

# 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 NewEnergy on a custom solution

## Primary Applications



Hospitality & Hotel

Restaurant

Architectural

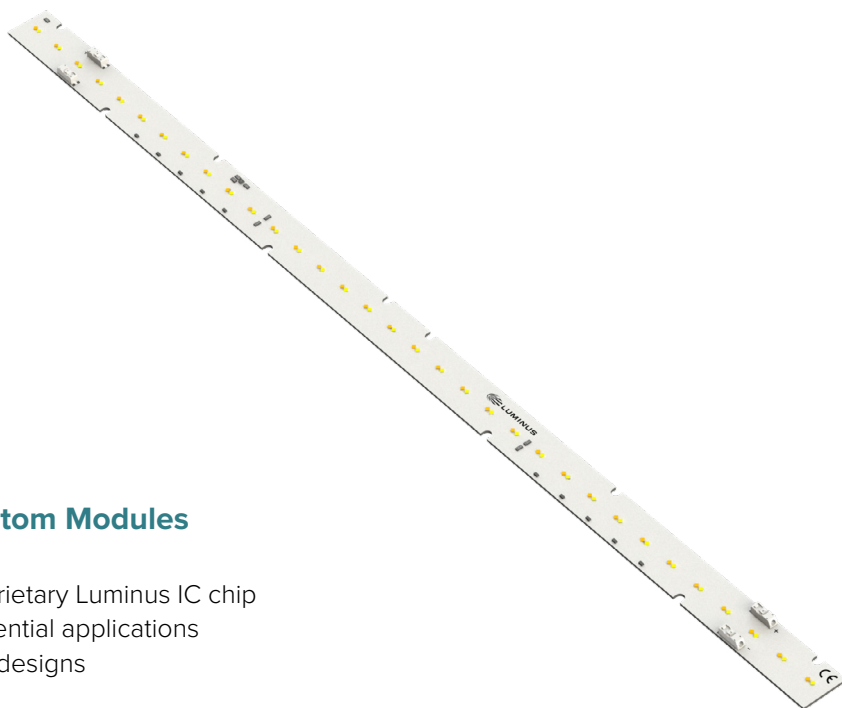
Residential



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 NewEnergy 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 NewEnergy 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 NewEnergy modules will simplify your lamp design.

## Custom Solutions

NewEnergy 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 NewEnergy

NewEnergy 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, NewEnergy offers leading solid state lighting components, modules and custom solutions. NewEnergy customers get to market faster, with less resources, at lower costs. Visit [New-EnergyLLC.com](http://New-EnergyLLC.com) for more information.

