

CATALOG #: _____

TYPE: _____

PROJECT: _____

NEW CONSTRUCTION AND REMODEL

FEATURES

- Beam angles ranging from 25° narrow to 60° wide for tailored performance
- Die cast trim choices include flush, regressed or angled lens
- Spring clip retention system eliminates trim sag
- Industry-leading efficacies as high as 97 lm/W
- Fully room-side accessible

SPECIFICATIONS

- **HOUSING** – Die-cast aluminum trim housing with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Swing-out mounting arms field adjust for ceiling thickness from 1/2" – 2-1/4".
- **OPEN REFLECTOR** – Low-iridescent anodized aluminum with top diffuser.
- **LENSED TRIM** – Die-cast aluminum frame with micro-prismatic, tempered glass 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. Minimum 24" O.C. marked spacing required for L40 lumen package.
- **LISTINGS** –
 - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for 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.
 - Title 24 (JA8) compliant in select configurations, see www.cacertappliances.energy.ca.gov.
- **WARRANTY** – 5-year limited warranty, see hew.com/warranty.



ORDERING EXAMPLE: 4DS - L20/835 - OPTIONS - DIM - UNV - LW - OF - WH - TRIM OPTIONS - N - F1

HOUSING

| SERIES | LUMENS ^[1] | CRI | CCT | OPTIONS | CONTROL ^[2] | VOLTAGE |
|--------|-----------------------|---------------------|----------|--|-------------------------------|-------------------------|
| 4DS | L10 1,000lm | 8 80 | 27 2700K | ATH Airtight construction | DIM Dimming driver, 0-10V | UNV 120-277V |
| | L15 1,500lm | 9 90 ^[3] | 30 3000K | F Fuse kit | DIM1 1% Dimming driver, 0-10V | 347 347V ^[6] |
| | L20 2,000lm | | 35 3500K | SDT Stepdown transformer ^[4] | | |
| | L30 3,000lm | | 40 4000K | CP Chicago plenum (CCEA) ^[5] | | |
| | L40 4,000lm | | 50 5000K | EM/7W 7-watt emergency battery ^[7] | | |
| | | | | EM/10W 10-watt emergency battery ^[8] | | |
| | | | | EM/10W/RTS 10-watt emergency battery with regressed test switch ^[9] | | |

TRIM^[10]

| TRIM TYPE | DISTRIBUTION ^[11] | FLANGE TYPE | REFLECTOR FINISH | TRIM OPTIONS |
|-------------------------------|------------------------------|---------------------------------------|--|---|
| L Flush lens | W Wide | OF 1/2" standard flange | Open trim types | MWT Textured white trim flange ^[17] |
| O Open reflector | 55° Open | | CS Clear semi-specular anodize | IP IP65 rated trim ^[18] |
| R Regressed lens | 60° Flush | SF 1/4" mud-in flange ^[16] | SG Satin-glow anodize | AD Diffuse acrylic lens ^[19] |
| A Angled lens ^[12] | 60° Regressed | | GD Gold anodize | PD Diffuse 1/8" polycarbonate lens ^[20] |
| | M Medium ^[13] | | CG Champagne gold anodize | WET/CC Wet location, covered ceiling listed ^[21] |
| | 45° Open | | PW Pewter anodize | AM Anti-microbial ^[22] |
| | 35° Flush | | SPC Clear specular anodize | |
| | 35° Regressed | | RG Rose gold anodize | |
| | N Narrow ^[14] | | Len's trim types | |
| | 40° Open | | CS Clear semi-specular powder coat | |
| | 25° Flush | | WH White texture powder coat | |
| | 25° Regressed | | BL Black texture powder coat | |
| | WW Wall wash ^[15] | | MB Black texture splay with white flange ^[23] | |

MOUNTING

MOUNTING TYPE^[24]

- N Open pan for new construction
- I IC-rated enclosure for new construction^[26]
- R Remodel kit^[27]

MOUNTING HARDWARE^[25]

- F1 Integral 2-position fixed pan bracket, universal bar hanger included^[28]
- BA1 Adjustable butterfly pan bracket, bar hanger not included^[29]
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included^[30]

NOTES

- Lumen output based on L trim type, W distribution and WH finish, 3500K/80CRI. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- See page 4 for ADDITIONAL CONTROL OPTIONS.
- Extended lead times may apply. Consult factory for availability.
- May be required for 347V, see product builder at hew.com/product-builder
- I Mounting Type required.
- Not available with EM batteries or DMX controls.
- N and R Mounting Types only.
- N and R Mounting Types only.
- Not available with WET/CC, ATH or IP options. N and R Mounting Types only. See page 5 for EM/10W/RTS DETAILS.

