



Lightolier LED Flat Downlight Select provides an easy and quick downlight solution without the traditional frame and reflector. Perfect for installation in low plenum and existing shallow space ceilings. The CCT selector feature makes it easy to choose CCT at the time of installation.

Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

Fixture

example: FD4R4CCT

Family	Size	CCT	
FD			
FD Flat Downlight	4R 4-inch Round	4CCT	2700K 3000K 4000K 5000K
	6R 6-inch Round		

Accessories

example: FD4NCP

Family	Model	
FD		
FD Flat Downlight	4NCP	4" NC Plate
	6NCP	6" NC Plate
	10EC	10 ft Extension Cable
	4TBK	4" Black Trim fascia
	6TBK	6" Black Trim fascia
	4TBN	4" Brushed Nickel Trim fascia
6TBN	6" Brushed Nickel Trim fascia	

Features

- Flange:** aluminum alloy, powder coating in white (RAL9003)
- Lens:** Diffuser is used for smooth and diffused light pattern.
- Junction Box:** steel, 4-1/8"x3-1/2"x1-2/9" (105mm*88mm*31mm). Clip attached on the side of the J-box to connect with fixture or new construction plate to meet NEC (National Electric Code). J-box also has key holes on the side for mounting on joist (see page 2).
- Connector:** locking power connection is used to connect J-box and fixture. Standard length of the connection is 11-4/5"(300mm).
- Ceiling cutout:** installation template on adhesive backed label is not provided.
4" round: 4 1/3" (110mm) diameter.
6" round: 6 2/9" (158mm) diameter.
- Gasket:** foam gasket supplied with fixture.

Electrical

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%)

Labels

cULus listed (UL 1598) for wet locations (covered ceiling only). IC rated for direct contact with thermal insulation. AirSeal for minimal air leakage. ENERGY STAR® certified. Title 24 compliant (JA8).

Warranty

Lifetime: Expected lifetime 50,000 hours and backed by a 5-year warranty (visit signify.com/warranties for details).

	Lumen output	Input voltage	Input freq	Max. input current	Max. input power	Max. THD	Power factor	CRI
4" Round	700lm	120V	60Hz	0.10A	11W	15%	0.9	90
6" Round	900lm	120V	60Hz	0.125A	13.5W	15%	0.9	90

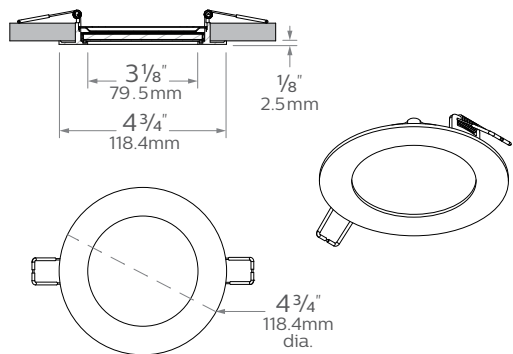
* Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances (lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)) in electrical and electronic products. For products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

Flat Downlight Select LED

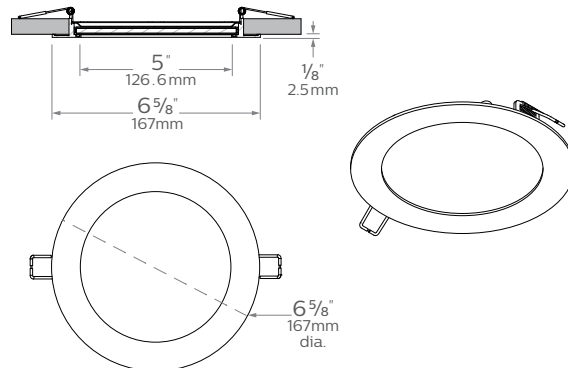
4" and 6" aperture recessed downlight

Dimensions:

Flat Downlight 4"

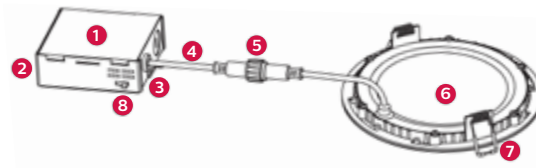


Flat Downlight 6"



