# **AisleFX**2" Linear Aisle Pendant





#### **Features**

Amerlux's AisleFX is a linear pendant designed to provide highly-efficient, uniformly illuminating and comfortable lighting to shelves in supermarket or retail applications. A market-leading efficacy of up to 145 lm/W leads to significant energy savings resulting in both long-term cost savings and a green lighting solution. The unique distribution options achieve the high vertical illumination necessary to effectively and evenly light shelving from top to bottom. The optics are designed to maximize light on the shelves while still providing ample light on the floor, enticing shoppers to step into the aisles and keeping their attention on the merchandise on the shelves. The fixture is designed to have the lens regress into the housing which reduces glare to create a visually comfortable environment for shoppers.

## **Product Overview**

Type: Linear Aisle Pendant

Wattage: 5W/ft, 10W/ft (or specify wattage between 3W/ft and 10W/ft)

Color Temp: 2700K\*, 3000K, 3500K, 4000K (\* 90+ CRI only)

CRI: 80+ or 90+ Dimming (wired): 0-10V, 1% dimming

# PROJECT:

## TYPE:

# Fixture Summary (see following pages for more information)

## **Performance Chart**

Lens	Wattage Per Foot	Delivered Lumens	LPW	Color Temp	CRI
DA	5	3033	145.2	3500K	80+
DA	10	5807	138.4	3500K	80+
ASY	5	3017	144.6	3500K	80+
ASY	10	5787	137.8	3500K	80+
FL	5	2981	142.7	3500K	80+
FL	10	5666	135	3500K	80+

Data is based on 4' fixture, 3500K-80 IES files available on website.

#### Runs

Individual Runs: 4' or 8' lengths

Continuous Runs: >8' (specify in 4' increments)\*

## **Electrical Data**

		4'		8'		
Wattage Per Foot		System Watts	Amps	System Watts	Amps	
5	120V	20.9	0.18	41.8	0.36	
0	277V	20.5	0.07	40.1	0.15	
10	120V	42	0.35	84	0.70	
10	277V	40	0.15	79	0.29	

Electronic multi-volt (120-277VAC), constant current LED driver







<sup>\*</sup> Increments of 4' equals to 47.5" increase in actual length (refer to length table pg4).





#### **Ordering Information** AFX-D 120/277 4 5 6 8 9 1 2 3 7 10 11 1 Model 2 Optics 4 Wattage (per foot) 3 Mounting AFX-D **DA** double asymmetric Pendant Mount (aircraft cable suspension) Standard **5** 5W/ft **ASY** asymmetric ASW10 through ceiling tile or gyp board, white, 10' ASW20 through ceiling tile or gyp board, white, 20' FL flood 10 10W/ft ASB10 through ceiling tile or gyp board, black, 10' **Optional** ASB20 through ceiling tile or gyp board, black, 20' **3** 3W/ft ASW10T over ceiling tee, white, 10' 4 4W/ft ASW20T over ceiling tee, white, 20' 6 6W/ft ASB10T over ceiling tee, black, 10' 7 7W/ft ASB20T over ceiling tee, black, 20' 8 8W/ft 9 9W/ft 5 Color Temp-CRI Voltage Length 83 CRI 90+ CRI **HW** high reflectance matte white 120/277V ft (specify in 4' increments)\* **30** 3000K-83 279 2700K-90+ **BT** black texture \* Increments of 4' equals to 47.5" increase in actual length (refer to length 309 3000K-90+ **35** 3500K-83 ST silver texture table pg4). For other RAL color, consult factory **40** 4000K-83 **359** 3500K-90+ **409** 4000K-90+ 9 Configuration 10 Drivers/Controls Options/Accessories 0-10V 0-10V electronic dimming, 1%, EMC-PF¹ emergency circuit requires power IND individual fixture, 4' or 8' lengths multi-volt, 120-277VAC constant feed located in last fixture section CON continuous run > than 8', in current driver (for other locations consult factory) 4' increments\* \* Increments of 4' equals to 47.5" increase PF1 - Extra power feed for additional circuiting in actual length (refer to length table EMB - emergency battery pack pg4). <sup>1</sup> Not available with IND (individual) configuration



## **Specifications**

#### Construction

Extruded aluminum housing and reflector. Die-cast end caps match fixture body finish.

