

Premier Linear

Project:	Type:
Product Code:	Date:

V041326



0.5" Concealed System

Curated Color & Dimming 192 high-efficacy LEDs per foot deliver perfect blending and color that integrates seamlessly with our downlight products.

Easy Installation & Serviceability Simple solderless connections with no soldering required. A modular design allows you to service just one component, not the entire run.

Minimal Form Factor The 0.5" x 0.5" form factor enables seamless integration into a wide variety of applications.

Universal Wire Exit Allows for optimum flexibility in install with ability to exit the wire from the side, end or back of the fixture.

PHYSICAL

Mounting Types

Flat Mounting Track
45° Mounting Track
Surface Mounting Channel
(May be recessed in Millwork)

Fixture Dimensions

0.5" x 0.5" Profile

Fixture & Connector Finish

Black Anodized Aluminum and Black Polycarbonate

Mounting Type Finish

Black Anodized, White Powder Coat
Satin Silver, Custom (RAL Colors)

Run Length

Max. 20' per Driver

OPTICAL

Delivered Lumens (Power)

400 lm/ft (4W)


Color Quality

93 CRI

Color Temperature

2000K 2400K 2700K
3000K 3500K

Beam Spread

 114°

Ambient Operating Temperature

-20°C to 40°C (-4°F to 104°F)

ELECTRICAL & CONTROLS

Input Voltage

Fixture: 48VDC
Driver: 100-277VAC



Dimming

TRIAC/ELV (0.5%, 120V only)
0-10V (0.1%, 110-277VAC)

Home Run Length

Max. 200' with 16/2 Wire
Max. 75' with 18/2 Wire

RATINGS

-  UL Listed for Damp Location
-  Closet Rated (Per NEC)

WARRANTY

5 year limited warranty; 50,000 hours

MAINTENANCE

Solder-free, touch safe modular connections that can be replaced in 1", 2" and 12" increments



Declare.



PRODUCT BUILDER | LINEAR

FULL FIXTURE SPEC

EXAMPLE: **LS05F4W20DF144FTB**

PRODUCT CODE		WATTAGE		CCT		LENS		LENGTH	MOUNTING	
LS05F		4W				DF				
LS05F	Linear Standard 0.5" Fixture	4W	4.0 Watts (400lm/ft)	20	2000K	DF	Dot Free	length 240" max (1" increments)	FTB	Flat Track, Black
				24	2400K				45B	45° Track, Black
				27	2700K				CHW	Channel, White
				30	3000K				CHS	Channel, Satin Silver
				35	3500K				CHC	Channel, Custom

POWER SUPPLY

EXAMPLE: **PSS4896WT101**

PRODUCT CODE		RATING		VOLTAGE		WATTAGE		CONTROL		OUTPUT	
PS		S		48		96W		T10		1	
PS	Power Supply	S	Standard	48	48V	96W	96 Watts	T10	Combined Triac & 0-10V	1	Single

COMPONENT PART NUMBERS (FOR FULL BOM BUILD)

FIXTURE

LS05F4W20DF12BK	12" Fixture with Middle Connector, 2000K
LS05F4W24DF12BK	12" Fixture with Middle Connector, 2400K
LS05F4W27DF12BK	12" Fixture with Middle Connector, 2700K
LS05F4W30DF12BK	12" Fixture with Middle Connector, 3000K
LS05F4W35DF12BK	12" Fixture with Middle Connector, 3500K
LS05F4W20DF2BK	2" Fixture, 2000K
LS05F4W24DF2BK	2" Fixture, 2400K
LS05F4W27DF2BK	2" Fixture, 2700K
LS05F4W30DF2BK	2" Fixture, 3000K
LS05F4W35DF2BK	2" Fixture, 3500K
LS05F4W20DF1BK	1" Fixture, 2000K ¹
LS05F4W24DF1BK	1" Fixture, 2400K ¹
LS05F4W27DF1BK	1" Fixture, 2700K ¹
LS05F4W30DF1BK	1" Fixture, 3000K ¹
LS05F4W35DF1BK	1" Fixture, 3500K ¹

