





# XFL Flexible Linear LED

## **Tunable White**

Xicato designs and delivers one of the broadest portfolio spot and linear light sources and electronics that enable architects, designers and building managers to create beautiful, smart spaces in which people love to live and work. With thousands of installations around the globe, Xicato continues to be a leading supplier of high quality lighting solutions. Xicato is defining the future of intelligent light sources by integrating electronics, software and connectivity. Founded in 2007, Xicato's headquarters is based in Silicon Valley and the company has offices in China, Europe and the US.





## XFL Flexible Linear LED Tunable White





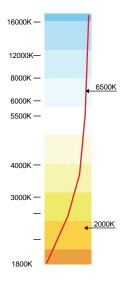






#### **Features**

- Unmatched performance for CRI, R9, Fidelity and Gamut
- Premium ≤ 2 SDCM color consistency
- High Density 240 LEDs/m with smaller CCT ranges
- Standard density 192 LEDs/m with higher flux for 2700K-6500K
- 24V input, standard for simpler power design and selection
- · Superior construction for higher reliability and heat management
- · Advanced on-board circuitry for a 2-channel driver
- 10-year warranty
- Available in spools (XFL) or as custom finished tape cut to a specified length with soldered lead wires



## **Spec Locks**

Spec Locks	Gold Plated PCB	CRI	R9	Gamut	Fidelity	SDCM Steps	Max Run	Luminous Efficacy	Benefits
Tunable White	<b>(a)</b>	<b>(a)</b>				<b>(a)</b>	<b>(a)</b>	<b>(a)</b>	Superior Construction, long lifespan Supported by Xicato Bluetooth® Mesh Control portfolio

## XFL SKU Builder / Ordering Part Number

Model Number is built as follows: XFL-AA-BBCC-DDD-EE-FF/GGJJ

(applicable to all order codes listed below)

The orderable Xicato part numbers are built as follows:

Spools: XFL-AA-BBCC-DDDEE-FF/GGJJ-HHHHH

Custom Tape: XFT-AA-BBCC-DDDEE-FF/GGJJ

XFL		TW	 24	3.0	 240	22		22/30	95		SP005
		TW	 24		 240	22			95		
Product		Collection	Voltage	Watts/foot*	LEDs/meter	IP Rating		CCT	CRI		Spool Length (m)**
XFL (Spools)				3.0	192***			2200-3000			5
XFT (Custom)				4.4				2400-3500			10
(Oddioin)	_			5.2				2700-6500***			30.5
				6.0			L		l		Blank**** (XFT Custom tape)
				5.3***						Į	, , , , ,

<sup>\* 1</sup> Watt/foot = 3.28 Watts/meter

<sup>\*\*\*\*</sup> This field is left blank for XFT order codes. Contact your Xicato Sales Representative to define the specific custom configuration for LED tape and soldered lead wires. The detailed configuration description will be provided with the quote and order confirmation



<sup>\*\* 5</sup>m Spool Length = 16.4 feet

<sup>\*\*\* 2700</sup>K-6500K is 5.3W/ft, 192 LEDs/m

## **XFT Custom Tape Options**

Contact your Xicato Sales representative to define and order your specific custom configuration

## LED Tape

	LED Tape Cut to Length
Length	Min: 3" Max: Max run length (page 4) Available in increments of cuttable length (page 4)

#### Input Lead Wire

	20 AWG UL2464 Lead Wire Only
Length	Min: 3" Max: 96" Available in 1" increments
Jacket Color	Black or White

### Optional Output Lead Wire

	20 AWG UL2464 Lead Wire Only
Length	Min: 3" Max: 96" Available in 1" increments
Jacket Color	Black or White



## Specifications for 2200K-3000K and 2400K-3500K

## Common properties across all SKUs

Color	Beam Angle	CRI	Voltage	IP Rating	Minimum Cuttable Length	LEDs/m	Profile	Standard Spool Length m (ft)	Operating Temperature	Storage Temperature	
WW + CW	120°	95	24VDC	22	25mm (0.98'')	240	10mm (0.39")	5 (16.4) 10 (32.8) 30.5 (98.4)	-20°C to 60°C	-20~ +70°C	

