



## Product Features

Helios Generation 2 Series Recessed Downlight represents the new generation of the ALLURE line, bringing the industry's best performance small-aperture downlights. Trim, optics, and aiming options provide the highest quality of light possible, offering uncompromised performance, finishes, and serviceability. Base light engine offers selectable wattage (5~19W) with 90CRI maintained across 2700K~4000K. A Dim-to-Warm option is available, providing 95CRI over a 3000K~2000K range. Heatsink and trim made from aluminum extruded profile; with a round finish for downlighting or wall wash application, >90 CRI for fixed CCT, >95 CRI for Dim-to-Warm; cULus listed for damp location standard.

## Technical Specifications

INPUT VOLTAGE	120-277VAC
FREQUENCY	50/60hz
LUMEN	500 ~ 1,200LM
WATTAGE	5 / 8 / 10 / 13 / 16 / 19W
LPW	67LPW Avg.
COLOR TEMPERATURE	2700K / 3000K / 3500K / 4000K / 3000K~2000K Dim-to-Warm
COLOR RENDERING INDEX	>90 (Static CCT), >95 (Dim-to-Warm)
DISTRIBUTION	30° / 50° Downlight
IP RATING	Damp Location / Wet Location with Optional Waterproof Lens
LIFE SPAN	>50,000 Hours
DIMMING	0-10v 1% Dimming and Triac Dimming (2-in-1)



## HELIOS G2 SERIES | 2" RECESSED

### SUBMITTAL WORKSHEET

Order Code Example: SERIES / LIGHT ENGINE / CCT / BEAM ANGLE / LENS HOLDER

HL2-G2 - blank - 927 - 30 - blank

A B C D E

Order Code Example: INPUT

blank

F



Light Engine



Optics



30° Vertical Tilt  
360° Horizontal  
Adjustable Lens Holder

#### A SERIES (CHOOSE ONE)

HL2-G2 Helios Gen 2 Series 2" Recessed Downlight

#### B LIGHT ENGINE (CHOOSE ONE)

CODE	POWER	LPW
blank <b>QS</b>	Field Selectable 5W / 8W / 10W / 13W / 16W / 19W	67 Avg.

#### C CCT (CHOOSE ONE)

CODE	CCT
927 <b>QS</b>	90CRI, 2700K
930 <b>QS</b>	90CRI, 3000K
935 <b>QS</b>	90CRI, 3500K
940 <b>QS</b>	90CRI, 4000K
DW <b>QS</b>	95CRI, 3000K-2000K Dim-to-Warm (Up to 13W / 840LM)

#### D BEAM ANGLE (CHOOSE ONE)

CODE	BEAM ANGLE
30 <b>QS</b>	30°
50 <b>QS</b>	50°

#### E LENS HOLDER

blank **QS** 30° Vertical Tilt Angle and 360° Horizontal Adjustment



#### F INPUT

CODE	INPUT
blank	0-10V, 1% Dimming and Triac Dimming (2-in-1)