Weight: 2.5 lbs/ft (may vary based on configurations and accessories)

#### Optical

All lenses are snap-in, extruded acrylic, with a maximum length of 4'. Lens is regressed into the housing for visual comfort.

#### **LED**

Our LED binning is within 3 MaoAdam ellipse. Boards are configured for maximum flexibility resulting in even illumination no matter the fixture layout. LED boards are easily replaced in the field with just a Phillips screw driver.

 $\textbf{Color Temperature Options:}\ 2700 \texttt{K*}, 3000 \texttt{K}, 3500 \texttt{K}, 4000 \texttt{K}$ 

CRI: 80+, 90+

**R9:** 16 @ CRI 83; **R9:** >50 @ CRI 92

**Life:** 50,000+ hr., > 70% of initial lumens (L70)

\* Available in 90+ CRI only

#### Electrical

**Wiring:** Individual and "Beginning of Run" (BOR) fixtures are pre-wired with power cord. All configurations have quick connect power harnesses for row connections.

Standard Wattage: 5W/ft, 10W/ft.

**Optional Wattages:** 3W/ft, 4W/ft, 6W/ft, 7W/ft, 8W/ft, 9W/ft. For other wattages consult factory. Emergency circuit via remote inverter or auxiliary emergency power supply (by others).

This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Amerlux® recommends using additional surge protection with this unit (supplied by others), surge and over voltage damage is not covered under warranty.

**EMC-PF** - Emergency circuit requires power feed to be located in last fixture section for continuous runs. For other locations consult factory. Not available for individual (IND) configuration.

**PF** - Extra power feed for additional circuiting. Not available for individual (IND) configuration.

#### Finish

All painted surfaces are premium powder coated baked on for maximum durability and color stability.

HW - High reflective matte White

**BT** - Black Texture

ST - Silver Texture

For special paint colors supply RAL and/or actual paint chip for factory consultation.

## Configurations/Lengths

**IND** - Individual fixtures are made of single standard lengths of 4' or 8'. These are stand alone fixtures with matching End Caps, supplied with the mounting hardware.

**CON** - Continuous runs, > 8' in 4' increments (Increments of 4' equals to 47.5" increase in actual length, refer to length table pg4). Runs made from standard lengths have End Caps at the beginning and end of run. Runs > 60' may require second power feed. Each housing has factory installed alignment pins. Mating fixtures are easily aligned and joined. Wiring is made fast and positive with molded quick connectors.

#### Mounting

AisleFX is intended for pendant mounting.

**Pendant Mount-ASWxx** - Direct pendant mounted in center of ceiling tile or gypsum board ceiling (standard) i.e. ASWxx. Or if canopy is installed on a grid Tee runner add, T i.e. ASWxxT.

Cable is stranded stainless steel wire. All fittings are protected against rust and corrosion. Canopies are  $5" \times 1/4"$  die formed painted steel. Adjustment mechanism allows for infinite height adjustment. Amerlux recommends the required feed and non-feed suspensions based upon length and electrical options. Options include: color of canopy and power cord (black or white), length 10' or 20', and mounting condition, in center of ceiling tile and in gypsum board ceiling (standard) i.e. ASWxx. Or if canopy is installed on a grid Tee runner add,  $\bf T$  i.e. ASWxxT

#### Options

**EMB** - Emergency battery pack - 10W output power, 90 min of illumination time, up to 1300 lm of initial light output. Illuminated test-switch/charging indicator light is provided. Wattage consumption by EM: 2.5W/ft (4ft fixture), 1.66W/ft (6ft fixture), 1.25W/ft (8ft fixture). Request can be made to light up 4ft section on 8ft unit.

#### Certifications

Approved to UL standards for damp locations as tested by CSA Intended for indoor use only DLC Listing pending

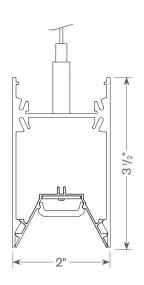
#### Warranty

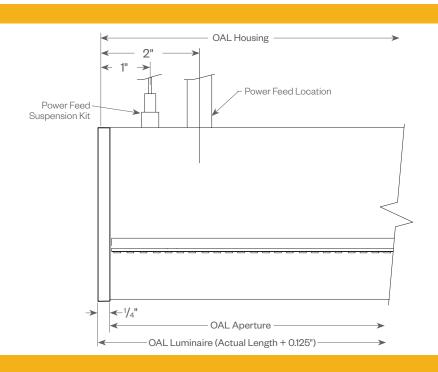
Amerlux's 5 year limited warranty. Please consult Amerlux website for details.





