# XLM Artist Series LED Module

# Corrected Cold Phosphor Technology®



# **Specification Features**

#### **Physical Characteristics**

**Module Source Type:** Corrected Cold Phosphor LED module. 83.95mm (3.31") x 45mm (1.77") x 18.6mm (.73"). Optical Aperture 71.2mm (2.8") x 15.1mm (.59").

Maximum Case Temperature: 90 °C Phosphor Proximity: Remote.

**Module Weight:** 138gm (4.9oz) (50ct Box weight 7.5kg (16.6lbs)). **Interfaces:** Base 83.95mm (3.31") x 45mm (1.77"). Provision for accessory reflector attachment. Integral connector. Integral mounting screws M3 x 0.5 x 20 mm. Tightening torque: .9Nm/8in. lbs. Integral thermal pad: Nominal thermal conductivity 10 W/m-K (through plane), 150 W/m-K (in plane), .127mm thick.

Module Housing: Diecast aluminum construction with sealed

glass aperture. IP66 Rated.

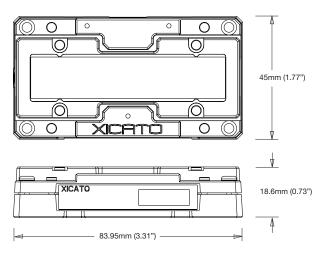
**Storage Temperature:** -40°C to 85°C **Photometric Characteristics** 

Color Consistency - Initial: CCT +/- 50K, Duv +/- .001,

1 x 2 step MacAdam (1 x 2 SDCM) along BBL. **Color Rendering Index:** Ra  $\geq$ 95. R9  $\geq$ 90. R15  $\geq$ 95 (R9 3500K, 4000  $\geq$  85).

Color Consistency - Maintained: C3 50,000hrs. 12

Lumen Maintenance: L70 50,000 hrs.4



#### Other

**Regulatory:** Modules UL recognized. RoHS compliant.

CE Compliant (IEC62031). IP66 (IEC60529).

**Mercury Content:** No mercury. **UV or IRC ontent:** None.

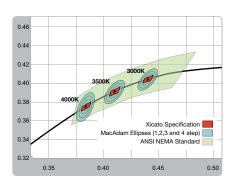
### **Ordering Guide\***

Luminous Flux	Model Part Number	Wire Harness Type (must specify)	Correlated Color Temperature (CCT)
	XLM9527-3000-B	3 or 4	2700K
00001	XLM9530-3000-B	3 or 4	3000K
3000 lm	XLM9535-3000-B	3 or 4	3500K
	XLM9540-3000-B	3 or 4	4000K

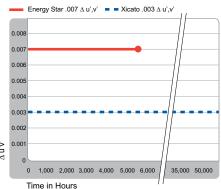
Wire Harness (packed in module box)								
Wire Harness Type Description								
"3"	XSA-26-3 Single Channel Wire Harness							
"4"	XSA-26-4 Two Channel Wire Harness							

<sup>\*</sup> For a complete list of luminaires incoporating Xicato LED Modules and information on compatible drivers, heatsinks and reflectors, go to **www.xicato.com** 

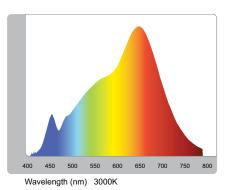
### **Color Consistency - Initial**



#### Color Consistency - Maintained



#### **Spectral Power Distribution**



#### **Color Rendering Index (Typical)**

Ra	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
98	98	99	98	98	98	97	98	98	98	99	98	88	98	98	98



