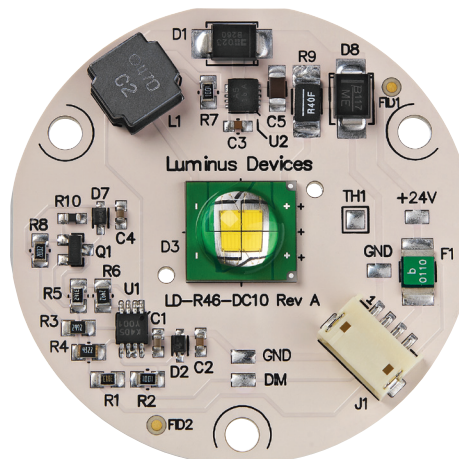


LD10

Luminus

Light Engine



Features:

- Microprocessor controlled, intelligent light engine
- Delivers 700 to 1200 lumens
- 24VDC constant voltage driver delivers consistent light output over engine life
- Thermal fold-back circuit to prevent over-temperature damage to the engine
- On board, 1 -10V dimming
- 14W or 20W, 24VDC constant voltage input
- Single form-factor lens family for beam angles from narrow to flood
- 46mm diameter aluminum substrate for easy mounting and good thermal contact
- High performance thermal pad available for heat sink attachment
- UL certification pending

Applications

- Track/spot
- Directional Lighting
- Commercial Lighting
- Shop Lighting
- Pendant

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Product Nomenclature Information

The part number designation is as follows:

LD10

—

LMS

—

NNX

—

11AA

Product	Luminous Flux Category	CCT & CRI	Package Configurator
LD10 Light Engine	008 or 011	CCT & CRI See Note 1 below	11: Electrical input and Configurator AA: Optics and Configurator

Note: Luminous Flux Category is consistent with the Zhaga categories defined in Book 3.

008 = C008 = 720lm - 1100lm

011 = C011 = 990lm - 1500lm

NNX nomenclature corresponds to the following:

NN = color temperature, where:

27 corresponds to 2700K

30 corresponds to 3000K

35 corresponds to 3500K

40 corresponds to 4000K

X = color rendering index, where:

M (medium) corresponds to a typical CRI of 82

Example:

The part number LD10-008-30M-11AA refers to a 3000K LD10 Light Engine with standard CRI and lumen output from 720 to 1100 lumens.

Product Performance

Part Number	Flux Category	CCT ¹	Luminous Flux ² $t_b = 65\text{ }^{\circ}\text{C}^3$	Efficacy	Input Power	Minimum Luminous Flux $t_b = 65\text{ }^{\circ}\text{C}^3$
Units		(K)	(lm)	(lm/W)	(W)	(lm)
LD10-008-27M-11AA	C008	2700	770	58	13.3	700
LD10-008-30M-11AA	C008	3000	850	64	13.3	770
LD10-008-35M-11AA	C008	3500	850	64	13.3	770
LD10-008-40M-11AA	C008	4000	900	68	13.3	830
LD10-011-27M-11AA	C011	2700	1150	58	20	975
LD10-011-30M-11AA	C011	3000	1200	60	20	1070
LD10-011-35M-11AA	C011	3500	1200	60	20	1070
LD10-011-40M-11AA	C011	4000	1280	64	20	1150

Product Specifications

Parameter	Units	Specification	Range/Comment
Board input voltage	V (DC)	24	16 - 26
Allowable input voltage ripple	V (DC)	plus/minus 0.5	At 24V nominal
Over-voltage protection	V (DC)	30	Over-voltage duration < 10ms
Maximum board input current	A	0.80	-
Maximum board temperature	$^{\circ}\text{C}$	80	
ESD ⁴ Sensitivity	V	> 2,000V HBM ⁵	Per Class 2 JESD22 A114B
Dimming	V	1 - 10	1V - 10% Output Min.
Storage Temperature Range	$^{\circ}\text{C}$	-40/+100	