- Trim ships separately.
- Beam angle based on CS or WH reflector finish.
- Available with WW Distribution only.
- Not available with L40.
- Not available with L40.
- O and A Trim Types only.
- For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 4 for FLANGE TYPE DETAILS. Not available with ATH or IP option.
- Not available with WH Reflector Finish or L Trim Type.
- L and R trim types only.
- Not available with O trim type. W distribution only.
- Not available with O trim type. W distribution only.
- Not available with O Trim Type.

- WH and BL Reflector Finishes only.
- R Trim Type only. Not available with MWT.
- Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 5 for MOUNTING TYPE DETAILS.
- Additional mounting hardware options available. See page 6 for MOUNTING HARDWARE DETAILS.
- Not available with L30 or L40 lumen packages.
- Also used in new construction sheetrock ceilings.
- N and I Mounting Types only. I Mounting requires external brackets.
- N Mounting Type only.
- N Mounting Type only.



4DS^{LED} 4.5" Downlight – Square

FIXTURE PERFORMANCE DATA

OPEN REFLECTOR TRIM TYPE

| | DISTRIBUTION | DELIVERED LUMENS | WATTAGE | EFFICACY (lm/W) |
|-----|--------------|------------------|---------|-----------------|
| L10 | W | 947 | 12.0 | 78.6 |
| | M | 1045 | 12.0 | 86.7 |
| | N | 1067 | 12.0 | 88.6 |
| L15 | W | 1395 | 17.4 | 80.1 |
| | M | 1540 | 17.4 | 88.4 |
| | N | 1573 | 17.4 | 90.3 |
| L20 | W | 1893 | 25.0 | 75.7 |
| | M | 2089 | 25.0 | 83.6 |
| | N | 2134 | 25.0 | 85.4 |
| L30 | W | 2839 | 36.0 | 78.9 |
| | M | 3090 | 36.0 | 85.8 |
| | N | 2999 | 36.0 | 83.3 |
| L40 | W | 3739 | 45.0 | 83.1 |
| | M | - | - | - |
| | N | - | - | - |

FLUSH LENS TRIM TYPE

| | DISTRIBUTION | DELIVERED LUMENS | WATTAGE | EFFICACY (lm/W) |
|-----|--------------|------------------|---------|-----------------|
| L10 | W | 1026 | 12.0 | 85.2 |
| | M | 1127 | 12.0 | 93.5 |
| | N | 1144 | 12.0 | 94.9 |
| L15 | W | 1511 | 17.4 | 86.7 |
| | M | 1666 | 17.4 | 95.6 |
| | N | 1684 | 17.4 | 96.6 |
| L20 | W | 2050 | 25.0 | 82.1 |
| | M | 2261 | 25.0 | 90.5 |
| | N | 2285 | 25.0 | 91.5 |
| L30 | W | 3077 | 36.0 | 85.5 |
| | M | 3333 | 36.0 | 92.6 |
| | N | 3214 | 36.0 | 89.3 |
| L40 | W | 4053 | 45.0 | 90.1 |
| | M | - | - | - |
| | N | - | - | - |

REGRESSED LENS TRIM TYPE

| | DISTRIBUTION | DELIVERED LUMENS | WATTAGE | EFFICACY (lm/W) |
|-----|--------------|------------------|---------|-----------------|
| L10 | W | 986 | 12.0 | 81.8 |
| | M | 1111 | 12.0 | 92.2 |
| | N | 1127 | 12.0 | 93.5 |
| L15 | W | 1453 | 17.4 | 83.4 |
| | M | 1637 | 17.4 | 93.9 |
| | N | 1660 | 17.4 | 95.3 |
| L20 | W | 1972 | 25.0 | 78.9 |
| | M | 2221 | 25.0 | 88.9 |
| | N | 2253 | 25.0 | 90.1 |
| L30 | W | 2957 | 36.0 | 82.2 |
| | M | 3285 | 36.0 | 91.3 |
| | N | 3166 | 36.0 | 88.0 |
| L40 | W | 3895 | 45.0 | 86.6 |
| | M | - | - | - |
| | N | - | - | - |