CHANNEL END CAPS

LS05CECFWH	Channel End Cap, Bottom Feed, White
LS05CECFSS	Channel End Cap, Bottom Feed, Satin Silver
LS05CECFCC	Channel End Cap, Bottom Feed, Custom Color
LS05CECRSWH	Channel End Cap, Rear/Side Feed, White ^{2,3}
LS05CECRSSS	Channel End Cap, Rear/Side Feed, Satin Silver ^{2,3}
LS05CECRSCC	Channel End Cap, Rear/Side Feed, Custom Color ^{2,3}

CONNECTORS

LS05ACPF	Linear Standard 0.5" Accessory, Connector, Power Feed
LS05ACM	Linear Standard 0.5" Accessory, Connector, Middle
LS05ACJ06	Linear Standard 0.5" Accessory, Connector, Jumper 6"
LS05ACJ24	Linear Standard 0.5" Accessory, Connector, Jumper 24"
LS05ACDE	Linear Standard 0.5" Accessory, Connector, Dead End

MOUNTING

LS05TFL84BK	Flat Track, Black
LS05T4584BK	45° Track, Black
LS05CHS84WH	Channel, Surface Mount, White ³
LS05CHS84SS	Channel, Surface Mount, Satin Silver ³
LS05CHS84CC	Channel, Surface Mount, Custom Color ³

NOTE: For Surface Mounting Channel, calculate lengths as follows:

Channel Cut Length: Fixture Length + 4mm (accounts for fixture and internal channel endcaps).

Total Installed Length: Channel Cut Length + 8mm (accounts for external channel endcap protrusion).

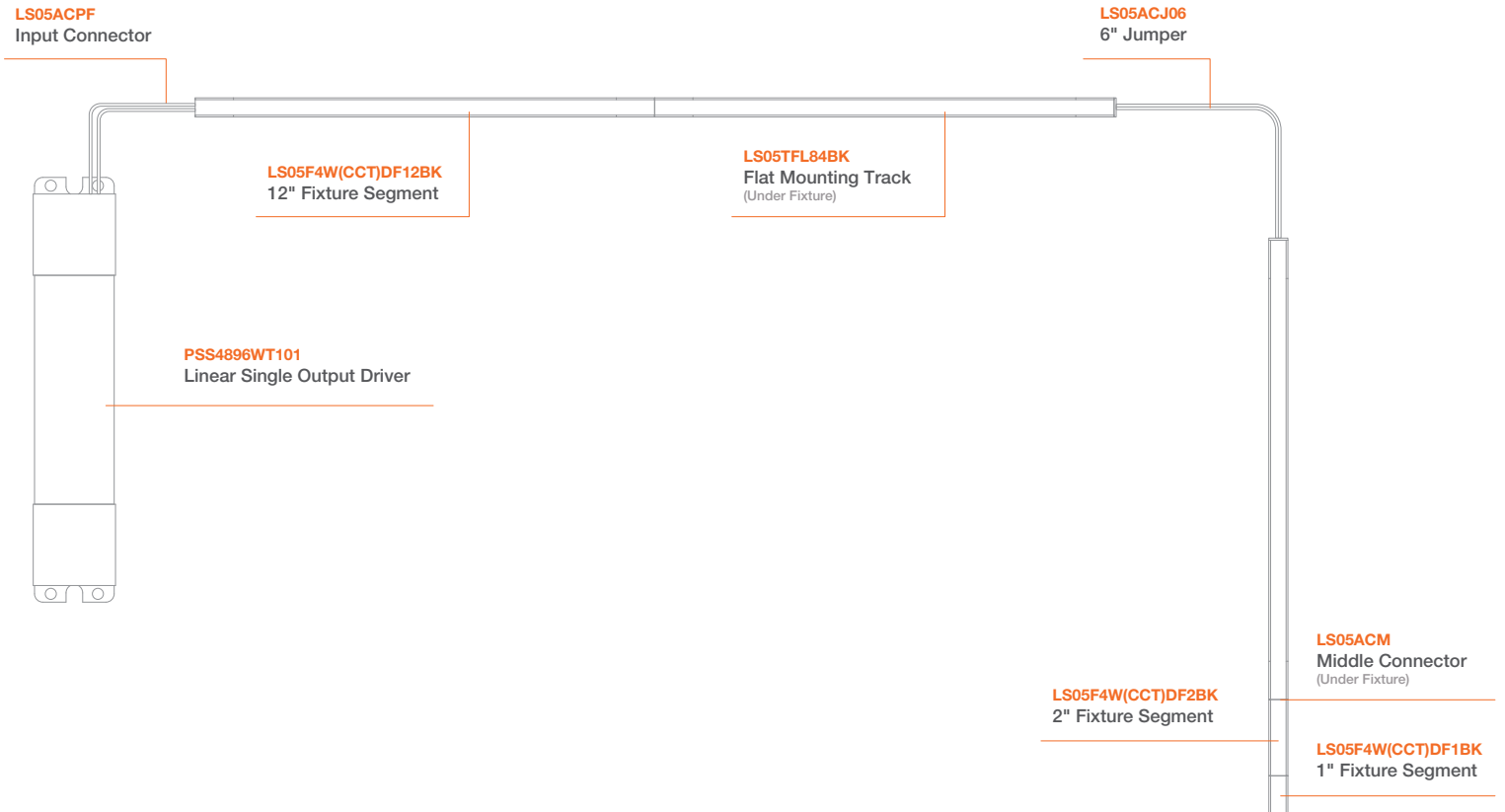
¹ May only be used as the last segment in a fixture run

