

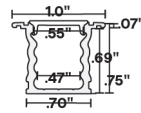
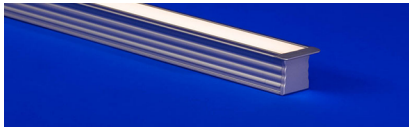


# ESSENTIALS FLUR™-FLAT (01) WD APPLICATIONS

24VDC Linear Fixtures - Recessed



410.2 & 410.16  
Closet Rated  
in 1.5HE



- Deep flanged recessed fixture
- Choose from diffused, polar, frosted, clear 45°, clear 60°, or clear 80° lens options for varying diode visibility and beam angles
- Offered with an optional mounting tray
- Stainless steel mounting 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
- Used in applications to provide warmer CCTs as the light is dimmed
- When using DALI and DMX power supplies, LED wattage must be doubled

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PRODUCT	WATTS/ FT	CCT	RATED	EFFICIENCY	LENS	WIRE INPUT/ OUTPUT	CONNECTOR/ WIRE IN	CONNECTOR/ WIRE OUT	WIRE COLOR	WIRE TYPE	MOUNTING	FINISH	LENGTH (IN)	EXACT/ OPTIMAL
											SST			

Sample Part Number: **FL1WD-6.0-19/30-DRY-WO-DF-P1-BW-BW-BK-CL2-SST-BK-48"-E**

<b>1</b> <b>PRODUCT</b> <b>FL1WD</b> LED engine is built with 2 wires suitable for phase dimming control. See following pages for compatible power supplies. <b>FL1DW</b> <b>FL1DW-USA</b> Select USA option for BAA and BABA projects. Only DRY 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.	<b>2</b> <b>WATTS/FT</b> <b>6.0</b> 6.0W/ft  <b>1.5HE</b> 1.5W/ft HE <b>2.5HE</b> 2.5W/ft HE <b>4.0HE</b> 4.0W/ft HE  <b>1.5HE</b> 1.5W/ft HE <b>2.5HE</b> 2.5W/ft HE	<b>3</b> <b>CCT</b> <b>19/27</b> 1900K/2700K <b>19/30</b> 1900K/3000K  <b>20/27</b> 2000K/2700K <b>20/30</b> 2000K/3000K <b>27/40</b> 2700K/4000K <b>27/55</b> 2700K/5500K  <b>24/30</b> 2400K/3000K <b>27/40</b> 2700K/4000K	<b>4</b> <b>RATED</b> <b>DRY</b> IP20  <b>DRY</b> IP20  <b>DMP</b> IP54	<b>5</b> <b>EFFICIENCY</b> <b>STD</b> Standard <b>WO</b> White Optics WhiteOptics - Internal coating, greater lumen output	<b>6</b> <b>LENS</b> <b>DF</b> Diffused <b>PR</b> Polar <b>FR</b> Frosted <b>CL/45</b> Clear 45° <b>CL/60</b> Clear 60° <b>CL/80</b> Clear 80° For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages	<b>7</b> <b>WIRE INPUT/OUTPUT</b> <b>S1</b> Single 1 (Input only) - End Feed <b>S2</b> Single 2 (Input only) - Bottom Feed  <b>P1</b> Pass Through 1 (Input/output) - End Feed <b>P2</b> Pass Through 2 (Input/output) - Bottom Feed	<b>8</b> <b>CONNECTOR/WIRE IN</b> <b>BW</b> Bare Wire (Standard 24") <b>BRL</b> Barrel <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"  <b>BW</b> Bare Wire (Standard 24") <b>BRL</b> Barrel <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"	<b>9</b> <b>CONNECTOR/WIRE OUT</b> <b>CLS</b> Closed End (No feed)  <b>BW</b> Bare Wire (Standard 24") <b>BRL</b> Barrel <b>CON6</b> Connector 6" <b>CON24</b> Connector 24"	<b>10</b> <b>WIRE COLOR</b> <b>WH</b> White <b>BK</b> Black <b>N/A</b> For Barrel wet barrel only available in black	<b>11</b> <b>WIRE TYPE</b> <b>CL2</b> Class 2 <b>CL2P</b> Plenum Rated <b>N/A</b> For Barrel CL2P only available with bare wire leads (BW)	<b>12</b> <b>MOUNTING</b> <b>SST</b> Stainless Steel	<b>13</b> <b>FINISH</b> <b>ST</b> Satin <b>BK</b> Black <b>CU</b> Custom Custom finishes require a longer lead time, consult factory	<b>14</b> <b>LENGTH (IN)</b> Minimum length is 12", maximum length is 98" not including end caps. Contact us for lengths under 12".	<b>15</b> <b>EXACT/OPTIMAL</b> <b>O</b> Optimal Illumination <b>E</b> 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.
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For continuous mounting, consider bottom feed.

