# LUMENWERX

# Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)



This product must be installed in accordance with the National Electrical Code and all applicable local codes, by a person familiar with the construction and operation of the product, and the hazards involved. Proper arounding is required for safety.

Ce produit doit être installé suivant le code national de l'électricité, ainsi que tous les codes locaux applicables, par une personne familière avec la construction et le fonctionnement du produit, ainsi que tous les risques qui y sont associés. La mise à terre électrique est obligatoire pour la sécurité.



Wire dimming conductors as Class 1.



Shown with 4" round adjustable fixture. Applicable to 3", and all types and shapes for 3" and 4".

### OVERVIEW



# Warnings

Install per national installation and accident prevention regulations.

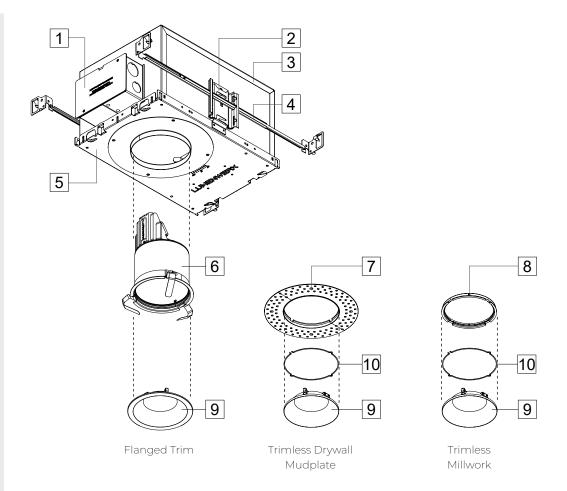
Clearance between sides of luminaire and parts of building must be 1/2" minimum; clearance to insulating materials to be 3" minimum, unless luminaires is IC rated.

Fixtures must be installed in applications where the ambient temperature does not exceed 40° C during normal operation.

Do not connect or disconnect LED board wire connector when the fixture is energized. This may result in permanent damage to the LED array.

Warranty claims will not be accepted if incorrect driver or

Do not cover the light element lens or heatsink with any materials or adhesive tapes.



### Index

Go to pages related to product configuration.

ASB + Housing	P.3
ACB	
AHC	P.5
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Electrical Connection	P.7
Ceiling Preparation	P.10
Light Element & Baffle	.P.12
Onboard emergency	
battery (DEB) 1	P.15
<sup>1</sup> For Aera 4" only.	



Tools Required

Allen Key 1/16" 1 Adjustable Hole Cutter Drywall Knife<sup>2</sup> Hammer

1 For millwork adapter only. <sup>2</sup> Or router.

### Items List

[1] - Electrical Box

[2] - Butterfly Bracket

[3] - IC/CP Box

[4] - Hanger Bar

[5] - Mounting Frame

[6] - Light Element

[7] - Mudplate

[8] - Millwork Adapter

[9] - Baffle

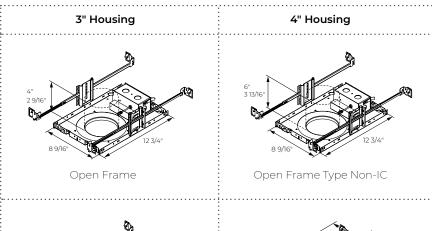
[10] - Spring Ring

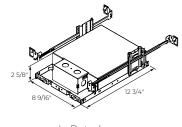


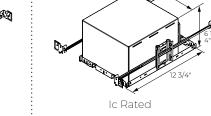
# Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

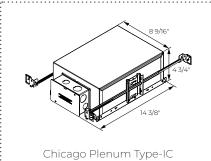
OVERVIEW - OPTIONS

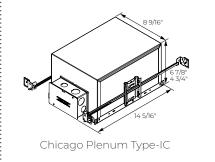
#### **INSTALLATION TYPES**



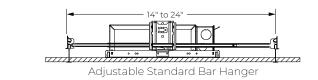




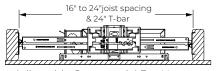




#### MOUNTING OPTIONS

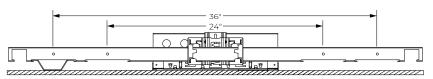


### GO TO PAGE 3 FOR ADJUSTABLE STANDARD BARS INSTALLATION.



Adjustable Commercial Bar Hanger

### GO TO PAGE 4 FOR ADJUSTABLE COMMERCIAL BARS INSTALLATION.



Adjustable Hat Channel Bars

### GO TO PAGE 5 FOR ADJUSTABLE HAT CHANNEL BARS INSTALLATION.



Flush Mount Bars

GO TO PAGE 6 FOR FLUSH MOUNT BARS INSTALLATION.