² Can also be used as a dead end

³ Wire exit hole is concealed when mounted

SAMPLE LAYOUT

EXAMPLE OF A TYPICAL LAYOUT FOR REFERENCE PURPOSES:



MOUNTING OPTIONS



Flat Mounting Track

LS05TFL84BK

SUMMARY:

The field cuttable Flat Mounting Track is our slimmest mounting option. When mounted on this channel, the fixture profile is exactly 0.5" x 0.5" including the channel.

INCLUDES:

- 84" Flat Mounting Track
- No.4 1/2" Phillips Flat Head Wood Screws (10 per 84" piece)
- Channel Alignment Tool (1 per channel)

FINISH:

Black Anodized



45° Mounting Track

LS05T4584BK

SUMMARY:

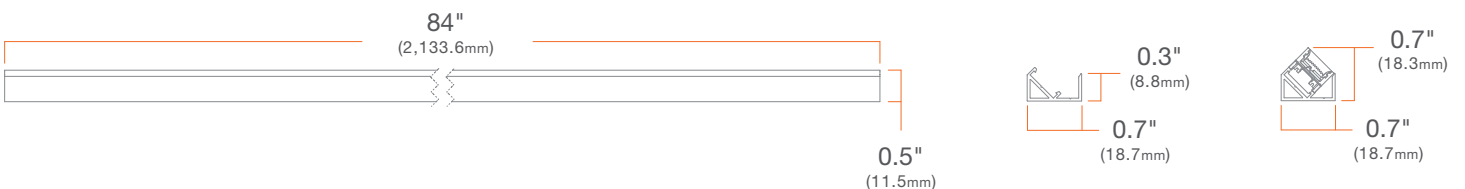
The field cuttable 45° Flat Mounting Track is designed to aim the fixture at a 45° angle.

INCLUDES:

- 84" Flat Mounting Track
- No.4 1/2" Phillips Flat Head Wood Screws (10 per 84" piece)
- Channel Alignment Tool (1 per channel)

FINISH:

Black Anodized



MOUNTING OPTIONS



Surface Mounting Channel

LS05TCH84WH

SUMMARY:

The field cuttable Channel provides a mounting platform that encompasses the entire fixture system, providing a completely seamless look. The black fixtures and connectors can be installed into the Channel, transforming the color of the installation to White, Satin Silver, or any custom RAL number. The Channel also provides supplementary protection to the fixture system and works well in high traffic applications like toe-kick where the fixture may be unintentionally kicked or bumped.

INCLUDES:

- 84" U Shaped Mounting Channel
- No.4 1/2" Phillips Flat Head Wood Screws (10 per 84" piece)
- Channel Alignment Tool (1 per channel)

ACCESSORIES:

- Channel End Caps:
- Rear/Side Feed
- End Feed

NOTES: For Surface Mounting Channel, calculate lengths as follows:

Channel Cut Length: Fixture Length + 4mm (accounts for fixture and internal channel endcaps).

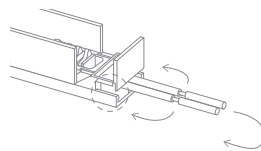
Total Installed Length: Channel Cut Length + 8mm (accounts for external channel endcap protrusion).

