

# HB50B

## HIGH POWER LINEAR LED LIGHTBAR

High Intensity | High Power  
100/277VAC | 1368-1691 lm/ft

**Exterior: Graze | Wall Washing | Signage |  
Façade | General Lighting**



Introducing The Smart Lighting HB50B Series, a cost-effective yet high-power exterior architectural fixture designed to excel in high-intensity grazing, wall washing, signage, and general illumination.

Capable of reaching over 10 stories or 100ft, the HB50B allows for precise customization with a broad selection of finely tuned optics to achieve your specific lighting goals. It features a universal 100/277VAC driver with integral 0-10v dimming capability and is available in options of 1368lm/ft or 1691lm/ft. Fitted with Nichia bin-sorted LEDs, the HB50B ensures high-quality, even illumination and comes with a powder-coated housing with integral glare shields.



The HB50B is easy to install, thanks to an integral universal power supply, a Plug and Play cable system, and diverse mounting options and accessories. The HB50B stands out as an affordable solution for uniform, precise, and impactful outdoor lighting.



## SPECIFICATIONS

Date: .....

Type: .....

Project: .....

Firm: .....

## PERFORMANCE

**Output**

16w-1368 lm/ft | 20w-1691 lm/ft

**Color Temperatures**

22k, 27k, 30k, 35k, 41k, 50k, 65k, R, G, B, A

**Beam Angles**8°, 15°, 20°, 30°, 45°, 60°, 75°, 90°, 120°,  
8°x40°, 18°x58°, 13°x17°, 15°x35° & 30°x60°**LEDs per Foot**

7

**LED's**

Nichia bin-sorted

**Color Consistency**

2 SCDM

**CRI**

83 standard, 92 optional

## ELECTRICAL

**Input Voltage**

Universal 100/277VAC

**Driver**

Integral

**Control**

0-10v dimming

**Heat dissipation**Full thermal management system  
(one cable for power and signal)**Connection**

Quick connect plug and play system

**Projected Lumen Maintenance**

&gt;90,000 hours

## PHYSICAL

**Fixture Length Options**

12", 24", 36", 48"

**Max Run Length**

184ft @277vac; 80ft @120vac

**Housing**

Extruded gray aluminum

**Lens**

Tempered Glass

**Fixture Finish (Standard)**

Anodized

**Powder Coated Finish (Optional)**

Black, Bronze, White, CU

**Standard Mounting**

Stainless adjustable brackets

**Optional Mounting**Powder-coated housing | extended arms or  
ground post stakes**Operating Temperature**

-40°F to 122°F, (-40°C to +50°C)