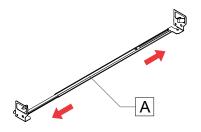


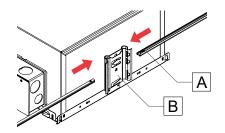
Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

# ADUSTABLE STANDARD BAR HANGERS (ASB)

# 1 ADJUST HANGER BARS.

Separate the hanger bars [A]. Insert the hanger bars [A] into the caterpillar brackets [B].





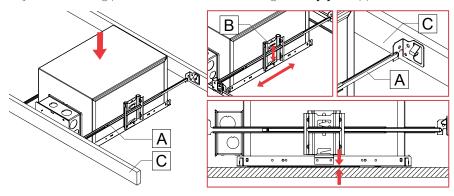
### HOUSING

# 2 MOUNT HOUSING IN CEILING.

### **DRYWALL CEILING**

Mount hanger bars [A] on supports [C] in ceiling.

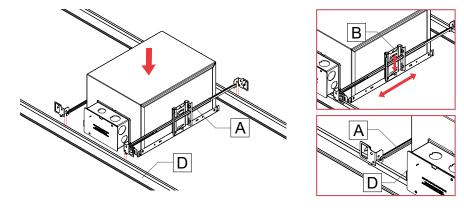
Adjust the caterpillar bracket **[B]** to align the bottom of the mounting plate to the top of the ceiling surface. The caterpillar bracket can be adjusted from 1" to 3". Adjust the housing position as well. Screw the hanger bars **[A]** to supports.



### **GRID CEILING**

Mount hanger bars [A] on T-bar [D] in ceiling.

Adjust the caterpillar bracket **[B]** to suit the ceiling thickness. The caterpillar bracket can be adjusted from 1" to 3". Adjust the housing position as well.



**3** GO TO PAGE 7 FOR ELECTRICAL CONNECTION INSTALLATION.



### \_UMENWERX

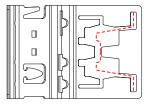
Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

# ADJUSTABLE COMMERCIAL BAR HANGERS (ACB)

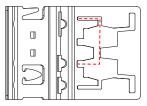
### DETERMINE HANGER BARS POSITION.

Insert hanger bars into butterfly brackets according to hanger types used.

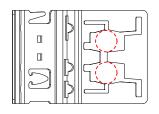
### **FURRING STRIP CHANNEL**



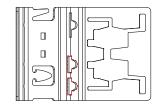
### 1/2" x 1/2" CHANNEL (2 POSITIONS)



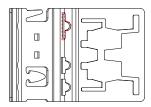
### 1/2" DIAMETER EMT



### 1/2" HANGER BARS 1287 & 1240



5/8" - 3/4" HANGER BARS

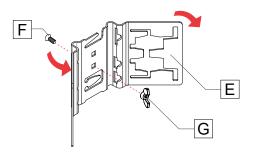


# 2 PREPARE BUTTERFLY BRACKET. 3 INSTALL HANGER BARS

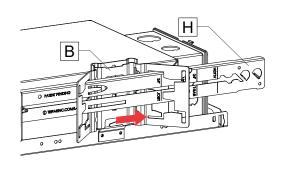
Squeeze the edges of the butterfly bracket [E] to unlock.

Mount butterfly bracket [E] to housing bracket with screw [F] and wing nut [G].

Note: This step applies to all variation of hanger bars installed into this bracket.



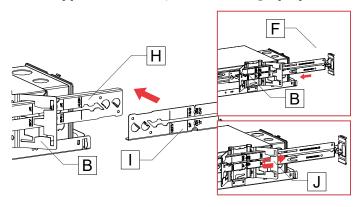
Slide in the first part of the adjustable commercial hanger bar [H] into the butterfly bracket [B]



# 4 ADJUST AND SET HANGER BARS

Insert the second part of the adjustable commercial hanger bar [I] to the first part [H]. Push the hanger bars [I+H] further into the butterfly bracket [B] and adjust the length.

Twist tab [J] inward to lock in place the bar hanger [I+H].



5 go to page 7 for electrical connection installation.