Note 1: All CRIs are 82 typical

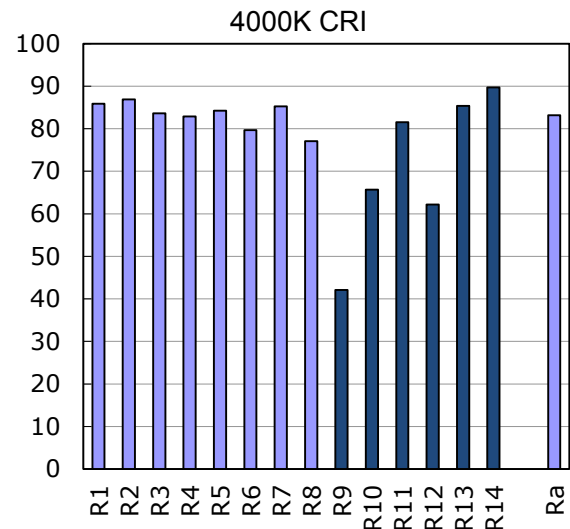
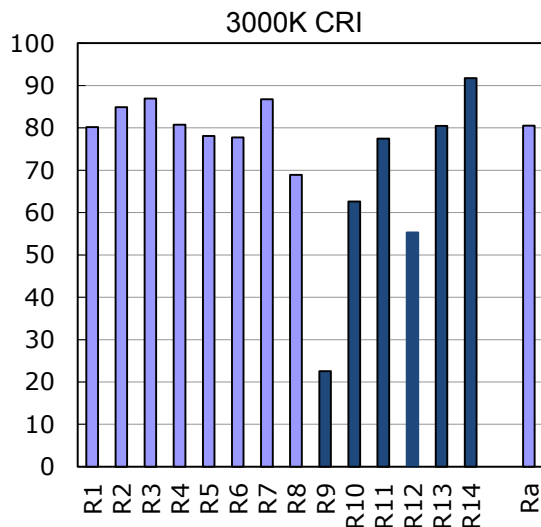
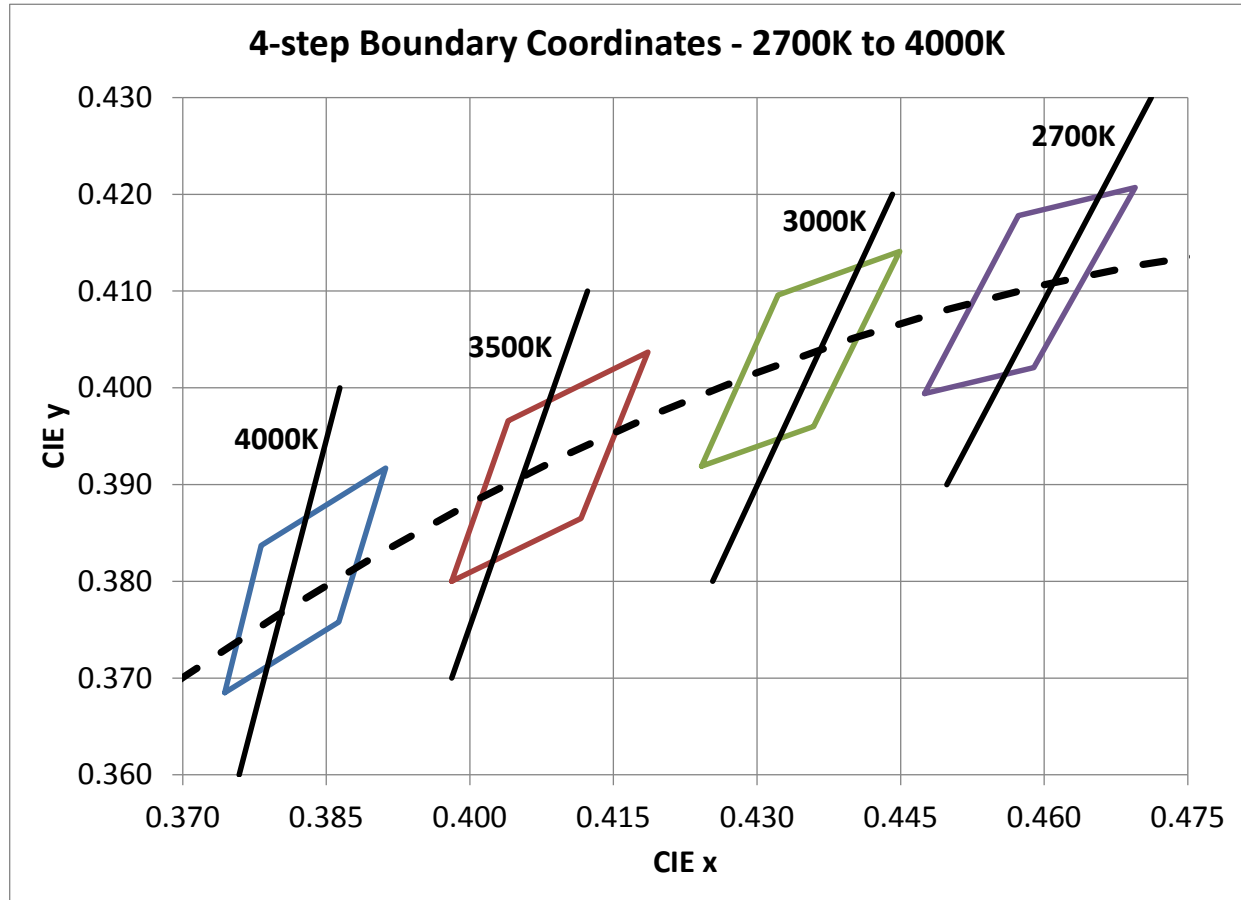
Note 2: Lumen values are typical