## ENVIRONMENT AND WARRANTY

**IP Rating**

IP66

**Environment**Dry, Damp or Wet locations  
0-100% non condensing humidity**Certifications**

UL, cUL

**Warranty**

5 year limited warranty

## PHYSICAL

### HB50B 16

#### Fixture Wattage

16w/ft

#### System Wattage

15w/ft

#### Lumens

1368lm/ft @4100K

#### Max Run Length

138ft @277vac

120ft @240vac

60ft @120vac

### HB50B 20

#### Fixture Wattage

20w/ft

#### System Wattage

17w/ft

#### Lumens

1691lm/ft @4100K

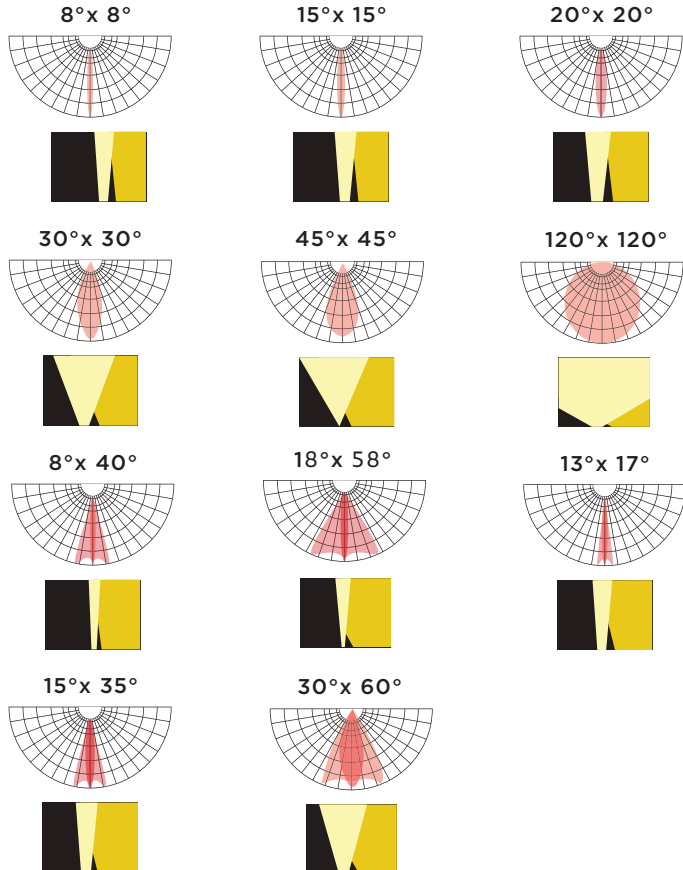
#### Max Run Length

110ft @277vac

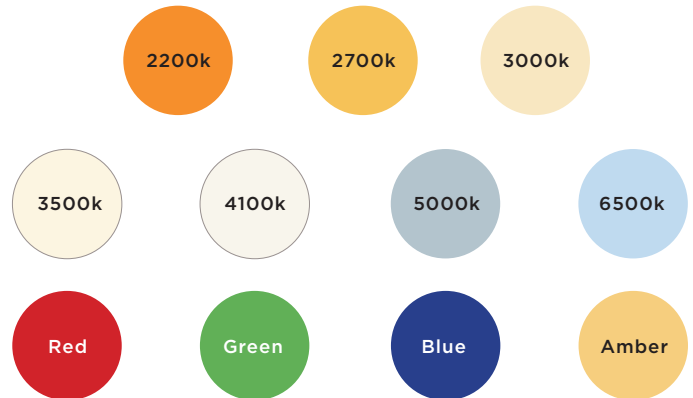
95ft @240vac

48ft @120vac

## OPTICS



## COLOR TEMPERATURES

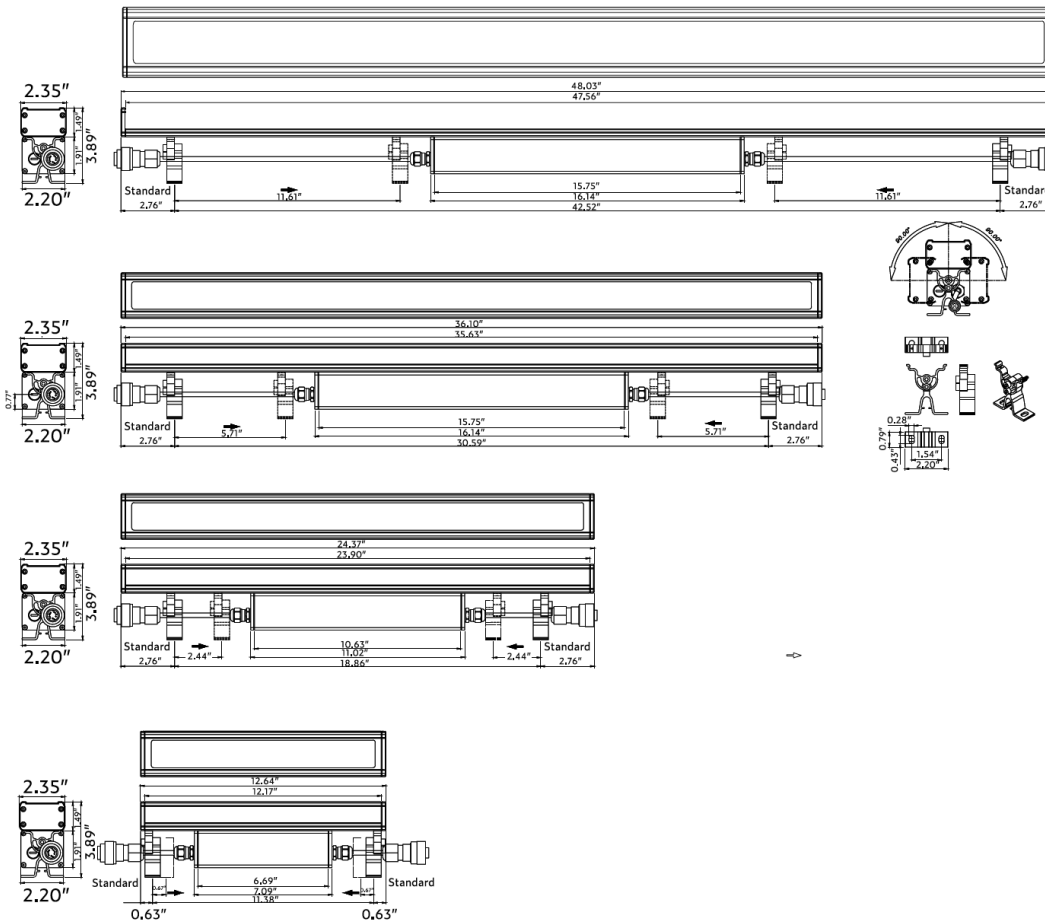


## DIMENSIONS AND DATA

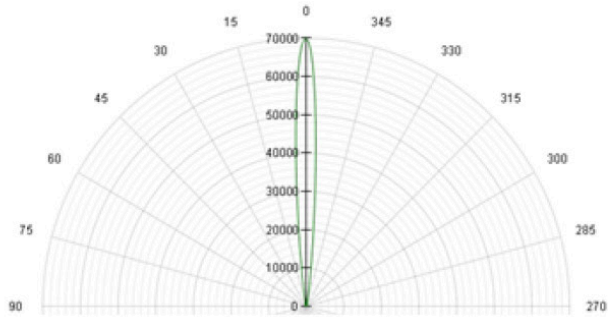
Model Number	Volt-age	View Angle	LEDs/pc	Lumens/Fixture	Watts PCBs/pc	Extrusion Length(A)	Total Length(B)
