PHILIPS
LIGHTOLIER

Downlighting

CorePro LED

Attractive, affordable, and easy to use 6" downlight

Project:

Location:

Cat.No:

Type:

Lamps: Qty:

Notes:

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

Ordering guide

example: CP6RB07830W

Catalog Number	Aperture	CRI	CCT	Lumens	System Watts (Max)	Efficacy (lm/W)	Voltage
CP6RB07830W	6-inch	80	3000K	835lm	11	75	120
CP6RB10930W	6-inch	90	3000K	1,000lm	16	63	120
CP6RB10830W	6-inch	80	3000K	1,200lm	14	86	120
CP6RB10840W	6-inch	80	4000K	1,250lm	14	89	120

Features

1. **Reflector/Flange:** One piece self flange cast aluminum, powder coated, non yellowing, white baffle and flange.
2. **Lens:** High transmittance lens allowing for smooth, diffused light pattern.
3. **Power supply:** Class 2 driver. Factory wired electronic LED driver (see Electrical section for specifications).
4. **LED board:** Light emitted source.
5. **Friction spring:** Stainless steel.
6. **Power connection:** Trim features quick connect plug installed as standard installation into CP6RN and CP6RR housings with mating connector. Trim ships with a medium base socket adapter whip for installation into 6" incandescent housings with medium base sockets.
7. **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
835lm	120V	50/60Hz	0.11A	11W	< 30%	> .9	-20° C
1,200lm	120V	50/60Hz	0.11A	14W	< 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.

RoHS COMPLIANT

Title 24

c UL us LISTED

ENERGY STAR

CP6 CorePro LED Downlight

Attractive, affordable, and easy to install 6" downlight

CP6RN: 6" 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 6-3/8".

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

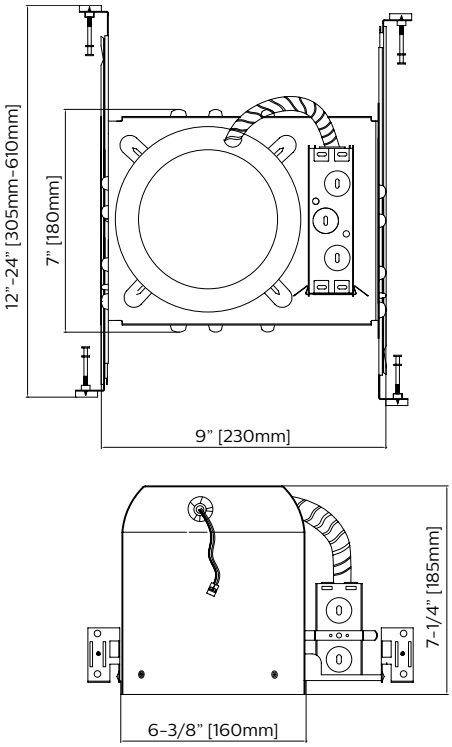
Pre-installed pre-nailed style bar hangers telescope from 12" to 24". Vertical design of interlocking bar hangers prevents sagging even at full 24" extension. Style bar hangers may be used on either long or short axis of housing.

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.



CP6RR: 6" IC/Airseal Remodeler Housing

Housing

Constructed of formed aluminum. Adjusts vertically in plaster frame to accommodate ceilings 1/2"to 1-1/4" thick. Housing can be pulled through plaster frame for access to junction box. Ceiling opening of 6".

Electrical Connection

LED quick-connect adapter.

Junction Box

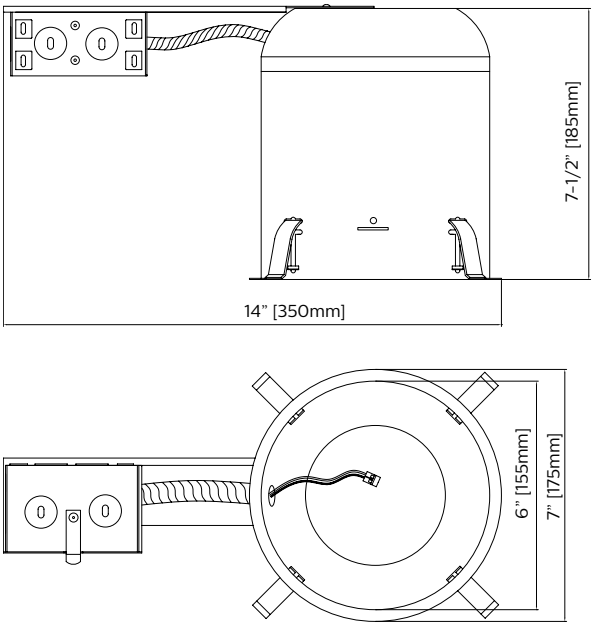
Galvanized steel with two snap-on covers and grounding pigtail. Knockouts for 1/2" & 3/4" conduit and Romex knockouts with strain relief.