Model Number	CCT Range (K)	Efficacy (lm/W)	Typical Luminous Flux lm/m , (lm/ft)	Power W/m , (W/ft)	Max Run Length m (ft)
XFL-TW-243.0-24022-22/3095	2200-3000	≤66	≤657 (≤200)	0.84 (2.0)	4 (42.4)
XFL-TW-243.0-24022-24/3595	2400-3500	≤67	≤666 (≤203)	9.84 (3.0)	4 (13.1)
XFL-TW-244.4-24022-22/3095	2200-3000	≤64	≤932 (≤284)	44.42.44.40	2 (0.0)
XFL-TW-244.4-24022-24/3595	2400-3500	≤65	≤945 (≤288)	14.43 (4.4)	3 (9.8)
XFL-TW-245.2-24022-22/3095	2200-3000	≤63	≤1078 (≤328)	47.04 (F.3)	2 5 (0.2)
XFL-TW-245.2-24022-24/3595	2400-3500	≤64	≤1094 (≤333)	17.06 (5.2)	2.5 (8.2)
XFL-TW-246.0-24022-22/3095	2200-3000	≤61	≤1208 (≤368)	40 (9 (/ 0)	2 (/ /)
XFL-TW-246.0-24022-24/3595	2400-3500	≤62	≤1226 (≤373)	19.68 (6.0)	2 (6.6)

#### Note:

- 1. Test environment temperature: 25±2°C.
- 2. Values above represent typical performance.
- 3. Luminous flux is tested at each CCT.
- 4. Luminous efficiency is a measured value.
- 5. Max run length is in reference to a single feed.
- 6. Max run length refers to operating length at UL class II @100W, 24V.
- 7. The luminous flux and power are listed within  $\pm 10\%$ .

## Performance Over CCT Range vs Drive Current Ratio

Model Number	CCT(K)	Typical Luminous Flux (lm)	Efficacy (lm/W)	Power (W)	I(A)	CW Current Ratio	WW Current Ratio	CRI	R9
	2249	252	46	5.52	0.23	0%	100%	96	88
	2465	252	47	5.40	0.23	31%	69%	96	91
XFL-TW-243.0-24022-22/3095	2720	255	48	5.35	0.22	63%	37%	97	93
	2787	256	48	5.35	0.22	72%	28%	96	93
	2963	259	49	5.34	0.22	90%	10%	96	92
	2249	375	44	8.47	0.35	0%	100%	96	87
	2411	377	46	8.19	0.34	23%	77%	96	91
XFL-TW-244.4-24022-22/3095	2714	382	48	8.04	0.34	66%	34%	96	92
	2901	373	48	7.74	0.32	87%	13%	96	92
	2953	390	48	8.04	0.34	92%	8%	96	91