#### **Technical Data**

Lighting <sup>1</sup>								Electrical (constant current)									
Module	Part Number	Correlated Color Temperature (CCT) <sup>2</sup>	Color Rendering Index (Ra) <sup>3</sup>	Color Consistency			Lumen Maint- enance	Module	Drive Current	Forward Voltage <sup>6, 9</sup>			Power Consumption		Efficacy (Typical)		
				SDCM	ССТ	Duv	(hrs)4		(mA)⁵	Min	Тур	Max	(W) <sup>7</sup>	lm	lm/W	U.G.O.O	
Single C	Single Channel Wiring Harness (both channels driven in series). Requires XSA-26-3°.																
	XLM9527-3000-B	2700K		≤1 x 2	± 40K	±0.001	50k	3000 lm	1050 53.6	E2.6	57.0	62.1	59.9	3000	50	U	
3000 lm	XLM9530-3000-B	3000K	CRI Ra		± 50K				1030	050   55.0	37.0	02.1					
	XLM9535-3000-B	3500K	≥95 R9 ≥90 R15 ≥95		±60K				700	51.7	55.1	59.9	38.6	2160	56	N	
	VI MOE 40 2000 B	40001/			± 70K				500	50.1	53.5	58.1	26.8	1665	62	J	
	XLM9540-3000-B	4000K							350	48.8	52.3	56.8	18.3	1170	64	G	
Two Cha	Two Channel Wiring Harness (each channel driven individually). Requires XSA-26-49.																
	XLM9527-3000-B	2700K	CRI Ra  ≥95  R9 ≥ 90  R15 ≥ 95	≤1 x 2	± 40K		50k	3000 lm	1050	26.0	20.5	21.1	59.9	3000	50	U	
3000 lm	XLM9530-3000-B	3000K			± 50K	±0.001			1050	20.8	28.5	31.1					
	XLM9535-3000-B	3500K			±60K				700	25.9	27.6	30.0	38.6	2160	56	N	
	VI MOT 40 2000 D	40001/			. 701/				500	25.1	26.8	29.1	26.8	1665	62	J	
	XLM9540-3000-B	40-3000-B 4000K			± 70K				350	24.4	26.2	28.4	18.3	1170	64	G	

#### Notes:

- Alllightingdatashownintheabovetableistakenatarecommendedoperatingtestpoint(Tc)temperature
  of 70°C and highest rated drive current.
- 2. '3000K' and '3500K' CCT's are 2950K and 3420K, respectively. CCT data ANSI/NEMA compliant.
- 3. 'Ra' is defined as the average of color rendering indices R1-R8. 3000K data shown.
- 4. Long term testing in process.
- 5. The module is designed for usage with a constant current power supply with an output current up to 1100mA max.
- $6. \quad Voltage \, data \, based \, on \, 20^{\circ}C \, to \, 90^{\circ}C \, operating \, range. \, For \, operation \, outside \, this \, range, \, contact \, Xicato.$
- Power consumption is stated as a typical value that is based on the typical range of forward voltage. Maximum and minimum power values can be calculated using the voltage range.
- 8. Absolute range of lumen output is  $\pm 10\%$  of typical value.
- 9. XLM is designed for one or two channel operation using a single wire harness attached to an integral connectoronthemodule.XSA-26-3isforsinglechanneloperation, XSA-26-4isfortwochanneloperation. XLM can be powered by a single driver using a single channel harness, a single driver with dual outputs using a two channel harness or two individual drivers using the two channel harness.

 $\Delta u'.v'.$ 

- 10. Specifications subject to change without notice.
- 11. Thermal compatibility classification: Contact Xicato for details.
- 12. Long term testing in process. C3= <.003

# Recommended LED Module Specification

**Physical Characteristics:** LED module shall be remote phosphor, nominal 45mm (1.77") diameter, and aluminum and glass construction. Module shall be sealed, meeting IP66 requirements. Module shall be field-servicable.

**Performance:** LED module shall have a CRI (Ra)  $\geq$ 95, with an R9 value  $\geq$ 85. CRI values shall be  $\pm$ 3/-0 points initial. LED module color points shall be within 1 x 2 SDCM initial. Flux output shall be measured at a minimum of 70 °C ( $\pm$ 5°C).

**General Requirements:** LED module shall be UL recognized, CE compliant and RoHS compliant. Module shall be warranted for 5 years for catastrophic failure, lumen maintenance ( $\ge$ L70), and color consistency (<.003  $\triangle$  u', v').

LED module shall be Xicato Module. #\_\_

## **About Xicato**

Xicato is passionate about light. Light has an emotional effect on people and a direct impact on business profitability. It ultimately influences everything in our lives. Xicato is a recognized leader in creating LED modules that provide superior aesthetics, economics and durability. Xicato aspires to be the trusted partner of the global lighting design community and luminaire manufacturers.

For an overview of our customers' luminaires visit www.xicato.com.

For the best in lighting design, Xicato recommends a qualified lighting designer from the Professional Lighting Design Association (PLDA) or the International Association of Lighting Designers (IALD).









