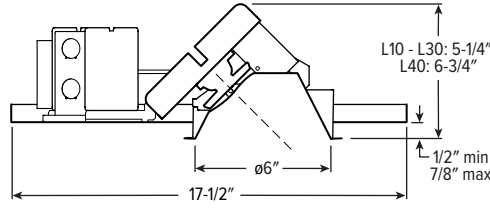


# 6AR LED 6" Adjustable Downlight – Round



CATALOG #: \_\_\_\_\_

TYPE: \_\_\_\_\_

PROJECT: \_\_\_\_\_

## NEW CONSTRUCTION AND REMODEL

ORDERING EXAMPLE: **6AR - L20/835 - OPTIONS - CONTROL/DIM - UNV - OW - OF - CS - TRIM OPTIONS - N - F1**

HOUSING
TRIM
MOUNT

### HOUSING

| SERIES | LUMENS <sup>[1]</sup>      | CRI                 | CCT                                      | OPTIONS  | CONTROL  | DRIVER <sup>[2]</sup>                              | VOLTAGE                                  |
|--------|----------------------------|---------------------|--|--|--|--|--|
| 6AR    | L10 1,000lm <sup>[3]</sup> | 8 80                | 27 2700K                                 | EM/7W 7-watt emergency battery <sup>[5]</sup>                                  | – None   | DIM Dimming driver, 0-10V                          | UNV 120-277V<br>347 347V <sup>[13]</sup> |
|        | L15 1,500lm                | 9 90 <sup>[4]</sup> | 30 3000K                                 | EM/10W 10-watt emergency battery <sup>[6]</sup>                                | AVI-LVFA Avi-on wireless fixture control <sup>[11]</sup> |  |  |
|        | L20 2,000lm                |                     | 35 3500K                                 | EM/10W/RTS 10-watt emergency battery with regressed test switch <sup>[7]</sup> |  | DIM1 1% Dimming driver, 0-10V                      |  |
|        | L30 3,000lm                |                     | 40 4000K                                 | ATH Airtight construction <sup>[8]</sup>                                       |  | DA Driver with 12V auxiliary power <sup>[12]</sup> |  |
|        | L40 4,000lm                |                     | 50 5000K                                 | CP Chicago plenum (CCEA) <sup>[9]</sup>  |  |  |  |
|        |                            |                     | F Fuse kit                               |  |  |  |  |
|        |                            |                     | SDT Stepdown transformer <sup>[10]</sup> |  |  |  |  |

### TRIM<sup>[14]</sup>

| TRIM TYPE        | DISTRIBUTION <sup>[15]</sup> | FLANGE TYPE                           | REFLECTOR FINISH                   | TRIM OPTIONS  |
|------------------|------------------------------|---------------------------------------|------------------------------------|---|
| O Open reflector | W Wide                       | OF 1/2" standard flange               | Open trim types                    | MWT Textured white trim flange <sup>[17]</sup>              |
| L Flush lens     | 55° Open                     | SF 1/4" mud-in flange <sup>[16]</sup> | CS Clear semi-specular anodize     | AD Diffuse acrylic lens <sup>[18]</sup>                     |
| A Angled lens    | 55° Flush                    |                                       | WH White texture powder coat       | PD Diffuse 1/8" polycarbonate lens <sup>[19]</sup>          |
|                  | 50° Angled                   |                                       | BL Black texture powder coat       | WET/CC Wet location, covered ceiling listed <sup>[20]</sup> |
|                  | M Medium                     |                                       | Lens trim types                    | AM Anti-microbial <sup>[21]</sup>                           |
|                  | 35° Open                     |                                       | CS Clear semi-specular powder coat |   |
|                  | 35° Flush                    |                                       | WH White texture powder coat       |   |
|                  | 35° Angled                   |                                       | BL Black texture powder coat       |   |
|                  | N Narrow                     |                                       |                                    |   |
|                  | 25° Open                     |                                       |                                    |   |
|                  | 25° Flush                    |                                       |                                    |   |
|                  | 30° Angled                   |                                       |                                    |   |

### MOUNTING

#### MOUNTING TYPE<sup>[22]</sup>

- N Open pan for new construction
- I IC-rated enclosure for new construction<sup>[24]</sup>
- R Remodel kit<sup>[25]</sup>

