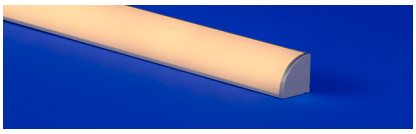
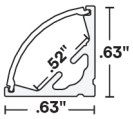
ESSENTIALS ARKA-FLAT (01) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Corner & Surface





- Corner and surface mount linear fixture with rounded lens
- Choose from diffused, polar, frosted, or clear lens options for varying diode visibility and beam angles
- Mounting options include stainless steel or plastic clips
- Features painted end caps to match extrusion finish
- Suitable for installation in the storage area of a clothes closet when specified with LEDs at 4.0 watts or less per foot per NEC regulations
- Can be suitable for exterior use when specified as wet, contact factory for more information
- Used in applications where CCT and brightness need to be controlled separately
- When using DALI and DMX power supplies, LED wattage must be doubled

INFORMATION REQUIRED FOR LIGHTING SCHEDULE

1 PRODUCT	2 WATTS/ FT	3 CCT	4 RATED	5 EFFICIENCY	6 LENS

ADDITIONAL INFORMATION REQUIRED TO ORDER

7 WIRE INPUT/ OUTPUT	8 CONNECTOR/ WIRE IN	9 CONNECTOR/ WIRE OUT	10 WIRE COLOR	11 WIRE TYPE	12 MOUNTING	13 FINISH	14 LENGTH (IN)	15 EXACT/ OPTIMAL

Sample Part Number: **AK1DW-2.5HE-20/30-DRY-STD-DF-P1-BW-BW-BK-CL2-SST-BK-48”-E**

1 PRODUCT

AK1DW
AK1DW-USA

Select USA option for BAA and BABA projects. Only DRY or WET ratings apply.

LED engine is built with 3 wires requiring 0-10V, DMX or DALI control. Using DALI, DMX, or non QTL power supplies may double watts/ft. See following pages for compatible power supplies.

2 WATTS/FT

1.5HE 1.5W/ft HE
2.5HE 2.5W/ft HE

1.5HE 1.5W/ft HE
2.5HE 2.5W/ft HE

3 CCT

20/27 2000K/2700K
20/30 2000K/3000K
27/40 2700K/4000K
27/55 2700K/5500K

24/30 2400K/3000K
27/40 2700K/4000K

4 RATED

DRY IP20
WET IP67

Can be suitable for exterior use, contact factory for more information

DMP IP54

5 EFFICIENCY

STD Standard
WO White Optics

WhiteOptics - Internal coating, greater lumen output

6 LENS

DF Diffused
PR Polar
FR Frosted
CL Clear

For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages

7 WIRE INPUT/OUTPUT

SINGLE (Input only)
S1 End Feed

PASS THROUGH (Input/output)
P1 End Feed

8 CONNECTOR/WIRE IN

BW Bare Wire (Standard 24”)
CON6 Connector 6”
CON24 Connector 24”

BW: Standard length is 24”, Max length is 120”. Request custom length by writing in part number next to BW (example: BW48)

BW Bare Wire (Standard 24”)
CON6 Connector 6”
CON24 Connector 24”

BW: Standard length is 24”, Max length is 120”. Request custom length by writing in part number next to BW (example: BW48)

9 CONNECTOR/WIRE OUT

CLS Closed End (No feed)

BW Bare Wire (Standard 24”)
CON6 Connector 6”
CON24 Connector 24”

BW: Standard length is 24”, Max length is 120”. Request custom length by writing in part number next to BW (example: BW48)

10 WIRE COLOR

WH White
BK Black

11 WIRE TYPE

CL2 Class 2
CL2P Plenum Rated

CL2P only available with bare wire leads (BW)

12 MOUNTING

SST Stainless Steel
PL Plastic Clip

13 FINISH

ST Satin
BK Black
BZ Bronze
CU Custom

Custom finishes require a longer lead time, consult factory

14 LENGTH (IN)

Minimum length is 12”, maximum length is 98” not including end caps. Contact us for lengths under 12”.

15 EXACT/OPTIMAL

O Optimal Illumination
E Exact Specified Length

Exact fixtures match the exact length you specify, but they may have dim spots at the ends. Optimal fixtures are slightly shorter than the length specified, but provide full illumination from end to end. See Exact/Optimal Fixture Length charts.