## HELIOS G2 SERIES | 2" RECESSED

### SUBMITTAL WORKSHEET

Order Code Example: FLANGE FINISH / TRIM / OPTIC MEDIA

**BK** - **BK** - **GDK-WH**

**G** **H** **I**

Order Code Example: MOUNTING / EMB

**HL2-NCH** - **EMB-H08170**

**J** **K**



#### **G** FLANGE FINISH (CHOOSE ONE)

**BK** **QS** Black  
**WH** **QS** White

#### **H** TRIM (CHOOSE ONE)

**BK** **QS** Black  
**WH** **QS** White  
**GD** **QS** Gold  
**CH** **QS** Chrome



#### **I** OPTIC MEDIA (CHOOSE ONE - OPTIONAL)

**blank** **QS** None  
**HB** **QS** Honeycomb Louver  
**WR** **QS** Wet Rated Waterproof Lens

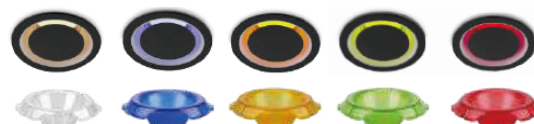
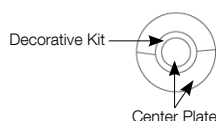
**BDK-\_\_** **QS** **Blue** Decorative Kit with **BK: Black** or **WH: White** Center Plate  
**GDK-\_\_** **QS** **Green** Decorative Kit with **BK: Black** or **WH: White** Center Plate  
**RDK-\_\_** **QS** **Red** Decorative Kit with **BK: Black** or **WH: White** Center Plate  
**TDK-\_\_** **QS** **Transparent** Decorative Kit with **BK: Black** or **WH: White** Center Plate  
**YDK-\_\_** **QS** **Yellow** Decorative Kit with **BK: Black** or **WH: White** Center Plate



**HB**  
Honeycomb



**WR**  
Wet Rated Waterproof Lens



Decorative Kit

#### **J** MOUNTING (CHOOSE ONE)

**RM\*** **QS** Retrofit/Remodel Kit  
**HL2-NCH\*** **QS** New Construction Frame Kit (Non-IC)  
**HL2-ICH\*** **QS** New Construction IC-Rated Frame Kit

\*See page 6 for spec.

#### **K** EMERGENCY BATTERY

**EMB-H08170** **QS** 90-Minute Self-Diagnostic Emergency Battery 8W 100-347VAC Input 170VDC Output  
**EMB-H18170** **QS** 90-Minute Self-Diagnostic Emergency Battery 18W 100-347VAC Input 170VDC Output

\*See page 8 for spec.

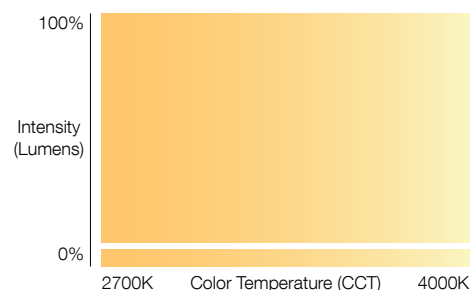
## HELIOS G2 SERIES | 2" RECESSED

### CCT

#### Fixed CCT

2700K, 3000K, 3500K, 4000K

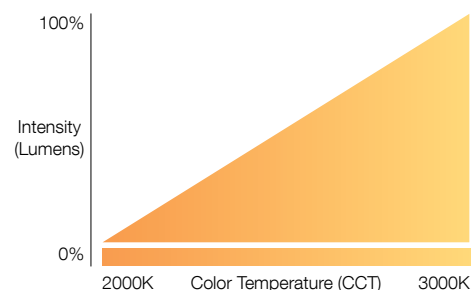
90+ CRI 



#### Dim-to-Warm

3000K~2000K

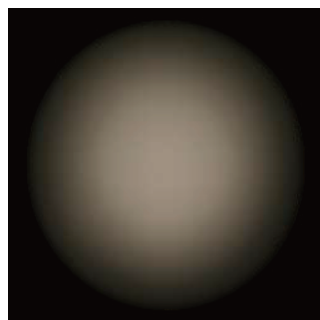
95+ CRI 



### LENS

#### Standard Lens

High efficiency reflector with balanced glare control and light distribution.



