



Lightolier LED Retrofit Downlight select provides an easy and quick downlight solution without the traditional frame and reflector. Perfect for installation in existing ceilings or new construction with the benefits of energy saving LED technology.

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



CCT with Select Switch

Fixture

example: RD4R79SCT1W

Family	Size	Lumens	CRI	CCT	Voltage	Finish
RD						W
RD Retrofit Downlight	4R 4in Round	7 700lm	9 90CRI	30 SCT 3000K Field Selectable 5CCT (2700K, 3000K, 3500K, 4000K & 5000K @ 40°C)	1 120V	W White (matte)
	6R 6in Round	9 900lm	9 90CRI	30 SCT 3000K Field Selectable 5CCT (2700K, 3000K, 3500K, 4000K & 5000K @ 40°C)	1 120V	

Accessories

RD4RN 4" Retrofit New Construction frame-in kit	RD6RN 6" Retrofit New Construction frame-in kit
RD4RR 4" Retrofit Remodeler housing	RD6RR 6" Retrofit Remodeler housing

Features

- Flange:** One piece self flange spun aluminum. White painted with baffle.
- Lens:** Diffuse lens allowing for smooth, comfortable light pattern.
- Power supply:** Integral class 2 driver. (see Electrical section for specifications)
- Friction spring:** Stainless steel.
- Lifetime:** L70 @ 50,000 hrs and backed with a 5-year warranty (see Philips.com/warranties for details).

- LED board:** Light emitted source.
- Power connection:** Trim features quick connect plug installed as standard. Trim ships with a medium base socket adapter whip for installation into incandescent housings with medium base sockets.
- Five field selectable color temperature options:** 2700K, 3000K, 3500K, 4000K (Default) & 5000K @ 25°C

Electrical

Electronic power supply: RoHS compliant. Class 2 power unit for use in a dry and damp locations.
Dimming: Intended for ELV/TRIAC (120V) dimming.

Labels

cETLus classified. Title 24 (JA8-2016). ENERGY STAR®. Wet Location. IC rated.

	Lumen Output	Input voltage	Input Freq	Max. Input current	Max. Input power	Max. THD	Power factor	CRI	Operating Temp. (Max)
Retrofit DL S 4" 5CCT	700lm	120V	60Hz	0.37A	9W	20%	0.9	90	40°C
Retrofit DL S 4" 3000K	700lm	120V	60Hz	0.37A	9W	20%	0.9	90	40°C
Retrofit DL S 6" 5CCT	850lm	120V	60Hz	0.41A	10W	20%	0.9	90	40°C
Retrofit DL S 6" 3000K	900lm	120V	60Hz	0.41A	10W	20%	0.9	90	40°C

* 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.

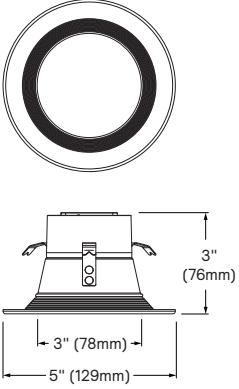


RD Retrofit Downlight

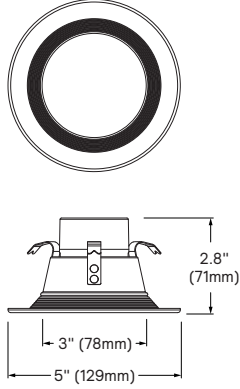
Round 4" & 6" Apertures

Dimensions

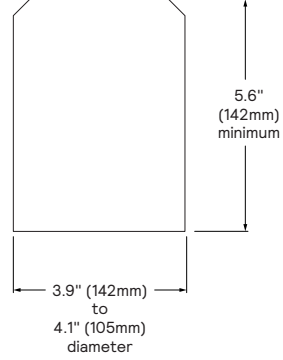
Retrofit Downlight 4"
(Field Selectable)



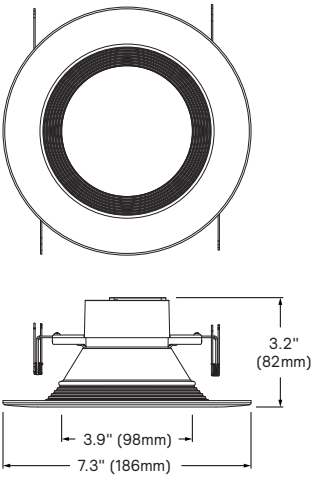
Retrofit Downlight 4"
(3000K)



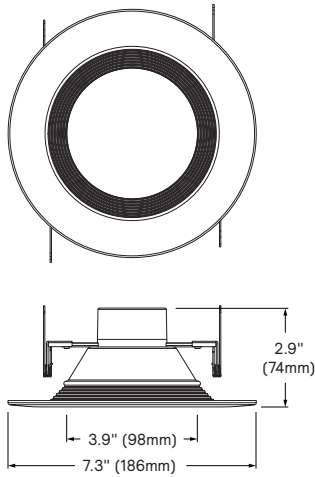
Retrofit Housing 4"



