



**Product Features**

Helios Series 3" 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 round and square options 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	475 ~ 1,700LM
WATTAGE	5 / 8 / 10 / 13 / 16 / 19W
LPW	93LPW Avg.
COLOR TEMPERATURE	2700K / 3000K / 3500K / 4000K / 3000K-2000K Dim-to-Warm
COLOR RENDERING INDEX	>90 (Static CCT), >95 (Dim-to-Warm)
DISTRIBUTION	15° / 24° / 36° / 60° - Low Glare Lens 18° / 24° / 38° / 50°
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 SERIES | 3" TRIMLESS RECESSED

### SUBMITTAL WORKSHEET

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

HL3-T - blank - 930 - 15 - TA

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)

**HL3-T** Helios Series 3" Trimless Recessed Downlight

#### B LIGHT ENGINE

CODE	POWER	LPW
<b>blank</b> <b>QS</b>	Field Selectable 5W / 8W / 10W / 13W / 16W / 19W	93 Avg.

#### C CCT (CHOOSE ONE)

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

#### D BEAM ANGLE (CHOOSE ONE)

CODE	BEAM ANGLE	LOW GLARE LENS
<b>15</b> <b>QS</b>	15°	<b>LG18</b> <b>QS</b> 18°
<b>24</b> <b>QS</b>	24°	<b>LG24</b> <b>QS</b> 24°
<b>36</b> <b>QS</b>	36°	<b>LG38</b> <b>QS</b> 38°
<b>60</b> <b>QS</b>	60°	<b>LG50</b> <b>QS</b> 50°

#### E LENS HOLDER (CHOOSE ONE)

<b>HA</b> <b>QS</b>	360° Horizontal Adjustment
<b>TA</b> <b>QS</b>	30° Vertical Tilt Angle and 360° Horizontal Adjustment



#### F INPUT

**blank** **QS** 0-10V, 1% Dimming and Triac Dimming (2-in-1)

## HELIOS SERIES | 3" TRIMLESS RECESSED

### SUBMITTAL WORKSHEET

Order Code Example: TRIM

R-BK

G

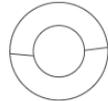


Trim

#### G TRIM (CHOOSE ONE)

##### ROUND

R-BK	QS	Black
R-WH	QS	White
R-GD	QS	Gold
R-CH	QS	Chrome



\*Optional Honeycomb or Wet-Rated Waterproof Lens. Select on Page 4.

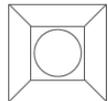
##### ROUND WALL WASH

RW-BK	QS	Black
RW-WH	QS	White



##### SQUARE

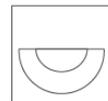
S-BK	QS	Black
S-WH	QS	White
S-GD	QS	Gold
S-CH	QS	Chrome



\*Optional Honeycomb or Wet-Rated Waterproof Lens. Select on Page 4.

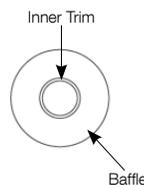
##### SQUARE WALL WASH

SW-BK	QS	Black
SW-WH	QS	White



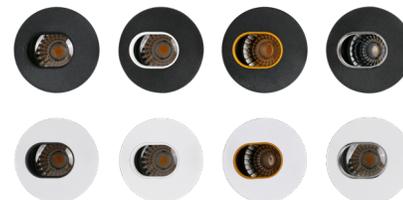
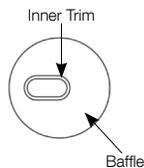
##### PINHOLE ROUND

