

# Flat Downlight



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

### **Product offering**

Catalog Code	Description	UPC Code	Qty. per SKU	Case Qty. (SKU/case)	Pallet Qty (SKU/pallet)
PILADISC4R30K	Disc light 4" Round 700lm 80 30K 120V DIM 4-Pack	046677600044	4	6	144
PILADISC6R30K	Disc light 6" Round 900lm 80 30K 120V DIM 4-Pack	046677600051	4	6	96

### **Technical specifications**

Nominal power	4": 11W; 6": 13.5W
Nominal lumens	4": 700lm; 6": 900lm
Input voltage	120VAC
сст	4": 3000K 6": 3000K
CRI	80
Power connection	Locking power connection is used to connect J-box and fixture. Standard length of the connection is 11-4/5" (300mm). Extension cable available as accessory.
Material and finishing	Flange: aluminum alloy, powder coated in white (RAL9003) Lens: hard acrylic material with diffused light pattern.
Weights	4": 0.99lbs.; 6": 1.35lbs.
Ceiling cutout	4": 4 1/3" (110mm) diameter 6": 6 2/9" (158mm) diameter

Electronic power supply	RoHS compliant.' Isolated driver, grounding. Class 2 power unit. Remote power supply can only accommodate one LED module and cannot be shared with other LED module. Fixture can be through wired.
Dimming	Compatible for ELV/TRIAC (120V) dimmers. Philips SR150LED120 TRIAC (100–1%) Leviton IPI06 TRIAC (100%–1%) Leviton 6615P ELV (100%–5%) Lutron DVELV-300P ELV(100%–1%) Lutron NLV1000 TRIAC (100–1%) Lutron PD-6WCL Wireless (100–1%)
Safety class	UL certified
IP rating	UL03 – Wet location
Compliance	cULus listed (UL 1598) for wet locations (covered ceiling only). IC rated for direct contact with thermal insulation. AirSeal for minimal air leakage.
Warranty	3-year limited warranty

<sup>\*</sup> 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.



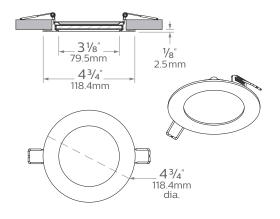


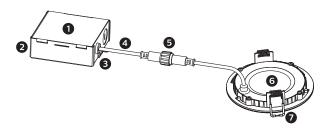




### **Dimensions**

### Flat Downlight 4"

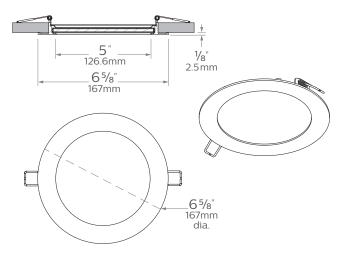




### Frame plate

Compatible with	Part Number(s)
New construction plate	0092S & 0092L
Extension cable	FD06C, FD20C

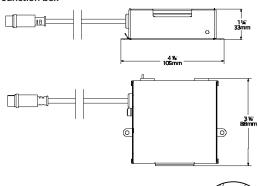
### Flat Downlight 6"



### Components

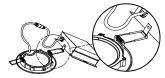
- 1. Electrical Box with knockouts
- 2. Mounting keyhole
- 3. Remodel NEC\* clip
- 4. 11.8"(0.3m) cord
- 5. Locking power connector
- 6. Integrated LED Luminaire
- 7. Spring clip for easy mounting

### Junction box



## Remodeler applications:

attach junction box clip to installation spring to assure NEC compliance.



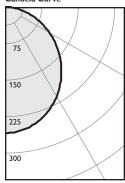
<sup>\*</sup> National Electric Code



### **Photometry**

### 4-inch, 700lm, 80 CRI, 120V-3000K

### Candela Curve



### Fixture: PILADISC4R30K

Output lumens: 700 lms Input watts: 11 W CRI: 80 min CCT¹: 3000K Spacing Crit.: 1.2

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	198	28.3%
0-40	320	45.7%
0-60	555	79.3%
0-90	700	100.0%

Angle	Mean CP	Lumens
0	259	
5	258	24
10	254	
15	246	69
20	237	
25	225	104
30	212	
35	196	123
40	179	
45	161	125
50	143	
55	124	111
60	104	
65	84	83
70	65	
75	46	49
80	28	
85	11	12
90	0	

### Single unit data

	Initial center beam foot-candles	
5'	10	6.0'
6'	7	7.2'
7'	5	8.4'
8'	4	9.6'
9'	3	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'	28.0	0.49
6'	19.0	0.32
7'	13.0	0.23
8'	11.0	0.19
9'	9.0	0.15

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

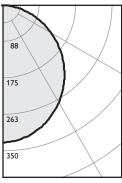
**Efficacy:** 63.6 lm/w Report<sup>2</sup>: 9290022700

#### oefficients of utilization

COETHCIENTS OF UTILIZATION												
Се	iling	80%			70	%	50	1%	30	)%	0%	
Wa	II	70	50	30	10	50	10	50	10	50	10	0
RCR Zonal cavity method		l – Eff	ective	e floo	r refl	ectan	ce = :	20%				
	0	119	119	119	119	116	116	111	111	106	106	100
0	1	109	104	99	95	101	94	97	91	93	88	83
Œ,	2	99	90	83	77	88	76	85	75	81	73	69
Room Cavity Ratio	3	90	79	71	64	77	63	74	62	72	61	58
Ę	4	82	70	61	54	69	54	66	53	64	52	49
a	5	75	62	53	47	61	46	59	46	57	45	43
Ö	6	70	56	47	41	55	40	53	40	52	40	37
οŭ	7	65	51	42	36	50	36	48	35	47	35	33
8	8	60	46	38	32	46	32	44	32	43	31	29
	9	56	43	34	29	42	29	41	28	40	28	26
	10	53	39	31	26	39	26	38	26	37	26	24

### 6-inch, 900lm, 80 CRI, 120V-3000K

### Candela Curve



### Fixture: PILADISC6R30K

Output lumens: 900 lms Input watts: 13 W CRI: 80 min CCT 1: 3000 K Spacing Crit.: 1.2

### Zonal summary

Zone	Lumens	%Luminaire
0-30	251	27.9%
0-40	408	45.3%
0-60	712	79.1%
0-90	900	100.0%

Angle	Mean CP	Lumens
0	330	
5	327	28
10	321	
15	313	80
20	301	
25	287	122
30	270	
35	251	147
40	230	
45	208	121
50	185	
55	160	68
60	135	
65	110	40
70	85	
75	60	23
80	36	_
85	9	6
90	0	

### Single unit data

	Initial center beam foot-candles				
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'	36.0	0.58		
6'	24.0	0.38		
7'	17.0	0.27		
8'	14.0	0.23		
9'	11.0	0.18		

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

**Efficacy: 69.2 lm/w**Report<sup>2</sup>: 9290022706

### 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
0	1	109	104	99	95	101	94	97	91	93	88	83
Ratio	2	99	90	83	77	88	76	85	75	81	73	69
2	3	90	79	71	64	77	63	74	62	72	61	58
Cavity	4	82	70	61	54	69	54	66	53	64	52	49
ě	5	75	62	53	47	61	46	59	46	57	45	43
0	6	70	56	47	41	55	40	53	40	52	40	37
Room	7	65	51	42	36	50	36	48	35	47	35	33
8	8	60	46	38	32	46	32	44	32	43	31	29
	9	56	43	34	29	42	29	41	28	40	28	26
	10	53	39	31	26	39	26	38	26	37	26	24

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