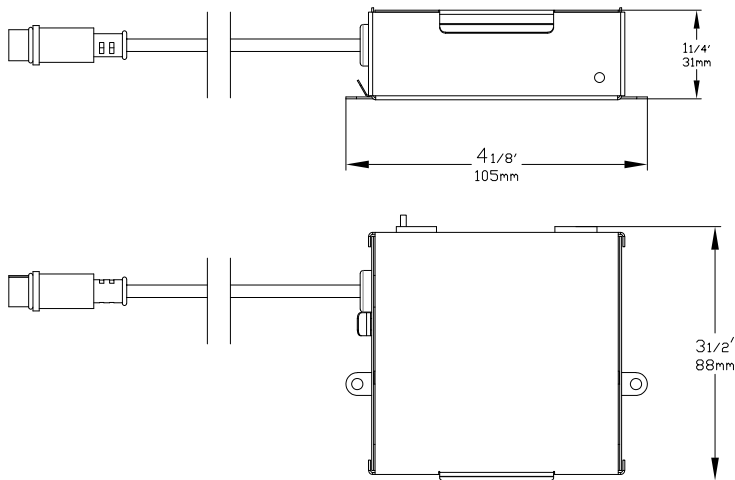
Components

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
8. CCT selector

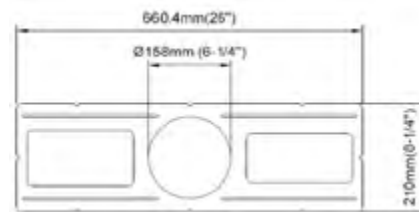


*NEC = National Electric Code

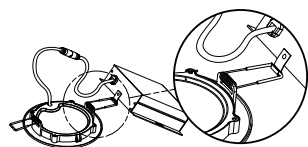
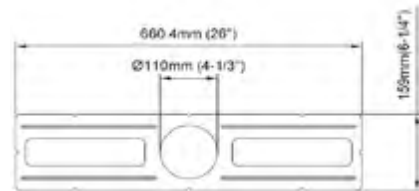
Junction box



4-inch NC plate



6-inch NC plate



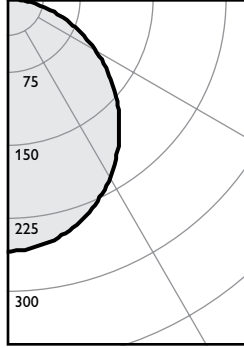
Remodeler applications:
attach junction box clip
to installation spring to
assure NEC compliance.

Flat Downlight Select LED

4" and 6" aperture recessed downlight

FDL 4" Round 700lm 90 2700K, 3000K, 4000K & 5000K 120V

Candela Curve



Fixture: **FD4R4CCT**

Output lumens: 700 lms
 Input watts: 11 W
 CRI: 90 CRI
 CCT¹: 2700K
 3000K
 4000K
 5000K
 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

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
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

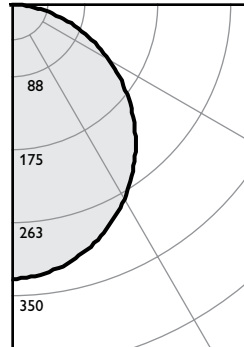
Efficacy: 63.6lm/w
 Report²: 9290022700

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	0	
Wall	Zonal cavity method - Effective floor reflectance = 20%											
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
	1	109	104	99	95	101	94	97	91	93	88	83
	2	99	90	83	77	88	76	85	75	81	73	69
	3	90	79	71	64	77	63	74	62	72	61	58
	4	82	70	61	54	69	54	66	53	64	52	49
	5	75	62	53	47	61	46	59	46	57	45	43
	6	70	56	47	41	55	40	53	40	52	40	37
	7	65	51	42	36	50	36	48	35	47	35	33
	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

FDL 6" Round 700lm 90 2700K, 3000K, 4000K & 5000K 120V

Candela Curve



Fixture: **FD6R4CCT**

Output lumens: 900 lms
 Input watts: 13 W
 CRI: 90 CRI
 CCT¹: 2700K
 3000K
 4000K
 5000K
 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

Height to lighted plane	Initial center beam foot-candles	Beam diameter (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'	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: 69.2lm/w
 Report²: 9290022706

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	0	
Wall	Zonal cavity method - Effective floor reflectance = 20%											
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
	1	109	104	99	95	101	94	97	91	93	88	83
	2	99	90	83	77	88	76	85	75	81	73	69
	3	90	79	71	64	77	63	74	62	72	61	58
	4	82	70	61	54	69	54	66	53	64	52	49
	5	75	62	53	47	61	46	59	46	57	45	43
	6	70	56	47	41	55	40	53	40	52	40	37
	7	65	51	42	36	50	36	48	35	47	35	33
	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

1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
 2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