PR-BK-BK	QS	<b>Black</b> Inner Trim / <b>Black</b> Baffle
PR-WH-BK	QS	<b>White</b> Inner Trim / <b>Black</b> Baffle
PR-GD-BK	QS	<b>Gold</b> Inner Trim / <b>Black</b> Baffle
PR-CH-BK	QS	<b>Chrome</b> Inner Trim / <b>Black</b> Baffle
PR-BK-WH	QS	<b>Black</b> Inner Trim / <b>White</b> Baffle
PR-WH-WH	QS	<b>White</b> Inner Trim / <b>White</b> Baffle
PR-GD-WH	QS	<b>Gold</b> Inner Trim / <b>White</b> Baffle
PR-CH-WH	QS	<b>Chrome</b> Inner Trim / <b>White</b> Baffle



##### PINHOLE OVAL

PO-BK-BK	QS	<b>Black</b> Inner Trim / <b>Black</b> Baffle
PO-WH-BK	QS	<b>White</b> Inner Trim / <b>Black</b> Baffle
PO-GD-BK	QS	<b>Gold</b> Inner Trim / <b>Black</b> Baffle
PO-CH-BK	QS	<b>Chrome</b> Inner Trim / <b>Black</b> Baffle
PO-BK-WH	QS	<b>Black</b> Inner Trim / <b>White</b> Baffle
PO-WH-WH	QS	<b>White</b> Inner Trim / <b>White</b> Baffle
PO-GD-WH	QS	<b>Gold</b> Inner Trim / <b>White</b> Baffle
PO-CH-WH	QS	<b>Chrome</b> Inner Trim / <b>White</b> Baffle



## HELIOS SERIES | 3" TRIMLESS RECESSED

### SUBMITTAL WORKSHEET

Order Code Example: **OPTIC MEDIA**

**BDK-WH**

H



Order Code Example: **MOUNTING / EMB**

**NCH - EMB-H08170**

I

J

### H OPTIC MEDIA (CHOOSE ONE - OPTIONAL)

<b>blank</b>	<b>QS</b>	None	<b>BDK-__**</b>	<b>QS</b>	<b>Blue</b> Decorative Kit with <b>BK: Black</b> or <b>WH: White</b> Center Plate
<b>HB*</b>	<b>QS</b>	Honeycomb Louver	<b>GDK-__**</b>	<b>QS</b>	<b>Green</b> Decorative Kit with <b>BK: Black</b> or <b>WH: White</b> Center Plate
<b>WR*</b>	<b>QS</b>	Wet Rated Round Waterproof Lens	<b>RDK-__**</b>	<b>QS</b>	<b>Red</b> Decorative Kit with <b>BK: Black</b> or <b>WH: White</b> Center Plate
<b>WS*</b>	<b>QS</b>	Wet Rated Square Waterproof Lens	<b>TDK-__**</b>	<b>QS</b>	<b>Transparent</b> Decorative Kit with <b>BK: Black</b> or <b>WH: White</b> Center Plate
			<b>YDK-__**</b>	<b>QS</b>	<b>Yellow</b> Decorative Kit with <b>BK: Black</b> or <b>WH: White</b> Center Plate

\*Compatible with **Round** and **Square** Downlight Trims Only

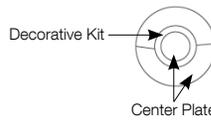
\*\*Compatible with **Round** Trims Only



**HB**  
Honeycomb



**WR/WS**  
Wet Rated Waterproof Lens



**Decorative Kit**  
For **ROUND** Trim Finish Only

### I MOUNTING (CHOOSE ONE)

<b>RM*</b>	<b>QS</b>	Retrofit/Remodel Kit
<b>HL3-NCH*</b>	<b>QS</b>	New Construction Frame Kit (Non-IC)
<b>HL3-ICH*</b>	<b>QS</b>	New Construction IC-Rated Frame Kit

\*See page 8 for spec.

### J EMERGENCY BATTERY

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

\*See page 10 for spec.