#### MOUNTING HARDWARE<sup>[23]</sup>

- F1 Factory-installed 2-position fixed pan bracket, universal bar hanger included<sup>[26]</sup>
- BA1 Adjustable butterfly pan bracket, bar hanger not included<sup>[27]</sup>
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included<sup>[28]</sup>

### NOTES

- <sup>1</sup> Lumen output based on O trim type, W distribution and CS finish, 3500K/80CRI. Actual lumens may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
- <sup>2</sup> See page 6 for ADDITIONAL DRIVER OPTIONS.
- <sup>3</sup> Not available with EM/10W emergency batteries.
- <sup>4</sup> Extended lead times may apply. Consult factory for availability.
- <sup>5</sup> N and R Mounting Types only. Not available with ATH option.
- <sup>6</sup> N and R Mounting Types only. Not available with ATH option.
- <sup>7</sup> Not available with WET/CC or ATH options. N and R Mounting Types only. See page 5 for EM/10W/RTS DETAILS.
- <sup>8</sup> I Mounting Type required.
- <sup>9</sup> I Mounting Type required.
- <sup>10</sup> May be required for 347V, see product builder at [hew.com/product-builder](http://hew.com/product-builder)
- <sup>11</sup> DA Driver only. See page 6 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS.
- <sup>12</sup> Avi-on Controls only.
- <sup>13</sup> Not available with EM batteries, DMX Driver, or Avi-on Controls.
- <sup>14</sup> Trim ships separately.
- <sup>15</sup> Beam angle based on CS or WH reflector finish.
- <sup>16</sup> For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 3 for FLANGE TYPE DETAILS. Not available with ATH option.
- <sup>17</sup> Not available with WH Reflector Finish or L Trim Type.
- <sup>18</sup> L and A Trim Types only. W distribution only.
- <sup>19</sup> L and A Trim Types only. W distribution only.
- <sup>20</sup> L Trim Type only. Not available with PD trim option.
- <sup>21</sup> WH and BL Reflector Finishes only.
- <sup>22</sup> Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
- <sup>23</sup> Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
- <sup>24</sup> Not available with L40 lumen package.
- <sup>25</sup> Also used in new construction sheetrock ceilings. Pan-less installation.
- <sup>26</sup> N and I Mounting Types only. Universal bar hanger ships uninstalled. I Mounting requires external brackets.
- <sup>27</sup> N Mounting Type only.
- <sup>28</sup> N Mounting Type only.



# 6AR LED 6" Adjustable Downlight – Round

## FEATURES

- Adjustable aim with 0° - 45° tilt and 360° rotation
- Beam angles ranging from 25° narrow to 55° wide for tailored performance
- Spring clip retention system eliminates trim sag
- Etched degree markers and directional indicator make it simple to fine-tune the illumination angle
- Choice of open reflector or die-cast lensed trims to complement interior style
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Fully room-side accessible
- Available with Avi-on wireless fixture controls



## SPECIFICATIONS

- HOUSING** – Die-cast aluminum spun and stamped articulating mechanism with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Mounting clips allow for ceiling thickness from 1/2" - 7/8".
- OPEN REFLECTOR** – Low-iridescent anodized aluminum. Clear semi-specular finish standard.
- LENSED TRIM** – Die-cast aluminum frame with micro-prismatic, acrylic lens.
- ELECTRICAL** – High-performance Class 2 C.O.B. LED array. Modular quick-connect plug for easy field-connection of LED light assembly to driver. Reported L70>55,000 hours. Reported L90>55,000 hours. Estimated L70 = 200,000 hours.
- MOUNTING** – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. Remodel kit option includes receiver bracket hardware. N and R mounting types for use in non-fire rated installations only. Minimum 24" O.C. marked spacing required for L30 and L40 lumen packages.
- LISTINGS** –
  - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for dry and damp locations. LED light assembly conforms to UL 2108 for remote installation.
  - Suitable for wet location under covered ceiling when specified with WET/CC option.
  - IC-rated for direct contact with insulation when specified with I Mounting Type.
  - City of Chicago Environmental Air approved when specified with CP option.
  - Complies with ASTM-E283 when specified with ATH option.
  - RoHS compliant.
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