# LUMENWERX

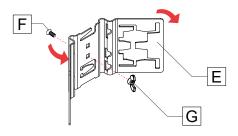
# Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

# ADJUSTABLE HAT CHANNEL BAR HANGERS (AHC)

### PREPARE BUTTERFLY BRACKET.

Squeeze the edges of the butterfly bracket **[E]** to unlock. Mount butterfly bracket **[E]** to housing bracket with screw **[F]** and wing nut **[G]**.

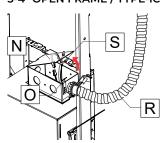
**Note:** This step applies to all variation of hanger bars installed into this bracket.



# 4 MAKE ELECTRICAL CONNECTIONS.

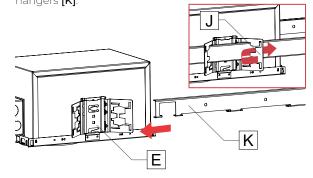
Unsnap the cover **[N]** from the hook **[O]** and pivot the cover. For Chicago Plenum, remove screws **[P]** to access the electrical box **[Q]**.

### 3-4" OPEN FRAME / TYPE-IC



### 2 INSERT HANGER BARS.

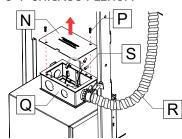
Insert hat channel bar hanger [K] into butterfly bracket [E]. Lock hat channel bar hangers [K] in place in butterfly bracket [E] by twisting the tab [J] inwards to the bar hangers [K].



# Install BX cable **[R]** to knockout and make the electrical connections between BX cable and quick connect cable with the marrettes **[S]**. Connect the main power to the driver using the quick connectors.

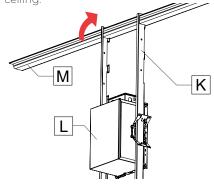
Snap the cover [N] back to finish.

### 3-4" CHICAGO PLENUM



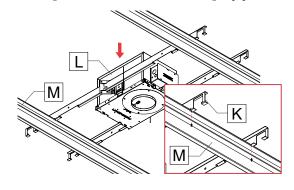
# **3** HANG MOUNTING FRAME.

With hat channel bar hangers [K] locked in place, hang the housing [L] onto the hat channel [M] in ceiling.



# 5 MOUNT ON HAT CHANNEL.

Place housing **[L]** onto hat channels **[M]** in ceiling. Affix the housing into the hat channels **[M]** by screwing into the hat channel bar hanger **[K]**.



# **6** GO TO PAGE 12 FOR LIGHT ELEMENT & BAFFLE INSTRUCTIONS.



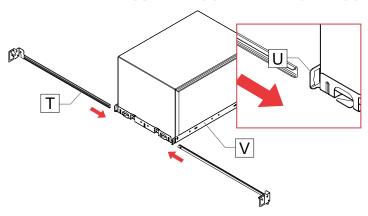
5/15

# Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

# FLUSH MOUNT BARS (FMB) -

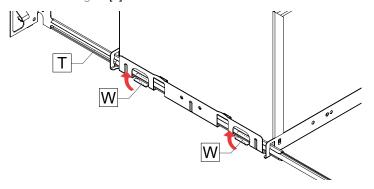
### INSERT HANGER BARS.

Insert flush mount bars [T] into slots [U] in the mounting frame [V].



# 3 LOCK HANGER BARS.

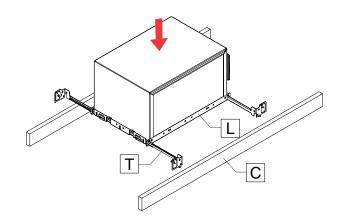
Lock flush mount bars [T] in place by twisting tabs [W] inwards to the bar hangers [T].

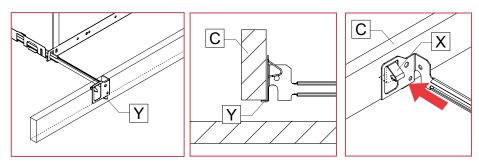


# 2 MOUNT HOUSING IN CEILING.

Place housing [L] into ceiling next to ceiling supports [C]. Mount bar hangers [T] into supports [C] by hammering in pin tab [X] into the supports [C].

Note: Make sure to have tab [Y] under supports [C] before hammering pin tab [X].