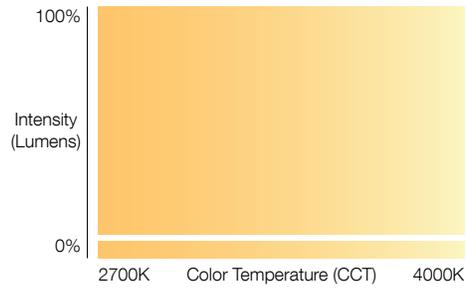
## HELIOS SERIES | 3" TRIMLESS RECESSED

### CCT

#### Fixed CCT

2700K, 3000K, 3500K, 4000K

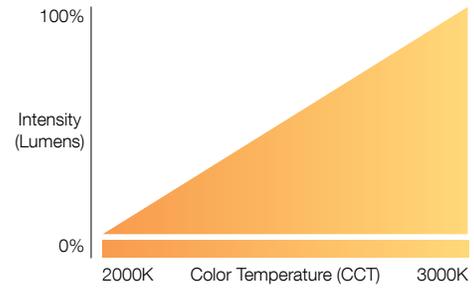
90+ CRI 



#### Dim-to-Warm

3000K~2000K

95+ CRI 



### LENS

#### Standard Lens

High efficiency reflector with balanced glare control and light distribution.



15° / 24° / 36° / 60°



#### Low Glare Lens

Generates a defined cut-off beam without side glare, maximizing anti-glare performance.



18° / 24° / 38° / 50°



## HELIOS SERIES | 3" TRIMLESS RECESSED

### DIMENSIONS



Trimless Spackle-In

#### HL3 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)

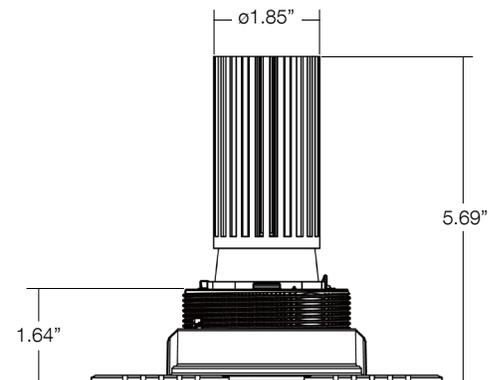
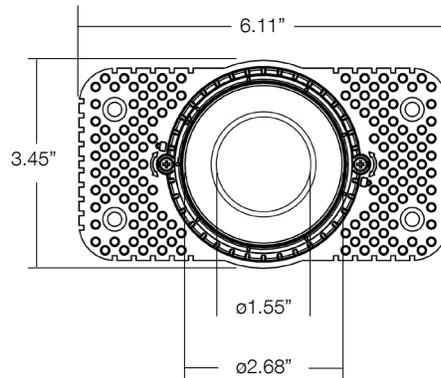
**Power Factor:** Greater than 0.9

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

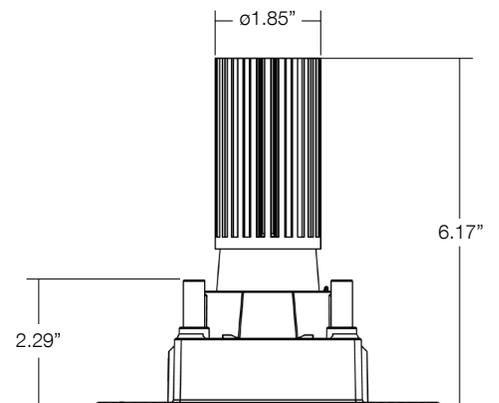
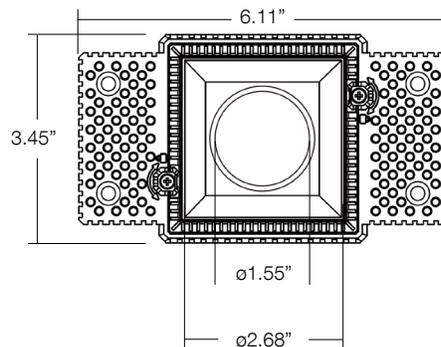
**Lifetime:** 50,000 hours at 70% lumen maintenance

