

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

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

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

Ceiling Cutout: 2RR: ø2-5/8" | 2RS: 2-5/8" x 2-5/8"

## FEATURES

- Remodel construction allows for room-side installation
- Wide, medium, and narrow distributions tailor performance to the application
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- 2" aperture is unobtrusive in small scale spaces
- Fixed or adjustable aim with 0° - 25° tilt and 360° rotation
- Open reflector with 5 finishes compliment interior style
- Driver and LEDs accessible from below the ceiling for ease of maintenance
- ENERGY STAR® certified
- Designed and manufactured in the USA

## SPECIFICATIONS

- HOUSING** – 20-gauge galvanized remodel driver enclosure. LED assembly accepts ceiling thicknesses from 1/2" to 7/8" thick. Extruded aluminum heat sink.
- REFLECTOR** – Injection molded vacuum metalized upper optic and ceiling trim. Clear semi-specular (CS) trim standard.
- ELECTRICAL** – High quality C.O.B. LED array. Reported L70 >50,000 hours.
- MOUNTING** – Recessed. Line voltage supply via flexible conduit, accessible through ceiling aperture, required prior to installation.
- LISTINGS** –
  - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0. Suitable for damp locations.
  - Suitable for wet location under covered ceiling when specified with DL option.
  - ENERGY STAR® certified in select configurations, see [www.energystar.gov](http://www.energystar.gov)
  - RoHS compliant.
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

ORDERING EXAMPLE: 2RR - F - D - L12C/835 - M - CS - OPTIONS - DIM - 120

## ORDERING INFO

| SERIES | TRIM TYPE           | ADJUSTMENT        | LUMENS <sup>[1]</sup> | CRI  | CCT                              | DISTRIBUTION               |
|--------|---------------------|-------------------|-----------------------|------|----------------------------------|----------------------------|
| 2RR    | F Flanged reflector | D Fixed downlight | L8C 800lm             | 8 80 | 27 2700K                         | N 30° Narrow               |
| 2RS    |                     | A Adjustable      | L12C 1200lm           | 9 90 | 30 3000K<br>35 3500K<br>40 4000K | M 35° Medium<br>W 40° Wide |

| REFLECTOR FINISH       | OPTIONS  | DRIVER                                 | VOLTAGE  |
|------------------------|--|--|----------|
| CS Clear semi-specular | DL Diffuse polycarbonate regressed lens        | DIM Dimming driver <sup>[4]</sup>      | 120 120V |
| SG Satin-glow          | F Fuse   | DL2 2-wire line voltage dimming driver | 277 277V |
| SPC Clear specular     | SFA Square flush flange adapter <sup>[2]</sup> |  |          |
| WH Matte white         | RFA Round flush flange adapter <sup>[3]</sup>  |  |          |
| BL Black               |  |  |          |



## NOTES

- Lumens based on downlight with CS reflector color and W distribution. See page 2 for FIXTURE PERFORMANCE DATA.
- For mud-in applications, shipped separately. See page 4 for FLUSH FLANGE ADAPTER DETAILS.
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- 10% dimming driver prewired for 0-10V low voltage applications.

# 2R<sup>LED</sup> 2" Remodel Downlight

## FIXTURE PERFORMANCE DATA

### ROUND

|            | LED PACKAGE | DISTRIBUTION | DELIVERED LUMENS | WATTAGE | EFFICACY (LM/W) |
|------------|-------------|--------------|------------------|---------|-----------------|
| DOWNLIGHT  | L8C         | W            | 988              | 14      | 72              |
|            |             | M            | 971              | 14      | 71              |
|            |             | N            | 922              | 14      | 67              |
| DOWNLIGHT  | L12C        | W            | 1361             | 21      | 68              |
|            |             | M            | 1338             | 20      | 67              |
|            |             | N            | 1271             | 21      | 63              |
| ADJUSTABLE | L8C         | W            | 481              | 14      | 35              |
|            |             | M            | 513              | 14      | 37              |
|            |             | N            | 430              | 14      | 31              |
| ADJUSTABLE | L12C        | W            | 663              | 20      | 33              |
|            |             | M            | 707              | 21      | 35              |
|            |             | N            | 593              | 20      | 29              |

