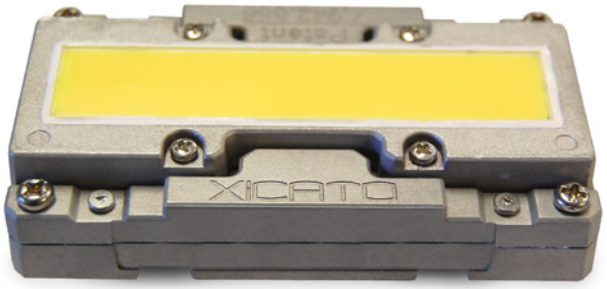
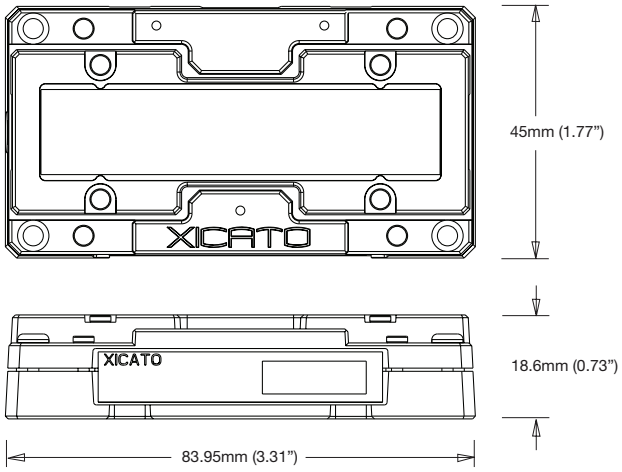
XLM 80 Series LED Module

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 ºC
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.
Module Housing: Diecast aluminum construction with sealed glass aperture. IP66 Rated.
Storage Temperature: -40ºC to 85ºC

Photometric Characteristics

Color Consistency: CCT +/- 50K, Duv +/- .001, 1 x 2 step MacAdam (1 x 2 SDCM) along BBL.
Color Rendering Index Consistency: +3/-0pts.
Color Rendering Index: Ra ≥ 80.
Module Life: Lumen maintenance L70/B50 50,000 hrs.

Other

Regulatory: Modules UL recognized. RoHS compliant.
Mercury Content: No mercury.
UV or IRC ontent: None.

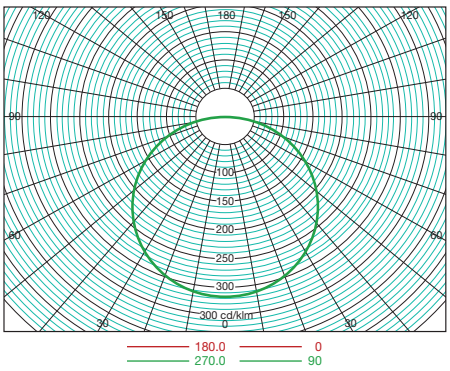
Ordering Guide*

Luminous Flux	Model Part Number	Wire Harness Type (must specify)	Correlated Color Temperature (CCT)
3000 lm	XLM8030-3000-B	3 or 4	3000K
	XLM8035-3000-B	3 or 4	3500K
	XLM8040-3000-B	3 or 4	4000K
4000 lm	XLM8030-4000-B	3 or 4	3000K
	XLM8035-4000-B	3 or 4	3500K
	XLM8040-4000-B	3 or 4	4000K
Example: XLM8040-3000-B3			

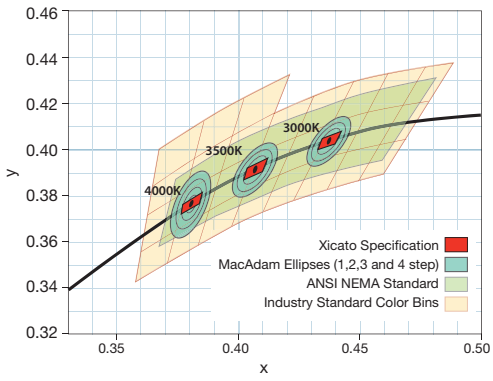
Wire Harness (packed in module box)	
Wire Harness Type	**Description**
"3"	XSA-26-3 Single Channel Wire Harness
"4"	XSA-26-4 Two Channel Wire Harness

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

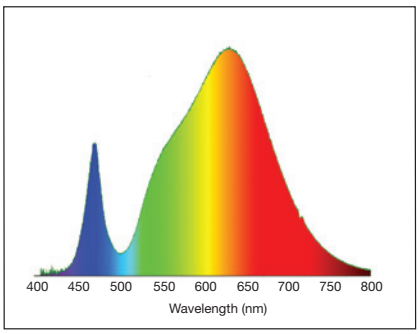
Photometric Performance



Color Consistency



Spectral Power Distribution



3000K

Color Rendering Index (Typical)