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

#### Round



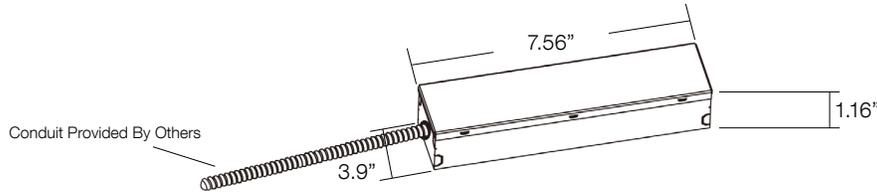
#### Square



## HELIOS SERIES | 3" TRIMLESS RECESSED

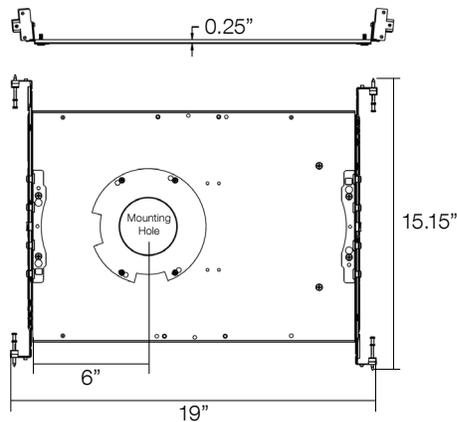
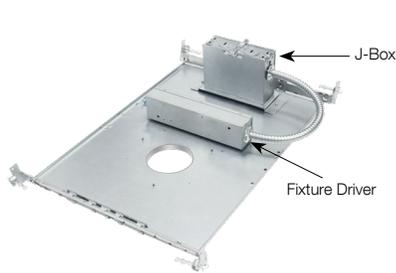
### DIMENSIONS - HOUSING

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

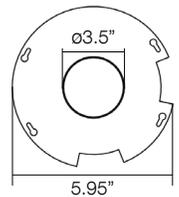


**HL3-NCH** - New Construction Frame Kit (Non-IC)

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

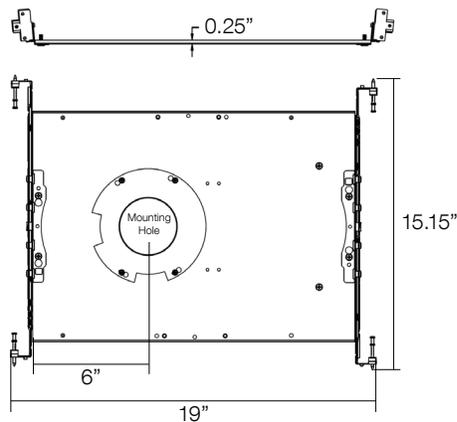
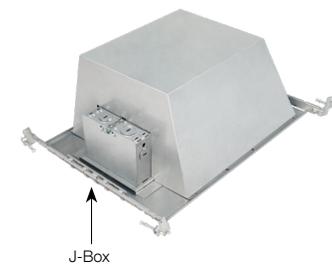


Mounting Hole  
for **Helios 3" Round**

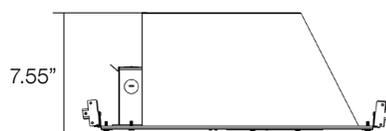
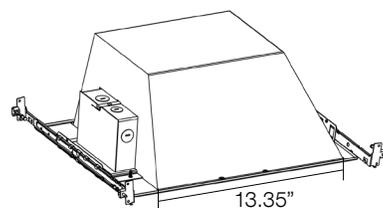
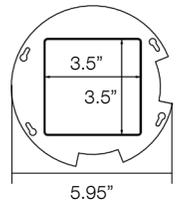