15° / 24° / 36° / 60°





## HELIOS G2 SERIES | 2" RECESSED

### DIMENSIONS



Trimmed with Flange

#### HL2-G2 Light Engine Summary

**LED Chip:** Static: CREE. Dim-to-Warm: Bridgelux.

**Power:** 5W / 8W / 10W / 13W / 16W / 19W

**Quality:** >90 CRI for fixed CCT, >95 CRI for Dim-to-Warm

**CCT:** Static: 2700K / 3000K / 3500K / 4000K. Dim-to-Warm: 3000K~2000K

**Input:** 120-277VAC

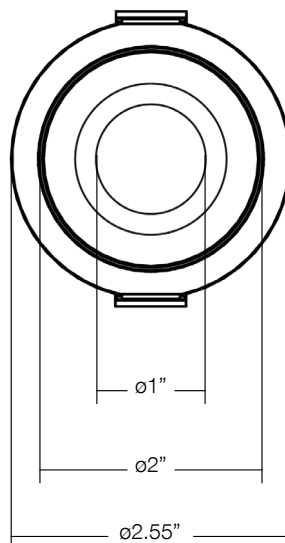
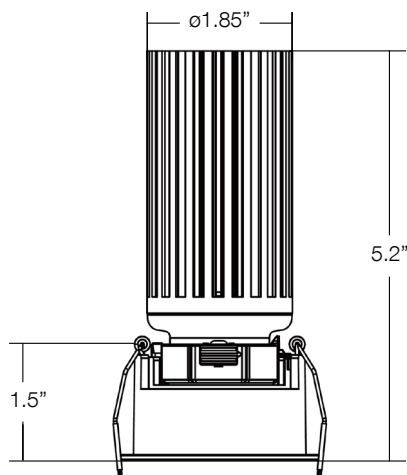
**Dimming:** 0-10v 1% Dimming and Triac Dimming (2-in-1)

**Power Factor:** Greater than 0.9

**Ambient Operating Temperature:** -20°C to 40°C

**Lifetime:** 50,000 hours at 70% lumen maintenance

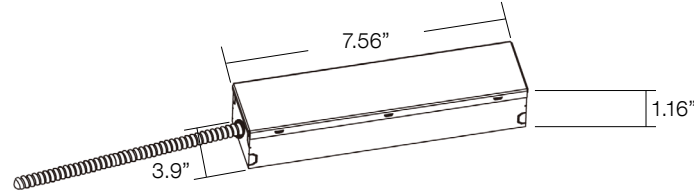
**Listing:** cULus Damp Location / Wet Location with Optional Waterproof Lens.



## HELIOS G2 SERIES | 2" RECESSED

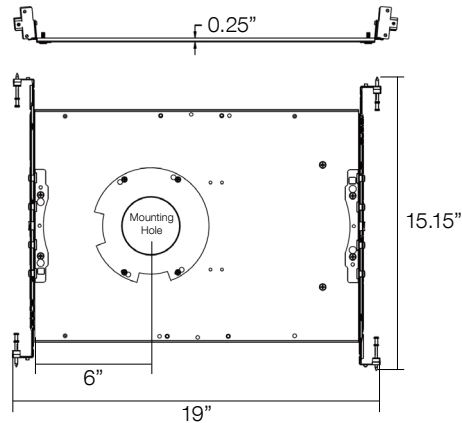
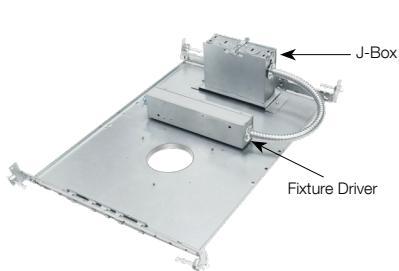
### DIMENSIONS - HOUSING

**RM** - No Housing, Remote Mount Driver with Enclosure

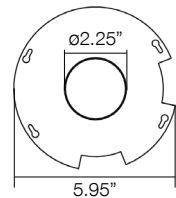


**HL2-NCH** - New Construction Frame Kit (Non-IC)

Standard Non-IC mounting frame.  
Wiring junction box, fixture driver box rest on the frame kit by magnet when installed as shown below.