5 year warranty | Warranty only valid with QTL power supplies | Field modifications void warranty | Data subject to change, all data has +/- 5% tolerance

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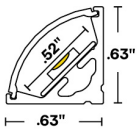
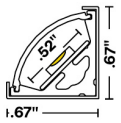
ESSENTIALS ARKA-FLAT (01) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Corner & Surface

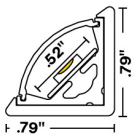
1 PRODUCT - DIMENSIONS



Profile



Profile with stainless steel mounting clip



Profile with plastic mounting clip

2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs]
Tested with AK1DW-**-30-DRY-STD

	1.5HE W/FT		2.5HEW/FT	
	LM/FT	CRI	LM/FT	CRI
CL	154	98	244	98
FR	150	98	236	98
PR	147	98	232	98
DF	134	98	211	98

[Calculated L70 = 70000 hrs]
Tested with AK1DW-**-30-DRY-WO

	1.5HE W/FT		2.5HEW/FT	
	LM/FT	CRI	LM/FT	CRI
CL	160	98	253	98
FR	158	98	250	98
PR	153	98	242	98
DF	142	98	225	98

6 DIODE VISIBILITY

DF - Diffused lens

PR - Polar lens

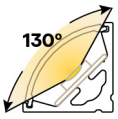
FR - Frosted lens

CL - Clear lens

PHOTOMETRIC PERFORMANCE

Nominal beam spread shown, beam spread varies based on light engine. For more detailed information, see photometric data.

CL



Clear 130°

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ESSENTIALS ARKA-FLAT (01) FOR TUNABLE APPLICATIONS

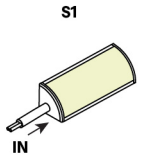
24VDC Linear Fixtures - Corner & Surface

TEMPERATURE RATINGS

		DW 1.5 HE W/FT		DW 3.0 HE W/FT		DW 2.5 HE W/FT		DW 5.0 HE W/FT	
		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply	
		Min	Max	Min	Max	Min	Max	Min	Max
DRY	Ambient Operating Temp - Surface	-4°F	145°F	-4°F	130°F	-4°F	140°F	-4°F	120°F
DMP	Ambient Operating Temp - Surface	-4°F	140°F	-4°F	125°F	-4°F	135°F	-4°F	115°F
WET	Ambient Operating Temp - Surface	-4°F	140°F	-4°F	125°F	-4°F	135°F	-4°F	115°F

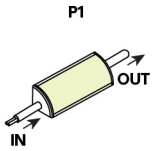
7 WIRE INPUT/OUTPUT

SINGLE (Input only)



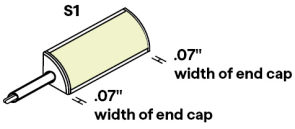
End Feed

PASS THROUGH (Input/Output)

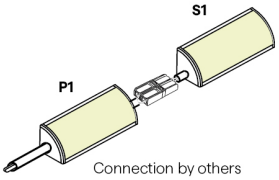


End Feed

CONFIGURATION OPTIONS

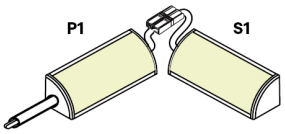


Single End Feed



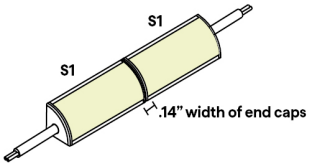
Connection by others

Non-Continuous End Feed



Connection by others

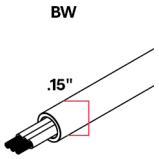
Non-Continuous Corner Feed



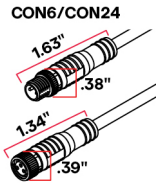
Continuous End to End Feed

8 / 9 CONNECTOR/WIRE – IN/OUT

Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out

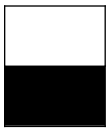


Bare Wire 24"
22 AWG



6" or 24" Overall
Wire Connector | 22 AWG
IP67 Rated, UL Listed

10 WIRE COLOR



White

Black

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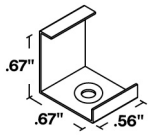
ESSENTIALS ARKA-FLAT (01) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Corner & Surface

12 MOUNTING

SST



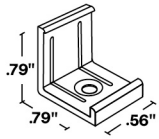
Stainless Steel Clip

2 clips provided for 4' or less; 4 clips provided for greater than 4'

To order separately use SST-03

Each clip comes with a #4 x 5/8" Flat Head SS

PL



Plastic Clip

2 clips provided for 4' or less; 4 clips provided for greater than 4'

To order separately use PLC-02

Each clip comes with a #4 x 5/8" Flat Head SS

13 FINISH

Satin

Black

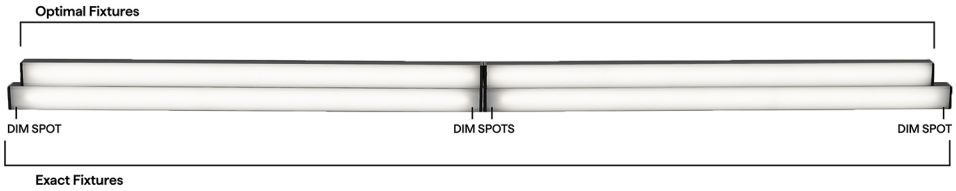
Bronze

Custom finishes require a longer lead time, consult factory

15 EXACT/OPTIMAL FIXTURE LENGTH

E/O Length Calculator → E/O Explained →

Exact fixtures are the exact length specified. Optimal fixtures' length is rounded down based on LED cut points to allow the fixture to be illuminated end to end. For runs with multiple fixtures that need to fill a specific length, it's recommended to order all optimal fixtures with an exact fixture at the end of the run.