4 GO TO PAGE 7 FOR ELECTRICAL CONNECTION INSTALLATION.

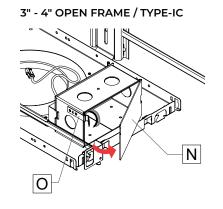


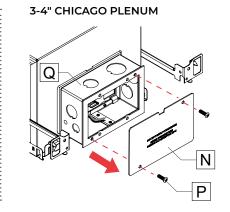
Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

### ELECTRICAL CONNECTION

# 1 UNSNAP COVER.

Unsnap the cover **[N]** from the hook **[O]** and pivot the cover. For Chicago Plenum, remove screws **[P]** to access the electrical box **[Q]**.

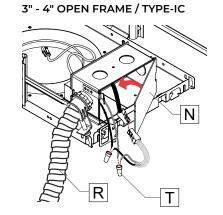


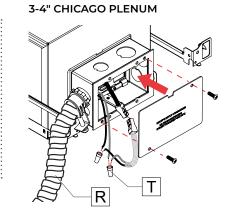


# 2 MAKE ELECTRICAL CONNECTIONS.

Install BX cable **[R]** to knockout and make the electrical connections between BX cable and quick connect cable with the marrettes **[T]**. Connect the main power to the driver using the quick connectors.

Snap the cover [N] back to finish.







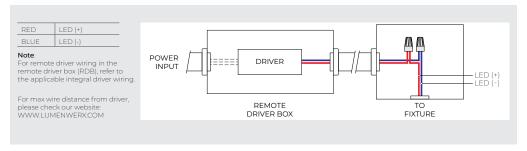
AERA 3-4 LUMENWERX

# Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

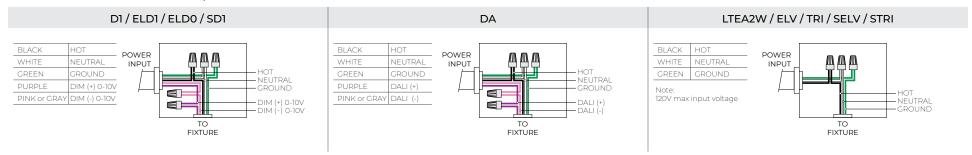
WIRING DIAGRAMS (1 Circuit)

For electrical connections, follow the wiring diagrams according to specified drivers in product configuration.

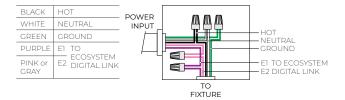
### **REMOTE DRIVER - STATIC WHITE, SOLA**



### INTEGRAL DRIVER - STATIC WHITE, SOLA



### LDE1/PEQ0

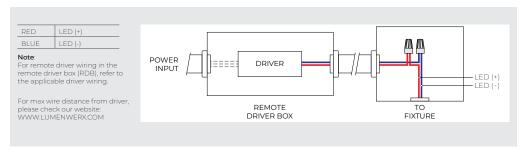


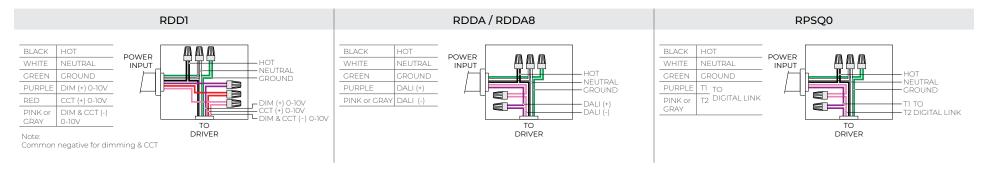


AERA 3-4 LUMENWERX

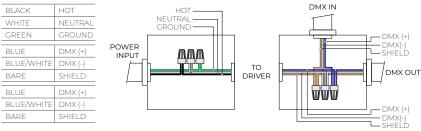
# Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

### **REMOTE DRIVER - DUO**





### **RDMX**



#### Note:

- Must follow DMX wiring architecture
- Use low capacitance wiring for DMX network



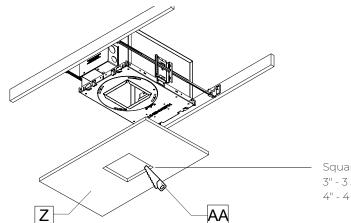
# Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

CEILING PREPARATION

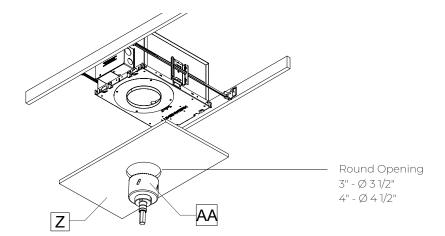
# 1 CEILING CUT-OUTS.