HB50B-12"-XXK-XXD-ACD-16	100/ 277VAC	8°, 15°, 20°, 30°, 45°, 120°, 8°x40°, 10°x60°, 13°x17°, 15°x35°, 30°x60°	7	1368 lm	16	12.17" (309mm)	12.64" (321mm)
HB50B-24"-XXK-XXD-ACD-16			14	2736 lm	32	23.90" (607mm)	24.37" (619mm)
HB50B-36"-XXK-XXD-ACD-16			21	4104 lm	48	35.63" (905mm)	36.1" (917mm)
HB50B-48"-XXK-XXD-ACD-16			28	5472 lm	64	47.56" (1208mm)	48" (1220mm)

Model Number	Volt-age	View Angle	LEDs/pc	Lumens/Fixture	Watts PCBs/pc	Extrusion Length(A)	Total Length(B)
HB50B-12"-XXK-XXD-ACD-20	100/ 277VAC	8°, 15°, 20°, 30°, 45°, 120°, 8°x40°, 10°x60°, 13°x17°, 15°x35°, 30°x60°	7	1691 lm	20	12.17" (309mm)	12.64" (321mm)
HB50B-24"-XXK-XXD-ACD-20			14	3382 lm	40	23.90" (607mm)	24.37" (619mm)
HB50B-36"-XXK-XXD-ACD-20			21	5073 lm	60	35.63" (905mm)	36.1" (917mm)
HB50B-48"-XXK-XXD-ACD-20			28	6764 lm	80	47.56" (1208mm)	48" (1220mm)

