ALO3D

Using the technology of SLS metal 3D printing, we are able to offer multiple patterns and components produced to the client's demand.



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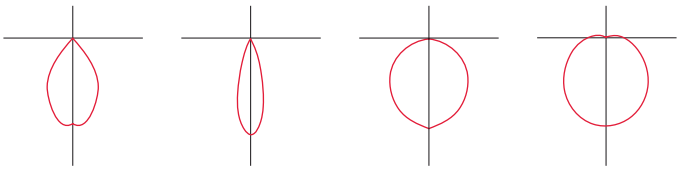
Performance

LS			
Distribution	**Output**	**Input W**	**Efficacy**
Symmetric 22°	**428 lm/ft**	**5 W/ft**	**86 lm/W**
Symmetric 55°	**365 lm/ft**	**5 W/ft**	**73 lm/W**
He tech	**379 lm/ft**	**5 W/ft**	**76 lm/W**
Diffuse lens	**478 lm/ft**	**5 W/ft**	**96 lm/W**

LH			
Distribution	**Output**	**Input W**	**Efficacy**
Symmetric 22°	**824 lm/ft**	**10 W/ft**	**82 lm/W**
Symmetric 55°	**702 lm/ft**	**10 W/ft**	**70 lm/W**
He tech	**730 lm/ft**	**10 W/ft**	**73 lm/W**
Diffuse lens	**920 lm/ft**	**10 W/ft**	**92 lm/W**

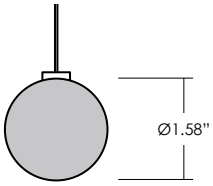
Based on static white 4000K. For the complete photometric data of this fixture go to page 6.

Photometric



Symmetric 55° (55) · Symmetric 22° (22) · HE tech™ (HE) · Diffuse Lens (DL)

Mounting

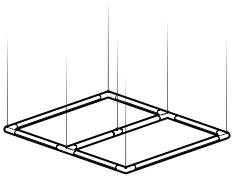


Aircraft cable

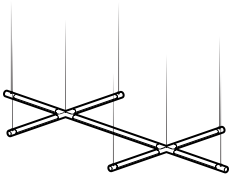
Need help?
Don't see what you need? We know that having so many options can be overwhelming. Please reach out to our factory for any specific request or questions you have.

Our Design Assist team (**designassist@alights.com**) team is here to make the process move smoothly.

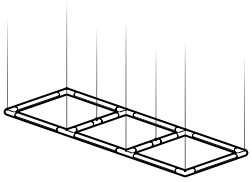
Pre-Configured Pattern



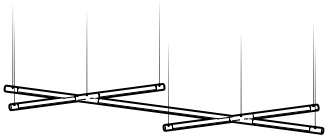
Grid Pattern Type 1



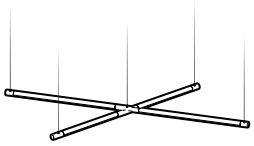
Grid Pattern Type 2



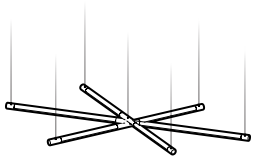
Grid Pattern Type 3



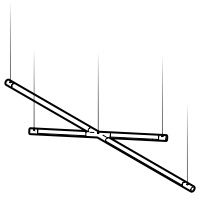
Stacked Pattern Type 1



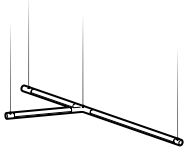
Stacked Pattern Type 2



Stacked Pattern Type 3

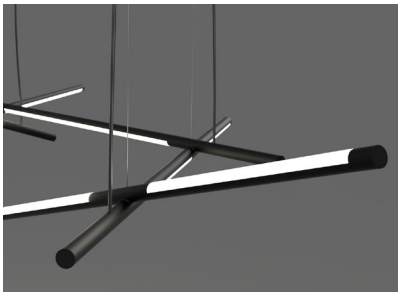


Organic Pattern Type 1



Organic Pattern Type 2

Project name _____ Type _____ Date _____ Quantities _____



Need help?
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We know that having so many options can be overwhelming. Please reach out to our factory for any specific request or questions you have.