## FIXTURE PERFORMANCE DATA

### OPEN REFLECTOR TRIM TYPE

|     | DISTRIBUTION | DELIVERED LUMENS | WATTAGE | EFFICACY (lm/W) |
|-----|--------------|------------------|---------|-----------------|
| L10 | W            | 1020             | 10.5    | 97.1            |
|     | M            | 1023             | 10.5    | 97.4            |
|     | N            | 1022             | 10.5    | 97.4            |
| L15 | W            | 1537             | 15.1    | 101.8           |
|     | M            | 1542             | 15.1    | 102.1           |
|     | N            | 1541             | 15.1    | 102.1           |
| L20 | W            | 2039             | 21.0    | 97.1            |
|     | M            | 2045             | 21.0    | 97.4            |
|     | N            | 2044             | 21.0    | 97.3            |
| L30 | W            | 2917             | 31.3    | 93.2            |
|     | M            | 2915             | 31.3    | 93.1            |
|     | N            | 2790             | 31.3    | 89.2            |
| L40 | W            | 3889             | 42.0    | 92.6            |
|     | M            | 3886             | 42.0    | 92.5            |
|     | N            | 3720             | 42.0    | 88.6            |

### FLUSH LENS TRIM TYPE

|     | DISTRIBUTION | DELIVERED LUMENS | WATTAGE | EFFICACY (lm/W) |
|-----|--------------|------------------|---------|-----------------|
| L10 | W            | 896              | 10.5    | 85.3            |
|     | M            | 956              | 10.5    | 91.1            |
|     | N            | 951              | 10.5    | 90.6            |
| L15 | W            | 1350             | 15.1    | 89.4            |
|     | M            | 1442             | 15.1    | 95.5            |
|     | N            | 1433             | 15.1    | 94.9            |
| L20 | W            | 1791             | 21.0    | 85.3            |
|     | M            | 1912             | 21.0    | 91.0            |
|     | N            | 1901             | 21.0    | 90.5            |
| L30 | W            | 2559             | 31.3    | 81.8            |
|     | M            | 2717             | 31.3    | 86.8            |
|     | N            | 2609             | 31.3    | 83.4            |
| L40 | W            | 3411             | 42.0    | 81.2            |
|     | M            | 3622             | 42.0    | 86.2            |
|     | N            | 3478             | 42.0    | 82.8            |

### ANGLED LENS TRIM TYPE

|     | DISTRIBUTION | DELIVERED LUMENS | WATTAGE | EFFICACY (lm/W) |
|-----|--------------|------------------|---------|-----------------|
| L10 | W            | 744              | 10.5    | 70.9            |
|     | M            | 889              | 10.5    | 84.7            |
|     | N            | 907              | 10.5    | 86.4            |
| L15 | W            | 1122             | 15.1    | 74.3            |
|     | M            | 1340             | 15.1    | 88.7            |
|     | N            | 1368             | 15.1    | 90.6            |
| L20 | W            | 1488             | 21.0    | 70.9            |
|     | M            | 1777             | 21.0    | 84.6            |
|     | N            | 1814             | 21.0    | 86.4            |
| L30 | W            | 2144             | 31.3    | 68.5            |
|     | M            | 2507             | 31.3    | 80.1            |
|     | N            | 2441             | 31.3    | 78.0            |
| L40 | W            | 2858             | 42.0    | 68.0            |
|     | M            | 3342             | 42.0    | 79.6            |
|     | N            | 3254             | 42.0    | 77.5            |

### MULTIPLIER TABLES

|        | COLOR TEMPERATURE |                   |
|--------|-------------------|-------------------|
|        | CCT               | CONVERSION FACTOR |
| 80 CRI | 2700K             | 0.92              |
|        | 3000K             | 0.98              |
|        | 3500K             | 1.00              |
|        | 4000K             | 1.01              |
|        | 5000K             | 1.02              |
| 90 CRI | 2700K             | 0.76              |
|        | 3000K             | 0.79              |
|        | 3500K             | 0.82              |
|        | 4000K             | 0.84              |
|        | 5000K             | 0.88              |

| OPEN REFLECTOR FINISH |                   |
|-----------------------|-------------------|
| CATALOG NUMBER        | CONVERSION FACTOR |
| CS                    | 1.00              |
| WH                    | 0.89              |
| BL                    | 0.79              |

| TRIM            |                   |
|-----------------|-------------------|
| CATALOG NUMBER  | CONVERSION FACTOR |
| AD <sup>1</sup> | 0.85              |
| PD <sup>1</sup> | 0.85              |