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 |

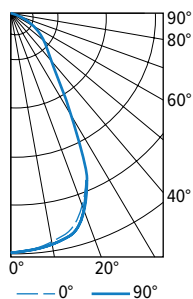
| OPEN REFLECTOR FINISH | | |
|-----------------------|---------------------|-------------------|
| CATALOG NUMBER | REFLECTOR FINISH | CONVERSION FACTOR |
| CS | Clear semi-specular | 1.00 |
| SG | Satin-glow | 0.83 |
| GD | Gold | 0.93 |
| CG | Champagne Gold | 0.96 |
| PW | Pewter | 0.86 |
| SPC | Specular | 1.02 |
| RG | Rose Gold | 0.88 |
| WH | White, textured | 0.99 |
| BL | Black, textured | 0.79 |

| TRIM | |
|----------------|-------------------|
| CATALOG NUMBER | CONVERSION FACTOR |
| AD | 0.85 |
| PD | 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, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.

PHOTOMETRY

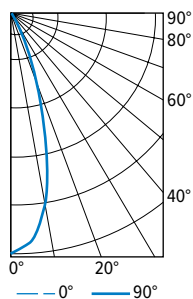
4DS-L20/835-DIM-UNV-LW-OF-WH Report #: 20316; 04/16/18 | Total Luminaire Output: 2050 lumens; 25.0 Watts | Efficacy: 82.1 lm/W | 83.8 CRI; 3478K CCT



| | VERTICAL ANGLE | HORIZONTAL ANGLE | | | ZONAL LUMENS |
|--------------------------|----------------|------------------|------|------|--------------|
| | | 0° | 45° | 90° | |
| CANDLEPOWER DISTRIBUTION | 0 | 1526 | 1526 | 1526 | |
| | 5 | 1512 | 1512 | 1513 | 144 |
| | 15 | 1426 | 1447 | 1456 | 410 |
| | 25 | 1107 | 1253 | 1110 | 546 |
| | 35 | 501 | 762 | 491 | 372 |
| | 45 | 317 | 344 | 314 | 254 |
| | 55 | 192 | 197 | 191 | 175 |
| | 65 | 101 | 98 | 99 | 100 |
| | 75 | 42 | 41 | 42 | 44 |
| | 85 | 5 | 4 | 6 | 5 |
| | 90 | 0 | 0 | 0 | |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|---------|--------|-----------|
| | 0 - 30 | 1100 | 54 |
| | 0 - 40 | 1472 | 72 |
| | 0 - 60 | 1902 | 93 |
| | 0 - 90 | 2050 | 100 |
| | 0 - 180 | 2050 | 100 |

4DS-L20/835-DIM-UNV-LM-OF-WH Report #: 20318; 04/20/18 | Total Luminaire Output: 2261 lumens; 25.0 Watts | Efficacy: 90.5 lm/W | 83.8 CRI; 3478K CCT



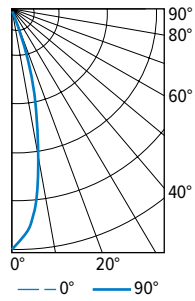
| | VERTICAL ANGLE | HORIZONTAL ANGLE | | | ZONAL LUMENS |
|--------------------------|----------------|------------------|------|------|--------------|
| | | 0° | 45° | 90° | |
| CANDLEPOWER DISTRIBUTION | 0 | 6047 | 6047 | 6047 | |
| | 5 | 5827 | 5790 | 5763 | 553 |
| | 15 | 3492 | 3513 | 3428 | 994 |
| | 25 | 948 | 987 | 856 | 438 |
| | 35 | 214 | 246 | 190 | 142 |
| | 45 | 77 | 84 | 72 | 61 |
| | 55 | 40 | 42 | 40 | 37 |
| | 65 | 25 | 24 | 25 | 24 |
| | 75 | 10 | 10 | 9 | 11 |
| | 85 | 2 | 1 | 2 | 2 |
| | 90 | 0 | 0 | 0 | |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|---------|--------|-----------|
| | 0 - 30 | 1985 | 88 |
| | 0 - 40 | 2126 | 94 |
| | 0 - 60 | 2224 | 98 |
| | 0 - 90 | 2261 | 100 |
| | 0 - 180 | 2261 | 100 |