CE  
RoHS



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
SENSITIVE DEVICES

# 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

<sup>(1)</sup> Typical Drive Current: 700mA, Max Drive Current: 900mA

<sup>(2)</sup> NewEnergy 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

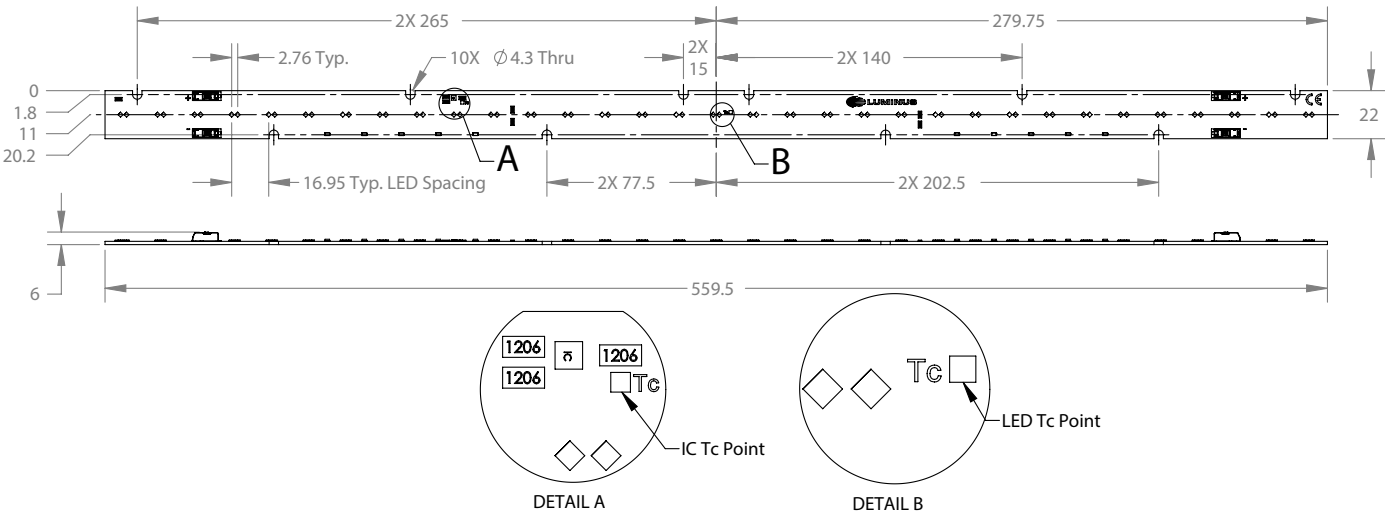
## Maximum Ratings

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

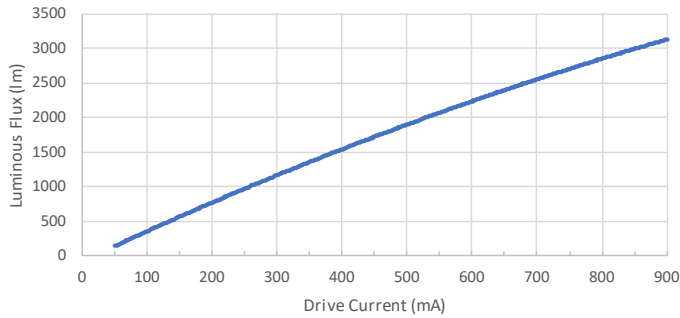
## Mechanical Dimensions



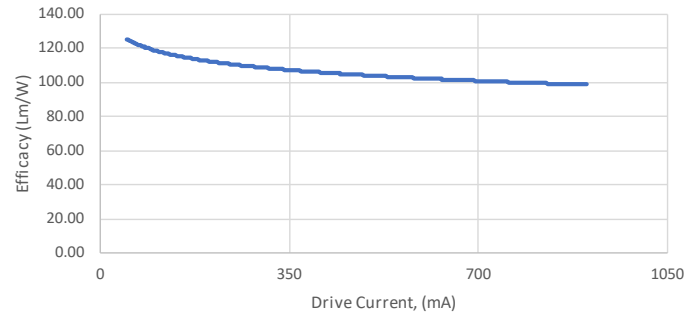
1. Four Poke-In Connectors accept 18-24 AWG solid or stranded wire
2. Recommended Mounting Hardware: 10x M3-.5 Socket Head Cap Screws

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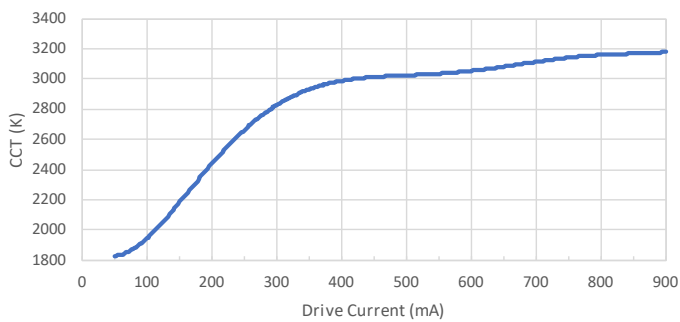
## Luminous Flux vs. Current



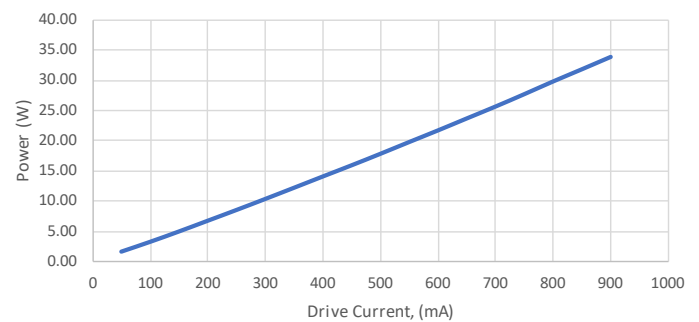
## Efficacy vs. Current



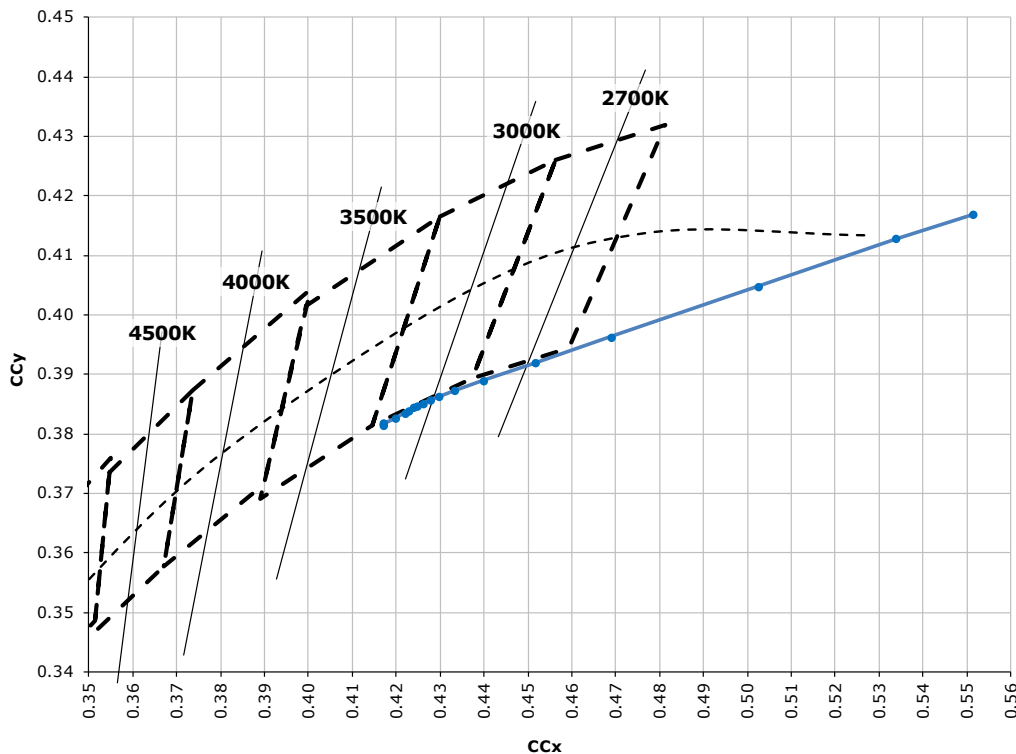
## CCT vs. Current



## Power vs. Current



## CIE 1931 Chromaticity Diagram with ANSI Bins



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

New Energy:

[DSB1-66G02-3018-90-01](#)