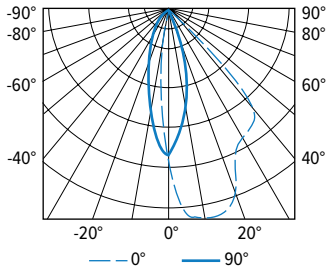
- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is based on 120V input.
- Results based on 3500K, 80 CRI, 0° tilt, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.



# 6AR LED 6" Adjustable Downlight – Round

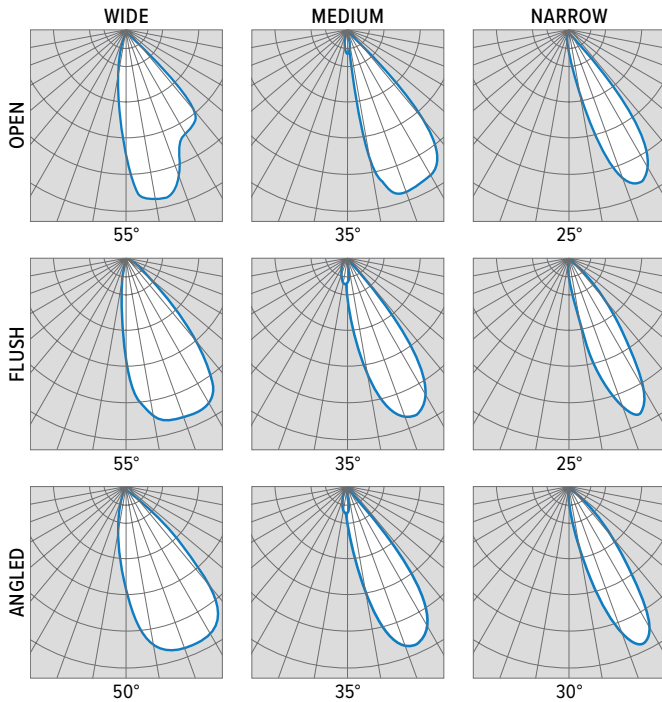
## PHOTOMETRY

6AR-L20/835-DIM-UNV-OW-OF-CS (25° tilt) Report #: 20390; 05/16/18 | Total Luminaire Output: 1958 lumens; 21.2 Watts | Efficacy: 92.5 lm/W | 82.3 CRI; 3571K CCT

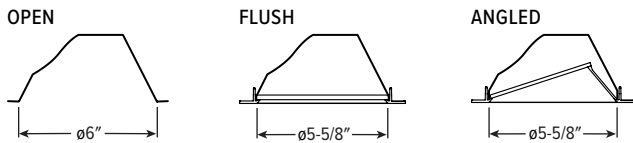


| CANDLEPOWER DISTRIBUTION | VERTICAL ANGLE | HORIZONTAL ANGLE |      |      |      |      | ZONAL LUMENS |
|--------------------------|----------------|------------------|------|------|------|------|--------------|
|                          |                | 0°               | 45°  | 90°  | 135° | 180° |              |
|                          | 0              | 2605             | 2605 | 2605 | 2605 | 2605 |              |
|                          | 5              | 3639             | 3208 | 2308 | 1607 | 1297 | 227          |
|                          | 15             | 3810             | 2844 | 1321 | 442  | 310  | 469          |
|                          | 25             | 2919             | 2543 | 541  | 122  | 92   | 548          |
|                          | 35             | 2592             | 1908 | 109  | 26   | 20   | 499          |
|                          | 45             | 1695             | 212  | 11   | 6    | 6    | 212          |
|                          | 55             | 20               | 2    | 0    | 0    | 2    | 3            |
|                          | 65             | 0                | 0    | 0    | 0    | 0    | 0            |
|                          | 75             | 0                | 0    | 0    | 0    | 0    | 0            |
|                          | 85             | 0                | 0    | 0    | 0    | 0    | 0            |
|                          | 90             | 0                | 0    | 0    | 0    | 0    | 0            |

