



Core value LED downlight for new construction and remodel applications that installs in many existing residential and commercial applications.

Project: \_\_\_\_\_

Location: \_\_\_\_\_

Cat.No: \_\_\_\_\_

Type: \_\_\_\_\_

Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_

Notes: \_\_\_\_\_



### Ordering guide

example: CP4RB07830W

| Catalog Number     | Aperture | CRI | CCT   | Lumens | System Watts (Max) | Efficacy (lm/W) | Voltage |
|--------------------|----------|-----|-------|--------|--------------------|-----------------|---------|
| <b>CP4RB07830W</b> | 4-inch   | 80  | 3000K | 800lm  | 11                 | 73              | 120     |
| <b>CP4RB07930W</b> | 4-inch   | 90  | 3000K | 750lm  | 11                 | 68              | 120     |

### Features

- Reflector/Flange:** One piece self flange cast aluminum, powder coated, non yellowing, white baffle and flange.
- Lens:** High transmittance lens allowing for smooth, diffused light pattern.
- Power supply:** Class 2 driver. Factory wired electronic LED driver (see Electrical section for specifications).
- LED board:** Light emitted source.
- Friction spring:** Stainless steel.
- Power connection:** Trim features quick connect plug installed as standard installation into CP4RN housing with mating connector. Trim ships with a medium base socket adapter whip for installation into 4" incandescent housings with medium base sockets.
- Lifetime:** Expected lifetime 50,000 hours and backed by a 5-year warranty (see Philips.com/warranties for details).

### Electrical

**Electronic power supply:** RoHS compliant\* Class 2 power unit for use in a dry and damp locations. Complies with FCC.

**Dimming:** All luminaires are intended for use with TRIAC type dimmers. Go to <http://www.lightolier.com/MKACatpdfs/LED-DIM.PDF> for the latest dimming switch capability information. 10%-100% dimming range.

| Lumen Output | Input Voltage | Input Frequency | Max. Input Current | Max. Input Power | Max THD | Power Factor | Min. Temp. Operating |
|--------------|---------------|-----------------|--------------------|------------------|---------|--------------|----------------------|
| 800lm        | 120V          | 50/60Hz         | 0.09A              | 11W              | < 30%   | > .9         | -20° C               |

Performance data based on 80 CRI 3000K.

\* Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electronic products. For products used in North America compliance to RoHS is voluntary and self-certified.

### Labels

cULus listed for wet locations.  
Energy Star certified.

Title 24 Certified to meet high efficiency requirements; 90 CRI configuration only.

# CP4 CorePro LED 4"

## Downlight

### CP4RN: 4" IC/Airseal frame-in kit housing

**Housing** - Constructed of formed aluminum. For use in direct contact with thermal insulation. Adjusts vertically in plaster frame to accommodate ceilings 1/2" to 1-1/2" thick. Ceiling opening 4 1/2".

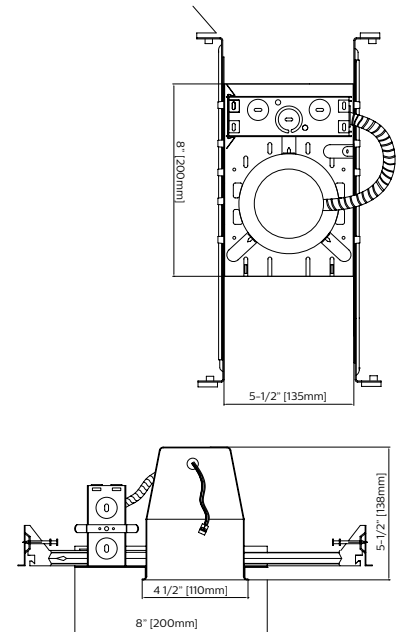
**Electrical Connection** - LED quick-connect adapter

**Junction Box**- galvanized steel with two snap-on covers and grounding pigtail. Knockouts for 1/2" & 3/4" conduit and Romex knockouts with strain relief

**Bar Hangers**: Pre-installed pre-nailed style bar hangers telescope from 16" to 24". Vertical design of interlocking bar hangers prevents sagging even at full 24" extension. Style bar hangers may be used on either long or short axis of housing.

**IC frame-in Kit** - Housing is cULus Listed for direct contact with thermal insulation cULus Listed for Damp Locations and Through Branch Wiring, 4 in/4 out.

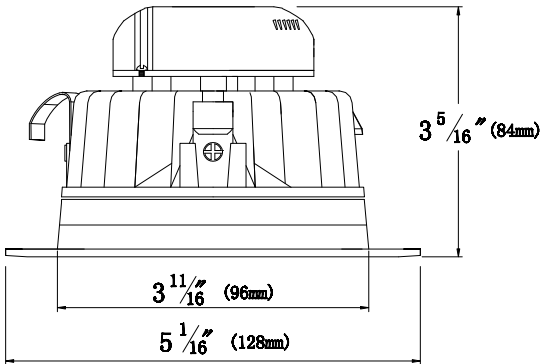
**AirSeal™**: Fixture is AirSeal™ rated according to ASTM E283 to no more than 2.0 cubic feet of air per minute at 75 pascals. Fixture meets Washington State Energy Code and Energy Conservation Code.