FINISH:

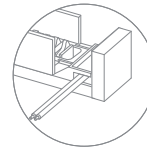
White Powder Coat, Satin Silver, Custom Color (RAL Colors)

WIRE EXIT LOCATIONS:

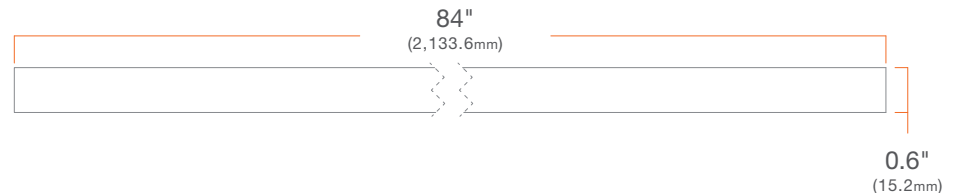
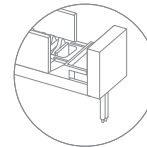
END FEED



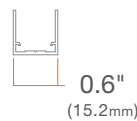
SIDE FEED



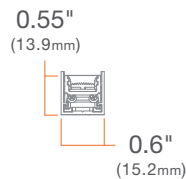
REAR FEED



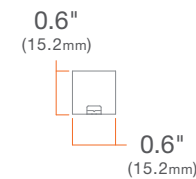
EMPTY CHANNEL



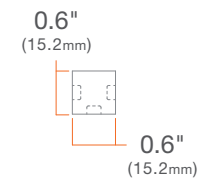
CHANNEL AND FIXTURE



CHANNEL WITH BOTTOM FEED END CAP



CHANNEL WITH REAR/SIDE FEED END CAP



DRIVER



Linear Single Output Driver

PSS4896WT101

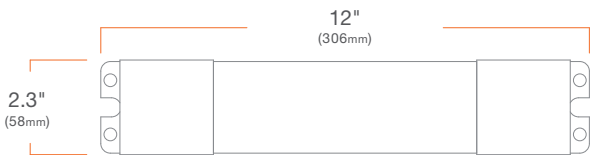
SUMMARY:

The Linear Single Output Driver powers up to 20' of fixture segments and is optimized for long home runs of 200' using 16/2 and 75' using 18/2. Built-in junction boxes enable convenient and compliant wiring without the need for added components.

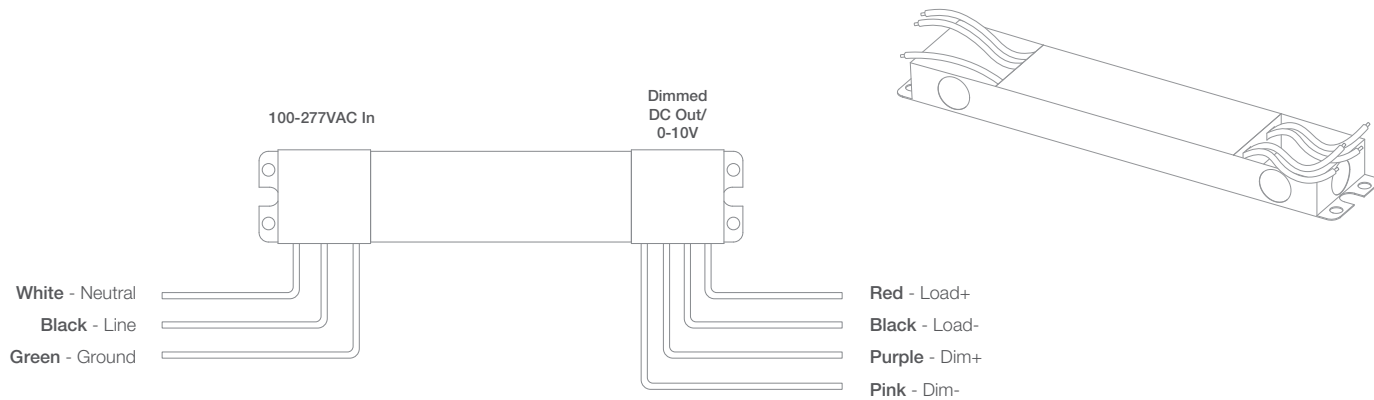
WATTAGE: 96W

INPUT VOLTAGE: 100-277VAC

DIMMING: TRIAC/ELV (0.5%, 120V only),
0-10V (0.1%, 110-277VAC)



WIRING DIAGRAM:



FIXTURES

Linear 12" Fixture Segment

LS05F4WXXDF12BK with Middle Connector Included

SUMMARY:

12" segment of illuminated fixture run, comes with Middle Connector included.

