



The Lightolier Commercial retrofit Downlight DualSelect is an easy to install downlight with adjustable lumen and CCT output switch. This convenient downlight is ideal for retail store, residential and office application.

Project: \_\_\_\_\_

Location: \_\_\_\_\_

Cat.No: \_\_\_\_\_

Type: \_\_\_\_\_

Notes: \_\_\_\_\_

### Fixture

example: CR4RLMCCT

Family	Size/Lumens	CCT	Voltage	Finish
		CCT		
CR				
CR Commercial Retrofit Downlight DualSelect	<b>4RLM</b> 4" Round 500-1000lm, 90CRI, 0-10V Dimming <b>6RLM</b> 6" Round 700-1500lm, 90CRI, 0-10V Dimming <b>8RLM</b> 8" Round 1000-2000lm, 90CRI, 0-10V Dimming <b>10RLM</b> 10" Round 2000-3000lm, 90CRI, 0-10V Dimming	CCT 3000K - 3500K - 4000K	- 120/347V	- White

### Features

- Flange:** Aluminum white painted with baffle.
- Power supply:** Integral class 1 driver. (see Electrical section for specifications)
- Lifetime:** L70 at 50,000 hours and backed with a 5-year warranty (see www.lightolier.com for details).
- LED board:** Light emitted source.
- Power connection:** Trim is supplied with quick connect metal conduit with connector inside.
- Dimming:** 0-10V Dimming
- Lumen Selectable:** Ability to switch to three different lumen package. Select the desired lumen output using the switch before installation. Lumen output can be changed after installation by un-installing the luminaire from the ceiling.  
**Note:** The default setting from Factory is set to the highest lumen value.
- CCT Selectable:** Select the desired CCT using the switch before installation. CCT can be changed after installation by un-installing the luminaire from the ceiling.

### Electrical

**Electronic power supply:** RoHS compliant. Class 1 power unit for use in a dry and damp locations.

### Labels

cULus listed.  
ENERGY STAR®.

Electrical Specs	Nominal Lumens	Input Volts	Input Freq.	Input Current	Input Power	THD Factor	Power Factor	Minimum Operating Temp.	Maximum Operating Temp.	IC/ Non-IC	Efficacy @90CRI 3000K
CR4RLMCCT	500lm/700lm/1000lm	120-347V	50/60HZ	102-21mA	5.5/8/12W	<25%@120V	>0.9@120V	-20°C	40°C	IC	80lm/W
CR6RLMCCT	700lm/1000lm/1500lm	120-347V	50/60HZ	147-26mA	7/10/17W	<25%@120V	>0.9@120V	-20°C	40°C	IC	85lm/W
CR8RLMCCT	1000lm/1500lm/2000lm	120-347V	50/60HZ	174-36mA	10/15/21W	<25%@120V	>0.9@120V	-20°C	40°C	IC	90lm/W
CR10RLMCCT	2000lm/2500lm/3000lm	120-347V	50/60HZ	264-65mA	20/25/32W	<25%@120V	>0.9@120V	-20°C	40°C	NON-IC	90lm/W

### Compatibility

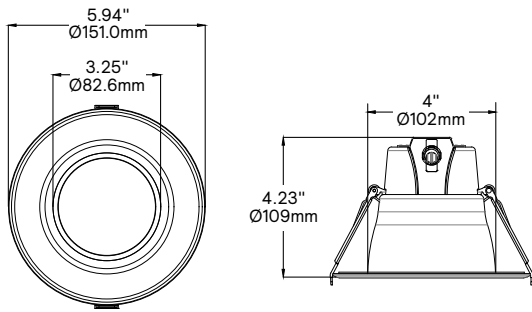
Series	Frame Aperture Range	
	Minimum	Maximum
4" Comm Retrofit	Ø4.0" (Ø102mm)	Ø5.1" (Ø130mm)
6" Comm Retrofit	Ø6.3" (Ø159mm)	Ø7.5" (Ø190mm)
8" Comm Retrofit	Ø7.9" (Ø200mm)	Ø9.4" (Ø240mm)
9.5" Comm Retrofit	Ø9.0" (Ø229mm)	Ø10.6" (Ø270mm)

# LED Commercial Retrofit Downlight DualSelect

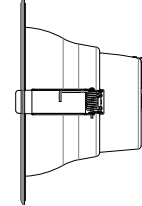
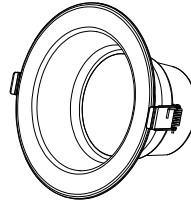
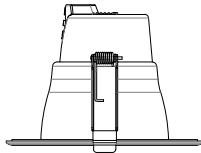
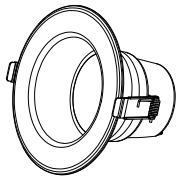
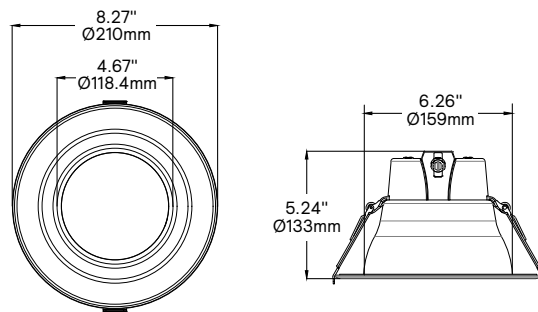
4", 6", 8" & 10" round aperture

