40' away (includes goggles, laser and battery)



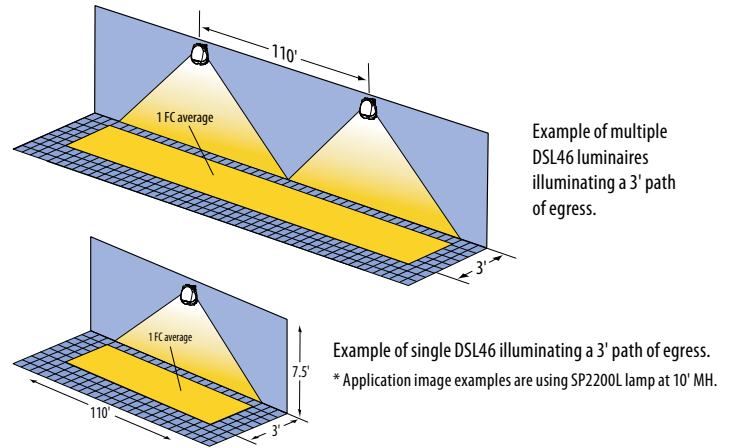
DSL3-DSL46

DSL3_DSL46 Industrial LED Emergency Lights

DSL3 SPACING GUIDELINES



DSL46 SPACING GUIDELINES



Maximum Spacing Guidelines — DSL3 SP640L						
Mounting Height	Illumination Level	Single Luminaire		Multiple Luminaire		Application Notes
		3' Path of Egress	6' Path of Egress	3' Path of Egress	6' Path of Egress	
7.5'	1FC Avg ¹	58'	56'	63'	57'	Open warehouse: 200'x15'x30' 10/10/10 reflectances
10'	1FC Avg ¹	56'	50'	59'	54'	
12'	1FC Avg ¹	56'	50'	58'	53'	
16'	1FC Avg ¹	52'	48'	54'	50'	
20'	1FC Avg ¹	48'	44'	50'	46'	
24'	1FC Avg ¹	44'	40'	46'	42'	

Notes:
1. Also meets the additional illumination requirements of NFPA 101: 1FC minimum and max/min ratio of 40:1.

Maximum Spacing Guidelines — DSL46 SP640L						
Mounting Height	Illumination Level	Single Luminaire		Multiple Luminaire		Application Notes
		3' Path of Egress	6' Path of Egress	3' Path of Egress	6' Path of Egress	
7.5'	1FC Avg ¹	54'	48'	57'	50'	Open warehouse: 200'x15'x30' 10/10/10 reflectances
10'	1FC Avg ¹	52'	48'	56'	50'	
12'	1FC Avg ¹	48'	42'	50'	45'	
16'	1FC Avg ¹	46'	40'	48'	43'	
20'	1FC Avg ¹	42'	38'	44'	40'	
24'	1FC Avg ¹	36'	34'	38'	36'	

Notes:
1. Also meets the additional illumination requirements of NFPA 101: 1FC minimum and max/min ratio of 40:1.

Maximum Spacing Guidelines — DSL3 SP1100L						
Mounting Height	Illumination Level	Single Luminaire		Multiple Luminaire		Application Notes
		3' Path of Egress	6' Path of Egress	3' Path of Egress	6' Path of Egress	
7.5'	1FC Avg ¹	76'	74'	82'	75'	Open warehouse: 200'x15'x30' 10/10/10 reflectances
10'	1FC Avg ¹	76'	72'	79'	75'	
12'	1FC Avg ¹	72'	70'	78'	74'	
16'	1FC Avg ¹	68'	66'	73'	69'	
20'	1FC Avg ¹	64'	62'	67'	64'	
24'	1FC Avg ¹	60'	58'	63'	60'	

Notes:
1. Also meets the additional illumination requirements of NFPA 101: 1FC minimum and max/min ratio of 40:1.

Maximum Spacing Guidelines — DSL46 SP1100L						
Mounting Height	Illumination Level	Single Luminaire		Multiple Luminaire		Application Notes
		3' Path of Egress	6' Path of Egress	3' Path of Egress	6' Path of Egress	
7.5'	1FC Avg ¹	69'	67'	72'	67'	Open warehouse: 200'x15'x30' 10/10/10 reflectances
10'	1FC Avg ¹	69'	62'	72'	66'	
12'	1FC Avg ¹	68'	61'	70'	65'	
16'	1FC Avg ¹	62'	60'	66'	62'	
20'	1FC Avg ¹	60'	56'	63'	60'	
24'	1FC Avg ¹	54'	54'	58'	55'	

Notes:
1. Also meets the additional illumination requirements of NFPA 101: 1FC minimum and max/min ratio of 40:1.

Maximum Spacing Guidelines — DSL3 SP2200L						
Mounting Height	Illumination Level	Single Luminaire		Multiple Luminaire		Application Notes
		3' Path of Egress	6' Path of Egress	3' Path of Egress	6' Path of Egress	
7.5'	1FC Avg ¹	124'	114'	128'	115'	Open warehouse: 200'x15'x30' 10/10/10 reflectances
10'	1FC Avg ¹	118'	116'	122'	114'	
12'	1FC Avg ¹	120'	116'	121'	114'	
16'	1FC Avg ¹	116'	112'	119'	114'	
20'	1FC Avg ¹	112'	108'	115'	111'	
24'	1FC Avg ¹	106'	104'	108'	107'	

Notes:
1. Also meets the additional illumination requirements of NFPA 101: 1FC minimum and max/min ratio of 40:1.

Maximum Spacing Guidelines — DSL46 SP2200L						
Mounting Height	Illumination Level	Single Luminaire		Multiple Luminaire		Application Notes
		3' Path of Egress	6' Path of Egress	3' Path of Egress	6' Path of Egress	
7.5'	1FC Avg ¹	110'	100'	110'	104'	Open warehouse: 200'x15'x30' 10/10/10 reflectances
10'	1FC Avg ¹	106'	100'	108'	104'	
12'	1FC Avg ¹	104'	100'	108'	104'	
16'	1FC Avg ¹	102'	98'	104'	101'	
20'	1FC Avg ¹	98'	94'	104'	100'	
24'	1FC Avg ¹	94'	90'	100'	92'	

Notes:
1. Also meets the additional illumination requirements of NFPA 101: 1FC minimum and max/min ratio of 40:1.