4DS^{LED} 4.5" Downlight – Square

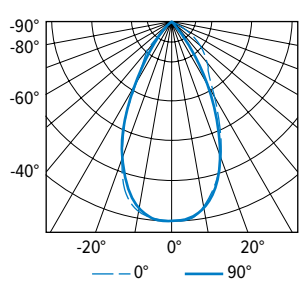
4DS-L20/835-DIM-UNV-LN-OF-WH Report #: 20319; 04/20/18 | Total Luminaire Output: 2285 lumens; 25 Watts | Efficacy: 91.5 lm/W | 83.8 CRI; 3478K CCT



| VERTICAL ANGLE | HORIZONTAL ANGLE | | | ZONAL LUMENS |
|----------------|------------------|------|------|--------------|
| | 0° | 45° | 90° | |
| 0 | 9567 | 9567 | 9567 | |
| 5 | 8671 | 8526 | 8592 | 820 |
| 15 | 3598 | 3354 | 3215 | 966 |
| 25 | 755 | 662 | 584 | 310 |
| 35 | 158 | 149 | 122 | 90 |
| 45 | 59 | 62 | 53 | 45 |
| 55 | 32 | 32 | 30 | 28 |
| 65 | 18 | 17 | 17 | 17 |
| 75 | 9 | 8 | 8 | 8 |
| 85 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|---------|--------|-----------|
| | 0 - 30 | 2096 | 92 |
| | 0 - 40 | 2186 | 96 |
| | 0 - 60 | 2259 | 99 |
| | 0 - 90 | 2285 | 100 |
| | 0 - 180 | 2285 | 100 |

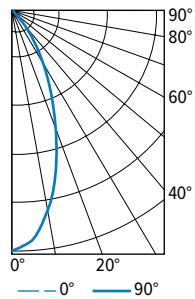
4DS-L20/835-DIM-UNV-OWW-OF-CS Report #: 20314; 04/16/18 | Total Luminaire Output: 1770 lumens; 25 Watts | Efficacy: 70.9 lm/W | 83.8 CRI; 3478K CCT



| VERTICAL ANGLE | HORIZONTAL ANGLE | | | | | | ZONAL LUMENS |
|----------------|------------------|------|------|------|------|--|--------------|
| | 0° | 45° | 90° | 135° | 180° | | |
| 0 | 1863 | 1863 | 1863 | 1863 | 1863 | | |
| 5 | 1861 | 1852 | 1853 | 1855 | 1854 | | 177 |
| 15 | 1587 | 1603 | 1596 | 1674 | 1663 | | 462 |
| 25 | 1084 | 1134 | 1038 | 1183 | 1048 | | 507 |
| 35 | 620 | 580 | 409 | 563 | 480 | | 332 |
| 45 | 454 | 267 | 134 | 193 | 179 | | 178 |
| 55 | 274 | 84 | 19 | 31 | 21 | | 73 |
| 65 | 166 | 18 | 0 | 0 | 0 | | 33 |
| 75 | 56 | 0 | 0 | 0 | 0 | | 10 |
| 85 | 0 | 0 | 0 | 0 | 0 | | 0 |
| 90 | 0 | 0 | 0 | 0 | 0 | | |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|---------|--------|-----------|
| | 0 - 30 | 1145 | 65 |
| | 0 - 40 | 1478 | 84 |
| | 0 - 60 | 1728 | 98 |
| | 0 - 90 | 1770 | 100 |
| | 0 - 180 | 1770 | 100 |

