





# **GENESIS 8**

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## Job Information Project Name Type Location Quantity Date

## 8" High Performance Commercial LED Recessed Series Recessed Downlighting

### **Description**

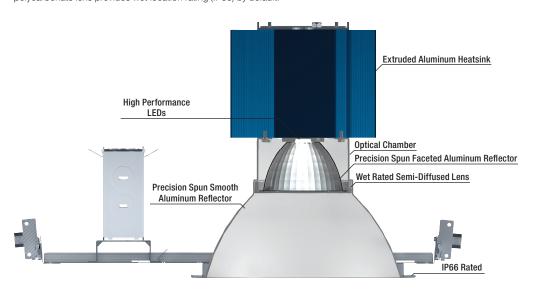
This fixture is a 8" high performance commercial recessed downlight, combining 90 CRI standard high power LEDs, dimmable driver and high reflectivity spun aluminum reflector. Key features are best in class optical control, easy to access field changeable optics, wet location rated IP66 construction and screw operated vertical adjustment.

#### **Kev Features:**

Upper optical chamber: Field changeable precision spun faceted aluminum reflector. Available beam angles (17 / 27 / 38 / 55). Optical chamber is sealed by gasketed twist and lock semi-diffuse polycarbonate lens providing wet location rating (IP66) by

Lower optics: Optical chamber is constructed with precision spun smooth aluminum reflector. Reflector is self flanged parabolic shape providing high angle cut-off and visual comfort. Available in semi-specular, specular and painted finishes.

Construction: Reflector is mechanically fastened to heat sink and has screw operated vertical adjustment to ensure secure, safe mechanical sandwich with ceiling material. Compatible with ceiling thicknesses from 1/s" to 3". Passively cooled extruded aluminum heat sink prolongs LED life by ensuring thermal dissipation. Gasketed trim and twist and lock semi-diffuse polycarbonate lens provides wet location rating (IP66) by default.





FIXTURE SPECIFICATIONS			
Aperture	8" (203mm)		
Application	Commercial Recessed		
Approved Location	Wet		
Auxiliary Output	12V@40mA Option*		
Beam Angles	17 / 27 / 38 / 55		
Certification	cETLus		
CRI	90		
Dimming	1% (Standard)*		
Emergency Backup	1000 lm for 90 min		
Hole Cut Size	8½" (216mm)		
IC Rating	@ 3500 lm or below		
Lumen Maintenance	70% @ 50,000 Hrs		
Lumens	Up to 9000 @ 90 CRI		
Lumens per Watt	Typical 80		
	New Construction		
Mounting Type	Remodel		
	Architectural		
Multi-Volt	120-277V w/IC Rated		
Power	12-110W		
Power Factor	> 0.9 (Standard)		
Power Supply Type	Constant Current		
Reflector Type	Parabolic		
Technology	Chip on board LED		
THD	<20%		
TM-30 Annex E	P2 / V- / F3		
Trim Outer Diameter	81/8" (225mm)		
Voltages	120 / 277 / 347		
Warranty	7 Years		

<sup>\*</sup> Refer to "LED Driver Options" for more details.

### **Ordering Guide**



#### **Mounting Frame**

Constructed of 22ga galvanized steel for optimum rigidity. Accommodates up to 3" ceiling thicknesses. Reflector firmly held in place through twist and lock mechanism. Hanger bars installed on short side.

#### **Junction Box**

Listed for through branch circuit wiring. Maximum of eight, 12AWG 90°C branch-circuit connections (four in and four out). Six ½" knockouts with true pry-out slots and four knockouts with Romex® cable clamp. Ground wire is provided on J-Box. Block connectors provided for 0-10V wiring.

## Hanger Bars – New Construction

Rigid hanger bars extend up to 25" (635mm). Score lines on the hanger bars allow for tool-less shortening down to 12" (305mm). Built-in line-up foot allows for accurate housing height during installation. Integrated T-bar clips easily snap onto T-bars.