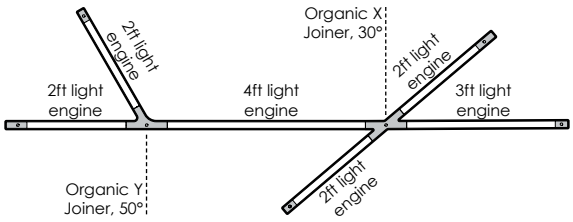
Our Design Assist team (**designassist@alights.com**) is here to make the process move smoothly.

ALO3D					
SERIES	**LENGTH OR PATTERN TYPE**	**JOINER** (SKIP IF PRE-CONFIGURED)	**LIGHT ENGINE** (SKIP IF PRE-CONFIGURED)	**NOM. OUTPUT**[1]	**CCT**
ALO3D	**S_** Straight run[1,2,3] **GR1** Grid pattern type 1 **GR2** Grid pattern type 2 **GR3** Grid pattern type 3 **ST1** Stacked pattern type 1 **ST2** Stacked pattern type 2 **ST3** Stacked pattern type 3 **OR1** Organic pattern type 1 **OR2** Organic pattern type 2 [1] Specify overall total length of fixtures in 2', 3', 4', 5' or 6' increments (I.E., S8', S10', S24'). Please provide RCP or sketch of the layout to **designassist@alights.com** for review. **NOTES [2,3]** See additional notes on the bottom right of the page. If Pre-Configured pattern is selected, skip joiner and light engine selection.	**L90_** 90° L joiner[1] **T90_** 90° T joiner[1] **X90_** 90° X joiner[1] **S2_ _** Stacked 2 joiner[2,3] **S3_ _** Stacked 3 joiner[2,3] **OY_ _** Organic Y joiner[2,3] **OX_ _** Organic X joiner[2] **FJ_** Feed straight joiner[1] [1] Specify total required quantities. [2] Specify required angle and total required quantities after. [3] For a reverse joiner, please contact **designassist@alights.com**	**LE1_** 1 Ft light engine[1] **LE2_** 2 Ft light engine[1] **LE3_** 3 Ft light engine[1] **LE4_** 4 Ft light engine[1] **LE5_** 5 Ft light engine[1] **LE6_** 6 Ft light engine[1] [1] Specify total required quantities.	**400LPF** Direct 400 lm/ft **800LPF** Direct 800 lm/ft [1] Nominal output. Refer to performace table on page 1 for exact output lm/ft.	**27K** Direct 2700k **30K** Direct 3000k **35K** Direct 3500k **40K** Direct 4000k

CRI	OPTIC	VOLTAGE	POWER SOURCE	DIMMING	EMERGENCY
80CRI 80+ CRI **90CRI** 90+ CRI	**22** Baffled optic 22° **55** Baffled optic 55° **HE** HE Tech™ **DL** Diffused lens **U** Unlit sections[1] **M** Mixed Optics[2] [1] Unlit sections available in non standard lengths, please contact designassist@alights.com for details. [2] Please provide RCP or sketch of layout to **designassist@alights.com** for review.	**MVOLT** Multi Volt (120-277) **120** 120V **277** 227V	**PSURF** Surface mounted driver box **PREC** Recessed mounted driver box	**ZT** 0-10V dimming[1] **_** None [1] Minimum dimming 1%	**E_** Emergency-Battery[1] **_** None [1] Factory provided remote emergency battery pack. Specify desired sections of fixture to be on emergency back up and provide RCP or sketch with layout of emergency sections. See technical data for more information.

MOUNTING	CEILING TYPE	OVERALL SUSPENSION[1]	CANOPY COLOR	CORD COLOR	EXTERIOR FINISH
AC Aircraft cable[1] **ACMIX** Mix Lenghts[2] [1] 48" cable. Max on site adjustability of 12" (36"-48"). [2] Specify length of cable to the nearest inch. Lengths confirmed during submittal process.	**TBAR** T-bar **TBARJ** T-bar W/J-box **HCB** Hard ceiling W/J-box	**24IN** 24 Inch **36IN** 36 Inch **48IN** 48 Inch **72IN** 72 Inch **96IN** 96 Inch **120IN** 120 Inch **144IN** 144 Inch **MIX** Mix [1] Consult factory if longer cable is required	**CANWHT** White **CANBLK** Black	**CSWHT** White **CSBLK** Black	**WHT** White **BLK** Black **TNM** Titanium **RAL_** RAL[1] **CCM** Custom color match CBD SFH SPN SDW SCY LME SMN [1] Specify 4 RAL digit code or other custom color. [1] Specify other custom color.