### SQUARE

|            | LED PACKAGE | DISTRIBUTION | DELIVERED LUMENS | WATTAGE | EFFICACY (Lm/W) |
|------------|-------------|--------------|------------------|---------|-----------------|
| DOWNLIGHT  | L8C         | W            | 937              | 14      | 68              |
|            |             | M            | 927              | 14      | 68              |
|            |             | N            | 841              | 14      | 61              |
| DOWNLIGHT  | L12C        | W            | 1291             | 20      | 65              |
|            |             | M            | 1277             | 20      | 64              |
|            |             | N            | 1159             | 20      | 58              |
| ADJUSTABLE | L8C         | W            | 660              | 14      | 48              |
|            |             | M            | 551              | 14      | 40              |
|            |             | N            | 398              | 14      | 29              |
| ADJUSTABLE | L12C        | W            | 910              | 20      | 46              |
|            |             | M            | 760              | 21      | 38              |
|            |             | N            | 548              | 21      | 27              |

### MULTIPLIER TABLES

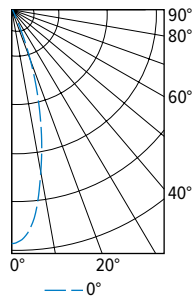
|        | COLOR TEMPERATURE |                   |
|--------|-------------------|-------------------|
|        | CCT               | CONVERSION FACTOR |
| 80 CRI | 2700K             | 1.00              |
|        | 3000K             | 1.05              |
|        | 3500K             | 1.07              |
|        | 4000K             | 1.08              |
| 90 CRI | 2700K             | 0.83              |
|        | 3000K             | 0.86              |
|        | 3500K             | 0.90              |
|        | 4000K             | 0.93              |

| REFLECTOR FINISH |                     |                   |
|------------------|---------------------|-------------------|
| CATALOG NUMBER   | REFLECTOR FINISH    | CONVERSION FACTOR |
| CS               | Clear semi-specular | 1.00              |
| SG               | Satin-glow          | 0.97              |
| SPC              | Specular            | 1.07              |
| WH               | Matte white         | 1.00              |
| BL               | Black               | 0.80              |

- 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 2700K, 80 CRI.
- Use multiplier tables to calculate additional options.

### PHOTOMETRY

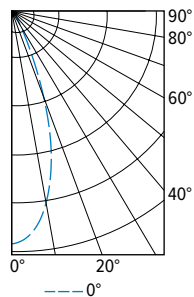
2RR-F-D-L12C/827-N-CS Report #: 11394407.07; 10/17/16 Total Luminaire Output: 1271 lumens; 21 Watts | Efficacy: 63.3 lm/W | 82 CRI; 2809K CCT



| CANDLEPOWER DISTRIBUTION | VERTICAL ANGLE | HORIZONTAL ANGLE | ZONAL LUMENS |
|--------------------------|----------------|------------------|--------------|
|                          |                | 0°               |              |
|                          | 0              | 5234             |              |
|                          | 5              | 4864             | 121          |
|                          | 15             | 2342             | 352          |
|                          | 25             | 250              | 127          |
|                          | 35             | 42               | 16           |
|                          | 45             | 21               | 9            |
|                          | 55             | 8                | 4            |
|                          | 65             | 5                | 3            |
|                          | 75             | 3                | 2            |
|                          | 85             | 1                | 1            |
|                          | 90             | 3                |              |

| LUMEN SUMMARY | ZONE   | LUMENS | % FIXTURE |
|---------------|--------|--------|-----------|
|               | 0 - 40 | 1239   | 98        |
|               | 0 - 60 | 1262   | 99        |
|               | 0 - 90 | 1271   | 100       |

2RR-F-D-L12C/827-M-CS Report #: 11394407.05; 10/17/16 Total Luminaire Output: 1343 lumens; 20 Watts | Efficacy: 67.4 lm/W | 83 CRI; 2776K CCT



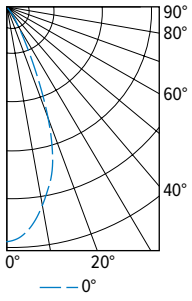
| CANDLEPOWER DISTRIBUTION | VERTICAL ANGLE | HORIZONTAL ANGLE | ZONAL LUMENS |
|--------------------------|----------------|------------------|--------------|
|                          |                | 0°               |              |
|                          | 0              | 3860             |              |
|                          | 5              | 3687             | 90           |
|                          | 15             | 2412             | 332          |
|                          | 25             | 488              | 183          |
|                          | 35             | 77               | 32           |
|                          | 45             | 29               | 14           |
|                          | 55             | 16               | 8            |
|                          | 65             | 10               | 5            |
|                          | 75             | 5                | 3            |
|                          | 85             | 1                | 1            |
|                          | 90             | 3                |              |

| LUMEN SUMMARY | ZONE   | LUMENS | % FIXTURE |
|---------------|--------|--------|-----------|
|               | 0 - 40 | 1283   | 96        |
|               | 0 - 60 | 1321   | 99        |
|               | 0 - 90 | 1338   | 100       |