### DRYWALL CEILING

Cut opening in drywall ceiling [Z] with drywall knife [AA].

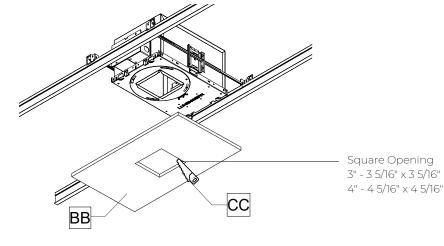


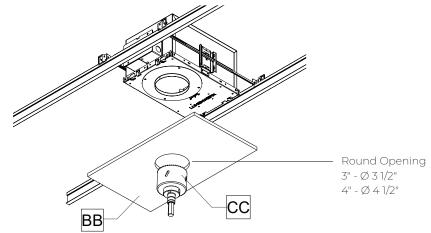




### **GRID CEILING**

Cut opening in grid ceiling tile [BB] with router [CC].







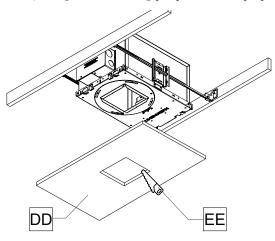
# LUMENWERX

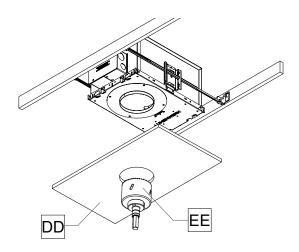
Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

# 1 CEILING CUT-OUTS.

### MILLWORK CEILING

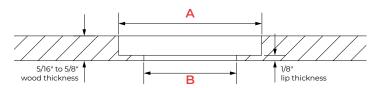
Cut opening in wood ceiling [DD] with router [EE].





Follow the table for dimensions based on size and baffle shape.

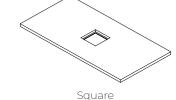
**Note:** The baffle opening is cut-through, but the collar opening is a step-hole that is at the back face of the ceiling.



	Α	В
	Collar Opening	Baffle Opening
3" Round	Ø 3 1/2"	Ø 3 1/16"
3" Square	3 1/2" x 3 1/2"	3 1/16" x 3 1/16"
4" Round	Ø 4 1/2"	Ø 4 1/16"
4" Square	4 1/2" x 4 1/2"	4 1/16" x 4 1/16"

### BACK FACE OF CEILING







# LUMENWERX

Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

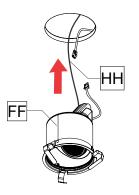
LIGHT ELEMENT & BAFFLE

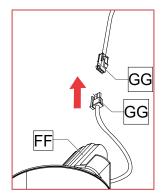
### INSTALL LIGHT ELEMENT.

### FLANGED TRIM

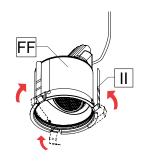
Bring the light element [FF] closer to the ceiling. Connect the light element [FF] to driver in housing with quick connectors [GG].

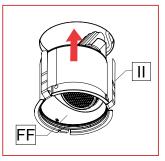
Attach the safety cable [HH] to a suitable point in the ceiling.





Squeeze spring clips [II] upwards onto light element [FF]. Insert light element [FF] into opening until spring clips [III] snap back above the ceiling in the housing.

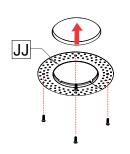


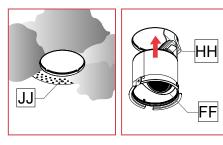


### TRIMLESS DRYWALL MUDPLATE

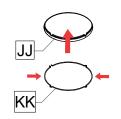
Attach mudplate [JJ] to ceiling and screw onto ceiling. Plaster and sand over mudplate [JJ]. Insert light element [FF] into opening.

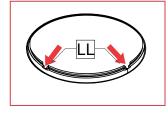
Attach the safety cable [HH] to a suitable point in the ceiling.





Squeeze spring ring **[KK]** into the mudplate **[JJ]** at the edge. Spring ring **[KK]** will snap into the mudplate notches **[LL]** around the mudplate edge.



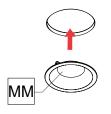


# 2 INSTALL BAFFLE.

### **FLANGED TRIM**

Snap in baffles **[MM]** in place into ceiling opening until audible click is heard.

**Note:** Before installing baffle on adjustable models, see page 14 for light element adjustment instructions (if required).