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.



CP6 CorePro LED Downlight

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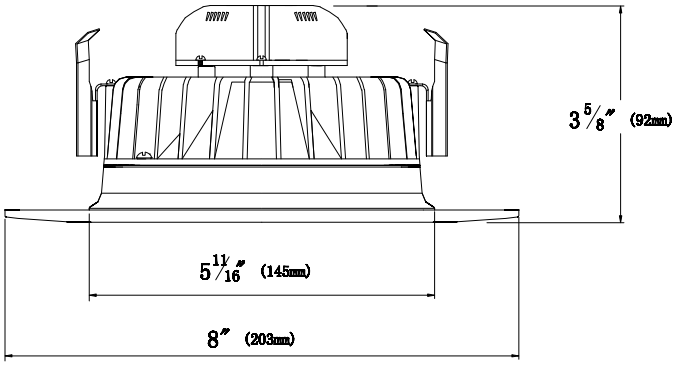
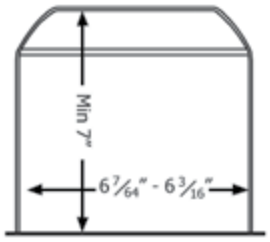
Dimensions



E26 Compatibility*

Manufacturer	Model
Philips	**CP6RN** **CP6RR** **1104IC** **CR1NBQP** **QL6NBQP** **P6GU** **P6RGU** **PR75ASIC** **PRR75ICX** **FD2IC6V90**
Halo	**H7T** **H7RT** **H7ICAT** **H7RICAT**
Lithonia	**L7X**
Juno	**IC22**
Progress	**P87-A1**

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



The 6"unit is shown with a standard (E26) adapter to fit medium base sockets

CP6RN: IC c/w LED Connector
New Construction Housing

CP6RR: IC c/w LED Connector
Remodeler Housing

CP6 CorePro LED Downlight

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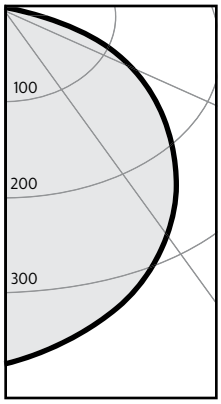
CP6RB07830W

Candela Curves



Angle	Mean CP	Lumens
0	337	
5	334	32
10	327	
15	317	90
20	303	
25	287	135
30	269	
35	248	160
40	226	
45	202	162
50	175	
55	145	138
60	112	
65	77	88
70	42	
75	16	29
80	6	
85	2	4
90	0	

Report[1]: BTS165315

Output lumens:	839.1lms	Efficacy:	75.6lm/w
Input Watts[2]:	11.1W	CCT[3]:	3000K
Spacing Criterion:	1.2	CRI:	>80

Single unit data

Height to Lighted Plane	Initial center beam foot-candles	Beam dia. (ft)*
5'	13	6.0
6'	9	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.
5'	34.6	0.49
6'	22.7	0.32
7'	16.2	0.23
8'	13.5	0.19
9'	10.8	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%										
0	119	119	119	119	116	116	111	111	106	106	100
1	110	106	102	99	104	97	99	94	96	91	86
2	101	93	87	82	91	81	88	79	85	77	73
3	92	83	75	69	81	68	78	67	75	66	63
4	85	73	65	59	72	58	70	58	67	57	54
5	78	66	57	51	65	51	63	50	61	50	47
6	72	59	51	45	58	44	57	44	55	44	41
7	67	54	46	40	53	39	52	39	50	39	37
8	62	49	41	35	49	35	47	35	46	35	33
9	58	45	37	32	45	32	44	32	43	31	30
10	55	42	34	29	41	29	40	29	39	29	27