Straight run order code example



S15	OY501-OX301	LE24-LE31-LE41	800IPF	35K

80CRI	DL	MVOLT	PSURF	ZT	AC	HCB	36IN

CANWHT	CSWHT	CANWHT	WHT

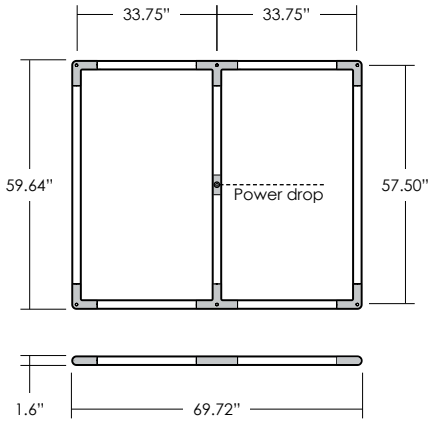
NOTES:

[2] Lit modules are available in nominal 2', 3', 4', 5' and 6' lengths. Alight will determine what combination of these lengths to utilize during the submittal process. For specific lengths contact **designassist@alights.com**.

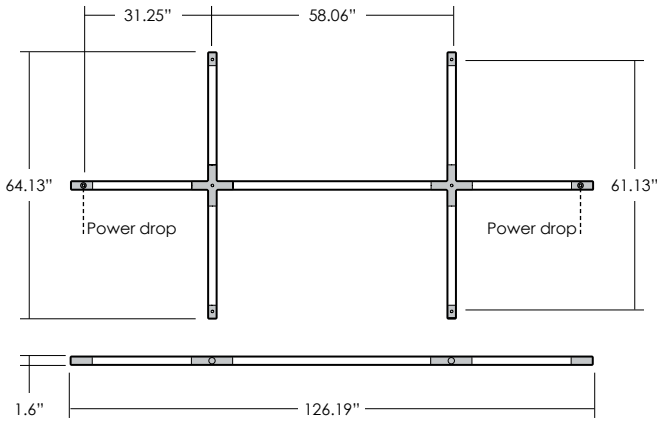
[3] Specified lengths are for the lit modules only. Joiners add additional length to the systems. Reference joiner dimensions on page 4, or contact **designassist@alights.com** for details.

