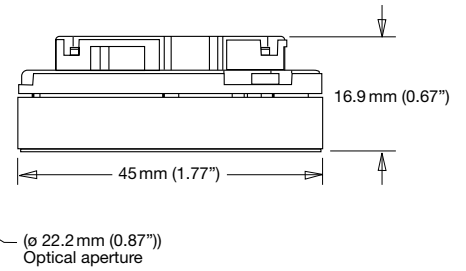
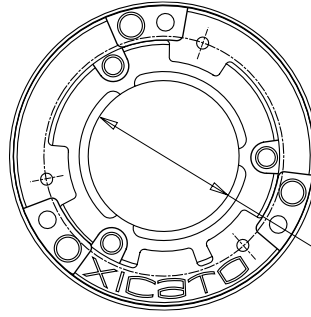


XSM Artist Series LED Module

Corrected Cold Phosphor Technology®



Specification Features

Physical Characteristics

Module Source Type: Corrected Cold Phosphor LED module.
 Dia. 45mm (1.77") x 16.9 mm (.67"). Optical Aperture Dia. 22.2mm (.87").
Maximum Case Temperature: 90°C
Phosphor Proximity: Remote.
Module Weight: 54gm (1.9oz) (100ct box weight 6kg (13.2lbs)).
Interfaces: Base dia. 45mm (1.77"). Provision for accessory reflector attachment. Integral wire harness 24 AWG, 40cm, UL105°C, 300V. Mounting screws M3 x 0.5 x 12mm. Internal thermal pad: Nominal thermal conductivity 10W/m-K (through-plane), 150W/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 (1x2 SDCM) along BBL.
Color Rendering Index: Ra: ≥ 95. R9 ≥ 90, R15 ≥ 95 (R9 3500K, 4000K ≥ 85)
Color Consistency - Maintained: C3 50,000hrs.¹¹
Lumen Maintenance: L80 50,000 hrs.⁴

Other

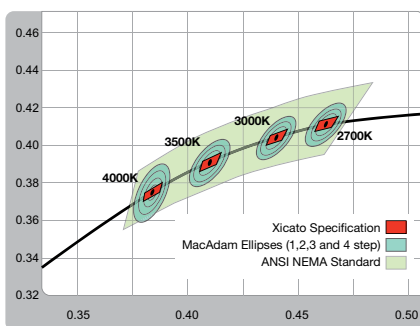
Regulatory: Modules UL recognized. RoHS compliant. CE Compliant (IEC62031). IP66 (IEC60529).
Mercury Content: No mercury.
UV or IR Content: None.

Ordering Guide*

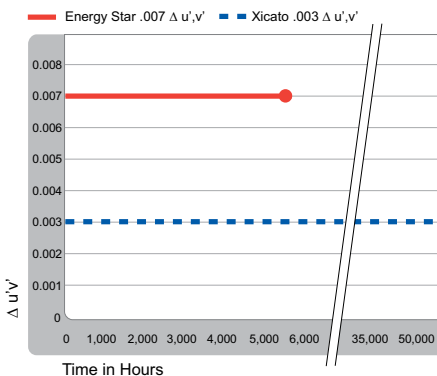
Luminous Flux	Part Number	Correlated Color Temperature
700 lm	XSM9527-700-C	2700K
	XSM9530-700-C	3000K
	XSM9540-700-C	4000K
1000 lm	XSM9527-1000-C	2700K
	XSM9530-1000-C	3000K
	XSM9535-1000-C	3500K
	XSM9540-1000-C	4000K
1300 lm	XSM9527-1300-C	2700K
	XSM9530-1300-C	3000K
	XSM9535-1300-C	3500K
	XSM9540-1300-C	4000K
2000 lm	XSM9527-2000-C	2700K
	XSM9530-2000-C	3000K
	XSM9535-2000-C	3500K
	XSM9540-2000-C	4000K

* For a complete list of luminaires incorporating Xicato LED Modules and information on compatible drivers, heatsinks and reflectors, go to www.xicato.com. For XSM 80 series, refer to XSM 80 Series Product Data Sheet.