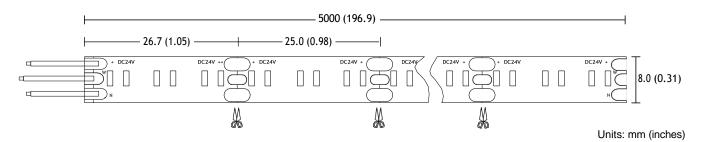


## Performance Over CCT Range vs Drive Current Ratio

Model Number	CCT(K)	Typical Luminous Flux (lm)	Efficacy (lm/W)	Power (W)	I(A)	CW Current Ratio	WW Current Ratio	CRI	R9
	2247	437	43	10.08	0.42	0%	100%	96	87
	2406	437	45	9.77	0.41	25%	75%	96	90
XFL-TW-245.2-24022-22/3095	2621	439	46	9.51	0.40	53%	47%	96	92
	2816	447	47	9.49	0.40	76%	24%	96	92
	2962	454	48	9.39	0.39	95%	5%	96	91
	2248	480	43	11.23	0.47	0%	100%	96	86
	2403	475	44	10.81	0.45	22%	78%	96	90
XFL-TW-246-24022-22/3095	2433	475	44	10.73	0.45	27%	73%	96	90
	2693	483	47	10.30	0.43	63%	37%	96	92
	2963	499	48	10.49	0.44	94%	6%	96	90
	2506	237	47	5.00	0.21	0%	100%	96	92
	2855	254	51	4.99	0.21	34%	66%	96	97
XFL-TW-243.0-24022-24/3595	3046	263	52	5.03	0.21	53%	47%	97	98
	3243	274	54	5.08	0.21	66%	34%	97	97
	3522	288	56	5.15	0.21	89%	12%	97	97
	2527	380	47	8.05	0.34	0%	100%	96	91
	2672	392	49	8.04	0.34	18%	82%	96	94
XFL-TW-244.4-24022-24/3595	2939	411	51	8.05	0.34	42%	58%	96	97
	3228	438	53	8.22	0.34	70%	30%	97	98
	3514	464	55	8.42	0.35	94%	6%	97	96
	2543	497	52	9.50	0.40	5%	95%	96	91
	2860	527	56	9.45	0.39	33%	67%	96	96
XFL-TW-245.2-24022-24/3595	2945	523	55	9.46	0.39	43%	57%	96	96
	3308	571	59	9.76	0.41	76%	24%	97	97
	3538	612	62	9.94	0.41	94%	6%	97	96
	2490	482	46	10.56	0.44	0%	100%	96	89
	2776	509	48	10.54	0.44	30%	70%	96	95
XFL-TW-246.0-24022-24/3595	3162	552	51	10.74	0.45	65%	35%	97	97
	3245	563	52	10.84	0.45	73%	27%	97	97
	3517	599	54	11.12	0.46	95%	5%	97	95

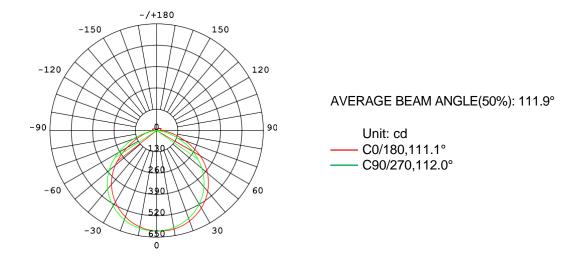
Note: Measured on a 1m sample

## **Profile Drawing**

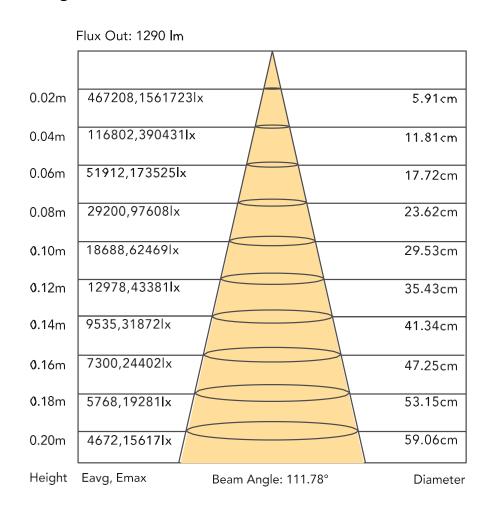




### **Polar Luminous Intensity Diagram**



### **Illuminance Cone Diagram**



Note:

The curves indicate the illuminated area and the average illumination when the luminaire is at different distance.