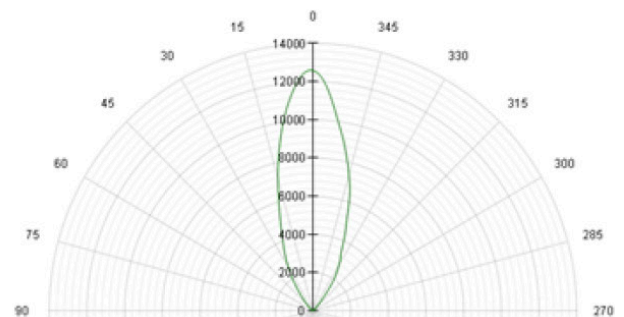
## PROFILE



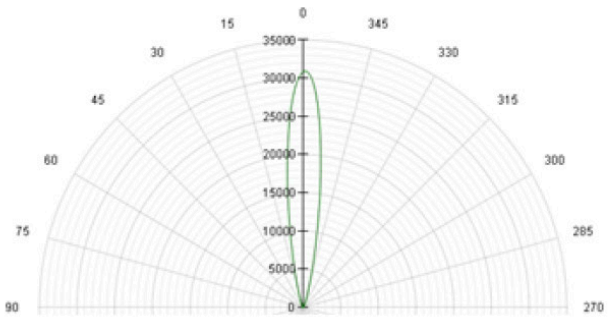
## POLAR CANDELA DISTRIBUTION



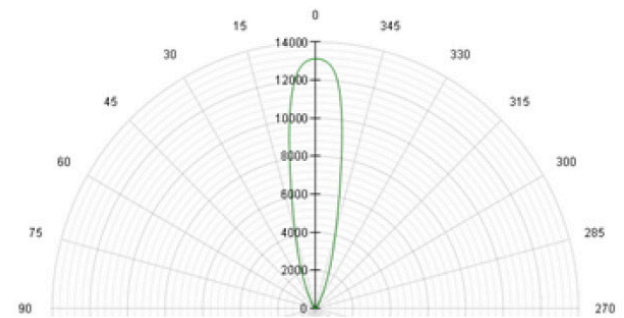
8° beam



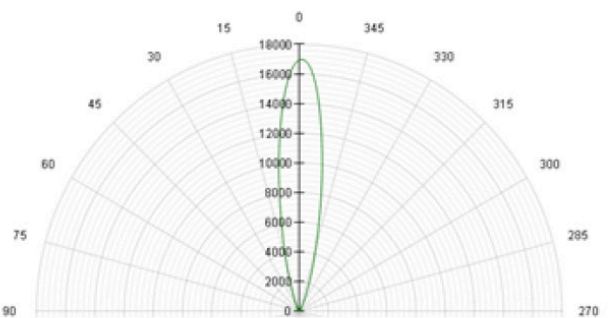
8x40° beam



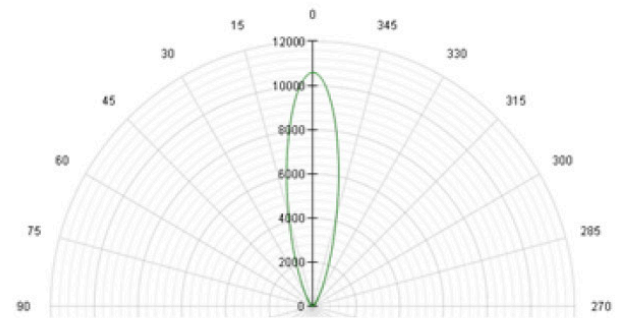
13x17° beam



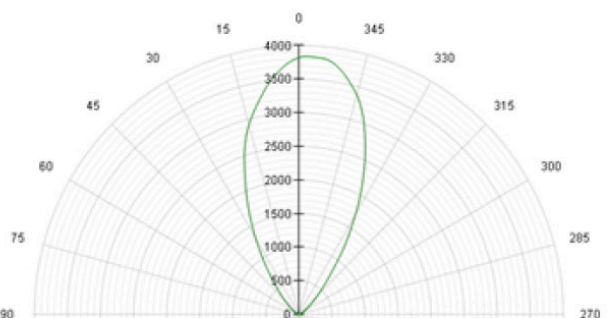
15° beam



20° beam



30° beam



45° beam

## CREATE YOUR FIXTURE

Example - HB50B-48-41-840-ACD-20

MODEL	LENGTH	COLOR	OPTICS
HB50B - 16	12"	22k	8
HB50B - 20	24"	27k	840
	36"	30k	1317
	48"	35k	15
		41k	1535
		50k	1060
		65k	20
			COVE/FLOOD
			120 120° x120°

VOLTAGE	CONTROL	WATTAGE
AC	D	16
100-277vac	ND	20
	Dimming	16w/ft
	Non Dimming	20w/ft

## SELECT CONNECTION

## Wire Lead

## QTY POWER/SIGNAL

HB50-5P-72"-W/L

HB50-5P-xx"- W/L

## QTY POWER

HB50-3P-72"-W/L

HB50-3P-xx"- W/L

\* 1 wire lead and end cap required for each run.

## End Cap

## QTY

HB50-5P-END CAP

## Jumper Cable

## QTY POWER/SIGNAL

HB50-5P-12"-J

HB50-5P-72"-J

HB50-5P-xx"-J

## QTY POWER

HB50-3P-12"-J

HB50-3P-72"-J

HB50-3P-xx"-J

\* All connectors to be hand tightened, do not use tools or this will void the warranty.

## Surge Protection

## QTY

LSP4-UNV

120/277v surge protector

\* A surge protection device must be installed on each supplying circuit to comply with TSLC's 5-year warranty terms.