**HL3-ICH** - New Construction IC-Rated Frame Kit

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



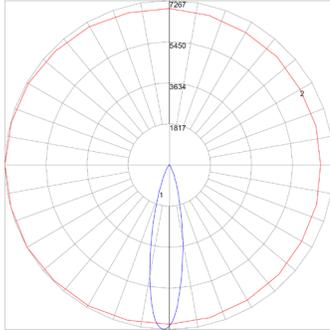
Mounting Hole  
for **Helios 3" Square**



## HELIOS SERIES | 3" TRIMLESS RECESSED

### PERFORMANCE

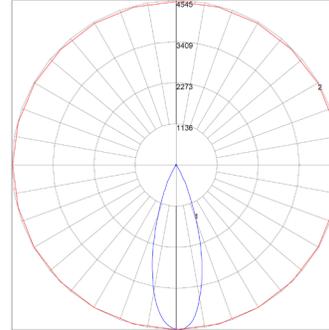
IES: HL3 Round @ 16W 90CRI 3000K 24°



Zone	Lumen	Luminaire%
0-30	1434	94.10
0-40	1492	97.90
0-60	1500	98.50
0-90	1504	98.70
0-180	1525	100

Lumen: 1525  
 Input Watts: 16 W  
 Efficacy: 95 LPW

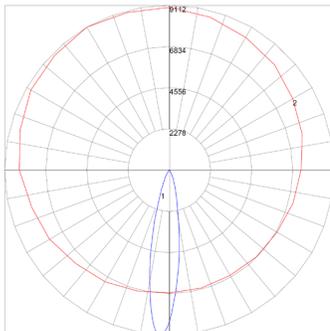
IES: HL3 Round @ 19W 90CRI 2700K 36°



Zone	Lumen	Luminaire%
0-30	1445	92.80
0-40	1496	96.00
0-60	1525	97.90
0-90	1538	98.70
0-180	1558	100

Lumen: 1558  
 Input Watts: 19 W  
 Efficacy: 82 LPW

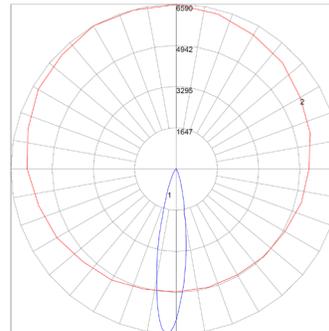
IES: HL3 Round @ 19W 90CRI 3000K 15°



Zone	Lumen	Luminaire%
0-30	1491	93.40
0-40	1562	97.80
0-60	1572	98.40
0-90	1576	98.20
0-180	1597	100

Lumen: 1597  
 Input Watts: 19 W  
 Efficacy: 84 LPW

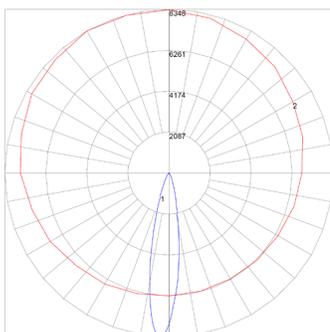
IES: HL3 Square @ 13W 90CRI 3000K 15°



Zone	Lumen	Luminaire%
0-30	1043	94.30
0-40	1079	97.50
0-60	1087	98.30
0-90	1092	98.70
0-180	1107	100

Lumen: 1107  
 Input Watts: 13 W  
 Efficacy: 85 LPW

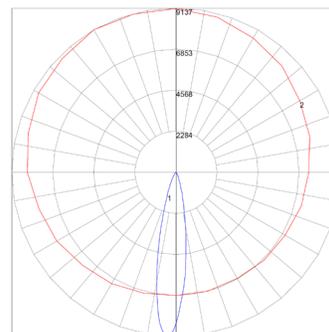
IES: HL3 Square @ 16W 90CRI 3000K 15°



Zone	Lumen	Luminaire%
0-30	1323	94.30
0-40	1367	97.50
0-60	1379	98.30
0-90	1384	98.70
0-180	1403	100