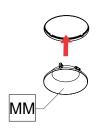




### TRIMLESS DRYWALL MUDPLATE

Snap in baffles **[MM]** in place into ceiling opening until audible click is heard.

**Note:** Before installing baffle on adjustable models, see page 14 for light element adjustment instructions (if required).







# LUMENWERX

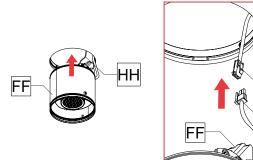
Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

# I INSTALL LIGHT ELEMENT.

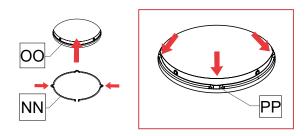
### TRIMLESS MILLWORK

Connect the light element [FF] to driver in housing with quick connectors [GG] and install from below.

Attach the safety cable **[HH]** to a suitable point in the ceiling.



Squeeze spring ring **[NN]** into the millwork adapter **[OO]** to keep the light module in place. Spring ring **[NN]** will snap into the millwork adapter notches **[PP]** around the millwork adapter edge.



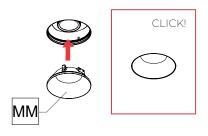
# 2 INSTALL BAFFLE.

### TRIMLESS MILLWORK

Snap in baffles **[MM]** in place into ceiling opening until audible click is heard.

**Note:** Edge of the trim should be flush with the surface.

**Note:** Before installing baffle on adjustable models, see page 14 for light element adjustment instructions (if required).





### LUMENWERX

Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

# AERA ADJUSTABLE - LIGHT ELEMENT ADJUSTMENT INSTRUCTIONS



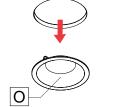
Shown with Aera round adjustable, but applies to Aera square adjustable also.

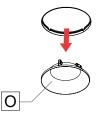
# REMOVE BAFFLE.

Remove baffle [O] from ceiling.

### **FLANGED TRIM**

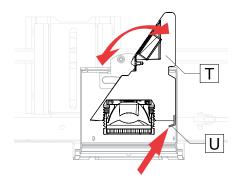
### TRIMLESS MUDPLATE





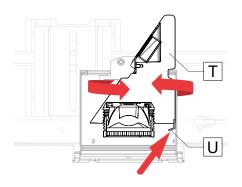
# 2 TILT OPTIC.

Push or pull the tab **[U]** to tilt the optic **[T]** into position.



# **3** ROTATE OPTIC

Use the tab **[U]** as leverage to rotate the optic **[T]**.

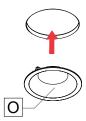


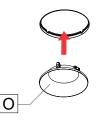
# REINSTALL BAFFLE.

Snap in baffles **[O]** in place into ceiling opening until audible click is heard.

### FLANGED TRIM

### TRIMLESS MUDPLATE







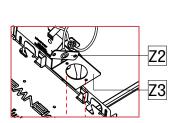
# LUMENWERX

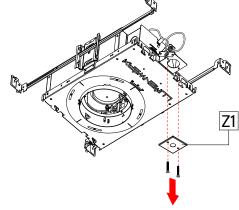
# Downlights - Recessed Open Frame (OF), IC Rated (IC), Chicago Plenum (CP)

### **EMERGENCY BATTERY OPTION**

# 1 REMOVE COVER PLATE.

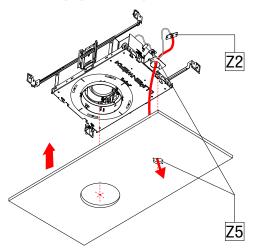
Unscrew cover plate [Z1]. Make sure the test switch bracket [Z2] is mounted on magnet [Z3] on the housing.





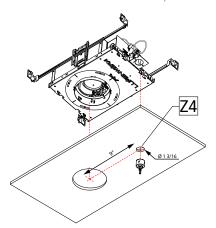
# 3 BRING TEST SWITCH BRACKET THROUGH HOLE.

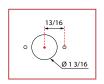
Take the test switch bracket [Z2] off the magnet and pull it out of the holes [Z5].



# 2 CEILING CUT-OUT.

Cut the ceiling with the adjustable hole saw ( $\emptyset$  1 3/16") **[Z4]** or a drywall router. Follow standard instructions for other steps.





# ....4 INSTALL TEST SWITCH TO CEILING.

Screw cover plate **[Z1]** and test switch bracket **[Z2]** back after installing the ceiling panel.