NOTES:

- May be used at the start, middle or end of run
- Can connect to input connector, middle connector or dead end cover

INCLUDES:

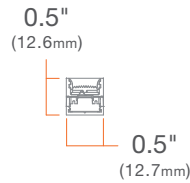
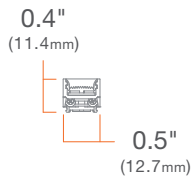
- 12" Fixture Segment (1)
- Middle Connector (1)

LED BRAND:

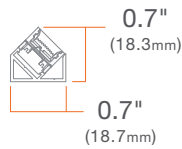
Bridgelux 2-step LED



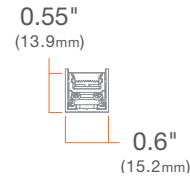
INSTALLED ON FLAT CHANNEL:



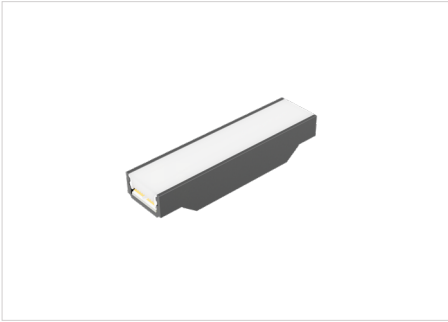
INSTALLED ON 45° CHANNEL:



INSTALLED ON COVER CHANNEL:



FIXTURES



Linear 2" Fixture Segment

LS05F4WXXDF2BK

SUMMARY:

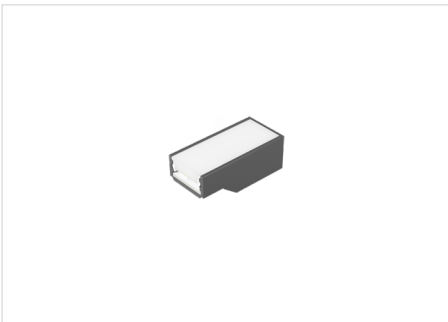
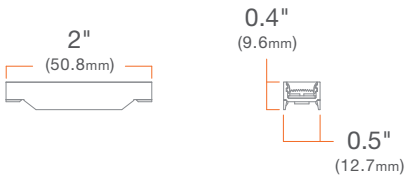
2" segment of illuminated fixture run.

NOTES:

- May be used at the start, middle or end of run
- Can connect to a middle connector or dead end cover

LED BRAND:

Bridgelux 2-step LED



Linear 1" Fixture Segment

LS05F4WXXDF1BK

SUMMARY:

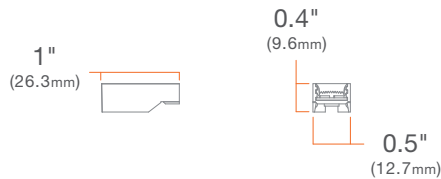
1" segment of illuminated fixture run.

NOTES:

- Has a permanent dead end cover on one end.
- May only be used as the last segment in a fixture run
- Can connect to a middle connector only on one end

LED BRAND:

Bridgelux 2-step LED



ACCESSORIES



Linear Input Connector

LS05ACPF

SUMMARY:

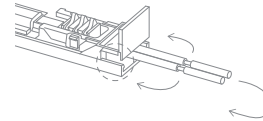
The Input Connector connects to the driver output and supplies power to the fixture run.