## **Product Details**





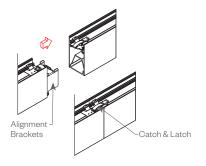
# **Length Table**

Ordered Length	Actual Length (ft-in)
4'	3' - 11.5"
8'	7' - 11"
12'	11' - 10.5"
16'	15' - 10"
20'	19' - 9.5"
24'	23' - 9"
28'	27' - 8.5"
32'	31' - 8"
36'	35' - 7.5"
40'	39' - 7"
44'	43' - 6.5"
48'	47' - 6"
52'	51' - 5.5"
56'	55' - 5"
60'	59' - 4.5"

Ordered Length	Actual Length (ft-in)
64'	63' - 4"
68'	67' - 3.5"
72'	71' - 3"
76'	75' - 2.5"
80'	79' - 2"
84'	83' - 1.5"
88'	87' - 1"
92'	91' - 0.5"
96'	95' - 0"
100'	98' - 11.5"
104'	102' - 11"
108'	106' - 10.5"
112'	110' - 10"
116'	114' - 9.5"
120'	118' - 9"

# **Tool-less Joining**

Line up the two housings using the alignment brackets. Secure them together by using the Catch & Latch System on the top of the extrusion.

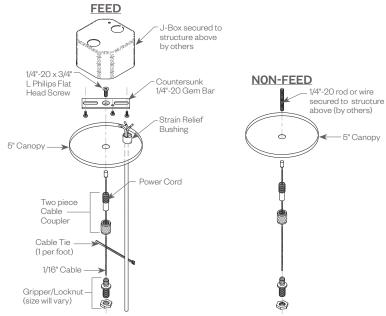






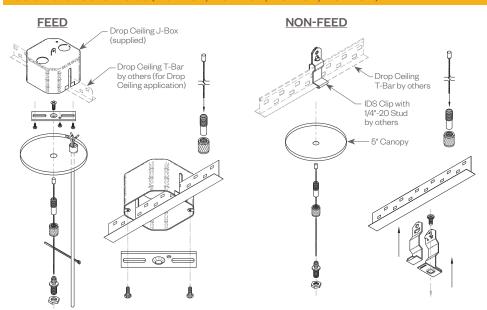
## **Cable Kit Suspension Options**

## CEILING OR GYPSUM BOARD (ASW10, ASW20, ASB10, ASB20)



Cat#	Length	Cord/Canopy	Application
ASW10	10'	white/white	ceiling tile/gypsum
ASW20	20'	white/white	ceiling tile/gypsum
ASB10	10'	black/black	ceiling tile/gypsum
ASB20	20'	black/black	ceiling tile/gypsum
ASW10T	10'	white/white	ceiling tee
ASW20T	20'	white/white	ceiling tee
ASB10T	10'	black/black	ceiling tee
ASB20T	20'	black/black	ceiling tee

# Tee Grid or Screw Slot (ASW10T, ASW20T, ASB10T, ASB20T)







## **Fixture Data**

MULTIPLYING FACTORS: (Multiplying Factor is based on 3500K-80 120V IES file on website)

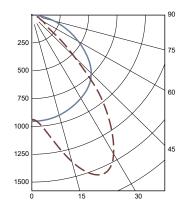
Wattage:	ЗW	4W	5W	6W	7W	8W	9W	10W
Factor:	0.30	0.39	0.50	0.61	0.71	0.81	0.91	1.0

CCT-CRI:	3000K-80	3500K-80	4000K-80	2700K-90	3000K-90	3500K-90	4000K-90
Factor:	0.97	1.0	1.02	0.90	0.92	0.92	0.94