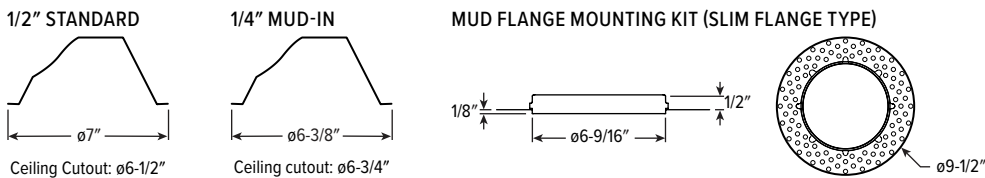
| LUMEN SUMMARY | ZONE    | LUMENS | % FIXTURE |
|---------------|---------|--------|-----------|
|               | 0 - 30  | 1244   | 64        |
|               | 0 - 40  | 1743   | 89        |
|               | 0 - 60  | 1958   | 100       |
|               | 0 - 90  | 1958   | 100       |
|               | 0 - 180 | 1958   | 100       |



## TRIM TYPE DETAILS



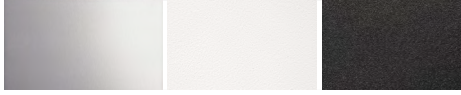
## FLANGE TYPE DETAILS



# 6AR LED 6" Adjustable Downlight – Round

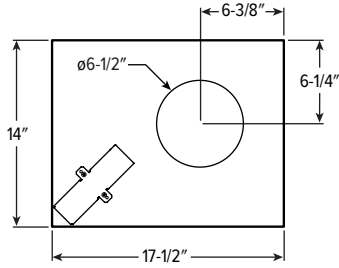
## REFLECTOR FINISH DETAILS

**CS** Clear semi-specular  
**WH** White  
**BL** Black

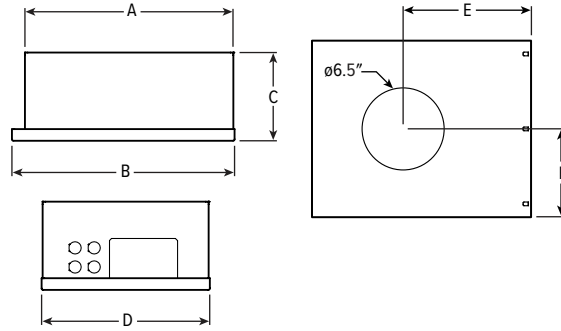


## MOUNTING TYPE DETAILS

### NEW CONSTRUCTION

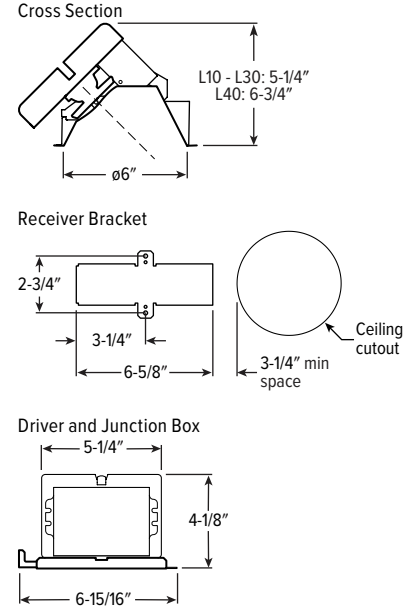


### IC-RATED



| LUMENS    | LENGTH   |         |        |         |         |         |
|-----------|----------|---------|--------|---------|---------|---------|
|           | A        | B       | C      | D       | E       | F       |
| L10 - L20 | 15-3/16" | 16"     | 6-3/8" | 12-1/8" | 9-1/2"  | 6-1/16" |
| L30       | 16-5/8"  | 17-1/2" | 7-7/8" | 14"     | 10-1/4" | 7"      |