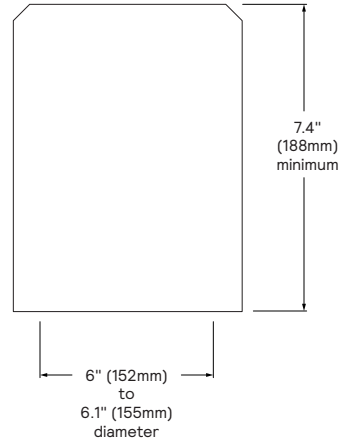
Retrofit Downlight 6"
(Field Selectable)



Retrofit Downlight 6"
(3000K)



Retrofit Housing 6"

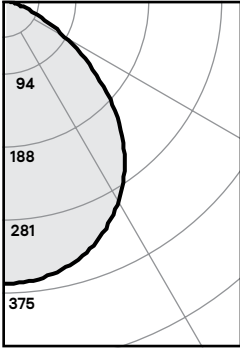


RD Retrofit Downlight

Round 4" & 6" Apertures

RD4R79SCT1W • 4" Round, 700 lumens, 90CRI, Field Selectable CCT, ELV/TRIAC dimming, Universal Voltage, White Finish

Candela Curve



Fixture: RD4R79SCT1W

Output lumens:	772 lms
Input watts:	8.9 W
CRI:	90 (min)
CCT ¹ :	2700K
Beam Angle:	93°
Spacing Criterion:	1.2

Zonal summary

Zone	Lumens	%Luminaire
0-30	274	35.5%
0-40	437	56.6%
0-60	694	89.9%
0-90	772	100.0%

Angle	Mean CP	Lumens
0	362	
5	360	
10	354	34
15	344	
20	330	97
25	311	
30	288	143
35	261	
40	230	163
45	196	
50	160	150
55	122	
60	88	107
65	59	
70	35	56
75	18	
80	8	18
85	2	
90	0	3

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	14	6.0'
6'	10	7.2'
7'	7	8.4'
8'	6	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'	33.0	0.39
6'	21.0	0.26
7'	15.0	0.18
8'	13.0	0.15
9'	10.0	0.12

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

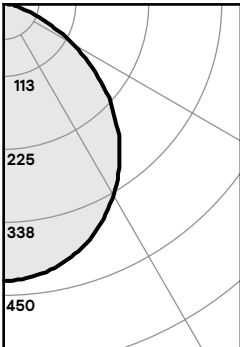
Efficacy: 86.7lm/w
Report²: RD4R79SCT1W.IES

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	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	93	84	90	82	87	80	76
	3	94	85	78	72	84	72	81	71	78	69	66
	4	87	76	69	63	75	62	73	62	71	61	58
	5	81	69	61	55	68	55	66	54	64	54	51
	6	75	63	55	49	62	48	60	48	58	48	45
	7	70	57	49	43	56	43	55	43	54	43	41
	8	65	52	45	39	52	39	51	39	49	39	37
	9	61	48	41	35	48	35	47	35	46	35	33
	10	57	45	37	32	44	32	43	32	42	32	30

RD6R99SCT1W • 6" Round, 900 lumens, 90CRI, Field Selectable CCT, ELV/TRIAC dimming, Universal Voltage, White Finish

Candela Curve



Fixture: RD6R99SCT1W

Output lumens:	943 lms
Input watts:	9.8 W
CRI:	90 (min)
CCT ¹ :	2700K
Beam Angle:	97°
Spacing Criterion:	1.2

Zonal summary

Zone	Lumens	%Luminaire
0-30	320	33.9%
0-40	512	54.3%
0-60	837	88.8%
0-90	943	100.0%

Angle	Mean CP	Lumens
0	426	
5	423	
10	416	40
15	403	
20	385	113
25	364	
30	338	167
35	307	
40	274	192
45	238	
50	198	184
55	157	
60	116	141
65	78	
70	46	78
75	21	
80	9	24
85	3	
90	0	3

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	17	6.0'
6'	12	7.2'
7'	9	8.4'
8'	7	9.6'
9'	5	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'	40.0	0.43
6'	26.0	0.29
7'	19.0	0.20
8'	16.0	0.17
9'	12.0	0.14

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

Efficacy: 96.2lm/w
Report²: RD6R99SCT1W.IES

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	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	104	98	100	95	96	92	88
	2	102	95	89	84	93	83	89	81	86	79	75
	3	94	84	77	71	83	71	80	70	77	68	65
	4	86	76	68	62	74	61	72	60	70	60	57
	5	80	68	60	54	67	54	65	53	63	52	50
	6	74	62	53	47	61	47	59	47	57	46	44
	7	69	56	48	42	55	42	54	42	53	42	39
	8	64	52	44	38	51	38	50	38	48	37	35
	9	60	47	40	34	47	34	46	34	45	34	32
	10	56	44	36	31	43	31	42	31	41	31	29

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.