## Dimmer Switch

## QTY

IP710-DLZ

0-10V Dimmer

## Optional Powder Coated Finish

## QTY

Powder coated finishes available for additional cost

BK Black

BZ Bronze

WH White

CU Custom

\* Fixture housing is anodized aluminum standard

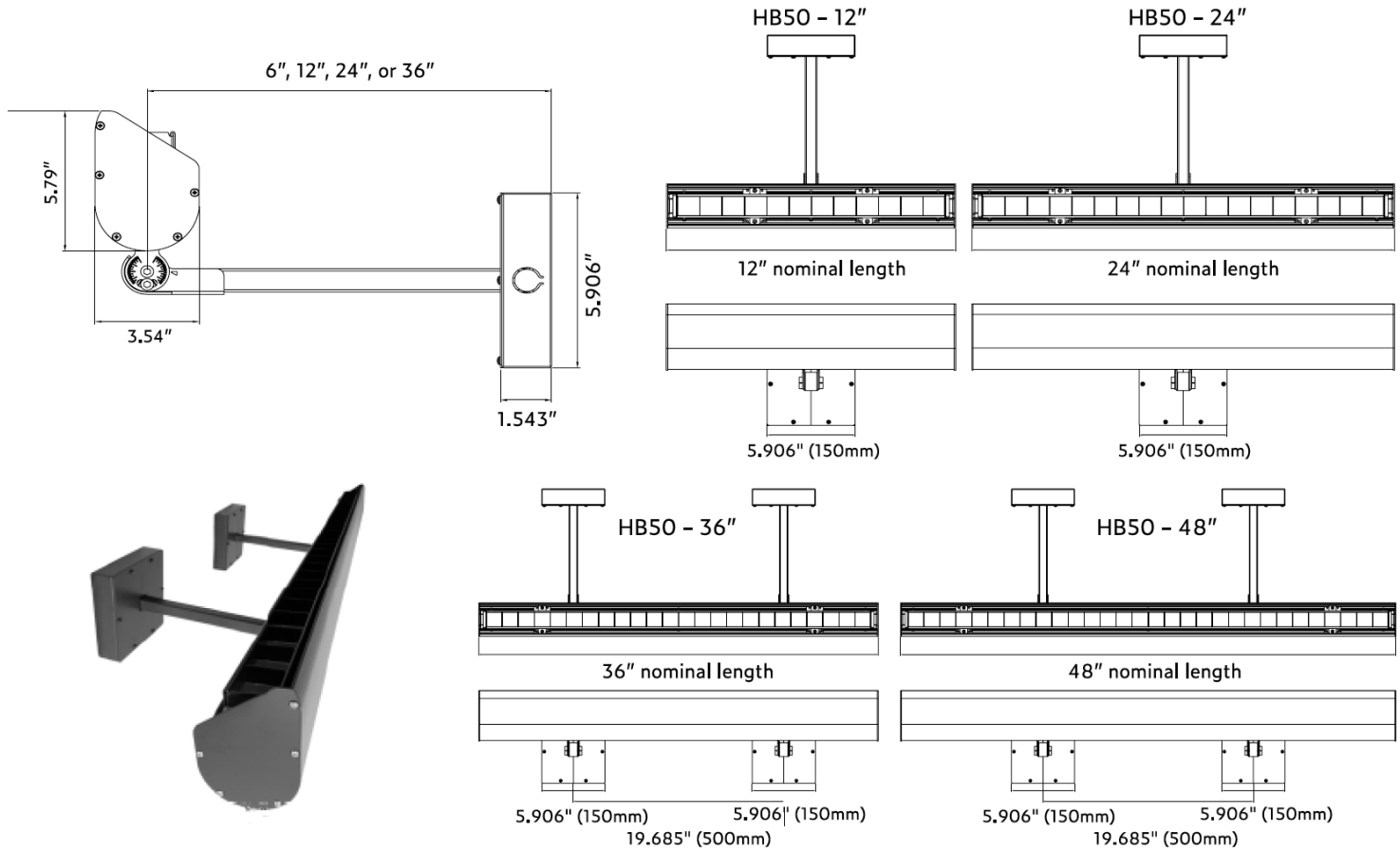


### MOUNTING OPTIONS

#### Housing and Extended Arms

HB50EXT-XXL-XXF-XXA (L=Length, F=Finish, A= Extended arm length)

QTY	Housing	(L) Housing Length	(F) Finish	(A) Extended Arm Length
	HB50EXT-	12"	BK - Black	6"
		24"	BZ- Bronze	12"
		36"	WH - White	18"
		48"	SI - Silver	24"
			CU - Custom	36"
				GPA (Ground Post Arm)



\* Standard fixture housing is anodized aluminum. Powder coating is available from factory in Black, Bronze, Silver, White, or custom.

\* There is a minimum quantity for powder coating or a surcharge will be added. Custom colors available upon request and will require a cost adder.

\* 1ft & 2ft extrusions require one ground post stake (HBEXP-GPS). 3ft & 4ft extrusions require two ground post stakes (HBEXP-GPS).