# CP4 CorePro LED 4"

## Downlight

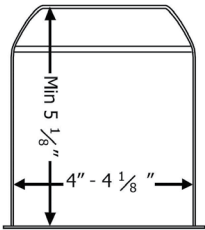
### Dimensions



### E26 Compatibility\*

| Manufacturer | Model  |
|--------------|--|
| Philips      | CP4RN,<br>FDIC4V50, P4,<br>P4R,<br>P4ASIC,<br>P4GU,<br>P4RGU,<br>R4,<br>RR4,<br>R4ASICG, |
| Halo         | H991CAT,<br>H99T,<br>H99RT,  |
| Seagull      | 1179, 1105   |
| All-Pro      | E1400ATSB  |

\* Any other luminaires meeting  
theses dimensions as shown  
are also compatible.



CP4RN: IC c/w LED Connector  
New Construction Housing



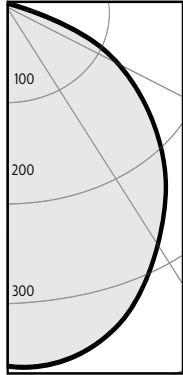
4\"unit shown with standard (E26)  
adapter to fit medium base sockets

# CP4 CorePro LED 4"

## Downlight

### CP4RB07830W

#### Candela Curves



| Angle | Mean CP | Lumens |
|-------|---------|--------|
| 0     | 343     |        |
| 5     | 342     | 32     |
| 10    | 338     |        |
| 15    | 329     | 91     |
| 20    | 316     |        |
| 25    | 301     | 134    |
| 30    | 282     |        |
| 35    | 261     | 157    |
| 40    | 239     |        |
| 45    | 214     | 155    |
| 50    | 186     |        |
| 55    | 156     | 127    |
| 60    | 125     |        |
| 65    | 93      | 79     |
| 70    | 63      |        |
| 75    | 34      | 27     |
| 80    | 13      |        |
| 85    | 5       | 4      |
| 90    | 0       |        |

#### Single unit data

| Height to Lighted Plane | Initial center beam foot-candles | Beam dia. (ft)* |
|-------------------------|----------------------------------|-----------------|
| 5'                      | 14                               | 6.0             |
| 6'                      | 10                               | 7.2             |
| 7'                      | 7                                | 8.4             |
| 8'                      | 5                                | 9.6             |
| 9'                      | 4                                | 10.8            |

\* Beam diameter is where foot-candles drop to 50% of maximum.

#### Multiple unit data - RCR 2

| Spacing on center | Initial center beam foot-candles | Watts per sq.ft. |
|-------------------|----------------------------------|------------------|
| 33.6              | 0.47                             | 0.55             |
| 22.1              | 0.31                             | 0.36             |
| 15.8              | 0.22                             | 0.26             |
| 13.1              | 0.19                             | 0.21             |
| 10.5              | 0.15                             | 0.17             |

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

#### Coefficients of utilization

| Ceiling           | 80%   |     |     |     | 70% |     | 50% |     | 30% |     | 0%  |     |
|-------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wall              | 70  | 50  | 30  | 10  | 50  | 10  | 50  | 10  | 50  | 10  | 0   |     |
| RCR               | Zonal cavity method - Effective floor reflectance = 20% |     |     |     |     |     |     |     |     |     |     |     |
| Room Cavity Ratio | 0   | 119 | 119 | 119 | 119 | 116 | 116 | 111 | 111 | 106 | 106 | 100 |
|                   | 1   | 110 | 106 | 102 | 99  | 104 | 97  | 100 | 94  | 96  | 91  | 87  |
|                   | 2   | 101 | 94  | 88  | 82  | 92  | 81  | 88  | 80  | 85  | 78  | 74  |
|                   | 3   | 93  | 83  | 76  | 70  | 82  | 69  | 79  | 68  | 76  | 67  | 63  |
|                   | 4   | 85  | 74  | 66  | 60  | 73  | 59  | 70  | 58  | 68  | 58  | 55  |
|                   | 5   | 79  | 67  | 58  | 52  | 65  | 52  | 63  | 51  | 61  | 50  | 48  |
|                   | 6   | 73  | 60  | 52  | 46  | 59  | 45  | 57  | 45  | 56  | 45  | 42  |
|                   | 7   | 68  | 55  | 46  | 40  | 54  | 40  | 52  | 40  | 51  | 40  | 38  |
|                   | 8   | 63  | 50  | 42  | 36  | 49  | 36  | 48  | 36  | 47  | 36  | 34  |
|                   | 9   | 59  | 46  | 38  | 33  | 45  | 33  | 44  | 33  | 43  | 32  | 30  |
| 10                | 55  | 43  | 35  | 30  | 42  | 30  | 41  | 30  | 40  | 29  | 28  |     |

#### Zonal lumens & percentages

| Zone | Lumens | %Luminaire |
|------|--------|------------|
| 0-30 | 258    | 31.9%      |
| 0-40 | 414    | 51.3%      |
| 0-60 | 696    | 86.3%      |
| 0-90 | 807    | 100.0%     |