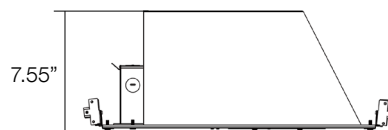
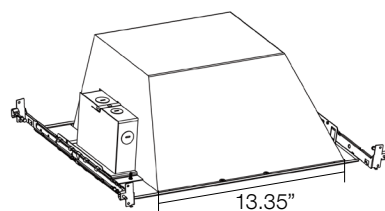
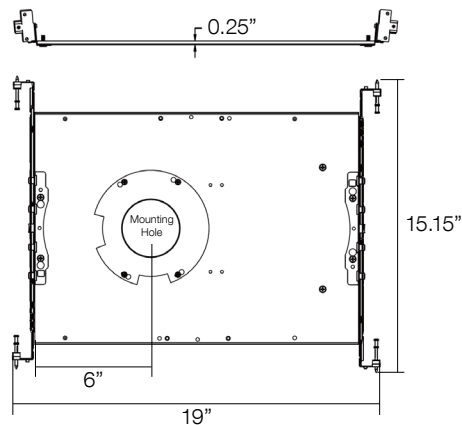
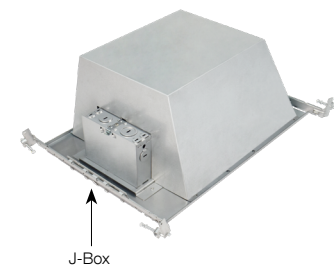


Mounting Hole



**HL2-ICH** - New Construction IC-Rated Frame Kit

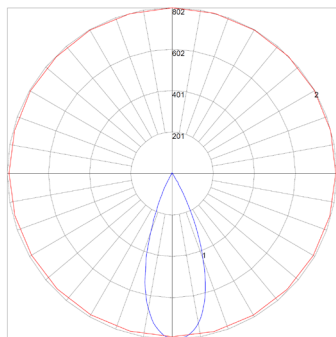
IC-Rated housing frame kit allows direct contact with insulation.



## HELIOS G2 SERIES | 2" RECESSED

### PERFORMANCE

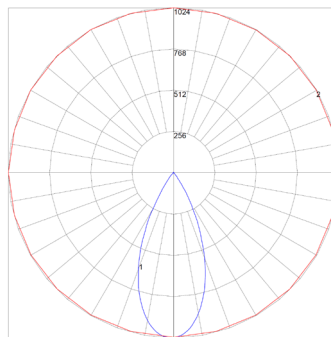
IES: HL2-G2 @ 5W 90CRI 3000K 30°



Zone	Lumen	Luminaire%
0-30	310	93.00
0-40	325	97.50
0-60	328	98.50
0-90	328	98.80
0-180	332	100

Lumen: 333  
 Input Watts: 5 W  
 Efficacy: 66 LPW

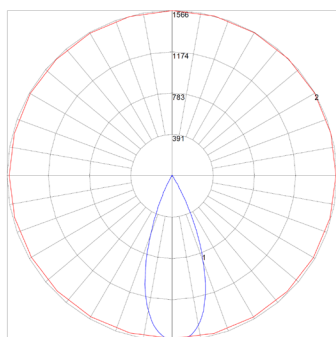
IES: HL2-G2 @ 8W 90CRI 3000K 50°



Zone	Lumen	Luminaire%
0-30	490	85.10
0-40	553	96.10
0-60	566	98.30
0-90	568	98.80
0-180	5763	100

Lumen: 576  
 Input Watts: 8 W  
 Efficacy: 72 LPW

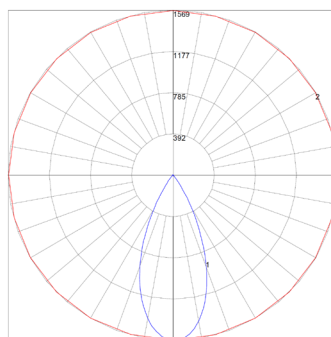
IES: HL2-G2 @ 10W 90CRI 3000K 30°



Zone	Lumen	Luminaire%
0-30	605	92.90
0-40	634	97.40
0-60	641	98.50
0-90	643	98.70
0-180	651	100