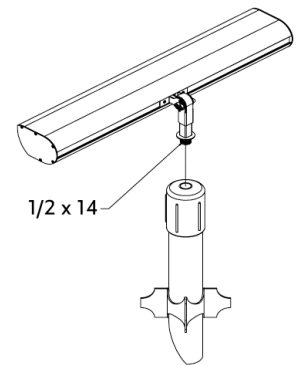
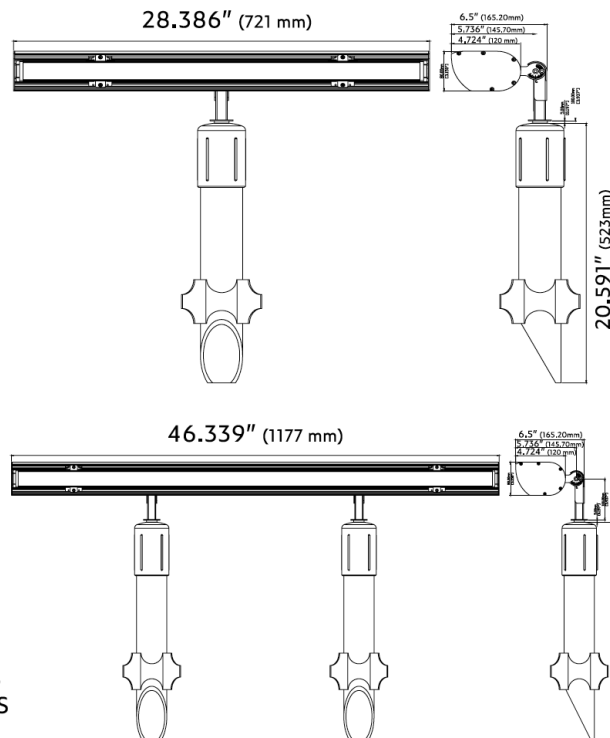
### Ground Posts Stakes

QTY **Select when using GPA above (1 per fixture for 12" & 24" housing and 2 for 36" & 48" housing)**  
 HBEXT-GPS Ground post mount

**1ft & 2ft extrusions require one HBEXT-GPS. 3ft & 4ft extrusions require two HBEXT-GPS.**



- \* 12" & 24" extrusions require one HBEXT-GPS
- \* 36" & 48" extrusions require two HBEXT-GPS