BRL only available with FL1WD  
BW: Standard length is 24", Max length is 120".  
Request custom length by writing in part number next to BW (example: BW48)

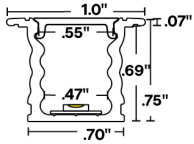
BRL only available with FL1WD  
BW: Standard length is 24", Max length is 120".  
Request custom length by writing in part number next to BW (example: BW48)



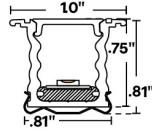
# ESSENTIALS FLUR™-FLAT (01) WD APPLICATIONS

24VDC Linear Fixtures - Recessed

## 1 PRODUCT - DIMENSIONS



Profile



Profile with stainless steel mounting clip and mounting tray

## 2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs]  
Tested with FL1WD-6.0-30-DRY-STD

	3000K	
	LM/FT	CRI
45	335	97
60	339	97
80	359	97
FR	314	97
PR	255	97
DF	221	97

[Calculated L70 = 70000 hrs]  
Tested with FL1DW-\*\*-30-DRY-STD

	1.5HE W/FT		2.5HE W/FT		4.0HE W/FT	
	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI
45	121	98	192	98	298	98
60	123	98	194	98	302	98
80	130	98	205	98	319	98
FR	118	98	186	98	289	98
PR	96	98	152	98	237	98
DF	71	98	113	98	175	98

[Calculated L70 = 70000 hrs]  
Tested with FL1WD-6.0-30-DRY-WO

	3000K	
	LM/FT	CRI
CL/45	359	97
CL/60	364	97
CL/80	385	97
FR	349	97
PR	285	97
DF	237	97

[Calculated L70 = 70000 hrs]  
Tested with FL1DW-\*\*-30-DRY-WO

	1.5HE W/FT		2.5HE W/FT		4.0HE W/FT	
	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI
45	134	98	211	98	328	98
60	135	98	213	98	331	98
80	140	98	221	98	343	98
FR	131	98	206	98	321	98
PR	110	98	174	98	271	98
DF	85	98	134	98	208	98

## 6 DIODE VISIBILITY



DF - Diffused lens

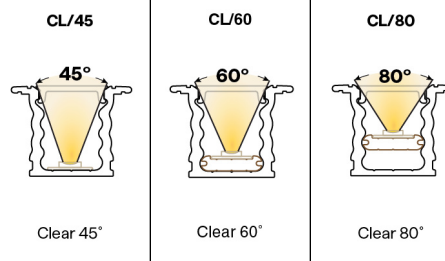
PR - Polar lens

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.



Clear 45°

Clear 60°

Clear 80°



# ESSENTIALS FLUR™-FLAT (01) WD APPLICATIONS

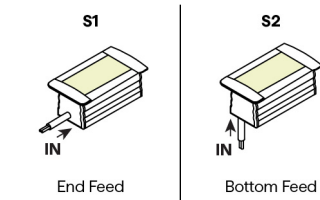
## 24VDC Linear Fixtures - Recessed

### TEMPERATURE RATINGS

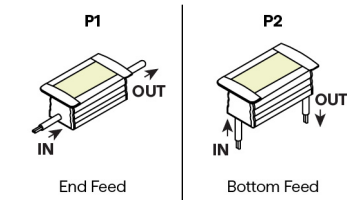
		WD 6.0 W/FT		DW 1.5 HE W/FT		DW 3.0 HE W/FT		DW 2.5 HE W/FT		DW 5.0 HE W/FT		DW 4.0 HE W/FT		DW 8.0 HE W/FT	
		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply		QTL power supply other than DALI, DMX	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
DRY	Ambient Operating Temp - Recessed	-4°F	110°F	-4°F	140°F	-4°F	125°F	-4°F	130°F	-4°F	110°F	-4°F	120°F	-4°F	100°F
	Ambient Operating Temp - Surface	**	**	**	**	**	**	**	**	**	**	**	**	**	**
DMP	Ambient Operating Temp - Recessed	**	**	-4°F	135°F	-4°F	120°F	-4°F	125°F	-4°F	105°F	**	**	**	**
	Ambient Operating Temp - Surface	**	**	**	**	**	**	**	**	**	**	**	**	**	**