Lumen: 1403  
 Input Watts: 16 W  
 Efficacy: 1403 LPW

IES: HL3 Square @ 19W 90CRI 3000K 15°



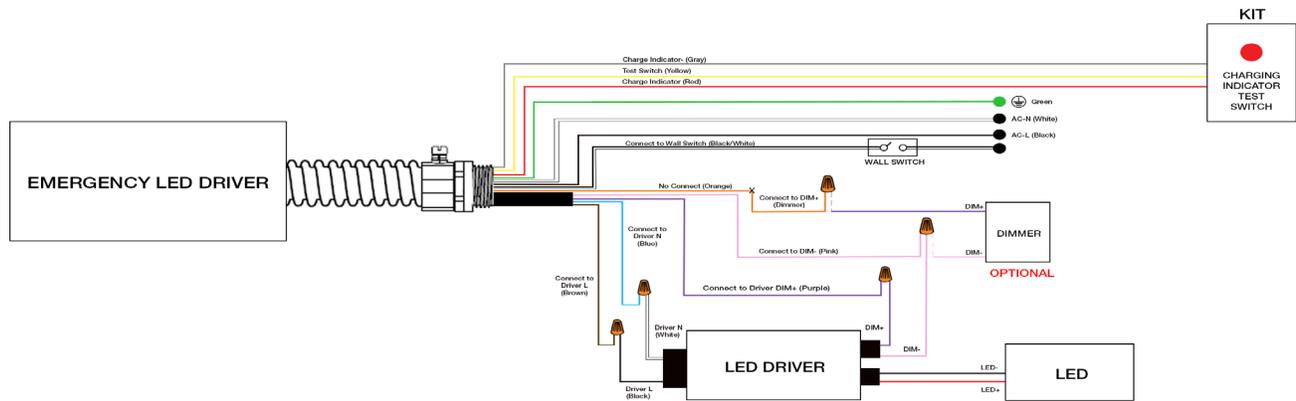
Zone	Lumen	Luminaire%
0-30	1448	94.30
0-40	1497	97.50
0-60	1509	98.30
0-90	1515	98.70
0-180	1536	100

Lumen: 1536  
 Input Watts: 19 W  
 Efficacy: 80 LPW

## HELIOS SERIES | 3" TRIMLESS 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 SERIES | 3" TRIMLESS RECESSED

### INSTALLATION

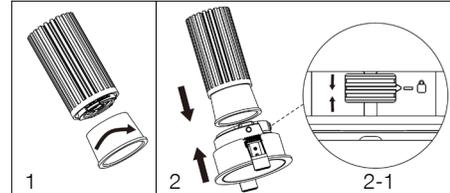
#### Assemble Trim, Lens, and LED Engine