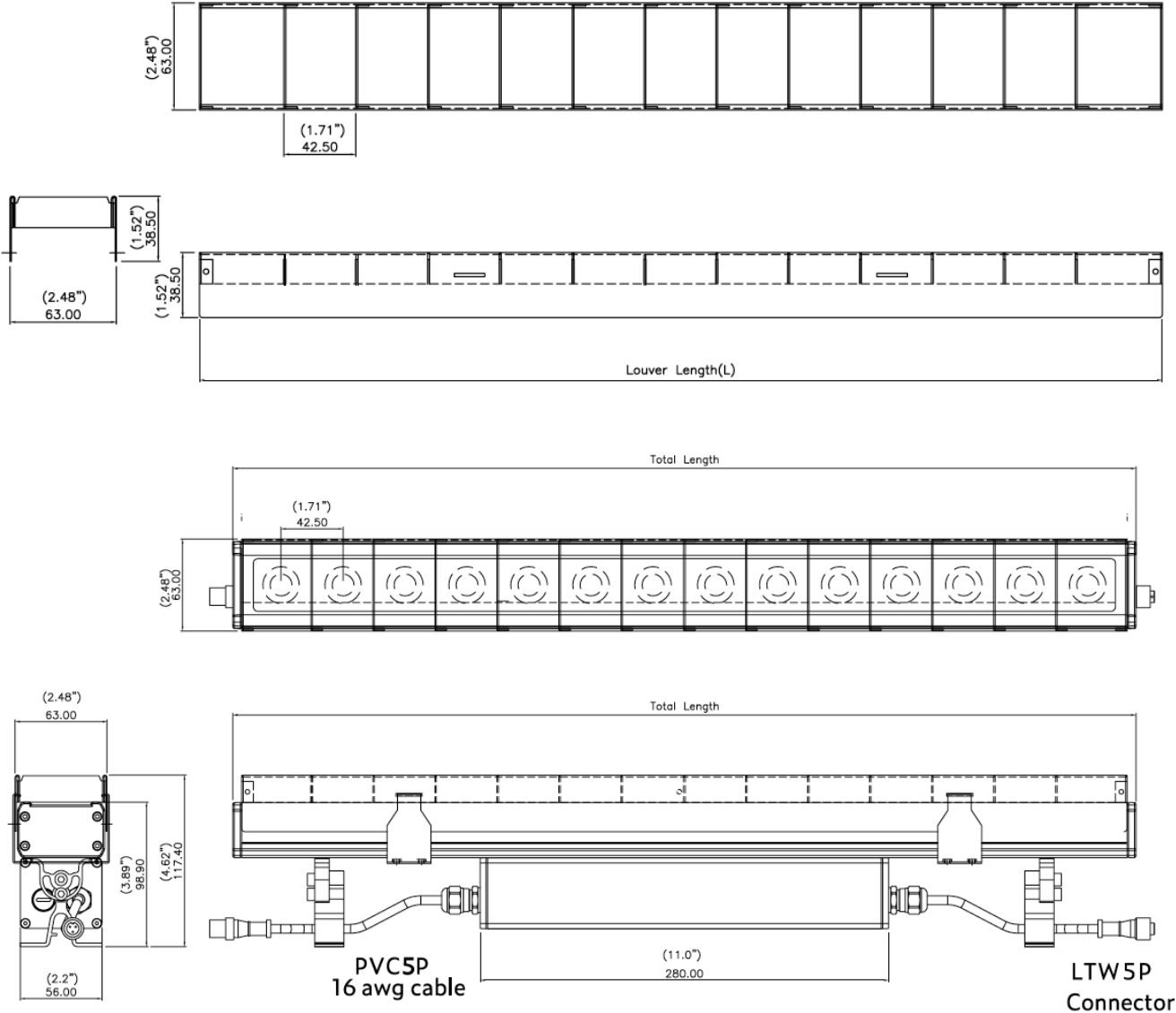


LOUVERS

Glare Protection

Standard louvers are in Black. Louvers are also available in Bronze, White, or custom.

QTY	Housing	Standard Inch	LEDs/unit	LEDs/Pitch	Louver Length	Total Length	(F) Finish
	HB50-12" LOUVER	12"	6	42.5 mm/1.71 in	309 mm/12.2 in	321 mm/12.6 in	BK - Black
	HB50-24" LOUVER	24"	12	42.5 mm/1.71 in	607 mm/23.9 in	619 mm/24.4 in	BZ- Bronze
	HB50-36" LOUVER	36"	18	42.5 mm/1.71 in	905 mm/35.6 in	917 mm/36.1 in	WH - White
	HB50-48" LOUVER	48"	24	42.5 mm/1.71 in	1208 mm/47.6 in	1220 mm/48 in	SI - Silver
							CU - Custom



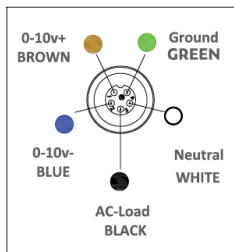
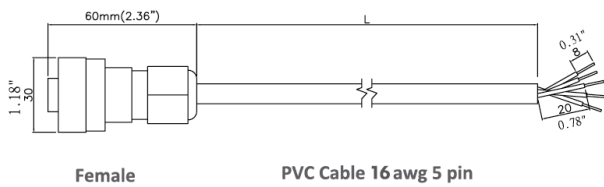
### WIRE LEAD

#### DESCRIPTION

5 pin 0-10v dimming wire lead

#### PART NUMBER

HB50-5P-xx" 16W/L

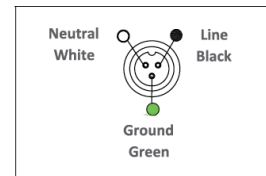
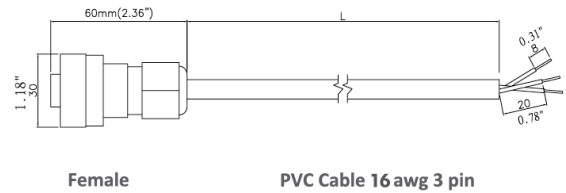


#### DESCRIPTION

3 pin non-dimming wire lead

#### PART NUMBER

HB50-3P-xx" 16W/L



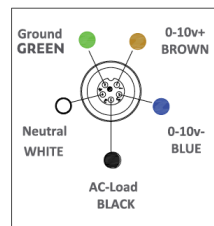
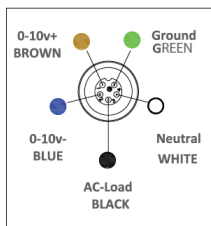
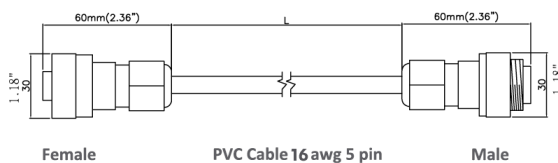
### JUMPER CABLE