## Max Bending Radius: Rmin = 20mm



## Specifications for 2700K-6500K

Model Number	CCT Range	Efficacy	Typical Luminous Flux	Power	Max Run Length
	(K)	(lm/W)	lm/m , (lm/ft)	W/m , (W/ft)	m (ft)
XFL-TW-245.3-19222-27/6595	2700-6500	≤110	≤1000 (≤305)	17.28 (5.3)	2 (6.56)

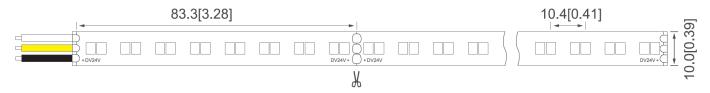
Model Number	Voltage	Ra	ССТ	Flux (Lm/m)	Efficiency (Lm/W)	Power (W/m)
XFL-TW-245.3-19222-276595	2700К		1020	118	8.64	
	24V DC	>95	6500K	1080	125	8.64
			WW+CW	2093	121	17.28

## Performance Over CCT Range vs Drive Current Ratio

Model Number	CCT(K)	Typical Luminous Flux (lm)	Efficacy (lm/W)	Power (W)	I(A)	CW Current Ratio	WW Current Ratio	CRI	R9
	2687	949	104	9.15	0.381	12%	88%	96	83
	2962	907	104	8.69	0.362	21%	79%	95	93
	3186	873	105	8.31	0.346	35%	65%	95	97
XFL-TW-245.3-19222-27/6595	3676	816	106	7.72	0.322	48%	52%	93	91
	4183	779	106	7.33	0.305	64%	36%	93	86
	5030	730	107	6.82	0.284	74%	26%	93	85
	6611	998	110	9.07	0.378	93%	7%	95	93

Note: Measured on a 1m sample

## **Profile Drawing**

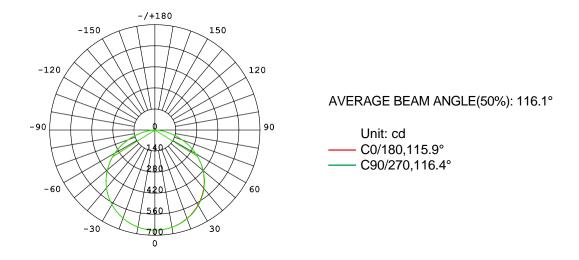


Units: mm (inches)

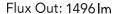
Use 18AWG parallel wire/sheathed cable in single feed

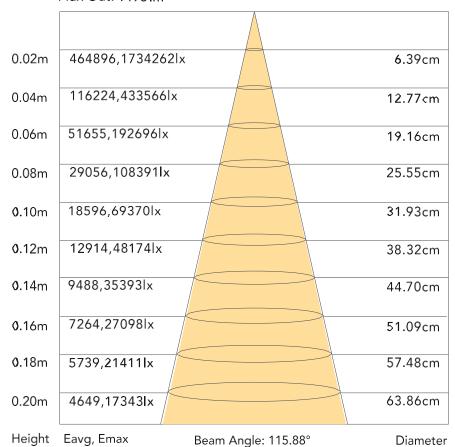


### **Polar Luminous Intensity Diagram**



### **Illuminance Cone Diagram**



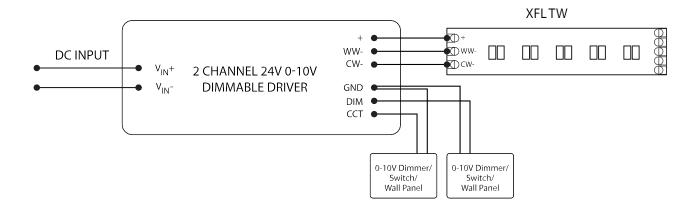


Note:

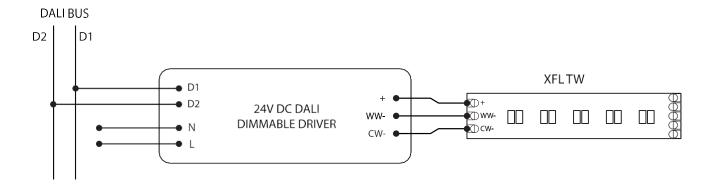
The curves indicate the illuminated area and the average illumination when the luminaire is at different distance.