### REMODEL



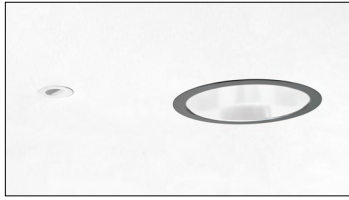
## APERTURE ADAPTOR ORDERING INFO

| ORDERING EXAMPLE: 4DR - GR - 0575 - WHT                    |                |   |   |
|--|----------------|---|---|
| SERIES   | CATALOG NUMBER | CEILING CUTOUT  | FINISH                                    |
| 4AR 6AR<br>4DR 6DR<br>4DS 6DS<br>4PR 6PR<br>4PS 6PS<br>8DR | GR             | Specify ceiling cutout in 1/8" increments.<br>Example: 5.75" = 0575 | <b>CS</b> Clear semi-specular powder coat |
|  |                | See Kit Components for application limits.                          | <b>WH</b> White texture powder coat       |
|  |                |   | <b>BL</b> Black texture powder coat       |

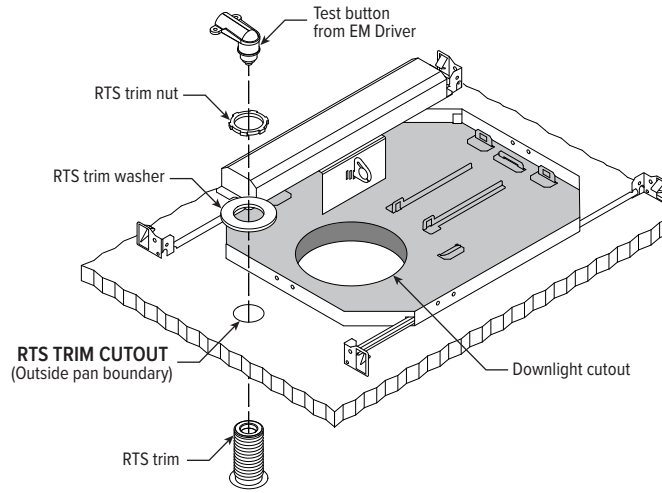
Additional finishes available, consult factory. For use with remodel downlights. For limitations and instructions, see [hew.com/aperture-adaptor.pdf](http://hew.com/aperture-adaptor.pdf)

# 6AR LED 6" Adjustable Downlight – Round

## EM/10W/RTS DETAILS

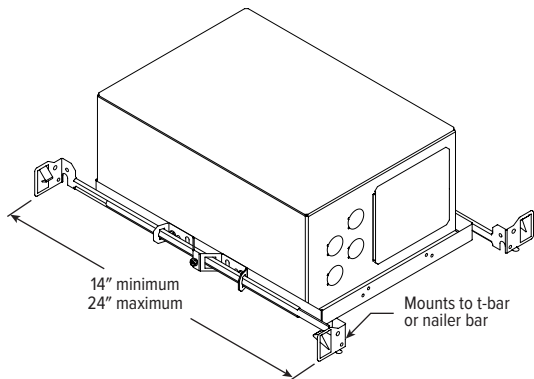
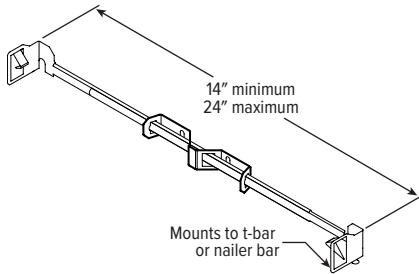


Shown Installed



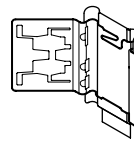
## MOUNTING HARDWARE DETAILS

**F1** Factory-installed 2-position fixed pan bracket, universal bar hanger included, ships uninstalled

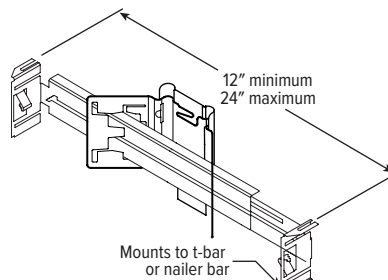


F1 with I Mounting Type

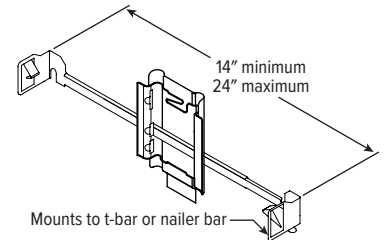
**BA1** Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



