



opulent
americas



LED Modules - Dim To Warm Linear

Power of Luminus in Standard and Custom LED Modules

Data Sheet

Version 1.0

Lean & Fast. Made Smarter.

Design Faster – use standard modules to shorten development time

Easy Integration – use standard LED drivers and dimmers

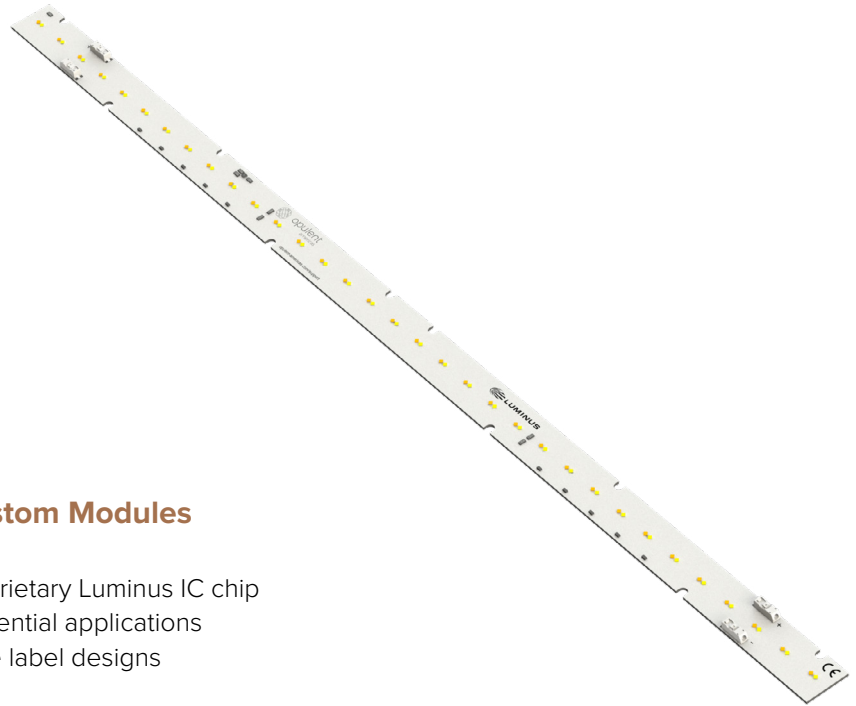
Maximum Flexibility – designed to Zhaga dimensions and screw hole specifications

Innovation – work with Opulent Americas on a custom solution

Primary Applications



Hospitality & Hotel
Restaurant
Architectural
Residential
Retail Shop
Entertainment
Transportation



Superior Performance in Standard & Custom Modules

- Dim as low as 1800K for the perfect warm glow
- Dim to warm with a single channel using the proprietary Luminus IC chip
- 3000K dimmed to 1800K for hospitality and residential applications
- Talk to Opulent Americas about custom or private label designs

Enhance Your Next Design

With traditional filament lamps, as the light source dims, the color temperature changes to a warmer appearance similar to candlelight. With LED lamps as the new standard in lighting, up until now, achieving this affect had proven difficult. The Dim to Warm linear LED modules from Opulent Americas enable lighting manufacturers to easily reproduce that warm glow traditionally associated with halogen light sources. Compatible with most single channel LED drivers and standard dimmer switches, these Opulent Americas modules will simplify your lamp design.

Custom Solutions

Opulent Americas operates facilities globally with ISO certifications for the LED lighting, automotive and medical industries. Our North Carolina based office provides quick engineering & sales support with an R&D lab for prototype development and custom solutions. Our in-house global manufacturing capabilities allow for both building in the United States as well as overseas at scale.

About Opulent Americas

Opulent Americas accelerates the adoption of LED technology through simple, modular products and custom designs. Through 30 years of experience, state of the art manufacturing, full traceability and advanced quality controls, Opulent offers leading solid state lighting components, modules and custom solutions. Opulent customers get to market faster, with less resources, at lower costs. Visit opulent-americas.com for more information.