## 2" AISLE DOUBLE ASYMMETRIC LENS 5W 3500K 4FT

Total Watts: 20 Total Lumens: 3033 Source: 192 White LED's

LTL# 14925691.02A



## ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1755	57.9
0-60	2741	90.4
0-90	3034	100.0
90-180	0	0.0

Efficacy (lumens/watt) = 145.2 lm/W

#### COEFFICIENTS OF UTILIZATION

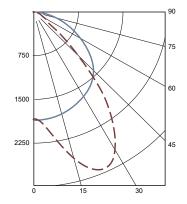
RC		80		
RW	70	50	30	10
RCR				
0	119	119	119	119
1	111	107	103	100
2	102	95	89	84
3	94	85	78	72
4	87	76	68	62
5	80	69	61	55
6	74	62	54	48
7	69	57	49	43
8	65	52	44	38
9	60	48	40	35
10	56	44	36	31

Note: Values expressed as % of total lumen output delivered to the task surface.

## 2" AISLE DOUBLE ASYMMETRIC LENS 10W 3500K 4FT

Total Watts: 42 Total Lumens: 5807 Source: 192 White LED's

LTL#14925691.03A



## ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	3352	57.7
0-60	5242	90.3
0-90	5807	100.0
90-180	0	0.0

Efficacy (lumens/watt) = 138.4 lm/W

#### COEFFICIENTS OF UTILIZATION

RC	80				
RW	70	50	30	10	
RCR					
0	119	119	119	119	
1	111	107	103	100	
2	102	95	89	84	
3	94	85	78	72	
4	87	76	68	62	
5	80	69	61	55	
6	75	62	54	48	
7	69	57	49	43	
8	65	52	44	38	
9	60	48	40	35	
10	56	44	36	31	

Note: Values expressed as % of total lumen output delivered to the task surface.



# **Fixture Data**

MULTIPLYING FACTORS: (Multiplying Factor is based on 3500K-80 120V IES file on website)

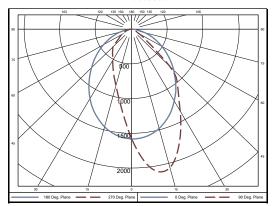
Wattage:	ЗW	4W	5W	6W	7W	8W	9W	10W
Factor:	0.30	0.39	0.50	0.61	0.71	0.81	0.91	1.0

CCT-CRI:	3000K-80	3500K-80	4000K-80	2700K-90	3000K-90	3500K-90	4000K-90
Factor:	0.97	1.0	1.02	0.90	0.92	0.92	0.94

#### 2" AISLE ASYMMETRIC LENS 5W 3500K 4FT

Total Watts: 20 Total Lumens: 3017 Source: 192 White LED's

LTL#14966986.02



## ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1759	58.3
0-60	2693	89.3
0-90	3017	100.0
90-180	0	0.0

## Efficacy (lumens/watt) = 144.6 lm/W

#### COEFFICIENTS OF UTILIZATION

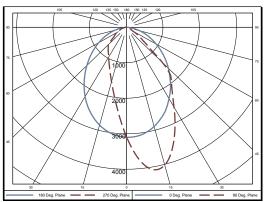
RC	80					
RW	70	50	30	10		
RCR						
0	119	119	119	119		
1	111	107	103	100		
2	102	95	90	85		
3	94	85	78	73		
4	87	77	69	63		
5	81	70	62	56		
6	75	63	55	50		
7	70	58	50	45		
8	66	53	46	40		
9	62	49	42	37		
10	58	46	39	34		

Note: Values expressed as % of total lumen output delivered to the task surface.

#### 2" AISLE ASYMMETRIC LENS 10W 3500K 4FT

Total Watts: 42 Total Lumens: 5786 Source: 192 White LED's

LTL# 14966986.01



## ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	3398	58.7
0-60	5172	89.4
0-90	5787	100.0
90-180	0	00

## E2981fficacy (lumens/watt) = 137.8 lm/W

#### COEFFICIENTS OF UTILIZATION

RC	80					
RW	70	50	30	10		
RCR						
0	119	119	119	119		
1	111	107	103	100		
2	102	95	90	85		
3	95	86	79	73		
4	88	77	69	64		
5	81	70	62	56		
6	76	64	56	50		
7	71	58	50	45		
8	66	54	46	41		
9	62	50	42	37		
10	58	46	39	34		

Note: Values expressed as % of total lumen output delivered to the task surface.