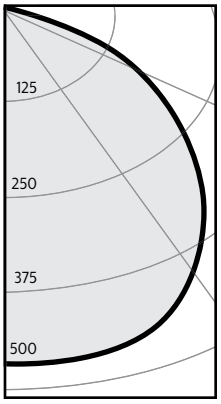
Room Cavity Ratio

Zonal lumens & percentages

Zone	Lumens	%Luminaire
0-30	257	30.6%
0-40	417	49.7%
0-60	717	85.5%
0-90	839	100.0%

CP6RB10830W

Candela Curves



Angle	Mean CP	Lumens
0	503	
5	499	47
10	491	
15	476	135
20	457	
25	433	200
30	405	
35	374	235
40	341	
45	306	236
50	265	
55	220	198
60	173	
65	125	126
70	78	
75	37	44
80	13	
85	5	6
90	0	

Report[1]: BTS165316

Output lumens:	1227 lms	Efficacy:	89.6lm/w
Input Watts[2]:	13.7W	CCT[3]:	3000K
Spacing Criterion:	1.2	CRI:	>80

Single unit data

Height to Lighted Plane	Initial center beam foot-candles	Beam dia. (ft)*
5'	20	6.0
6'	14	7.2
7'	10	8.4
8'	8	9.6
9'	6	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.
5'	50.8	0.61
6'	33.3	0.40
7'	23.8	0.28
8'	19.8	0.24
9'	15.9	0.19

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%										
0	119	119	119	119	116	116	111	111	106	106	100
1	110	106	102	99	104	97	99	94	96	91	86
2	101	93	87	82	92	81	88	79	85	77	74
3	92	83	75	69	81	68	78	67	76	66	63
4	85	74	65	59	72	59	70	58	68	57	54
5	78	66	58	51	65	51	63	50	61	50	47
6	72	60	51	45	59	45	57	44	55	44	42
7	67	54	46	40	53	40	52	39	51	39	37
8	63	50	41	36	49	36	48	35	46	35	33
9	59	46	38	32	45	32	44	32	43	32	30
10	55	42	34	29	42	29	41	29	40	29	27

Room Cavity Ratio

Zonal lumens & percentages

Zone	Lumens	%Luminaire
0-30	382	31.1%
0-40	617	50.3%
0-60	1051	85.7%
0-90	1227	100.0%

Adjustment factors

Color temperature (CCT)
4000K = 107%

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.

CP6 CorePro LED Downlight

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CP6RB10930W

Candela Curves

Angle	Mean CP	Lumens
0	468	
5	464	44
10	456	
15	442	125
20	424	
25	401	185
30	374	
35	345	217
40	313	
45	279	216
50	240	
55	197	178
60	153	
65	108	109
70	64	
75	27	34
80	9	
85	3	4
90	0	

Report[1]: BTS165317

Output lumens:	1113 lms	Efficacy:	70.0 lm/w
Input Watts[2]:	15.9 W	CCT[3]:	3000 K
Spacing Criterion:	1.2	CRI:	>90

Single unit data

Height to Lighted Plane	Initial center beam foot-candles	Beam dia. (ft)*
5'	19	6.0
6'	13	7.2
7'	10	8.4
8'	7	9.6
9'	6	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.
5'	46.3	0.70
6'	30.4	0.46
7'	21.7	0.33
8'	18.1	0.28
9'	14.5	0.22

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%										
0	119	119	119	119	116	116	111	111	106	106	100
1	110	106	102	99	104	97	100	94	96	92	87
2	101	94	88	83	92	82	88	80	85	78	74
3	93	83	76	70	82	69	79	68	76	67	64
4	85	74	66	60	73	59	70	59	68	58	55
5	79	67	58	52	66	52	63	51	62	51	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	32	43	32	30
10	55	43	35	30	42	30	41	30	40	29	28

Room Cavity Ratio

Zonal lumens & percentages

Zone	Lumens	%Luminaire
0-30	354	31.8%
0-40	571	51.3%
0-60	965	86.7%
0-90	1113	100.0%

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.

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