#### Hanger Bars - Architectural

#### **C-Channel**

Architectural frame bracket accepts C-Channel and EMT conduit. Vertically adjustable.

#### **LED Characteristics**

Fixed CCT high power chips maintain uniform intensity with a typical 90+ CRI. Also available with White Tunable (2700 K - 5000 K).

#### Control

Multiple dimming and control options available, from traditional 0-10V for 1% dimming to fully wireless dimming and tunable white control with our OnCloud solution powered by WiZ. Dimming controls include OnCloud, 0-10V, Lutron EcoSystem, Casambi, DALI, DMX and Encelium, for a full list with more details refer to the "LED Driver Options" table. Auxiliary output option available gives the freedom to power 3rd party devices for extra control. Consult factory for compatible dimmers.

#### **System Protection**

Integral thermal protection provided to avoid overheating or improper installations. Will disconnect if insulation

is detected. Insulation must maintain 3" (76mm) clearance from top or sides.

#### Electrical

Junction box mounted for ease of maintenance, constant current LED driver with a power factor above 0.9 and THD below 20% standard ensures high efficiency and low systemic harmonic distortion. Class 2 construction. See LED Driver Options for more specific details.

#### Reflector

Constructed of spun aluminum, the reflector provides precision distribution of light with low glare.

#### **Thermal Performance**

Extruded aluminum heat sink ensures optimal heat dissipation and LED life.

#### **LED Optics**

Integrated soft lens provides visual comfort.

#### **Environment**

Suitable for use in wet locations.

#### Warranty

7-Year warranty.



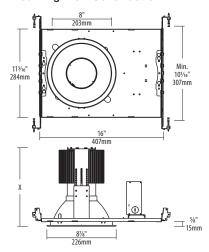
## **LED Driver Options**

Driver	Maximum Lumen Output		Dimming	Notes	
Dilvei	120/277V	347V	Dillilling	Notes	
(S) Standard	9000 lm	N/A	10% TRIAC/ELV   1% 0-10V	TRIAC/ELV only available at3500 lm or below	
(B) -40°C	8000 lm	9000 lm	1% 0-10V	Low Temperature Driver	
(L) Lutron EcoSystem	4000 lm	N/A	1% EcoSystem	Hi-lume 1% EcoSystem w/Soft-on, Fade-to-Black	
(Q) Casambi Integrated*	4000 lm	4000 lm	1% Casambi Module	Casambi Wireless Module included	
(D) DALI*	8000 lm	8000 lm	1% DALI	Dali 2.0 rated to -40°C	
(M) DMX	5000 lm	N/A	0.1% DMX/RDM	Rated to -40°C	
(0) 0-10V w/AUX	9000 lm	9000 lm	1% 0-10V	With 12VDC 40mA Max. Auxiliary output	
(E) Encelium Integrated	9000 lm	9000 lm	1% Encelium	Encelium Wireless Light Management System	
(T) Lutron T-series*	4000 lm	N/A	1% T-Series 2-Channel	T-Series 2-Channel Tunable White 1%	
(K) Tunable White Dual 0-10V*	4000 lm	N/A	0.1% Dual 0-10V	2 Channels isolated 0-10V control	
(W) OnCloud Enabled*	4000 lm	N/A	0.1% OnCloud Wi-Fi	OnCloud tunable white Wi-Fi control	
(U) Lutron Athena*	9000 lm	9000 lm	1% 0-10V	Lutron Athena Tunable White	

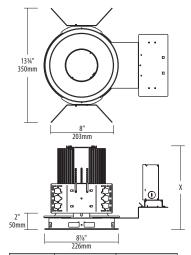
<sup>\*</sup> Tunable White capable driver.