Lumen: 651  
 Input Watts: 10 W  
 Efficacy: 65 LPW

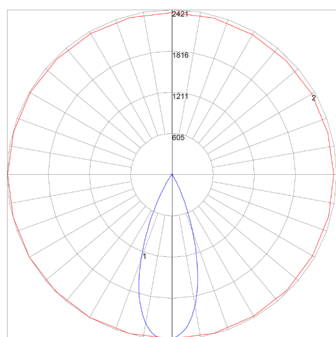
IES: HL2-G2 @ 13W 90CRI 3000K 50°



Zone	Lumen	Luminaire%
0-30	748	85.10
0-40	844	96.00
0-60	864	98.30
0-90	868	98.70
0-180	879	100

Lumen: 879  
 Input Watts: 13 W  
 Efficacy: 67 LPW

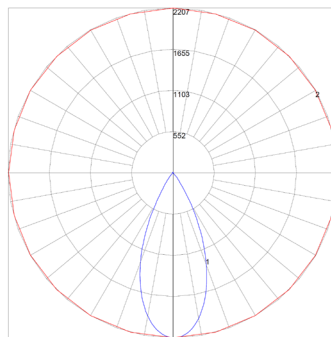
IES: HL2-G2 @ 16W 90CRI 3000K 30°



Zone	Lumen	Luminaire%
0-30	945	92.40
0-40	995	97.30
0-60	1006	98.40
0-90	1009	98.70
0-180	1023	100

Lumen: 1023  
 Input Watts: 16 W  
 Efficacy: 64 LPW

IES: HL2-G2 @ 19W 90CRI 3000K 50°



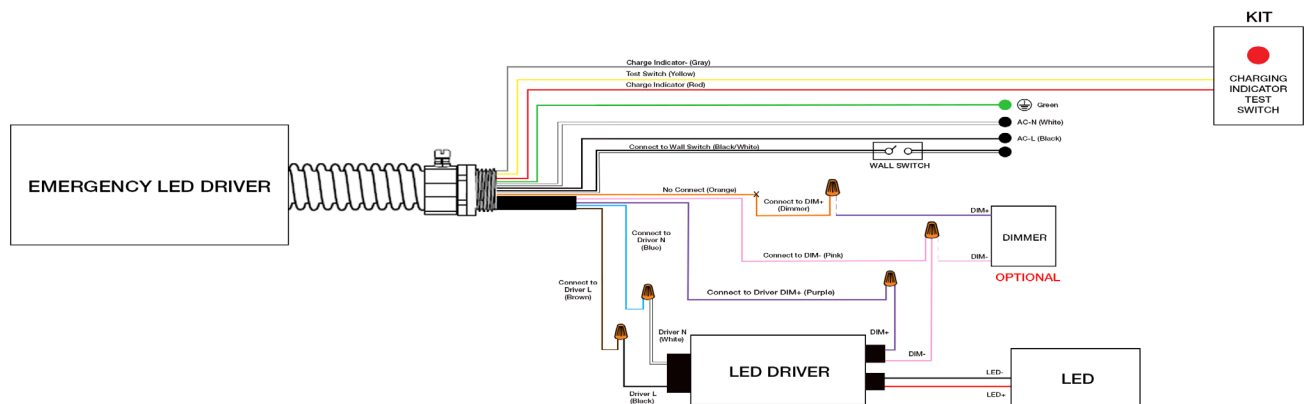
Zone	Lumen	Luminaire%
0-30	1051	85.00
0-40	1188	96.00
0-60	1215	98.30
0-90	1221	98.70
0-180	1237	100

Lumen: 1237  
 Input Watts: 19 W  
 Efficacy: 65 LPW

## HELIOS G2 SERIES | 2" RECESSED

### EMB SPEC

Model	Battery Capacity	Input	Output	Output Power	Operating Temp	Installation
EMB-H08170	90mins	100-347VAC	170VDC	8W	0°C ~ 50°C 32°F ~ 122°C	Field Install
EMB-H18170	90mins	100-347VAC	170VDC	18W	0°C ~ 50°C 32°F ~ 122°C	Field Install



## HELIOS G2 SERIES | 2" RECESSED

### INSTALLATION

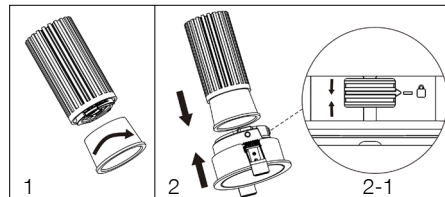
#### Assemble Trim, Lens, and LED Engine

##### 1. Assemble Lens and LED Engine:

Attached together, and secure them tight with clockwise direction.