Project name | Type | Date | Quantities

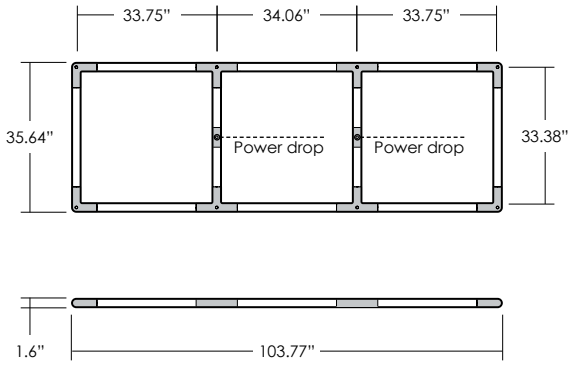
Grid Pattern Type 1



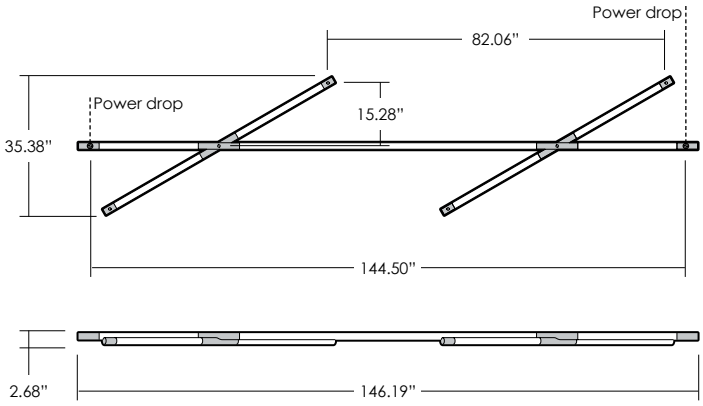
Grid Pattern Type 2



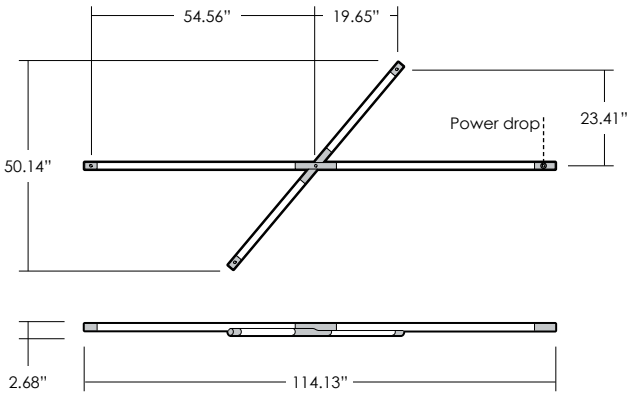
Grid Pattern Type 3



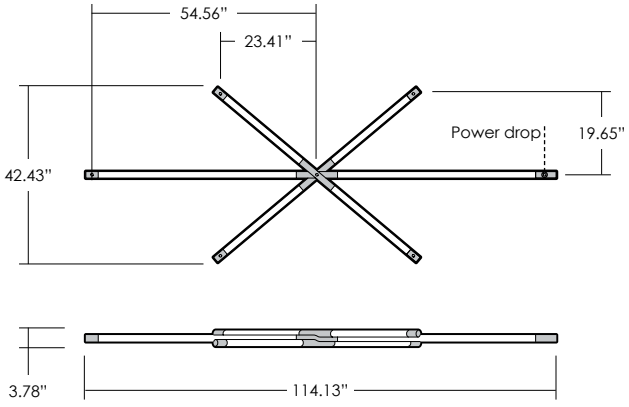
Stacked Pattern Type 1



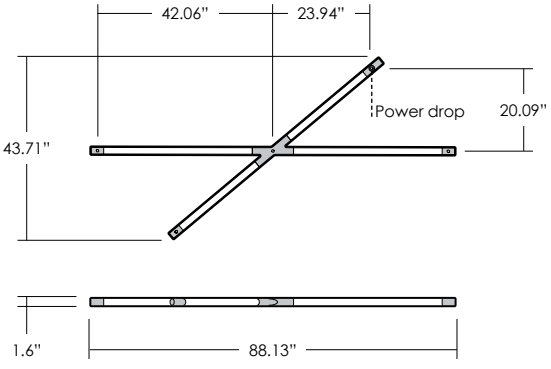
Stacked Pattern Type 2



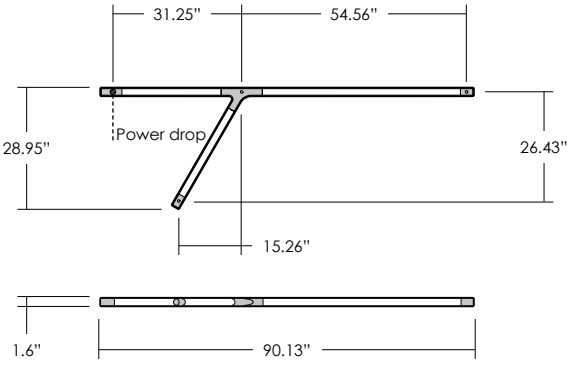
Stacked Pattern Type 3



Organic Pattern Type 1

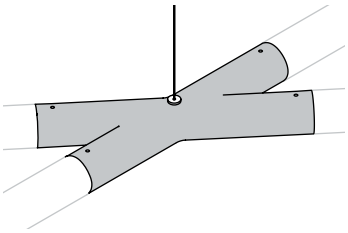


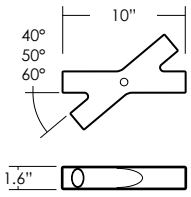
Organic Pattern Type 2



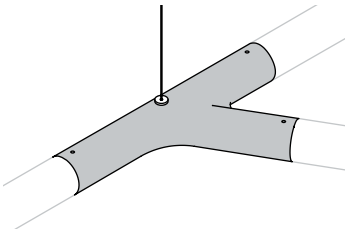
Project name | Type | Date | Quantities

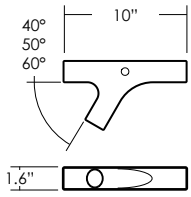
Joiner



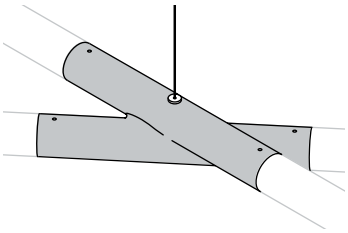


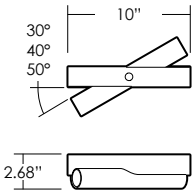