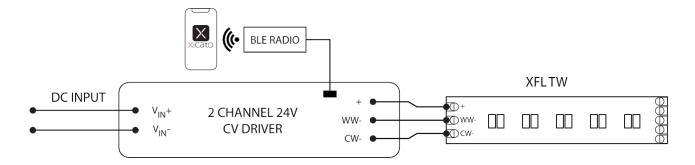
## 0-10V Wiring Diagram



## **DALI Wiring Diagram**



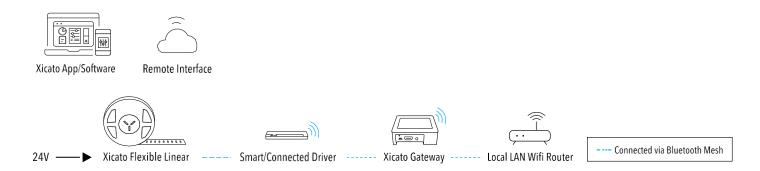
## Wired + Wireless Wiring Diagram





## **Xicato Controls and Integration**

The XFL Portfolio is part of Xicato's comprehensive end-to-end systems, energizing environments through brilliant lighting and Smart Controls.



#### Connectors

For a complete list of connectors, please visit xicato.com/xfl.

#### Aluminum Channels

For a complete list of commonly used profiles with this product, please visit xicato.com/xfl.

#### Installation

Affix with 3M self adhesive tape. 3M tape is included with XFL.

Visit xicato.com/resources to download XFL Flexible Linear LED Installation Instructions for Dry Location Linear Lighting.



#### Warning

- 1. This product should be installed and serviced in accordance with local and national electrical code regulations by a qualified, licensed electrician. If you are unclear as to how to install and wire this product, contact a qualified professional.
- 2. Tape light should only be powered by a UL Listed Class 2 DC 24V power supply.
- 3. Always disconnect the power supply before cutting or connecting tape light. Never attempt any work before shutting off the electricity.
- 4. Do not exceed maximum tape light run length. Series connections must be within the maximum run length.
- 5. LED tape light is designed to be cut at designated cut points only. Cutting anywhere other than the cut points will result in damage to the tape light.
- 6. Do not stare directly into LED lights when illuminated.
- 7. Do not power LED tape while coiled on reel.
- 8. Adhere tape to a clean, dry mounting surface free of oils, silicones and dirt particles. If surface is electrically conductive, isolation between soldering points and mounting surface is necessary.
- Do not install LED tape in a location with direct exposure to the sun or where the ambient temperature is outside the listed temperature range of the product.
- 10. Prior to installation, verify all components (LED tape, driver, control, & accessories) are compatible. Configure and pretest your LED system prior to installation to ensure all components are operating correctly.
- 11. Unused product should be properly placed and stored in an anti static bag.
- 12. Failure to follow safety warnings, and installation instructions will void the warranty for this product.

### Consumer Acknowledgment

Xicato, Inc. stands behind its products when they are used in accordance with our specifications. When purchasing Xicato products, the customer agrees and acknowledges that design, configuration and installation are complex processes not managed by Xicato, and minor changes or errors in layout and infield adjustments may have a significant impact. Choosing correct components is critical. Xicato will work with the original purchaser to make product selections to the extent of the limited information that the customer provides, but Xicato cannot design a system that anticipates all unknown factors. For this reason, our Warranty does not cover problems caused by improper design, configuration or installation issues. Xicato strongly recommends that licensed professionals be used in the design and installation of any lighting systems with Xicato products. The specifications include important information that should be reviewed and followed.

Please read our full Terms and Conditions to understand what is covered by Xicato's official warranty.

## Regulatory Information

#### **Electrical Safety & Handling**

CE	IEC 62031:2008
UL	UL 8750 Cert E499492
Model	XFL-VW-24-22-X
Туре	XFL-TW-24aa-bb22-Xcc-dd

#### Warranty

Warranty Duration 10 year







Xicato Global Headquarters

102 Cooper Court Los Gatos, CA 95032 **Contact Us** 

Tel: +1 866 223 8395 info@xicato.com