NOTES:

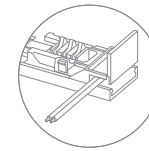
- Must be used to start every fixture run
- End cap portion can be broken off in the field to allow for seamless runs

WIRE EXIT LOCATIONS:

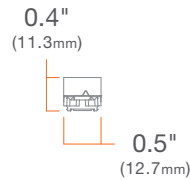
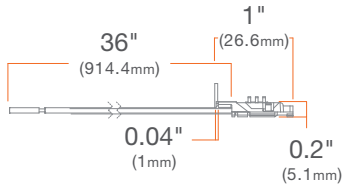
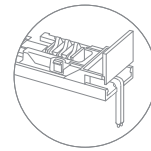
END FEED



SIDE FEED



REAR FEED



Linear Middle Connector

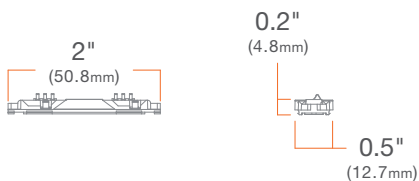
LS05ACM

SUMMARY:

The Middle Connector is used to make connections between 12", 2" or 1" fixture segments.

NOTES:

- Magnetized to secure to the ends of fixtures and snaps into place on mounting channel



ACCESSORIES



Linear Jumper

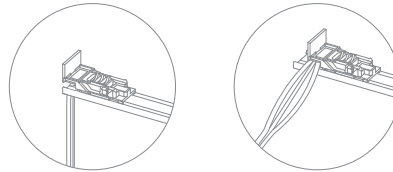
LS05ACJ06 (6")

LS05ACJ24 (24")

SUMMARY:

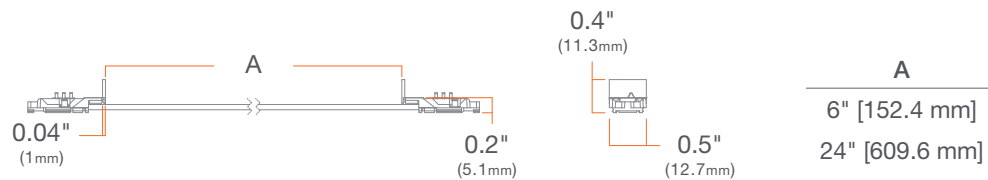
Jumpers may be used mid fixture run where continuous or straight runs are not possible (e.g. to bend a corner or between shelves). Jumpers come in 6" or 24" lengths standard.

WIRE EXIT LOCATIONS:



NOTES:

- Wire lead can be bent left, right or down to facilitate multiple wire exit locations (see drawing left below)
- End cap portion can be broken off in the field to allow for seamless runs
- Jumpers utilize 3 wires. Jumpers may be cut to length but 3 conductors must be re-connected to supply power to the subsequent fixture segments
- Do not connect directly to driver, and only after an input connector and fixture segment
- Each foot of jumper cable used reduces the allowable home run length by three feet. For example, six feet of jumpers reduces a 200-foot home run limit (16/2) to 182 feet.



Linear Dead End Cover

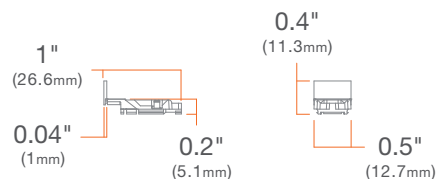
LS05ACDE

SUMMARY:

The Dead End Cover is used at the end of a fixture run to cover exposed terminals, seal the fixture end, and attach the fixture to the mounting channel.

NOTES:

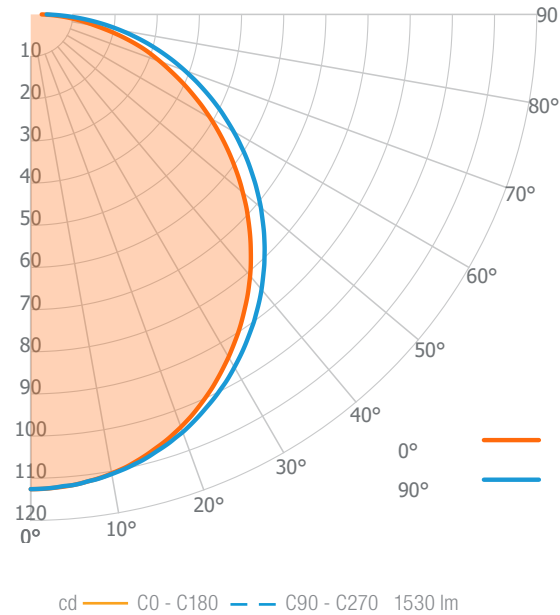
- Can be connected to a 12" or 2" fixture segment
- 1" fixture segments have a permanently installed dead end cover