RoHS CE

LED Module Specifications - Dim To Warm Linear

Product Selection Table

Dimming Profile	Part Number	CCT Range	CRI (Min)	Luminous Flux (lm)		Efficacy (lm/W)		Watts (W)	
				700mA (Typical)	900mA (Max)	700mA (Typical)	900mA (Max)	700mA (Typical)	900mA (Max)
Halogen	DSB1-66G02-3018-90-01	3000K to 1800K	92	2545	3110	99.4	92.0	25.6	33.8

⁽¹⁾ Typical Drive Current: 700mA, Max Drive Current: 900mA

⁽²⁾ Opulent Americas may ship modules in flux bins higher than the values specified by the order code without advance notice. Shipments will always adhere to the chromaticity bin restrictions specified by the order code.

Order Code Formatting

Series	-	LED Count	LED Code	-	Color Temp Range	-	Color Rendering Index	-	Dimming Profile
DSB1 - Dim To Warm LED PCB Assembly, Linear		66 - 66 LEDs	G02 - MP-1616 XNOVA Cube		3018 - 3000K to 1800K		90 - 90 CRI		01 - Halogen Like
					4027 - 4000K to 2700K (Future Product)				02 - Linear Style (Future Product)

LED Module Specifications - Dim To Warm Linear

Electrical Characteristics

Part Number	Forward Voltage (v)		Typical LED Thermal Resistance - Junction to Solder Point (°C/W) RTh j-sp
	700mA (Typical)	900mA (Max)	
DSB1-66x	36.6	38	22

Intended for connection to a class 2 power source with a maximum operating voltage of 50 Vdc

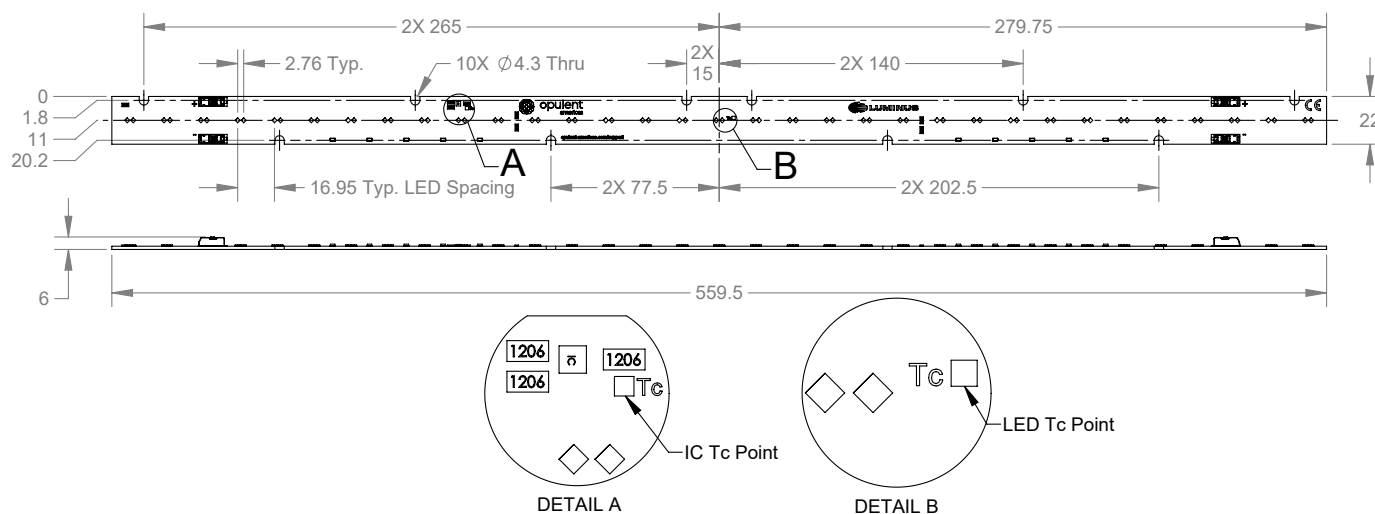
Maximum Ratings

Part Number	DC Current (mA)	LED Tc Temp (°C)	IC Tc Temp (°C)	Power (W)
DSB1-66x	900	80	80	34.2