Organic X joiner



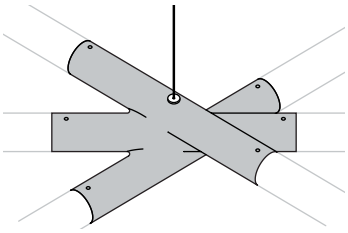


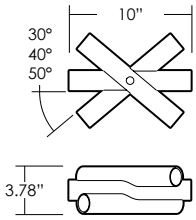
Organic Y joiner



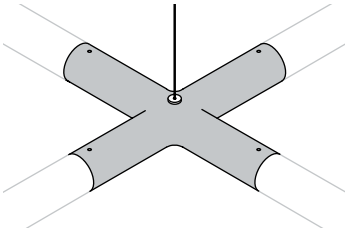


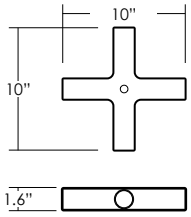
Stacked 2 joiner



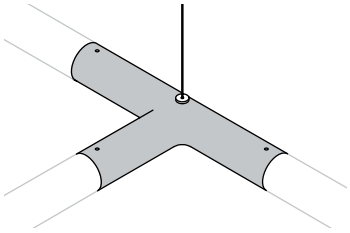


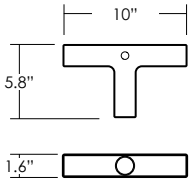
Stacked 3 joiner



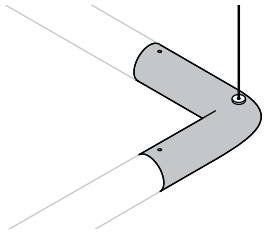


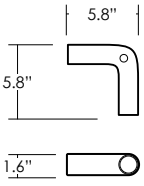
90° X joiner



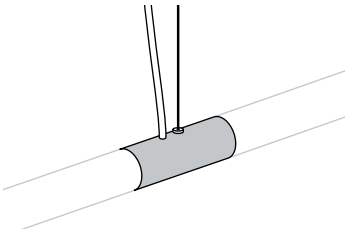


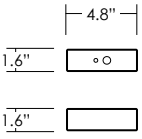
90° T joiner





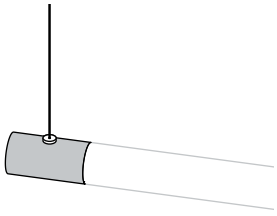
90° L joiner

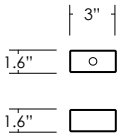




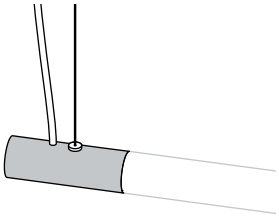
Feed straight joiner

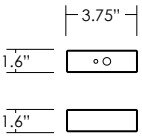
End segment





Non powered end segment.