**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).



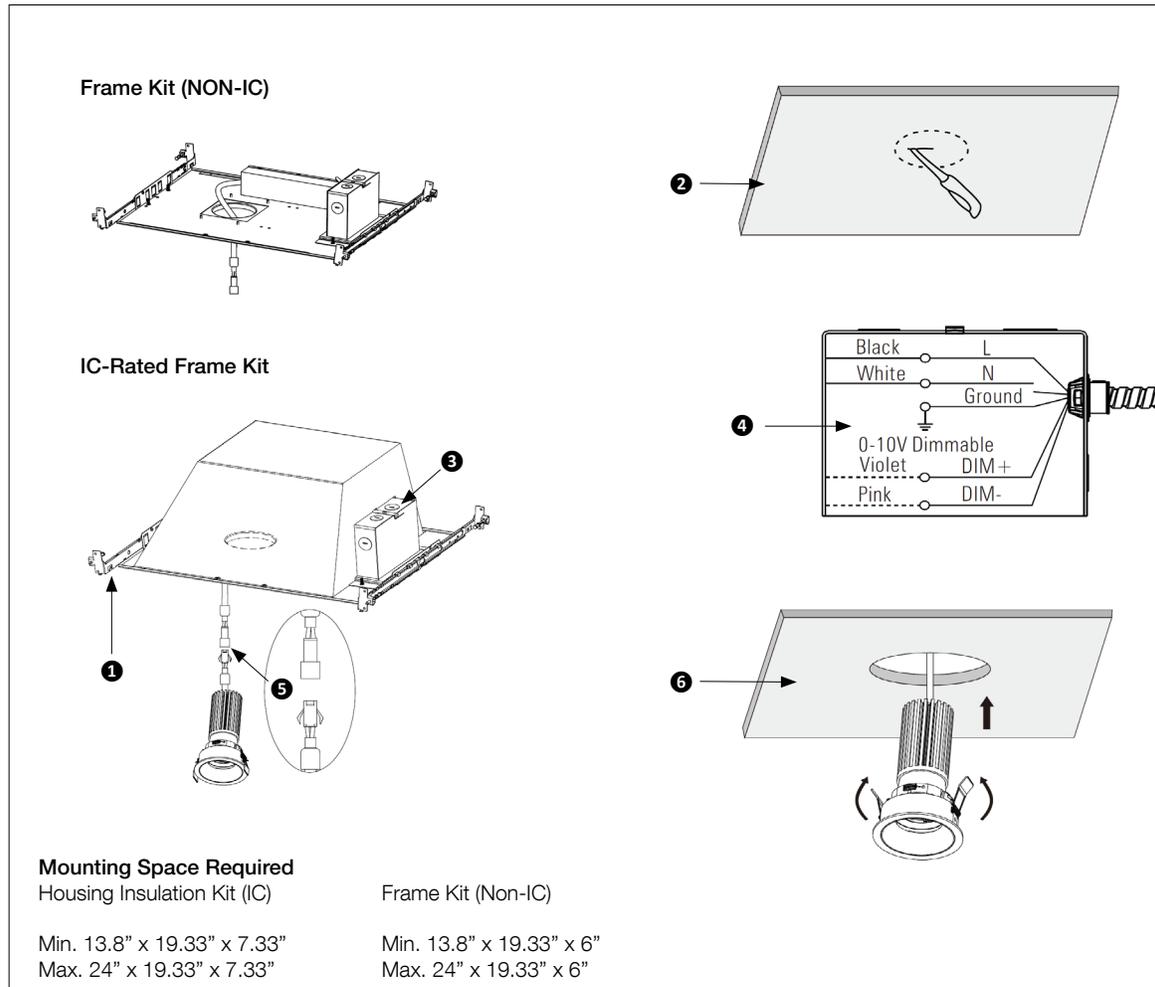
#### New Construction Applications

**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 hole in drywall **2**. A round  $\phi 3.60$ " hole needed for Helios 3" Round Trimless; 3.60" x 3.60" square hole for Helios 3" Square Trimless.

**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). For **Trimless** installation, refer to **Diagram B** (page 12).