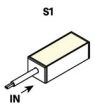
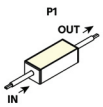
DW-HE DRY, DMP LENGTHS BY INCH

Available in any length in between 12" and 98.43", chart below shows example lengths. Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 – 1/8". Consult factory for lengths under 12".

EXACT LENGTH

Requested Length	Potential dim spot on either end of fixture
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

OPTIMAL LENGTH: highlighted rows are closest to requested nominal length

Requested Nominal Length	S1  End Feed	P1  End Feed
12"	10.51"	10.86"
13"	12.51"	12.86"
14"	12.51"	12.86"
15"	14.51"	14.86"
16"	14.51"	14.86"
17"	16.51"	16.86"
18"	16.51"	16.86"
19"	18.51"	18.86"
20"	18.51"	18.86"
21"	20.51"	20.86"
22"	20.51"	20.86"
23"	22.51"	22.86"
24"	22.51"	22.86"
36"	34.51"	34.86"
48"	46.51"	46.86"
60"	58.51"	58.86"
72"	70.51"	70.86"
84"	82.51"	82.86"
96"	94.51"	94.86"

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ESSENTIALS ARKA-FLAT (01) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Corner & Surface

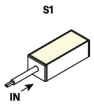
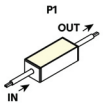
DW-HE WET LENGTHS BY INCH

Available in any length in between 12" and 98.43", chart below shows example lengths. Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 – 1/8". Consult factory for lengths under 12".

EXACT LENGTH

Requested Length	Potential dim spot on either end of fixture
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

OPTIMAL LENGTH: highlighted rows are closest to requested nominal length

Requested Nominal Length	S1	P1
	 End Feed	 End Feed
12"	10.66"	11.06"
13"	12.66"	11.06"
14"	12.66"	13.06"
15"	14.66"	13.06"
16"	14.66"	15.06"
17"	16.66"	15.06"
18"	16.66"	17.06"
19"	18.66"	17.06"
20"	18.66"	19.06"
21"	20.66"	19.06"
22"	20.66"	21.06"
23"	22.66"	21.06"
24"	22.66"	23.06"
36"	34.66"	35.06"
48"	46.66"	47.06"
60"	58.66"	59.06"
72"	70.66"	71.06"
84"	82.66"	83.06"
96"	94.66"	95.06"

COMPATIBLE POWER SUPPLIES

See power supplies cut sheets for more information. Data subject to change, all data has +/- 5% tolerance.

DIM TO LEVEL	INDOOR	OUTDOOR
	DW-HE Tunable Applications	DW-HE Tunable Applications
0.1%	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+TW QT-CAB-eLED+TW-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QTM-eLED+TW QTM-eLED+TW-AWN QZ-DMX	Q-SET-QZ-DMX QOM-eLED+DALI-DT6 QOM-eLED+DALI-DT8 QOM-eLED+PS-DALI-DT6 QOM-eLED+PS-DALI-DT8 QOM-eLED+TW QZ-DMX
1%	QZ-DALI-DT8	Q-SET+QZ-DALI-DT8 QZ-DALI-DT8
10%	Non-Dim Power Supply with TW App Dongle	

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ESSENTIALS ARKA-FLAT (01) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Corner & Surface

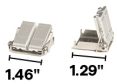
DIMMING PROTOCOL	INDOOR	OUTDOOR
	DW-HE Tunable Applications	**DW-HE Tunable Applications**
0-10V	QT-CAB-eLED+TW QT-CAB-eLED+TW-AWN QTM-eLED+TW QTM-eLED+TW-AWN	QOM-eLED+TW
Lutron Athena	QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+TW-AWN QTM-eLED+DALI-DT8-AWN QTM-eLED+TW-AWN	
DMX LED wattage must be doubled for DW-HE products	QZ-DMX	Q-SET-QZ-DMX QZ-DMX
DALI-2: DT6 LED wattage must be doubled for DW-HE products except for AWN	QT-CAB-eLED+DALI-DT6 QTM-eLED+DALI-DT6	QOM-eLED+DALI-DT6
DALI-2: DT8 LED wattage must be doubled for DW-HE products except for AWN	QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QZ-DALI-DT8	Q-SET+QZ-DALI-DT8 QOM-eLED+DALI-DT8 QZ-DALI-DT8
SCENE App Dimmed	Non-Dim Power Supply with TW App Dongle	

COMPATIBLE MOUNTING ACCESSORIES

HINGE - HMB-M

Adjustable mounting bracket - Medium

HINGE - HMB-L



Adjustable mounting bracket - Large

HINGE - HMB-XL

Adjustable mounting bracket - XLarge

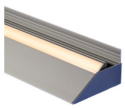
Q-PIVOT

Small mounting accessory

Q-ANGLE

Adjustable mounting accessory

QUOVA-STANDARD

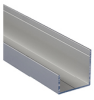


QUOVA Knife Edge

VHB

Double sided mounting tape

SD-J-LARGE



J Mounting Bracket

NL-LARGE

L Mounting Bracket

SD-L-MEDIUM

L Mounting Bracket

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