PHOTOMETRY

Linear 12" Fixture Segment 2000K

Candela Distribution



Luminous Intensity

0°	0°
0°	113
5°	112
10°	111
15°	108
20°	104
25°	99
30°	94
35°	88
40°	81
45°	74
50°	66
55°	58
60°	49
65°	41
70°	33
75°	25
80°	16
85°	9
90°	3

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	88	26%
0° - 40°	144	42%
0° - 60°	256	75%
0° - 90°	339	99%
0° - 180°	342	100%

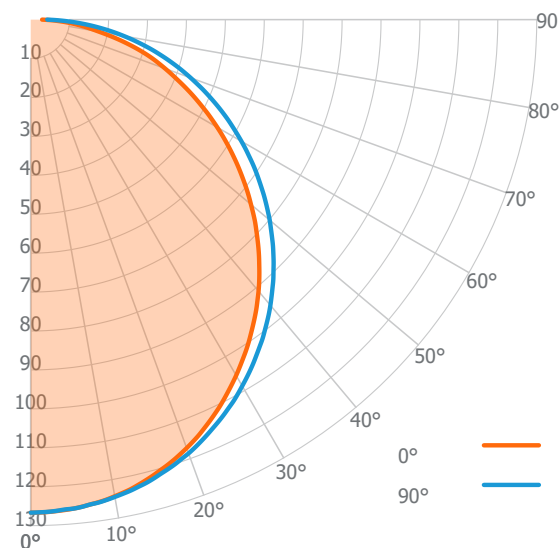
Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	12.5 fc	8.8 ft
6 ft	3.1 fc	17.6 ft
9 ft	1.4 fc	26.4 ft
12 ft	0.8 fc	35.2 ft

Input Watts: **4.0 W**
 Lumens: **342 lm**
 Efficacy: **86 lm/W**
 Beam Angle: **111° x 119°**

Linear 12" Fixture Segment 2400K

Candela Distribution



Luminous Intensity

0°	0°
0°	127
5°	126
10°	124
15°	121
20°	117
25°	112
30°	106
35°	99
40°	91
45°	83
50°	74
55°	65
60°	55
65°	46
70°	37
75°	28
80°	18
85°	10
90°	3

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	99	26%
0° - 40°	162	42%
0° - 60°	289	75%
0° - 90°	381	99%
0° - 180°	385	100%

Illuminance Chart

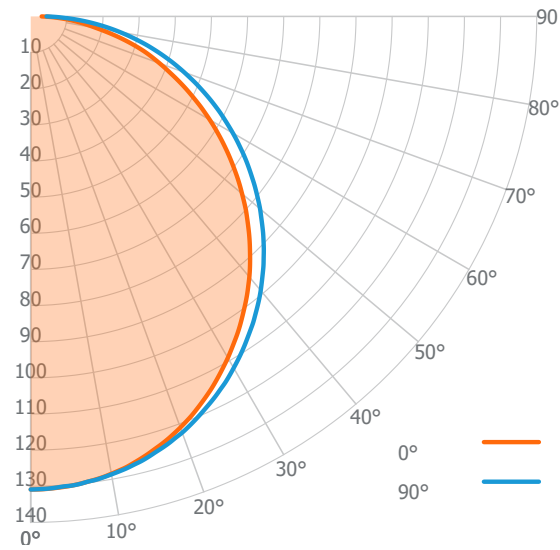
Distance from LED	Foot Candles	Diameter
3 ft	14.1 fc	8.8 ft
6 ft	3.5 fc	17.6 ft
9 ft	1.6 fc	26.4 ft
12 ft	0.9 fc	35.2 ft

Input Watts: **4.0 W**
 Lumens: **385 lm**
 Efficacy: **96 lm/W**
 Beam Angle: **111° x 119°**

PHOTOMETRY

Linear 12" Fixture Segment 2700K

Candela Distribution



Luminous Intensity

Angle	Luminous Intensity
0°	131
5°	130
10°	128
15°	125
20°	121
25°	116
30°	109
35°	102
40°	94
45°	85
50°	76
55°	67
60°	57
65°	47
70°	38
75°	29
80°	18
85°	11
90°	3