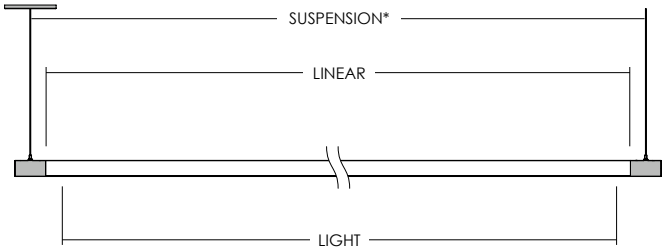
Powered end segment

The end segment is used to complete linear runs. Standard suspension 48" field adjustable aircraft cable. Maximum on-site adjustment is 12" (36"-48"). Specify length to the nearest inch if 48" is not suitable.

Project name | Type | Date | Quantities

Light engine

Nominal lengths



Elements is a simplified product line comprised of 2', 3', 4', 5', and 6' nominal length fixtures that can be joined to create continuous rows or patterns using a joiner.

*Suspension points are calculated between a POWER END SEGMENT and NON POWER END SEGMENT. For all other configurations, refer to component dimensions on page 4.

DIMENSIONS			
		HE TECH™ DIFFUSED LENS	BAFFLED OPTIC 22° BAFFLED OPTIC 55°
NOMINAL 2'	SUSPENSION	27.75"	27.75"
	LINEAR	24.06"	24.06"
	LIGHT	24.06"	22.90"
NOMINAL 3'	SUSPENSION	39.75"	39.75"
	LINEAR	36.06"	36.06"
	LIGHT	36.06"	34.35"
NOMINAL 4'	SUSPENSION	51.75"	51.75"
	LINEAR	48.06"	48.06"
	LIGHT	48.06"	45.80"
NOMINAL 5'	SUSPENSION	63.75"	63.75"
	LINEAR	60.06"	60.06"
	LIGHT	60.06	57.25"
NOMINAL 6'	SUSPENSION	75.75"	75.75"
	LINEAR	72.06"	72.06"
	LIGHT	72.06"	68.70"

Optic



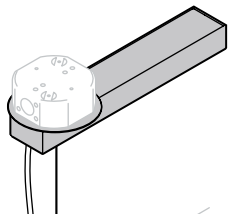
Baffled optic 55 degrees | Baffled optic 22 degrees | HE Tech™ | Diffuse Lens | Unlit

Maximum run lengths are calculated by dividing the maximum DC load (100W) by the DC power consumption per foot of each linear segment.

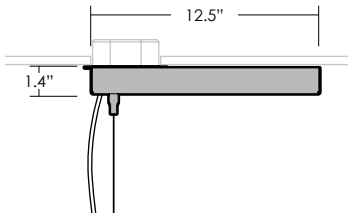
For example, a max of 10 linear feet of the diffuse lens segment at high output can be powered by a single driver: 100W÷10W/ft=10ft. A maximum of 20 linear feet of the same but in standard output can be powered by a single driver: 100W÷5W/ft=20ft.

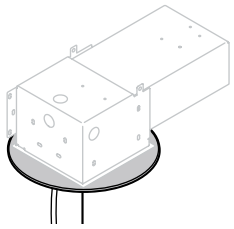
Combining several linear segments is possible and recommended.

Power source

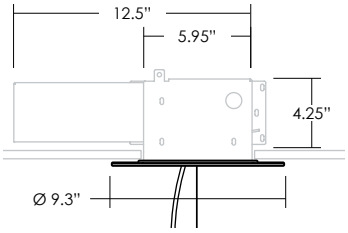


Surface mounted driver box.





Recessed mounted driver box



Standards 120-277V 100W (DC) driver with 0-10V dimming. Surface-mounted canopy: 12.5" x 1.40" x 2.2". Recessed box: 13"x 6" x 4" with ø9.3" flat cover plate.