#### DESCRIPTION

5 pin 0-10v dimming jumper

#### PART NUMBER

HB50-5P-xx" 16J

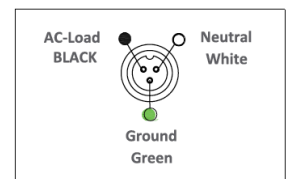
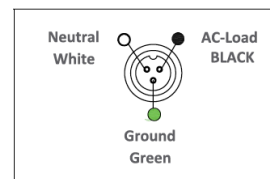
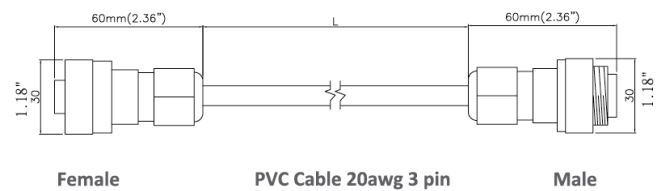


#### DESCRIPTION

3 pin non-dimming jumper

#### PART NUMBER

HB50-3P-xx" 16J



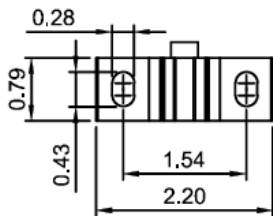
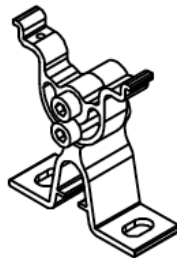
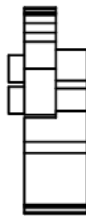
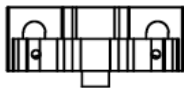
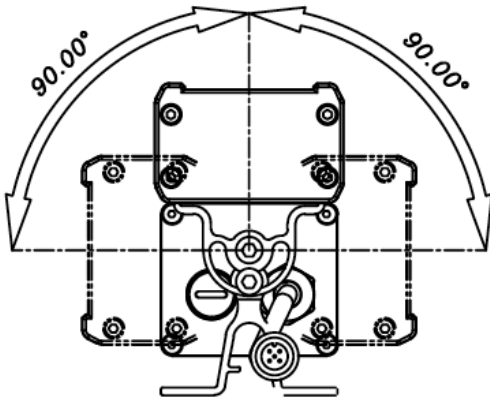
### INTEGRATED ADJUSTABLE BRACKETS

#### DESCRIPTION

HB30 Adjustable Bracket

#### PART NUMBER

AL-HB30 ADJ.Bracket



### SURGE PROTECTION

#### DESCRIPTION

Surge Protection Device

#### PART NUMBER

AL-LSP-UNV

The use of a surge protection device is necessary to maintain your warranty. Specifications are subject to change without notice.

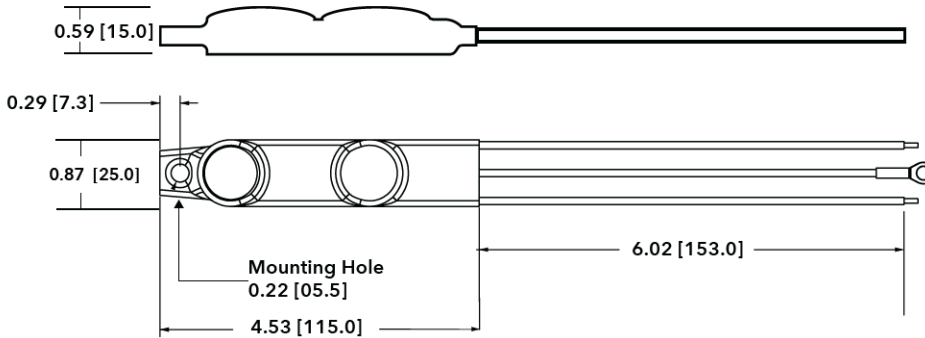
#### SPECIFICATIONS

Input Voltage	120-277V (+/- 5%)		
Frequency	50Hz-60Hz		
Maximum Continuous Voltage	320V		
Maximum Discharge Current	L-N 20kA; L-G, N-G 10kA (8/20Qs standard wave)		
Nominal Discharge Current	5kA		
Measured Limiting Voltage (VpK)	L-N	L-G	N-G
	1200	1320	1320
Max Case Temperature	85°C		

PULSE RATING (8 X 20 SEC)		
Surge Level	# of Strikes	
	L-N	L-G, N-G
10,000A	*2	1
6,500A	4	2
5,000A	30	15
2,000A	200	100
700A	20000	1000

\*1 strike at 20,000A

#### MECHANICAL DIMENSIONS : IN (MM)



#### WIRING DIAGRAM