# 2R<sup>LED</sup> 2" Remodel Downlight

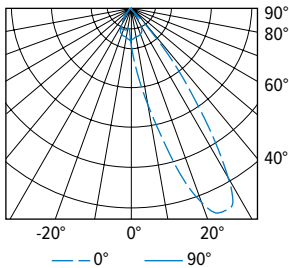
**2RR-F-D-L12C/827-W-CS** Report #: 11394407.01; 10/05/16 Total Luminaire Output: 1361 lumens; 21 Watts | Efficacy: 67.7 lm/W | 82 CRI; 2418K CCT



| CANDLEPOWER DISTRIBUTION | VERTICAL ANGLE | HORIZONTAL ANGLE |              |
|--------------------------|----------------|------------------|--------------|
|                          |                | 0°               | ZONAL LUMENS |
|                          | 0              | 3000             |              |
|                          | 5              | 2882             | 70           |
|                          | 15             | 2168             | 280          |
|                          | 25             | 722              | 223          |
|                          | 35             | 161              | 68           |
|                          | 45             | 32               | 17           |
|                          | 55             | 17               | 8            |
|                          | 65             | 10               | 6            |
|                          | 75             | 6                | 4            |
|                          | 85             | 2                | 1            |
|                          | 90             | 2                |              |

| LUMEN SUMMARY | ZONE   | LUMENS | % FIXTURE |
|---------------|--------|--------|-----------|
|               | 0 - 40 | 1300   | 96        |
|               | 0 - 60 | 1343   | 99        |
|               | 0 - 90 | 1361   | 100       |

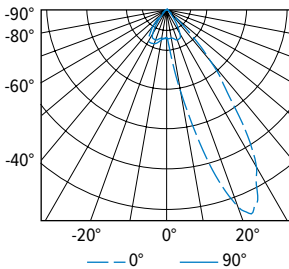
**2RR-F-A-L12C/827-N-CS** Report #: 11394407.22; 10/11/16 Total Luminaire Output: 593.4 lumens; 20 Watts | Efficacy: 29.7 lm/W | 82 CRI; 2832K CCT



| CANDLEPOWER DISTRIBUTION | VERTICAL ANGLE | HORIZONTAL ANGLE |     |     |      |      | ZONAL LUMENS |
|--------------------------|----------------|------------------|-----|-----|------|------|--------------|
|                          |                | 0°               | 45° | 90° | 135° | 180° |              |
|                          | 0              | 287              | 287 | 287 | 287  | 287  |              |
|                          | 5              | 528              | 446 | 273 | 199  | 179  | 7            |
|                          | 15             | 1407             | 776 | 255 | 215  | 198  | 55           |
|                          | 25             | 1996             | 597 | 224 | 226  | 199  | 177          |
|                          | 35             | 902              | 128 | 102 | 130  | 117  | 83           |
|                          | 45             | 66               | 10  | 23  | 41   | 45   | 20           |
|                          | 55             | 4                | 5   | 11  | 16   | 16   | 5            |
|                          | 65             | 3                | 4   | 6   | 9    | 9    | 4            |
|                          | 75             | 2                | 2   | 3   | 5    | 4    | 2            |
|                          | 85             | 1                | 1   | 1   | 1    | 1    | 1            |
|                          | 90             | 0                | 19  | 1   | 0    | 0    |              |

| LUMEN SUMMARY | ZONE   | LUMENS | % FIXTURE |
|---------------|--------|--------|-----------|
|               | 0 - 40 | 543    | 92        |
|               | 0 - 60 | 581    | 98        |
|               | 0 - 90 | 593    | 100       |

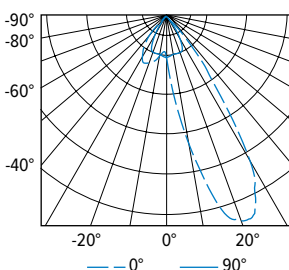
**2RR-F-A-L12C/827-M-CS** Report #: 11394407.21; 10/06/16 Total Luminaire Output: 703 lumens; 21 Watts | Efficacy: 34.9 lm/W | 83 CRI; 2788K CCT



| CANDLEPOWER DISTRIBUTION | VERTICAL ANGLE | HORIZONTAL ANGLE |     |     |      |      | ZONAL LUMENS |
|--------------------------|----------------|------------------|-----|-----|------|------|--------------|
|                          |                | 0°               | 45° | 90° | 135° | 180° |              |
|                          | 0              | 263              | 263 | 263 | 263  | 263  |              |
|                          | 5              | 425              | 359 | 264 | 262  | 262  | 7            |
|                          | 15             | 1434             | 743 | 278 | 307  | 311  | 57           |
|                          | 25             | 1892             | 643 | 284 | 325  | 329  | 133          |
|                          | 35             | 960              | 58  | 140 | 224  | 232  | 105          |
|                          | 45             | 185              | 10  | 28  | 74   | 83   | 33           |
|                          | 55             | 5                | 6   | 13  | 24   | 26   | 8            |
|                          | 65             | 4                | 4   | 8   | 13   | 14   | 5            |
|                          | 75             | 2                | 3   | 4   | 6    | 7    | 3            |
|                          | 85             | 1                | 1   | 1   | 2    | 1    | 1            |
|                          | 90             | 1                | 3   | 0   | 0    | 0    |              |