Board Material Properties

Property	Value	Unit
Solder Mask Color	White	-
Thickness	.062	in
Construction	CEM3	-
Temperature	130	°C
Flame Rating	V-0	-
Copper Thickness	1	oz

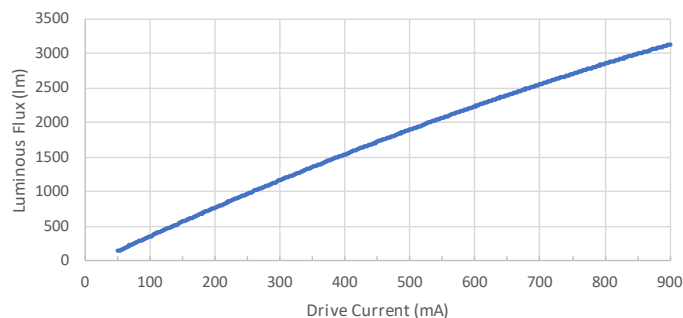
Mechanical Dimensions



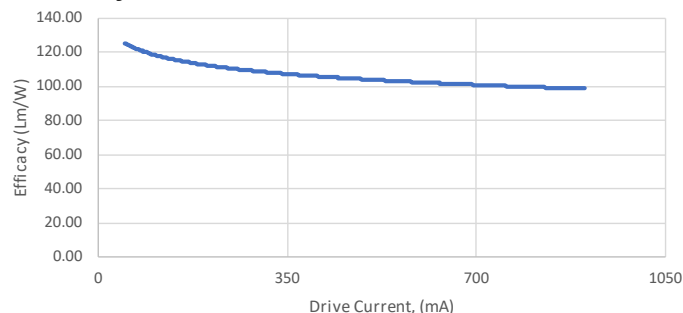
1. Four Poke-In Connectors accept 18-24 AWG solid or stranded wire
2. Recommended Mounting Hardware: 10x M3-.5 Socket Head Cap Screws

LED Module Specifications - Dim To Warm Linear

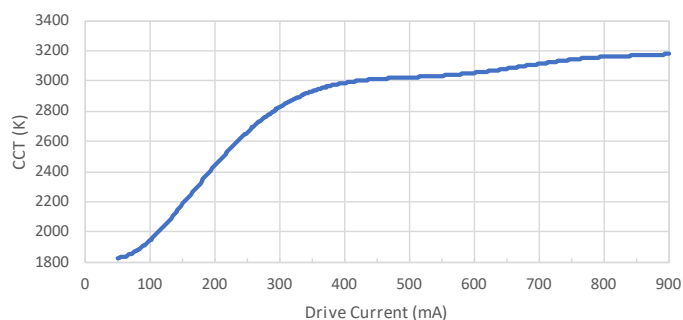
Luminous Flux vs. Current



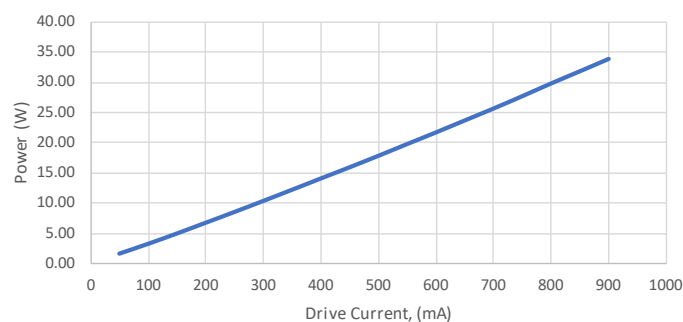
Efficacy vs. Current



CCT vs. Current



Power vs. Current



CIE 1931 Chromaticity Diagram with ANSI Bins