Ra	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
81	80	85	89	81	78	80	86	66	16	64	79	58	81	93	75

Technical Data

Lighting[1]								Electrical (constant current)							
Module	Part Number	Correlated Color Temperature (CCT)[2]	Color Rendering Index (Ra)[3]	Color Consistency			Lumen Maint-enance (hrs)[4]	Module	Drive Current (mA)[5]	Forward Voltage[6, 9]			Power Consumption (W)[7]	Lumen Output[8] (Typical)	Efficacy (Typical)	Thermal Class[11]
				SDCM	CCT	Duv				Min	Typ	Max		lm	lm/W	
Single Channel Wiring Harness (both channels driven in series). Requires XSA-26-3[9].																
3000 lm	XLM8030-3000-B	3000K	≥80	≤1 x 2	± 50K	± 0.001	50k	3000 lm	1000	37.3	41.6	46.3	41.6	3000	72	N
	XLM8035-3000-B	3500K			± 60K				700	36.0	40.3	44.8	28.2	2250	80	J
	XLM8040-3000-B	4000K			± 70K				500	34.9	39.2	43.6	19.6	1700	88	G
									350	34.1	38.4	42.7	13.4	1250	93	E
4000 lm	XLM8030-4000-B	3000K	≥80	≤1 x 2	± 50K	± 0.001	50k	4000 lm	1000	48.5	59.5	65.9	59.5	4000	67	T
	XLM8035-4000-B	3500K			± 60K				700	46.8	57.6	64.5	40.3	3000	74	M
	XLM8040-4000-B	4000K			± 70K				500	45.8	56.4	63.2	28.2	2250	80	J
									350	44.4	54.9	61.5	19.2	1650	86	F
Two Channel Wiring Harness (each channel driven individually). Requires XSA-26-4[9].																
3000 lm	XLM8030-3000-B	3000K	≥80	≤1 x 2	± 50K	± 0.001	50k	3000 lm	1000	18.5	20.8	23.3	41.6	3000	72	N
	XLM8035-3000-B	3500K			± 60K				700	18.0	20.1	22.6	28.2	2250	80	J
	XLM8040-3000-B	4000K			± 70K				500	17.3	19.6	22.0	19.6	1700	87	G
									350	16.9	19.2	21.5	13.4	1250	93	E
4000 lm	XLM8030-4000-B	3000K	≥80	≤1 x 2	± 50K	± 0.001	50k	4000 lm	1000	24.1	29.7	33.0	59.5	4000	67	T
	XLM8035-4000-B	3500K			± 60K				700	23.3	28.8	32.2	40.3	3000	74	M
	XLM8040-4000-B	4000K			± 70K				500	22.7	28.2	31.6	28.2	2250	80	J
									350	22.0	27.4	30.7	19.2	1650	86	F

Notes:
1. All lighting data shown in the above table is taken at a recommended operating test point (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.
4. Lumen maintenance is 50k hours based on L70/B50 criteria.
5. The module is designed for usage with a class 1 or class 2 constant current power supply with an output current up to 1000mA. Current may vary ±10% without affecting lifetime performance.
6. Voltage data based on 20°C to 90°C operating range. For operation outside this range, contact factory.
7. 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 ±10% of typical value.
9. XLM is designed for one or two channel operation using one of two wire harnesses attaching to an integral connector on the module. XSA-26-3 is for single channel operation, XSA-26-4 is for two channel operation. XLM 3000 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. XLM 4000 can be powered using a single driver with dual outputs using a two channel harness, single driver with single channel (class 1) or two individual drivers, using a two channel harness.
10. Specifications subject to change without notice.
11. Thermal compatibility classification: Contact Xicato for details.

Recommended LED Module Specification

Physical Characteristics: LED module shall be remote phosphor, nominal 83.95mm (3.31") x 45mm (1.77") x 18.6mm (0.73"), 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) ≥80. CRI values shall be +3/-0 points initial. LED module color points shall be within 1 x 2 MacAdam Steps initial. Flux output shall be measured at a minimum of 70 °C (±5°C).
General Requirements: LED module shall be UL recognized, and RoHS compliant.
LED module shall be Xicato Module. #_____

Luminaire Thermal Validation Program and Warranty

The Xicato Luminaire Thermal Validation Program was developed to ensure that luminaires incorporating Xicato LED Modules perform properly and deliver quality light that meets customer requirements. Qualified luminaires carry limited 5 year warranty. For details on Xicato's Luminaire Thermal Validation Program and warranty, contact Xicato.

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).

Xicato

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