## **Technical Drawings**

#### **Mounting: New Construction**

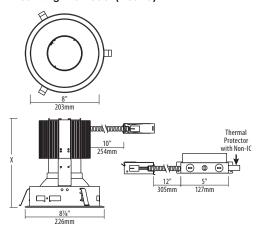


#### **Mounting: Architectural C-Channel Brackets**



	Medium Heatsink	Large Heatsink
HEIGHT (X)	81/4" (210mm)	10" (254mm) (Shown)

#### Mounting: Remodel (Round)



#### Notes:

- <sup>1</sup> Delivered lumens provided are based on 4000 K @ 90CRI with wide reflector.
- <sup>2</sup> 4000 lm configurations and above available with 0-10V dimming only.
- <sup>3</sup> Above ceiling access required.
- <sup>4</sup> Additional Emergency Back-up not available.
- <sup>5</sup> Ships in 3 weeks or less.
- <sup>6</sup> Only available with IC Rated Light Outputs.
- 7 Not available in 347V.
- 8 Only 0-10V dimming available if "S" Driver selected.
- <sup>9</sup> Refer to "LED Driver Options" table for maximum lumen output per driver type.
- <sup>10</sup> White Tunable control is available only with "W", "K", "T", "D", "Q" and "U" drivers.
- 11 Medium heatsink.

- 12 Large heatsink.
- <sup>13</sup> Maximum 6000 Im light output with medium heatsink only.
- <sup>14</sup> Compatible with Casambi, Encelium and Lutron Athena node (provided by others).
- <sup>15</sup> Compatible with Dali2 Type 8.

Quick Ship option is available on orders of 75 pieces or less, and will ship within 7 business

days. Options must be selected from Quick Ship section to qualify.

For additional options please consult your A-Line representative. All trademarks are the property of their respective owners. Due to our continued efforts to improve our products, product specifications are subject to change without notice.

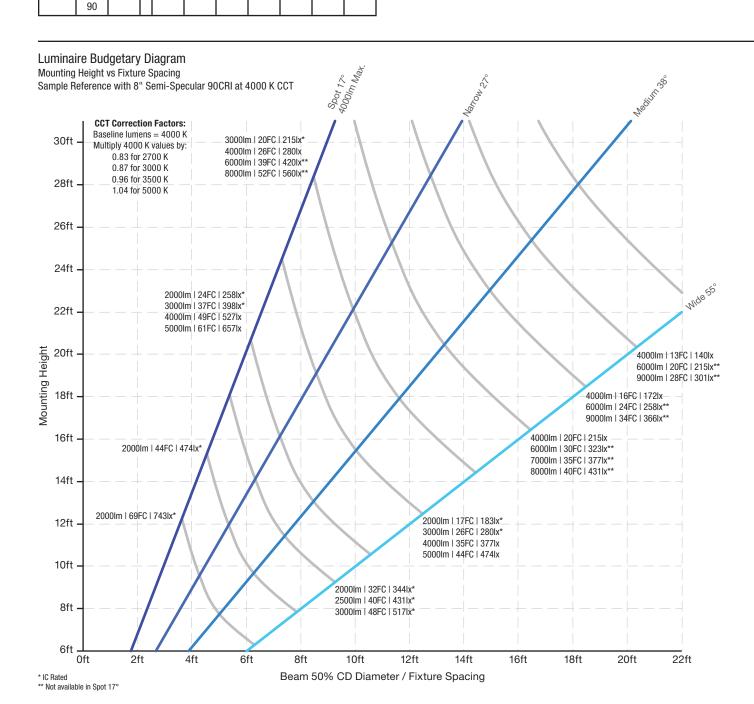
### Certified

Configurations certified under Energy Star

#### l <sup>Light</sup> Output l Color Temp. l <sup>LE</sup>D Driver GEN08-IS 27 S HC S Χ R 30 N SW В N 2 IM 35 M WH L 2 Α 30 40 W BK Q С 35 HB 0 40 HW Ε 50 60 70 80