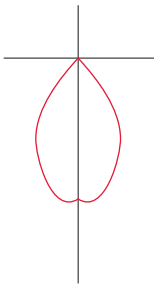
Project name | Type | Date | Quantities

Photometric data

DIRECT SYMMETRIC
LH - 4000K - 55°

Lumens: 702 lm/ft
Input watts: 10 W/ft (DC)
Efficacy: 70 lm/W

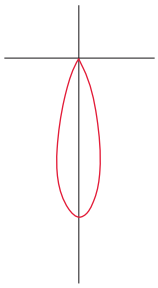
DLH: —



DIRECT SYMMETRIC
LH - 4000K - 22°

Lumens: 824 lm/ft
Input watts: 10 W/ft (DC)
Efficacy: 82 lm/W

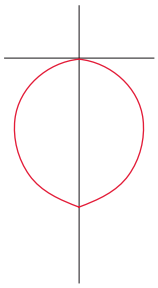
DLH: —



DIRECT SYMMETRIC
LH - 4000K - HE Tech™

Lumens: 730 lm/ft
Input watts: 10 W/ft (DC)
Efficacy: 73 Lm/W

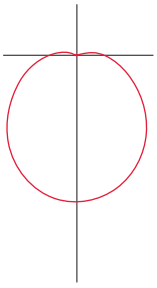
DLH: —



DIRECT SYMMETRIC
LH - 4000K - Diffuse lens

Lumens: 920 lm/ft
Input watts: 10 W/ft (DC)
Efficacy: 92 Lm/W

DLH: —



Light loss factors (LLF)

OUTPUT	CCT	DIRECT							
		22°		55°		HE Tech™		Diffused lens	
		CRI 80 +	CRI 90 +	CRI 80 +	CRI 90 +	CRI 80 +	CRI 90 +	CRI 80 +	CRI 90 +
LH (high)	4000k	824 lm/ft	671 lm/ft	702 lm/ft	572 lm/ft	730 lm/ft	645 lm/ft	920 lm/ft	812 lm/ft
	3500k	788 lm/ft	637 lm/ft	671 lm/ft	543 lm/ft	715 lm/ft	623 lm/ft	901 lm/ft	786 lm/ft
	3000k	761 lm/ft	607 lm/ft	649 lm/ft	517 lm/ft	688 lm/ft	589 lm/ft	867 lm/ft	742 lm/ft
	2700k	748 lm/ft	570 lm/ft	637 lm/ft	486 lm/ft	661 lm/ft	558 lm/ft	834 lm/ft	704 lm/ft
LS (standard)	4000k	428 lm/ft	348 lm/ft	365 lm/ft	297 lm/ft	379 lm/ft	335 lm/ft	478 lm/ft	422 lm/ft
	3500k	409 lm/ft	331 lm/ft	349 lm/ft	282 lm/ft	371 lm/ft	324 lm/ft	468 lm/ft	408 lm/ft
	3000k	395 lm/ft	315 lm/ft	337 lm/ft	269 lm/ft	357 lm/ft	306 lm/ft	450 lm/ft	386 lm/ft
	2700k	388 lm/ft	296 lm/ft	331 lm/ft	253 lm/ft	343 lm/ft	290 lm/ft	433 lm/ft	366 lm/ft

Maximum run length per power drop

Maximum run lengths are calculated by dividing the maximum DC load (100W) by the DC power consumption per foot of each linear segment. For example, a maximum of 10 linear feet of Diffuse Lens at high output can be powered by a single starter feed: 100W÷10W/ft=10ft.
Combining several linear segments is possible and recommended.

Need several power drops for continuous rows? Have questions?

We know that having so many options can be overwhelming. Please reach out to our factory for any specific request or questions you have.

Our Design Assist team (**designassist@alights.com**) is here to make the process move smoothly.

OUTPUT	LINEAR SEGMENTS	DC LOAD/FT
LH HIGH OUTPUT	Baffled optic 22°	10 W/ft
	Baffled optic 55°	10 W/ft
	Diffused lens	10 W/ft
	HE tech™	10 W/ft
LS STANDARD OUTPUT	Baffled optic 22°	5 W/ft
	Baffled optic 55°	5 W/ft
	Diffused lens	5 W/ft
	HE tech™	5 W/ft

Project name | Type | Date | Quantities

LINEAR DIMENSIONS
2', 3', 4', 5' and 6' nominal length lit/unlit modules can be joined to create continuous row length or pattern using joiners or swivels.

Custom patterns are possible. Contact Design Assist (**designassist@alights.com**) for modifications to product not detailed within the specification sheets or with help configuring your pattern.