##### 2. Assemble Lens and Trim:

Slide the button downward in the trim direction to combine the lens and trim. Once aligned, slide it upward to lock into place (See 2-1).



#### New Construction Applications

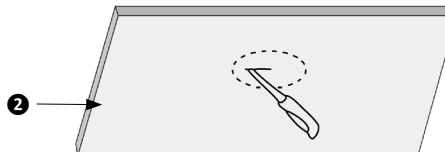
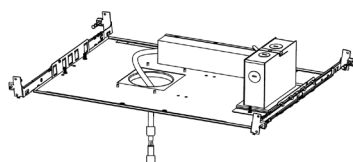
**Step 1:** Install the fixture in the ceiling using the two hanger bars **1** (Supplied) . Mount the fixture in the ceiling so that the weight of the fixture is supported by the hanger bars, mounting channel, bar, and/or hanger wires secured to the building structure. Drill a ø2.30" hole in drywall **2**.

**Step 2:** Open the J-box **3** **4**, connect the power supply and ground wire according to the wiring diagram. (Only if the driver has 0-10V dimming, the dimming wire needs to be connected).

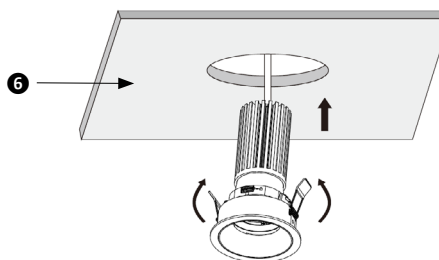
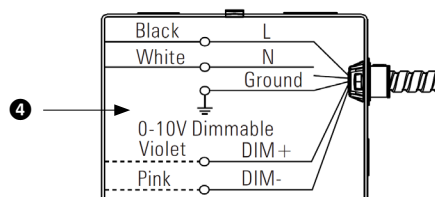
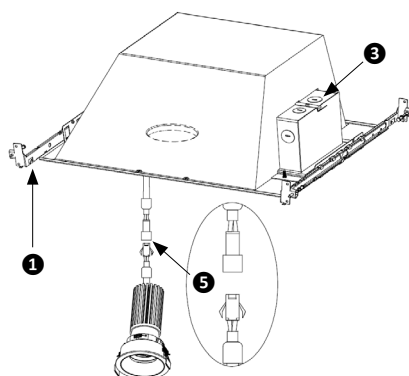
**Step 3:** Connect LED downlight with housing using provided quick-connectors **5**.

**Step 4:** Complete installation by carefully tighten the spring clips through the ceiling opening **6**.

##### Frame Kit (NON-IC)



##### IC-Rated Frame Kit



##### Mounting Space Required

Housing Insulation Kit (IC)

Min. 13.8" x 19.33" x 7.33"

Max. 24" x 19.33" x 7.33"

Frame Kit (Non-IC)

Min. 13.8" x 19.33" x 6"

Max. 24" x 19.33" x 6"

## HELIOS G2 SERIES | 2" RECESSED

### INSTALLATION

#### Remodel Applications

**Step 1:** Drill a  $\phi 2.30"$  hole in the ceiling.

**Step 2:** Plug AC power cord into the quick connector A. (Only if the driver has 0-10V dimming, the quick connector B needs to be connected.) Plug the male connector with the female connector. Connect the ground wire **2**.

**Step 3:** Connect LED downlight with housing using provided quick-connectors **3**.

**Step 4:** The driver box is fixed to the ceiling by magnetic force of a magnet **4**.

**Step 5:** Complete installation by carefully tighten the spring clips through the ceiling opening **5**.