#### Wattage

Light Output	Wattage
IA: 1000 lm	11 W
IB: 1200 lm	13 W
IC: 1500 lm	19 W
IS: 2000 lm	22 W
IL: 2500 lm	26 W
IM: 3000 lm	32 W
30:3000 lm	35 W
35: 3500 lm	42 W
40: 4000 lm	45 W
50 : 5000 lm	58 W
60:6000 lm	78 W
70:7000 lm	83 W
80:8000 lm	93 W
90:9000 lm	110 W



To use Liteline's Luminaire Budgetary Diagram:

- 1. Determine mounting height above work surface for application on Y axis.
- 2. Determine appropriate spacing by comparing beam cone size on X axis.
- 3. Select appropriate beam angle and lumen package from slope line at intersection point.

### **Photometry**

#### **CCT Correction Factors :**

Baseline lumens = 4000 K

Multiply 4000 K lumen values by:

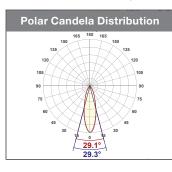
0.83 for 2700 K

0.87 for 3000 K

0.96 for 3500 K

1.04 for 5000 K

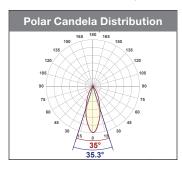
GEN08-9040-NHC×××××: 8" GENESIS, 9000 Im @ 4000 K with Narrow beam spread and semi-specular reflector.



Beam Details				
0,00				
D	Lux	FC	L	W
<b>D</b> 4'	<b>Lux</b> 15703	<b>FC</b> 1459	<b>L</b> 2.1'	<b>W</b> 2.1'
4'	15703	1459	2.1'	2.1'
4' 8'	15703 3926	1459 365	2.1' 4.2'	2.1' 4.2'

Zon	al Lumen Sı	ummary
Zone	Lumens	% Luminaire
0-30	7215	83.73%
0-40	8387	97.33%
0-60	8568	99.43%
60-90	9.88	0.11%
70-100	8.92	0.10%
90-120	9.70	0.11%
0-90	9689	99.55%
90-180	38.4	0.45%
0-180	8617	100%

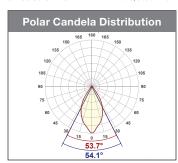
 $\textbf{GEN08-9040-MHC} \\ \times \times \times \times \times \text{: 8" GENESIS, } 9000 \text{ Im } @ 4000 \text{ K with Medium beam spread and semi-specular reflector.}$ 



Beam Details				
0°/   D				
D	Lux	FC	L	W
<b>D</b> 4'	<b>Lux</b> 12572	<b>FC</b> 1168	<b>L</b> 2.5'	<b>W</b> 2.5'
4'	12572	1168	2.5'	2.5'
4' 8'	12572 3143	1168 292	2.5' 5.1'	2.5' 5.1'

Zon	al Lumen Sı	ummary
Zone	Lumens	% Luminaire
0-30	7030	82.23%
0-40	8278	96.83%
0-60	8498	99.40%
60-90	11.0	0.13%
70-100	9.82	0.11%
90-120	10.6	0.12%
0-90	8509	99.53%
90-180	40.0	0.47%
0-180	8549	100%

GEN08-9040-WHC×××××: 8" GENESIS, 9000 Im @ 4000 K with Wide beam spread and semi specular reflector.



	0.5				
	D	Lux	FC	L	w
_	4'	7629	709	4.1'	4.1'
	8'	1907	177	8.1'	8.1'
	12'	848	79	12.2'	12.2'
	16'	477	44	16.3'	16.3'
	20'	305	28	20.3	20.31

Beam Details

Zonal Lumen Summary				
Zone	Lumens	% Luminaire		
0-30	6206	69.33%		
0-40	8041	89.82%		
0-60	8716	97.36%		
60-90	192	2.14%		
70-100	93.2	1.04%		
90-120	12.1	0.14%		
0-90	8907	99.50%		
90-180	44.8	0.50%		
0-180	8952	100%		