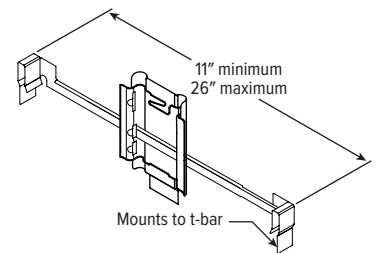
**BA2** Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)



**CA1** Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)



**CA2** Adjustable caterpillar pan bracket, t-bar hanger included (N Mounting Type only)



SEE NEXT PAGE FOR CONTROL DETAILS.



# 6AR LED 6" Adjustable Downlight – Round

## AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS

### AVI-ON NETWORK FEATURES

#### Simple

- Gateway-free distributed control
- Factory pre-commissioning
- Contractor friendly installation
- Occupancy/vacancy/daylight sensing

#### Scalable

- Virtually unlimited network size
- Spans small areas to large warehouses
- Flexible control strategies

#### Secure

- Optional cloud connectivity
- UL IoT platinum security rating
- DLC 5.0 compliant

### DIGITAL INSTALLATION TOOLS

Avi-On mobile apps provide intuitive, quick installation and commissioning. Pro tools are available to qualified installers.



Commissioning Mobile App



Zone Scanner Web App



Commissioning Pro App

### SYSTEM COMPONENTS



The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Avi-On is under license. Other trademarks and trade names are those of their respective owners.

### ACCESSORIES

| WALL STATIONS         |  |
|-----------------------|--|
| AVI-2401AC            | Scene controller - numbered 1-4, 120-277VAC        |
| AVI-2402BAT           | Scene controller - numbered 1-4, battery powered   |
| AVI-2401AC-2          | Dimmer with presets - percentages, 120-277VAC      |
| AVI-2402BAT-2         | Dimmer with presets - percentages, battery powered |
| AVI-SWITCH            | AC paddle wall switch                              |
| AVI-DIMMER            | Circuit dimmer switch                              |
| CONNECTIVITY          |  |
| AVI-2001RAB-01-P      | Remote access bridge for projects 100 or greater   |
| AVI-2001RAB-01-C      | Remote access bridge for projects less than 100    |
| AVI-KIT-NTM           | Network time manager with Battery Backup           |
| CEILING MOUNT SENSORS |  |
| AVI-KIT-SEN-DUCM      | PIR motion and ultrasonic sensor kit               |
| AVI-KIT-SEN-ICM       | PIR motion and photocell sensor kit                |

For load controllers and additional accessory info, see [hew.com/avi-on](http://hew.com/avi-on)

### ADDITIONAL DRIVER OPTIONS

Lumen restrictions apply: L30 max for DMX driver, L40 max for Lutron drivers, L40 max for DIM LINE driver. R Mounting Type not available with DMX or FCJS controls. R Mounting Type requires 12" minimum plenum depth when specified with VRF/DBI controls. 347V may require stepdown transformer, see product builder at [hew.com/product-builder](http://hew.com/product-builder). I Mounting Type not available with Lutron controls.

| CATALOG NUMBER | DESCRIPTION  |
|----------------|--|
| DIM            | Dimming driver prewired for 0-10V low voltage applications   |
| DIM1           | 1% dimming driver prewired for 0-10V low voltage applications  |
| DIM LINE       | Line voltage dimming driver (TRIAC and ELV compatible at 120V only)  |
| DA             | Dimming driver with 12V auxiliary  |
| DMX            | 0.1% dimming driver for DMX controls   |
| LDE1           | Lutron Hi-lume 1% EcoSystem dimming LED driver   |
| VRF/DBI/LDE1   | Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and digital link interface, for use with Lutron Hi-lume 1% EcoSystem dimming LED driver |
| FCJS/DIM       | Lutron Vive PowPak wireless fixture control with dimming driver  |
| FCJS/DIM1      | Lutron Vive PowPak wireless fixture control with 1% dimming driver   |