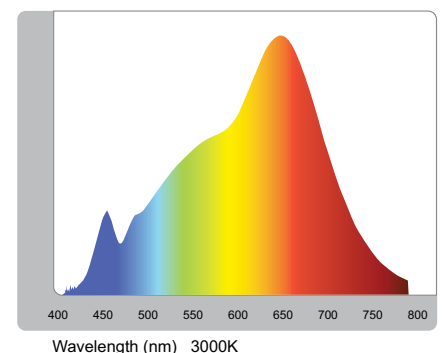
Color Consistency - Initial



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 ¹								Electrical (constant current)								
Module	Part Number	Correlated Color Temperature	Color Rendering Index ³	Color Consistency			Lumen Maintenance ⁴	Module	Drive Current ⁵	Forward Voltage ⁶			Power Consumption ⁷	Lumen Output ⁹ (Typical)	Efficacy (Typical)	Thermal Class ¹⁰
		(CCT) ²		SDCM	CCT	Duv	hrs			mA	Min	Typ				
700 lm	XSM9527-700-C	2700K	CRI Ra ≥ 95 R9 ≥ 90 R15 ≥ 95	≤1 x 2	±40K	±0.001	50k	700	15.3	19.2	22.6	13.4	700	52	F	
	XSM9530-700-C	3000K			±50K				14.8	18.8	22.0	9.4	550	59	D	
	XSM9540-700-C	4000K			±70K				14.5	18.5	21.5	6.8	400	59	C	
1000 lm	XSM9527-1000-C	2700K	CRI Ra ≥ 95 R9 ≥ 90 R15 ≥ 95	≤1 x 2	±40K	±0.001	50k	1000	16.0	20.5	23.4	21.5	1000	46	H	
	XSM9530-1000-C	3000K			±50K				15.3	19.2	22.6	13.4	720	54	F	
	XSM9535-1000-C	3500K			±60K				14.8	18.8	22.0	9.4	540	57	D	
	XSM9540-1000-C	4000K			±70K				14.5	18.5	21.5	6.5	380	59	C	
1300 lm	XSM9527-1300-C	2700K	CRI Ra ≥ 95 R9 ≥ 90 R15 ≥ 95	≤1 x 2	±40K	±0.001	50k	1300	23.9	26.4	30.0	27.7	1300	47	K	
	XSM9530-1300-C	3000K			±50K				23.1	25.4	29.0	17.8	930	52	G	
	XSM9535-1300-C	3500K			±60K				22.3	24.7	28.2	12.4	700	57	E	
	XSM9540-1300-C	4000K			±70K				21.8	24.2	27.6	8.5	500	59	C	
2000 lm	XSM9527-2000-C	2700K	CRI Ra ≥ 95 R9 ≥ 90 R15 ≥ 95	≤1 x 2	±40K	±0.001	50k	2000	37.5	41.1	46.4	43.2	2000	46	Q	
	XSM9530-2000-C	3000K			±50K				36.1	39.6	44.8	27.7	1420	51	K	
	XSM9535-2000-C	3500K			±60K				35.1	38.4	43.6	19.2	1070	56	G	
	XSM9540-2000-C	4000K			±70K				34.3	37.6	42.6	13.2	780	59	E	

Notes:

- 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.
- '3000K' and '3500K' CCT's are 2950K and 3420K, respectively. CCT data ANSI/NEMA compliant.
- 'Ra' is defined as the average of color rendering indices R1-R8. 3000K data shown.
- XSM 700lm/1000lm based on LM-80/TM-21. XSM1300lm long term test ing in process.
- The module is designed for usage with a constant current power supply with an output current up to 770mA or 1100mA max. without affecting lifetime performance.
- Voltage data based on 20°C to 90°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.
- Absolute range of lumen output is ±10% of typical value.
- Specifications subject to change without notice.
- Thermal compatibility classification: Contact Xicato for details.
- C3= <.003 Δ u', v'.

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) ≥95, with an R9 value ≥85. CRI values shall be +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 (±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 (≥L70), and color consistency (<.003 Δ 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).

XICATO