### 7 WIRE INPUT/OUTPUT

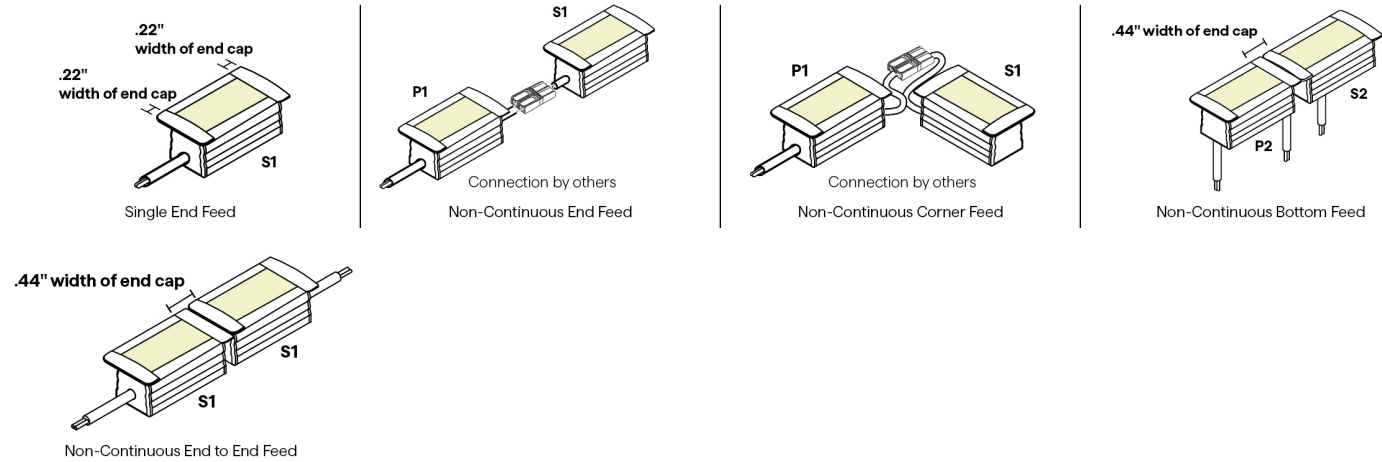
SINGLE (Input only)



PASS THROUGH (Input/Output)



### CONFIGURATION OPTIONS



### 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

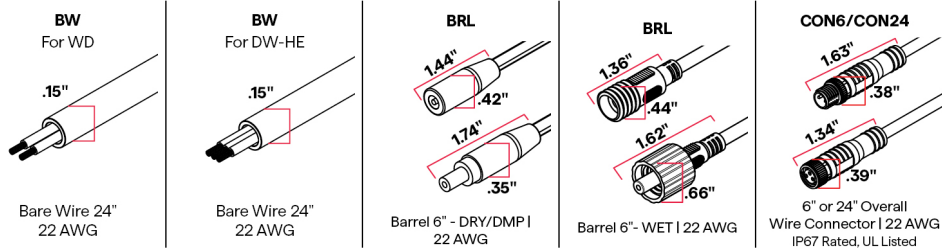
### 10 WIRE COLOR





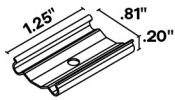
# ESSENTIALS FLUR™-FLAT (01) WD APPLICATIONS