**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**.



## HELIOS SERIES | 3" TRIMLESS RECESSED

### INSTALLATION

#### Remodel Applications

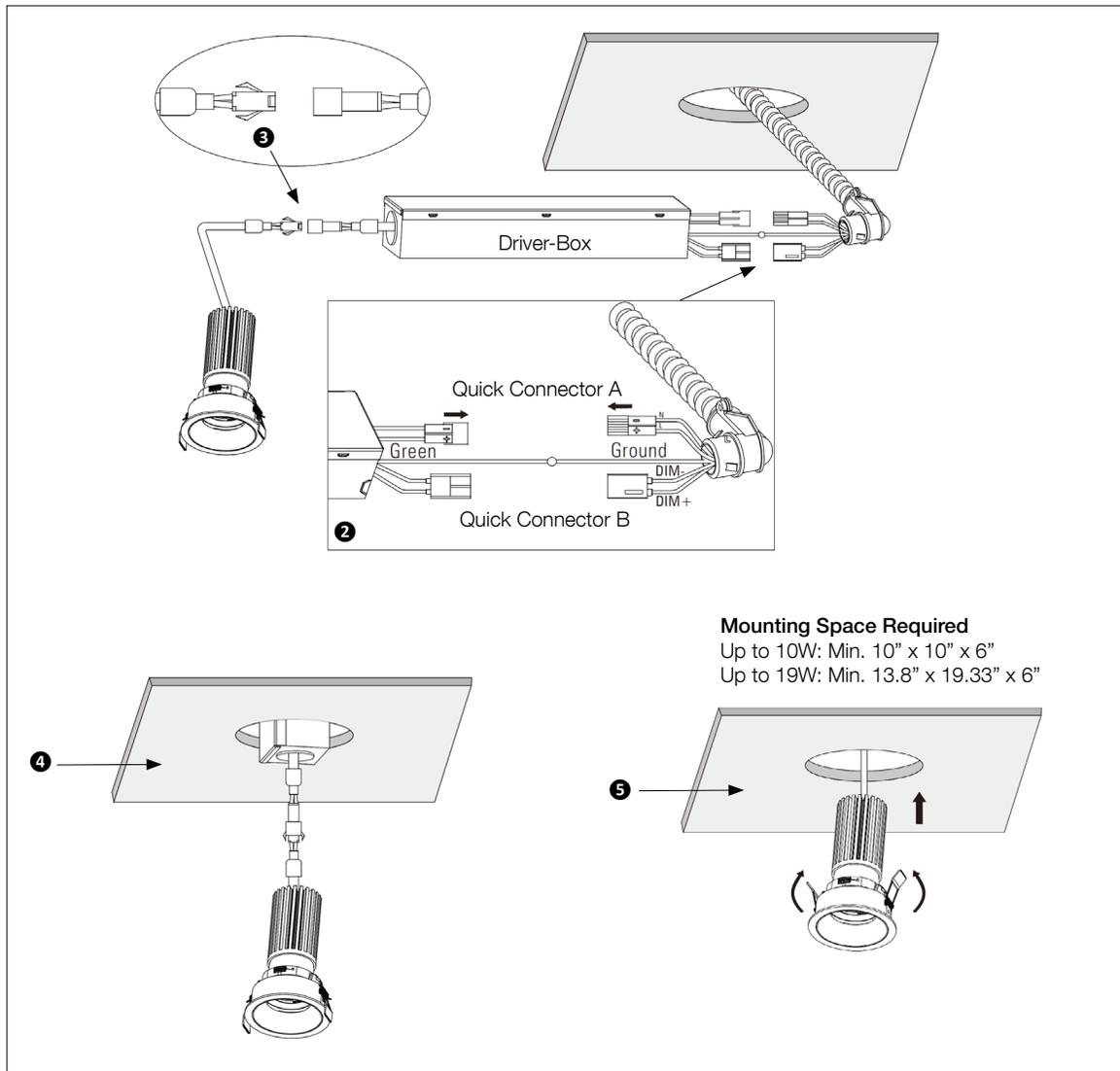
**Step 1:** Drill hole in the ceiling. A round  $\varnothing 3.60"$  hole needed for Helios 3" Round Trimless;  $3.60" \times 3.60"$  square hole for Helios 3" Square Trimless.

**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**. For **Trimless** installation, refer to **Diagram B** (page 12).

**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**.



## HELIOS SERIES | 3" TRIMLESS RECESSED

### INSTALLATION

#### Trimless Mounting

**Step 1:** Secure the outer ring to the ceiling with screws.

**Step 2:** Rotate the inner ring to set the desired height. Use a screwdriver to tighten the screws on both sides (Clockwise) to fix the inner ring in place.

**Step 3:** Install the dust cover and apply plaster for a seamless finish.

Diagram B