| LUMEN SUMMARY | ZONE   | LUMENS | % FIXTURE |
|---------------|--------|--------|-----------|
|               | 0 - 40 | 632    | 89        |
|               | 0 - 60 | 692    | 98        |
|               | 0 - 90 | 707    | 100       |

**2RR-F-A-L12C/827-W-CS** Report #: 11394407.19; 10/06/16 Total Luminaire Output: 663.1 lumens; 21 Watts | Efficacy: 33.1 lm/W | 82 CRI; 2845K CCT



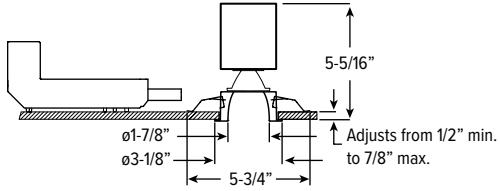
| CANDLEPOWER DISTRIBUTION | VERTICAL ANGLE | HORIZONTAL ANGLE |     |     |      |      | ZONAL LUMENS |
|--------------------------|----------------|------------------|-----|-----|------|------|--------------|
|                          |                | 0°               | 45° | 90° | 135° | 180° |              |
|                          | 0              | 311              | 311 | 311 | 311  | 311  |              |
|                          | 5              | 570              | 475 | 301 | 272  | 271  | 8            |
|                          | 15             | 1472             | 855 | 289 | 334  | 349  | 65           |
|                          | 25             | 1543             | 605 | 265 | 363  | 387  | 126          |
|                          | 35             | 574              | 103 | 105 | 248  | 290  | 90           |
|                          | 45             | 78               | 10  | 23  | 65   | 86   | 29           |
|                          | 55             | 5                | 6   | 11  | 19   | 21   | 6            |
|                          | 65             | 4                | 4   | 6   | 10   | 11   | 4            |
|                          | 75             | 2                | 2   | 3   | 5    | 5    | 2            |
|                          | 85             | 1                | 1   | 1   | 1    | 1    | 1            |
|                          | 90             | 1                | 23  | 0   | 1    | 0    |              |

| LUMEN SUMMARY | ZONE   | LUMENS | % FIXTURE |
|---------------|--------|--------|-----------|
|               | 0 - 40 | 600    | 91        |
|               | 0 - 60 | 651    | 98        |
|               | 0 - 90 | 663    | 100       |

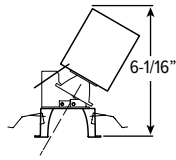
# 2R<sup>LED</sup> 2" Remodel Downlight

## CROSS SECTIONS

### FIXED (shown with mounting pan)



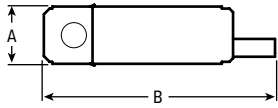
### ADJUSTABLE



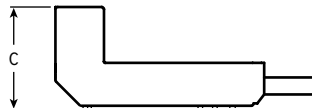
Ceiling Cutout: 2RR:  $\phi 2-5/8"$  | 2RS:  $2-5/8" \times 2-5/8"$

## DRIVER BOX

### TOP VIEW



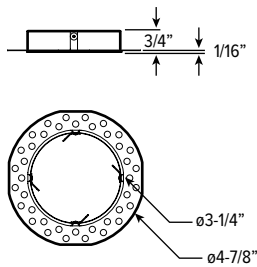
### SIDE VIEW



|   | DL2 (2-LINE) | DIM (0-10V) |
|---|--------------|-------------|
| A | 2-3/16"      | 2-1/4"      |
| B | 8-1/16"      | 9-5/16"     |
| C | 3-1/4"       | 3-1/4"      |

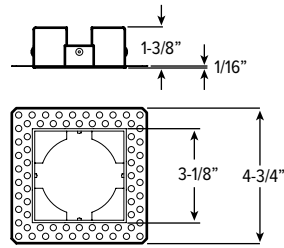
## FLUSH FLANGE ADAPTER DETAILS

### ROUND



Ceiling cutout:  $\phi 3-5/16"$

### SQUARE



Ceiling cutout:  $3-1/4" \times 3-1/4"$

## TRIM FINISH DETAILS