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	102	26%
0° - 40°	167	42%
0° - 60°	298	75%
0° - 90°	394	99%
0° - 180°	398	100%

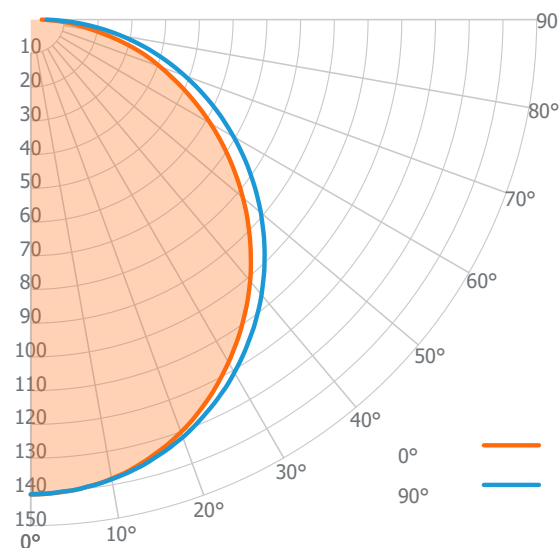
Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	14.5 fc	8.8 ft
6 ft	3.6 fc	17.6 ft
9 ft	1.6 fc	26.4 ft
12 ft	0.9 fc	35.2 ft

Input Watts: 4.0 W
 Lumens: 398 lm
 Efficacy: 100 lm/W
 Beam Angle: 111° x 119°

Linear 12" Fixture Segment 3000K

Candela Distribution



Luminous Intensity

Angle	Luminous Intensity
0°	141
5°	140
10°	138
15°	135
20°	130
25°	124
30°	117
35°	110
40°	101
45°	92
50°	82
55°	72
60°	62
65°	51
70°	41
75°	31
80°	20
85°	11
90°	3

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	110	26%
0° - 40°	180	42%
0° - 60°	321	75%
0° - 90°	424	99%
0° - 180°	427	100%

Illuminance Chart

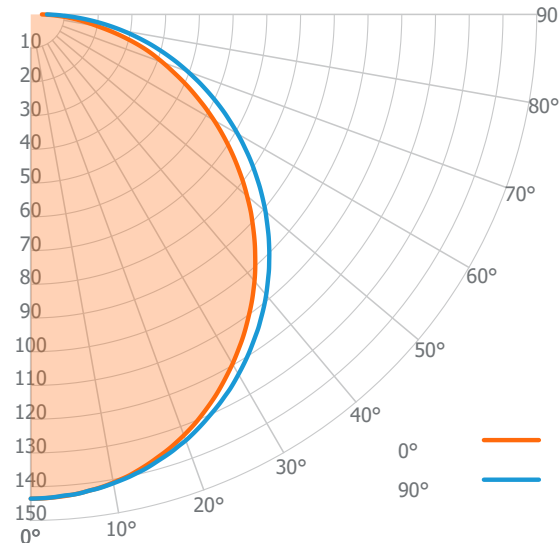
Distance from LED	Foot Candles	Diameter
3 ft	15.6 fc	8.8 ft
6 ft	3.9 fc	17.6 ft
9 ft	1.7 fc	26.4 ft
12 ft	1.0 fc	35.2 ft

Input Watts: 4.0 W
 Lumens: 427 lm
 Efficacy: 107 lm/W
 Beam Angle: 111° x 119°

PHOTOMETRY

Linear 12" Fixture Segment 3500K

Candela Distribution



Luminous Intensity

Angle	Luminous Intensity (lm)
0°	144
5°	143
10°	141
15°	137
20°	133
25°	127
30°	120
35°	112
40°	103
45°	94
50°	84
55°	73
60°	63
65°	52
70°	42
75°	31
80°	20
85°	12
90°	3

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0° - 30°	112	26%
0° - 40°	183	42%
0° - 60°	327	75%
0° - 90°	432	99%
0° - 180°	436	100%

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3 ft	16.0 fc	8.8 ft
6 ft	4.0 fc	17.6 ft
9 ft	1.8 fc	26.4 ft
12 ft	1.0 fc	35.2 ft

Input Watts: **4.0 W**
 Lumens: **436 lm**
 Efficacy: **109 lm/W**
 Beam Angle: **111° x 119°**