24VDC Linear Fixtures - Recessed



## 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-01

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

## 13 FINISH



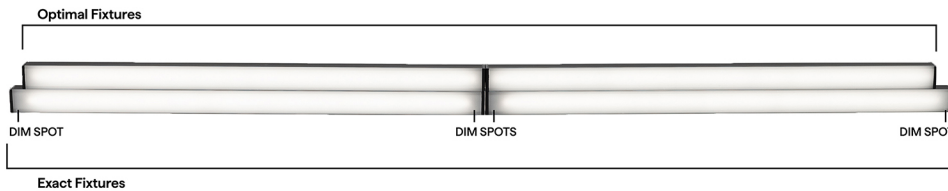
Custom finishes require a longer lead time, consult factory

## 14 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.





# ESSENTIALS FLUR™-FLAT (01) WD APPLICATIONS

24VDC Linear Fixtures - Recessed

## WD DRY LENGTHS BY INCH

### EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 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

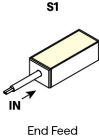
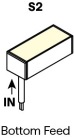
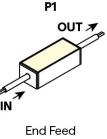
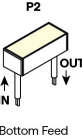
Requested Nominal Length	S1 & S2		P1 & P2	
				
12"	10.41"		10.66"	
13"	12.41"		12.66"	
14"	12.41"		12.66"	
15"	14.41"		14.66"	
16"	14.41"		14.66"	
17"	16.41"		16.66"	
18"	16.41"		16.66"	
19"	18.41"		18.66"	
20"	18.41"		18.66"	
21"	20.41"		20.66"	
22"	20.41"		20.66"	
23"	22.41"		22.66"	
24"	22.41"		22.66"	
36"	34.41"		34.66"	
48"	46.41"		46.66"	
60"	58.41"		58.66"	
72"	70.41"		70.66"	
84"	82.41"		82.66"	
96"	94.41"		94.66"	

## DW-HE DRY DMP LENGTHS BY INCH

### EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 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

Requested Nominal Length	S1 & S2		P1 & P2	
				
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"	



# ESSENTIALS FLUR™-FLAT (01) WD APPLICATIONS

24VDC Linear Fixtures - Recessed

## COMPATIBLE POWER SUPPLIES

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

DIM TO LEVEL	INDOOR	
	DW-HE Warm Dim Applications	WD
0.1%	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+WD QT-CAB-eLED+WD-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QTM-eLED+WD QTM-eLED+WD-AWN QZ-DW	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+0-10V QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-BOWTIE+DIMMER QZ-DMX QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP
1%	QZ-DALI-DT8	QTM-eLED(E) QZ-DALI-DT6
10%	Non-Dim Power Supply with WD App Dongle	Non-Dim Power Supply with SW App Dongle


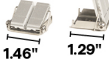




DIMMING PROTOCOL	INDOOR	
	DW-HE Warm Dim Applications	WD
Phase	QZ-DW	QT-CAB-QZ-PH/0-10V QTM-eLED(E) QZ-BOWTIE+DIMMER QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP
0-10V	QT-CAB-eLED+WD QT-CAB-eLED+WD-AWN QTM-eLED+WD QTM-eLED+WD-AWN QZ-DW	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QTM-eLED+0-10V QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP
Lutron Athena	QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+WD-AWN QTM-eLED+DALI-DT8-AWN QTM-eLED+WD-AWN	QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+DALI-DT6-AWN
ECO System		QTM-eLED(E)
DMX If using DW LED, wattage must be doubled		QZ-DMX
DALI-2: DT6 If using DW LED, wattage must be doubled except for AWN	QT-CAB-eLED+DALI-DT6 QTM-eLED+DALI-DT6	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-DALI-DT6
DALI-2: DT8 If using DW LED, wattage must be doubled 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	
SCENE App Dimmed	Non-Dim Power Supply with WD App Dongle	Non-Dim Power Supply with SW App Dongle



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24VDC Linear Fixtures - Recessed

## COMPATIBLE MOUNTING ACCESSORIES

HINGE - HMB-M	HINGE - HMB-L	HINGE - HMB-XL	Q-PIVOT	Q-ANGLE	VHB
 1.41" .71"	 1.46" 1.29"	 1.46" 4"	 .75" 1.03"	 2.23" 1.38"	
Adjustable mounting bracket - Medium	Adjustable mounting bracket - Large	Adjustable mounting bracket - XLarge	Small mounting accessory	Adjustable mounting accessory	Double sided mounting tape