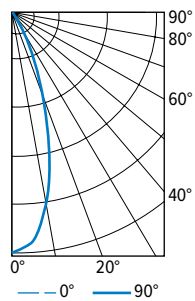
4DS-L20/835-DIM-UNV-OM-OF-CS Report #: 20312; 04/20/18 | Total Luminaire Output: 2089 lumens; 25 Watts | Efficacy: 83.6 lm/W | 83.8 CRI; 3478K CCT



| VERTICAL ANGLE | HORIZONTAL ANGLE | | | ZONAL LUMENS |
|----------------|------------------|------|------|--------------|
| | 0° | 45° | 90° | |
| 0 | 3726 | 3726 | 3726 | |
| 5 | 3579 | 3542 | 3543 | 339 |
| 15 | 2585 | 2560 | 2556 | 726 |
| 25 | 1378 | 1364 | 1369 | 638 |
| 35 | 446 | 557 | 433 | 309 |
| 45 | 63 | 130 | 60 | 69 |
| 55 | 6 | 10 | 6 | 7 |
| 65 | 0 | 0 | 0 | 0 |
| 75 | 0 | 0 | 0 | 0 |
| 85 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|---------|--------|-----------|
| | 0 - 30 | 1703 | 82 |
| | 0 - 40 | 2013 | 96 |
| | 0 - 60 | 2089 | 100 |
| | 0 - 90 | 2089 | 100 |
| | 0 - 180 | 2089 | 100 |

4DS-L20/835-DIM-UNV-RM-OF-WH Report #: 20323; 04/23/18 | Total Luminaire Output: 2221 lumens; 25 Watts | Efficacy: 88.9 lm/W | 83.8 CRI; 3478K CCT



| VERTICAL ANGLE | HORIZONTAL ANGLE | | | ZONAL LUMENS |
|----------------|------------------|------|------|--------------|
| | 0° | 45° | 90° | |
| 0 | 5934 | 5934 | 5934 | |
| 5 | 5723 | 5656 | 5624 | 540 |
| 15 | 3487 | 3468 | 3398 | 981 |
| 25 | 943 | 1008 | 963 | 453 |
| 35 | 188 | 255 | 209 | 142 |
| 45 | 61 | 79 | 63 | 54 |
| 55 | 34 | 35 | 32 | 30 |
| 65 | 17 | 16 | 17 | 17 |
| 75 | 4 | 3 | 3 | 4 |
| 85 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|---------|--------|-----------|
| | 0 - 30 | 1974 | 89 |
| | 0 - 40 | 2116 | 95 |
| | 0 - 60 | 2200 | 99 |
| | 0 - 90 | 2221 | 100 |
| | 0 - 180 | 2221 | 100 |



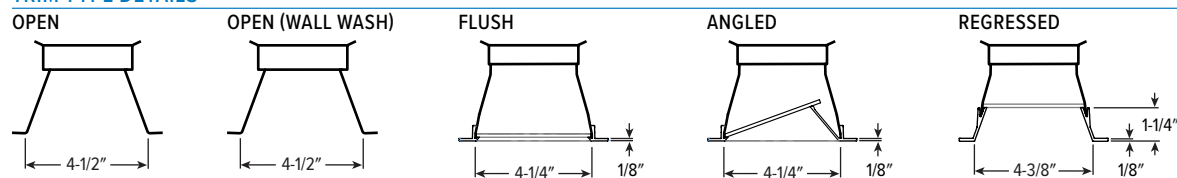
4DS^{LED} 4.5" Downlight – Square

ADDITIONAL CONTROL OPTIONS

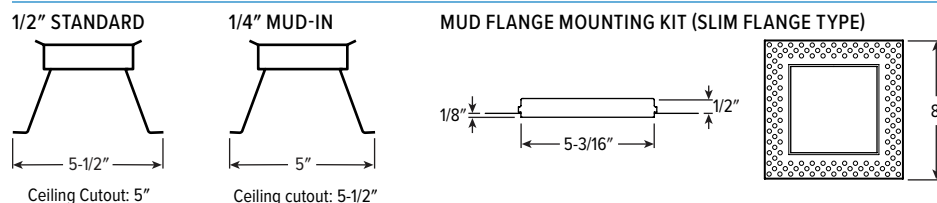
Lumen restrictions apply: L30 max for DMX driver, L30 max for Lutron drivers, L40 max for DIM LINE driver. R Mounting Type only available with DIM, DIM1, and DIM LINE controls. 347V may require stepdown transformer, see product builder at hew.com/product-builder.