OPTICS
Baffled optic is a custom-designed and manufactured optical system comprised of a Total Internal Reflecting (TIR) optic used in conjunction with a primary light-absorbing baffle. System optics provide high efficiency with a 55° sharp cut-off (half-angle from Nadir), 22° angle and a 55° FWHM angle (full width half maximum).

The high-efficiency extruded diffuse acrylic lens technology, patented HE Tech™, features an integrated opaque white reflector. It delivers superior lumen output with optimal uniform lens surface luminance for direct distribution.

Diffuse lens is used for a wider lambertian distribution, delivering beautifully refined light with uncompromising performance.

Unlit is an optical option that can be used in combination with lit segments to create unique patterns with or without light.

LED LIGHT SOURCE
Custom manufactured linear board array uses high performance Nichia® LED in combination with a performance driven heat sink technology. Tested in accordance with LM79 and LM-80; L70>60,0000hr; operated at reduced output for high efficacy and lumen maintenance. 2700K, 3000K, 3500K, and 4000K with standard 80+ CRI; other color temperatures and 90+ CRI available. LED color variation is maintained at a 3-step MacAdam ellipse (SDCM 3x). LEDs are available in Standard and High outputs. Refer to photometry for delivered lumens.

LED DIMMING DRIVER
Standard constant voltage 120-277V electronic driver with 0-10V dimming control (dim to off). Max Driver life of 100,000 hrs with ambient operating temperature range of -20°C to 60°C, maximum case temperature of 80°C. Electrical specifications at maximum driver load: PF >0.90, THD 20%, >90% Efficiency.

EMERGENCY
This luminaire can be provided with a remote LED emergency lighting battery pack for both normal and emergency operation, 120-277v only. This emergency pack contains long-life Ni-Cad recyclable batteries, 24-hour charger, and converter circuit. Test switch and charge indicators provided. Test button to also be remotely located within 3 feet of the luminaire, by others in accordance with local code. Emergency mode provides constant power to a nominal 10W LED load for a period of 90 minutes. Please consult the factory for emergency configuration assistance. Our Design Assist team (**designassist@alights.com**) is always available for collaboration and specification support.

ELECTRICAL
Maximum AC load of 120W per driver; Maximum DC load of 100W of installed light sources. This translates to a maximum of 10 linear feet of high output (LH) linear segments or 20 linear feet of standard output (LS) linear segments. Light sources can be mixed on the same driver. Consult the specification guide for more details.

CONTROLS
nLight enabled, remote mounted controls provided by others. Please contact an Acuity controls representative for more information.

MOUNTING
Suspension with aircraft cables includes 48" standard length 1/16" stainless steel adjustable aircraft cables with secure micro grippers to field set suspension length, comes factory installed in the fixture. Surface canopy: 12.5" x 1.40" x 2.2" surface mounted canopy. Recessed box: ø9.3" flat plate with recessed driver box. Cord strain also included. Black power cord provided for black and titanium finish, white power cord provided for all other fixture finishes unless otherwise specified. Canopy and cover plates standard white, unless otherwise noted. Consult factory for alternative mounting options.

PLUG & PLAY
Innovative plug and play system for joining segments with a simple click. Easily combine or remove segments, joiners or swivels as needed up to the maximum DC load. All linear segments can be rotated 360° and locked in place as needed using a discreet set screw on the joiner.

STRUCTURE
Robust, high quality aluminum extruded housing. 3D printed aluminum joiners. 1 lbs/ft approximate fixture weight.

FINISH
Electrostatically applied powder coat finish. Standard finish options include titanium, white, and black. Other colors and custom finish options available, specify RAL# or contact factory regarding custom finish requirements. Canopy and cover plates standard finish is white, unless otherwise noted.

LISTING
UL/CUL rated for Damp Locations. Tested in accordance with UL 1598 and certified to CEC/CSA C22.2.

The Aloft3D is assembled in the U.S.A. and complies with the Buy America(n) Act (BAA), Build America, Buy America (BABA) government procurement requirements under FAR, DFARS, and DOT.

WARRANTY
Visit our website to learn more: www.alights.com/downloads/warranty/

Project name | Type | Date | Quantities