Note 3: Temperature t_b is the same as $t_{r,mod,max}$, the Zhaga standard for maximum temperature at which rated LED module performance is specified.

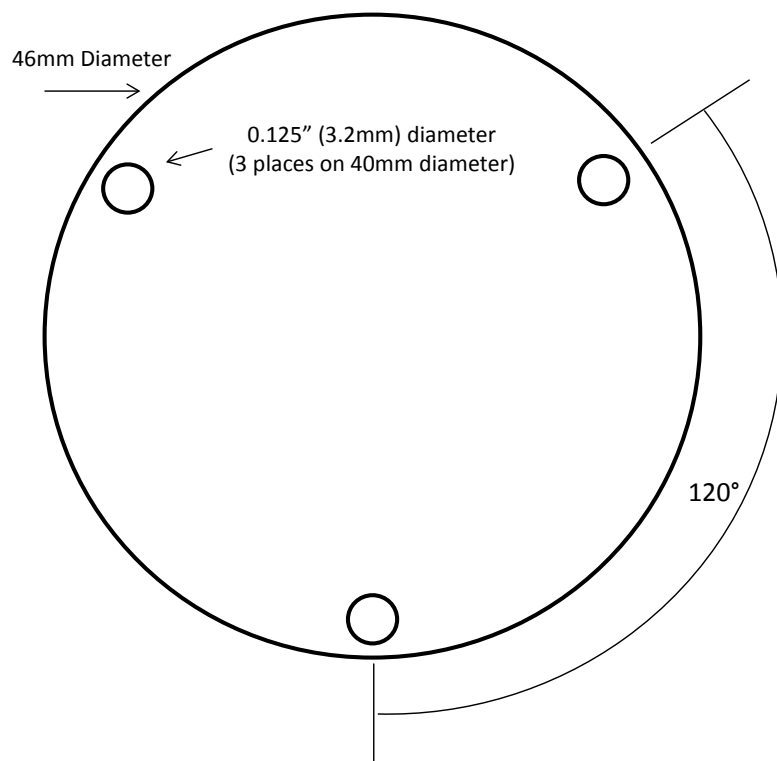
Note 4: Electrostatic Discharge (ESD)

Note 5: Human Body Model (HBM)

Chromaticity Range



Mechanical Dimensions – LD10 Light Engine



Electrical Connections

Connector Wire Postion	Cable Wire Input (color)	Wire function	Wire Input Voltage
1	White	Dimming	Dimming Ground
2	Black	Board Power	Board Power Ground
3	Red	Board Power	24V DC
4	Blue	Dimming	10V DC

Ordering Information

Ordering Part Number	Color	Description
LD10-008-27M-11AA	2700K White	LD10 Light Engine with typical 770 lumens output at 2700K CCT.
LD10-008-30M-11AA	3000K White	LD10 Light Engine with typical 850 lumens output at 3000K CCT.
LD10-008-35M-11AA	3500K White	LD10 Light Engine with typical 850 lumens output at 3500K CCT.
LD10-008-40M-11AA	4000K White	LD10 Light Engine with typical 900 lumens output at 4000K CCT.
LD10-011-27M-11AA	2700K White	LD10 Light Engine with typical 1,150 lumens output at 2700K CCT.
LD10-011-30M-11AA	3000K White	LD10 Light Engine with typical 1,200 lumens output at 3000K CCT.
LD10-011-35M-11AA	3500K White	LD10 Light Engine with typical 1,200 lumens output at 3500K CCT.
LD10-011-40M-11AA	4000K White	LD10 Light Engine with typical 1,280 lumens output at 4000K CCT.

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