| 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) |
| DMX | 0.1% dimming driver for DMX controls |
| LTE LINE | Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only) |
| LDE1 | Lutron Hi-lume 1% EcoSystem dimming LED driver |
| LDE5 | Lutron 5-Series 5% EcoSystem dimming LED driver |
| VRF/DBI/LDE1 | Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron Hi-lume 1% EcoSystem dimming LED driver, and digital link interface |
| VRF/DBI/LDE5 | Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron 5-Series 5% EcoSystem dimming LED driver, and digital link interface |
| FCJS/DIM | Lutron Vive PowPak wireless fixture control with dimming driver |
| FCJS/DIM1 | Lutron Vive PowPak wireless fixture control with 1% dimming driver |
| ELDO SOLOB | EldoLED Solodrive, 0.1% dimming driver for 0-10V controls |
| ELDO SOLOB DALI | EldoLED Solodrive, 0.1% dimming driver for DALI controls |
| ELDO ECO1 | EldoLED Ecodrive, 1% dimming driver for 0-10V controls |
| ELDO ECO1 DALI | EldoLED Ecodrive, 1% dimming driver for DALI controls |

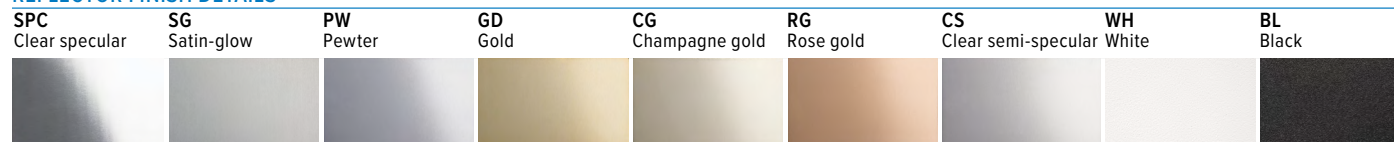
TRIM TYPE DETAILS



FLANGE TYPE DETAILS



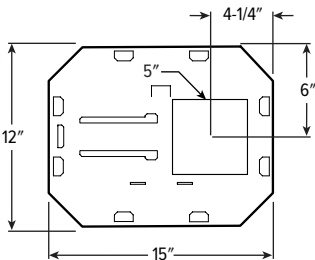
REFLECTOR FINISH DETAILS



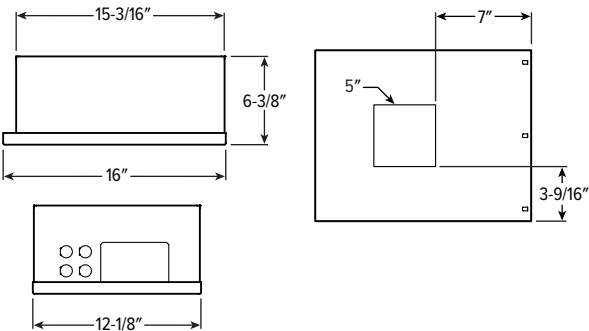
4DS^{LED} 4.5" Downlight – Square

MOUNTING TYPE DETAILS

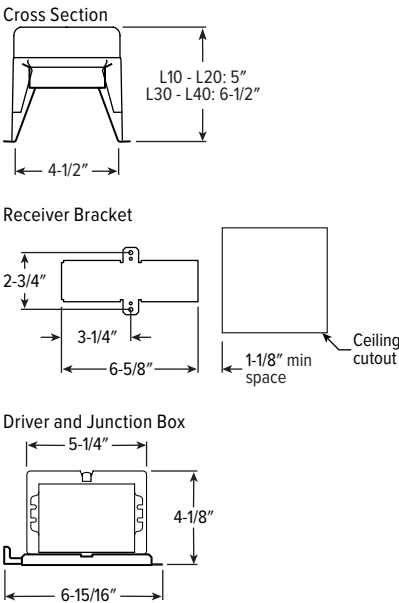
NEW CONSTRUCTION



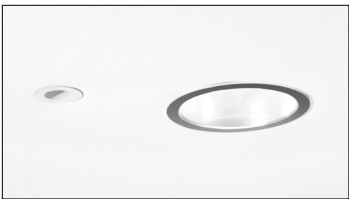
IC-RATED



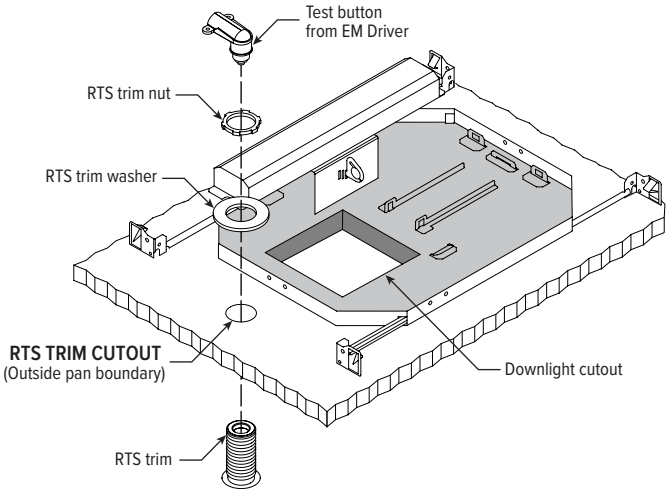
REMODEL



EM/10W/RTS DETAILS



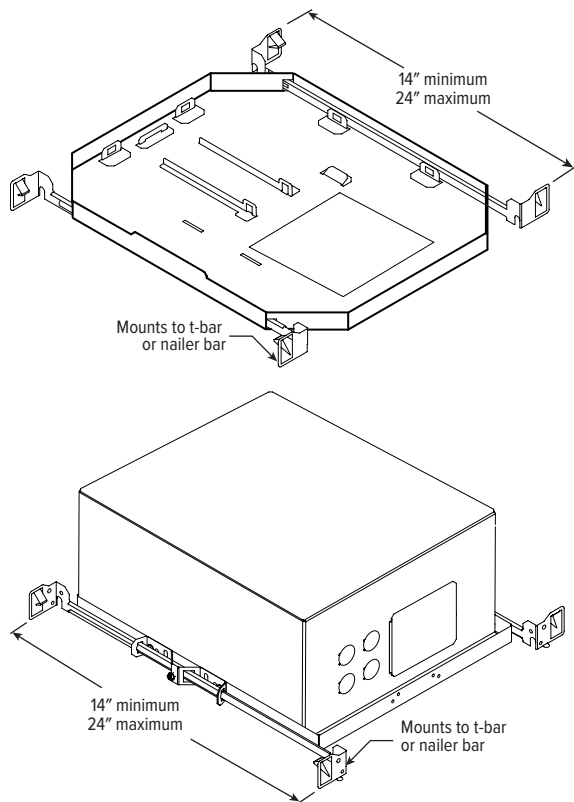
Shown Installed



4DS^{LED} 4.5" Downlight – Square

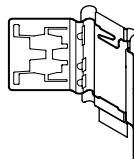
MOUNTING HARDWARE DETAILS

F1 Integral 2-position fixed pan bracket, universal bar hanger included

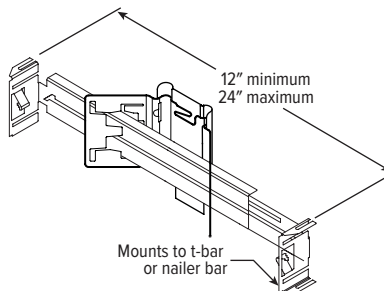


F1 with I Mounting Type

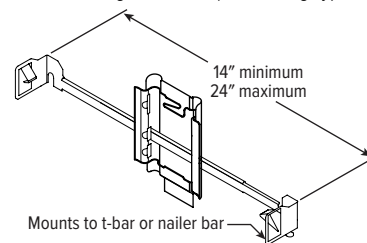
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



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)