## **Fixture Data**

MULTIPLYING FACTORS: (Multiplying Factor is based on 3500K-80 120V IES file on website)

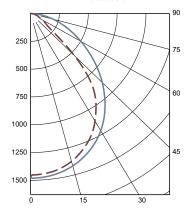
Wattage:	ЗW	4W	5W	6W	7W	8W	9W	10W
Factor:	0.30	0.39	0.50	0.61	0.71	0.81	0.91	1.0

CCT-CRI:	3000K-80	3500K-80	4000K-80	2700K-90	3000K-90	3500K-90	4000K-90
Factor:	0.97	1.0	1.02	0.90	0.92	0.92	0.94

#### 2" AISLE FLOOD LENS 5W 3500K 4FT

Total Watts: 20 Total Lumens: 2981 Source: 192 White LED's

LTL#14966986.04



## ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1763	59.2
0-60	2677	89.8
0-90	2981	100.0
90-180	0	0.0

Efficacy (lumens/watt) = 142.7 lm/W

#### COEFFICIENTS OF UTILIZATION

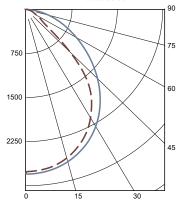
RC		80		
RW	70	50	30	10
RCR				
0	119	119	119	119
1	111	107	103	100
2	102	95	90	85
3	95	86	79	73
4	88	77	69	63
5	81	70	62	56
6	76	64	55	50
7	70	58	50	45
8	66	53	46	40
9	62	49	42	37
10	58	46	38	33

Note: Values expressed as % of total lumen output delivered to the task surface.

#### 2" AISLE FLOOD LENS 10W 3500K 4FT

Total Watts: 42 Total Lumens: 5666 Source: 192 White LED's

#### LTL#14966986.03



## ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	3348	59.1
0-60	5087	89.8
0-90	5666	100.0
90-180	0	00

Efficacy (lumens/watt) = 135.0 lm/W

#### COEFFICIENTS OF UTILIZATION

RC	80						
RW	70	50	30	10			
RCR							
0	119	119	119	119			
1	111	107	103	100			
2	102	95	90	85			
3	95	86	79	73			
4	88	77	69	63			
5	81	70	62	56			
6	75	63	55	50			
7	70	58	50	45			
8	66	53	46	40			
9	62	49	42	37			
10	58	46	38	33			

Note: Values expressed as % of total lumen output delivered to the task surface.





**PROJECT:** 

## **Dimming Capability**

Amerlux® AisleFX is compatible with 0-10V dimming protocols. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc) may affect dimming performance.

#### --- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY, FOR WIRELESS DIMMERS, CONSULT FACTORY ---

#### 0-10V - DIMMING (Standard)

Integrates into a variety of building management and daylighting controls

#### Notes:

- 120VAC or 277VAC\*
- Dims down to 1% light output
- · Requires interface to turn off power to driver
- · Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

#### 0-10V Wiring Diagram Driver 0-10V Grav 0-10V (-) Line Dimming Purple ● 0-10V (+) Control Ground Switched Hot Black White Neutral Green

Ground

#### Compatible Dimmers<sup>†</sup>:

#### Wall Box

Lutron: Diva - DVSTV Maestro - MS-Z101 Nova-T - NTSTV-DV Wattstopper: ADF-120277

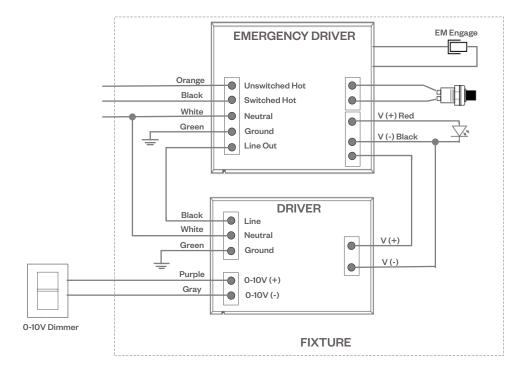
Leviton: Renoir II

#### Center System

Lutron Grafixk Eye with GRX-TV1 Interface

Neutral

## **Emergency Fixture with Built-in Battery Pack Wiring Diagram**



- \* Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer installation instructions for 277VAC wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.