## LIGHTOLIER

by (s) ignify

## **Downlighting**

CorePro LED 6"

CP6 Downlight



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

Project:	
Location:	
Cat.No:	
Туре:	
Lamps:	Qty:
Notes:	

example: CP6RB07830W



## Ordering guide

Catalog Number	Aperture	CRI	сст	Lumens	System Watts (Max)	Efficacy (lm/W)	Voltage
CP6RB07830W	6-inch	80	3000K	8351m	11	75	120
CP6RB10840W	6-inch	80	4000K	1,200 lm	14	86	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.
- 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.
- 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.

			r				
Lumen Output	Input Voltage	Input Frequency	Max. Input Current	Max. Input Power	Max THD	Power Factor	Min. Temp. Operating
835 lm	120 V	50/60Hz	0.11A	11W	< 30%	> .9	-20° C
1 2001	1201/	FO/COLL=	0.11.4	1.4\4/	- 200/	- 0	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.



## 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".

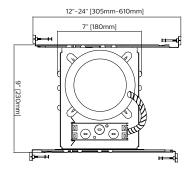
Electrical Connection - LED quick-connect adapter

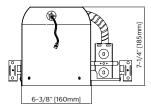
**Junction Box**- galvanized steel with two snap-on covers and grounding pigtail. Knockouts for 1/2" & 3/4" conduit and Romex knockouts with strain relief

Bar Hangers: Pre-installed pre-nailed style bar hangers telescope from 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.





## CP6RR: 6" IC/Airseal Remodeler Housing

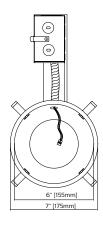
**Housing** – Constructed of formed aluminum. Adjusts vertically in plaster frame to accommodate ceilings 1/2" to 1-1/4" thick. Housing can be pulled through plaster frame for access to junction box. Ceiling opening of 6".

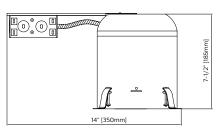
**Electrical Connection** - LED quick-connect adapter

**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.





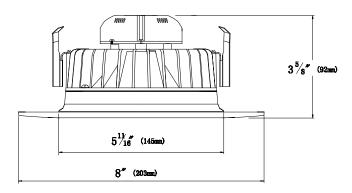






## Downlight

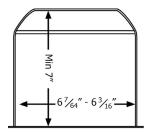
## **Dimensions**



## **E26 Compatibility\***

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

<sup>\*</sup> Any other luminaires meeting theses dimensions as shown are also compatible.





6"unit shown with 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



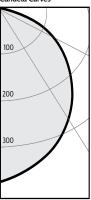




## Downlight

## CP6RB07830W

#### Candela Curves



Mean CP	Lumen
337	
334	32
327	
317	90
303	
287	135
269	
248	160
226	
202	162
175	
145	138
112	
77	88
42	
16	29
6	
2	4
0	
	337 334 327 317 303 287 269 248 226 202 175 145 112 77 42 16 6

#### Report<sup>1</sup>: BTS165315

Output lumens:	839.1lms	Efficacy:	75.6 lm/w
Input Watts <sup>2</sup> :		CCT <sup>3</sup> :	3000 K
Spacing Criterion:	1.2	CRI:	>80

#### Single unit data

Initial center beam foot-candles	Beam dia. (ft)*
13	6.0
9	7.2
7	8.4
5	9.6
4	10.8

<sup>\*</sup> 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

Ceil	ing		80	)%		70	)%	50	)%	30	)%	0%
Wal	.l	70	50	30	10	50	10	50	10	50	10	0
RCF	?	Zonal cavity method - Effe				fectiv	e flo	or ref	lecta	nce =	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
Room Cavity Ratio	2	101	93	87	82	91	81	88	79	85	77	73
26	3	92	83	75	69	81	68	78	67	75	66	63
Ę	4	85	73	65	59	72	58	70	58	67	57	54
a Z	5	78	66	57	51	65	51	63	50	61	50	47
Õ	6	72	59	51	45	58	44	57	44	55	44	41
Ö	7	67	54	46	40	53	39	52	39	50	39	37
Š	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

### 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%





<sup>1.</sup> Correlated Color Temperature within specs as defined in ANSI\_NEMA\_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

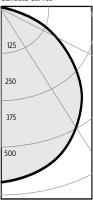
<sup>2.</sup> Wattage: controlled to within 5%

<sup>3.</sup> Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

## Downlight

## CP6RB10930W

#### Candela Curves



Angle	Mean CP	Lumen
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<sup>1</sup>: BTS165317

Output lumens:		Efficacy:	70.0 lm/w
Input Watts <sup>2</sup> :	15.9 W	CCT <sup>3</sup> :	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		

<sup>\*</sup> 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%		
Wal	.l	70	50	30	10	50	10	50	10	50	10	0
RCF	?	Zona	al cav	ity m	etho	d - Ef	fectiv	e flo	or ref	lecta	nce =	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
Room Cavity Ratio	2	101	94	88	83	92	82	88	80	85	78	74
æ	3	93	83	76	70	82	69	79	68	76	67	64
τζ	4	85	74	66	60	73	59	70	59	68	58	55
ă	5	79	67	58	52	66	52	63	51	62	51	48
Ö	6	73	60	52	46	59	45	57	45	56	45	42
οŭ	7	68	55	46	40	54	40	52	40	51	40	38
Š	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

#### 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%