#### Adjustment factors

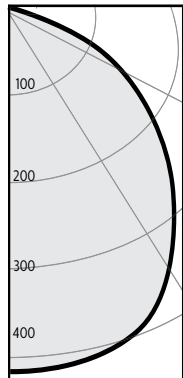
| Color temperature (CCT) |
|-------------------------|
| 4000K = 105%            |

#### Report<sup>1</sup>: BTS165311

|                            |           |                    |           |
|----------------------------|-----------|--------------------|-----------|
| Output lumens:             | 806.9 lms | Efficacy:          | 75.4 lm/w |
| Input Watts <sup>2</sup> : | 10.7W     | CCT <sup>3</sup> : | 3000 K    |
| Spacing Criterion:         | 1.2       | CRI:               | >80       |

### CP4RB07930W

#### Candela Curves



| Angle | Mean CP | Lumens |
|-------|---------|--------|
| 0     | 377     |        |
| 5     | 370     | 35     |
| 10    | 358     |        |
| 15    | 340     | 98     |
| 20    | 317     |        |
| 25    | 289     | 140    |
| 30    | 259     |        |
| 35    | 228     | 154    |
| 40    | 195     |        |
| 45    | 160     | 139    |
| 50    | 125     |        |
| 55    | 92      | 100    |
| 60    | 64      |        |
| 65    | 40      | 54     |
| 70    | 22      |        |
| 75    | 10      | 18     |
| 80    | 4       |        |
| 85    | 1       | 3      |
| 90    | 0       |        |

#### Single unit data

| Height to Lighted Plane | Initial center beam foot-candles | Beam dia. (ft)* |
|-------------------------|----------------------------------|-----------------|
| 5'                      | 15                               | 5.5             |
| 6'                      | 10                               | 6.6             |
| 7'                      | 8                                | 7.7             |
| 8'                      | 6                                | 8.8             |
| 9'                      | 5                                | 9.9             |

\* Beam diameter is where foot-candles drop to 50% of maximum.

#### Multiple unit data - RCR 2

| Spacing on center | Initial center beam foot-candles | Watts per sq.ft. |
|-------------------|----------------------------------|------------------|
| 5'                | 33.6                             | 0.47             |
| 6'                | 22.1                             | 0.31             |
| 7'                | 15.8                             | 0.22             |
| 8'                | 13.1                             | 0.19             |
| 9'                | 10.5                             | 0.15             |

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

#### Coefficients of utilization

| Ceiling           | 80%   |     |     |     | 70% |     | 50% |     | 30% |     | 0%  |     |
|-------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wall              | 70  | 50  | 30  | 10  | 50  | 10  | 50  | 10  | 50  | 10  | 0   |     |
| RCR               | Zonal cavity method - Effective floor reflectance = 20% |     |     |     |     |     |     |     |     |     |     |     |
| Room Cavity Ratio | 0   | 119 | 119 | 119 | 119 | 116 | 116 | 111 | 111 | 106 | 106 | 100 |
|                   | 1   | 111 | 107 | 103 | 100 | 105 | 99  | 100 | 96  | 97  | 93  | 88  |
|                   | 2   | 102 | 95  | 90  | 85  | 94  | 84  | 90  | 82  | 87  | 80  | 76  |
|                   | 3   | 94  | 85  | 78  | 73  | 84  | 72  | 81  | 71  | 78  | 70  | 66  |
|                   | 4   | 87  | 77  | 69  | 63  | 75  | 63  | 73  | 62  | 71  | 61  | 58  |
|                   | 5   | 81  | 69  | 61  | 55  | 68  | 55  | 66  | 55  | 64  | 54  | 52  |
|                   | 6   | 75  | 63  | 55  | 49  | 62  | 49  | 60  | 49  | 59  | 48  | 46  |
|                   | 7   | 70  | 58  | 50  | 44  | 57  | 44  | 55  | 44  | 54  | 43  | 41  |
|                   | 8   | 65  | 53  | 45  | 40  | 52  | 40  | 51  | 39  | 50  | 39  | 37  |
|                   | 9   | 61  | 49  | 41  | 36  | 48  | 36  | 47  | 36  | 46  | 36  | 34  |
| 10                | 58  | 45  | 38  | 33  | 45  | 33  | 44  | 33  | 43  | 33  | 31  |     |

#### Zonal lumens & percentages

| Zone | Lumens | %Luminaire |
|------|--------|------------|
| 0-30 | 274    | 36.9%      |
| 0-40 | 428    | 57.6%      |
| 0-60 | 667    | 89.8%      |
| 0-90 | 743    | 100.0%     |

#### Report<sup>1</sup>: BTS165312

|                            |           |                    |           |
|----------------------------|-----------|--------------------|-----------|
| Output lumens:             | 742.7 lms | Efficacy:          | 68.8 lm/w |
| Input Watts <sup>2</sup> : | 10.8W     | CCT <sup>3</sup> : | 3000 K    |
| Spacing Criterion:         | 1.1       | CRI:               | >90       |

1. Correlated Color Temperature within specs as defined in ANSI\_NEMA\_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
2. Wattage: controlled to within 5%
3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