## Dimensions

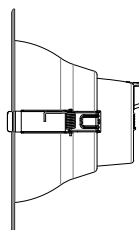
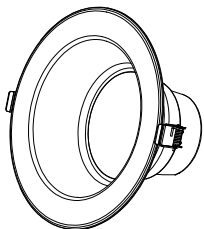
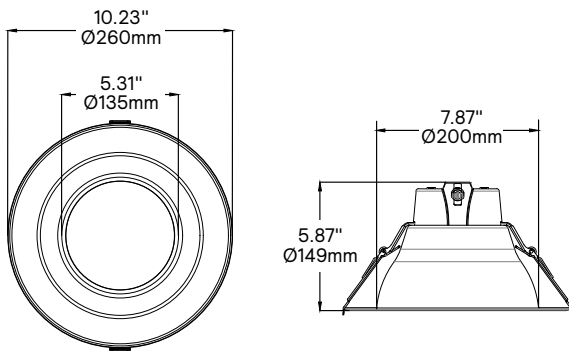
Retrofit downlight 4"



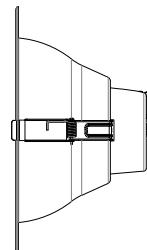
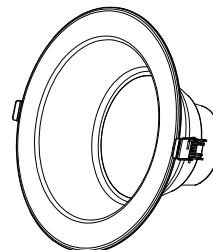
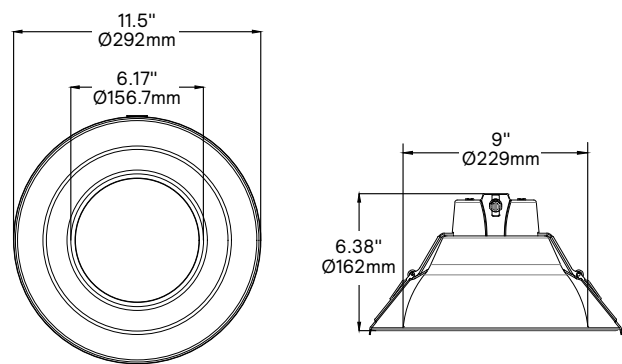
Retrofit downlight 6"



Retrofit downlight 8"



Retrofit downlight 10"



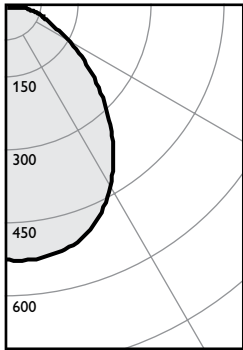
# LED Commercial Retrofit Downlight DualSelect

4", 6", 8" & 10" round aperture

## Photometry

### 4-inch LED, 1000lm, 90CRI, 3000K

#### Candela Curve



Angle	Mean CP	Lumens
0	523	
5	510	48
10	501	
15	487	137
20	461	
25	425	195
30	382	
35	333	208
40	282	
45	238	178
50	181	
55	135	121
60	96	
65	66	67
70	50	
75	34	36
80	21	
85	8	9
90	0	

#### Single unit data

Height to Lighted Plane	Initial center beam foot-candles	Beam dia. (ft)*
5'	21	5.7'
6'	14	6.8'
7'	10	8.0'
8'	8	9.1'
9'	6	10.3'

\* 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	0.53
6'	26.0	0.35
7'	19.0	0.25
8'	16.0	0.21
9'	13.0	0.17

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

#### Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	0	
Wall												
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	87
	2	102	95	89	84	93	83	90	81	87	80	76
	3	94	85	78	72	84	72	81	71	78	69	66
	4	87	77	69	63	75	63	73	62	71	61	58
	5	81	70	62	56	68	55	66	55	65	54	52
	6	75	63	55	50	62	49	61	49	59	49	46
	7	70	58	50	44	57	44	56	44	54	44	42
	8	66	53	46	40	53	40	51	40	50	40	38
	9	62	49	42	37	49	37	48	36	47	36	34
	10	58	46	38	34	45	34	44	33	43	33	31

#### Zonal lumens & percentages

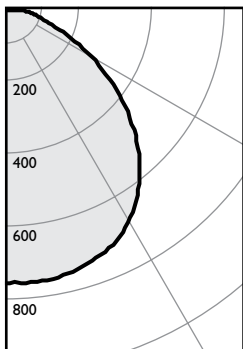
Zone	Lumens	%Luminaire
0-30	381	38.1%
0-40	589	58.9%
0-60	887	88.7%
0-90	1000	100.0%

#### CR4RLMCCT

Output lumens:	1000 lm	Efficacy:	83.0 lm/w
Spacing Criterion:	1.14	CCT <sup>3</sup> :	3000K
Input Watts <sup>2</sup> :	12.0 W	CRI:	90min

### 6-inch LED, 1500lm, 90CRI, 3000K

#### Candela Curve



Angle	Mean CP	Lumens
0	736	
5	733	70
10	721	
15	701	197
20	674	
25	633	288
30	580	
35	515	316
40	444	
45	369	278
50	293	
55	220	278
60	154	
65	98	191
70	64	95
75	48	
80	32	16
85	16	
90	0	

#### Single unit data

Height to Lighted Plane	Initial center beam foot-candles	Beam dia. (ft)*
5'	21	5.7'
6'	14	6.8'
7'	10	8.0'
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#### Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq.ft.
5'	40.0	0.53
6'	26.0	0.35
7'	19.0	0.25
8'	16.0	0.21
9'	13.0	0.17

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#### Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	0	
Wall												
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	87
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	3	94	85	78	72	84	72	81	71	78	69	66
	4	87	77	69	63	75	63	73	62	71	61	58
	5	81	70	62	56	68	55	66	55	65	54	52
	6	75	63	55	50	62	49	61	49	59	49	46
	7	70	58	50	44	57	44	56	44	54	44	42
	8	66	53	46	40	53	40	51	40	50	40	38
	9	62	49	42	37	49	37	48	36	47	36	34
	10	58	46	38	34	45	34	44	33	43	33	31

#### Zonal lumens & percentages

Zone	Lumens	%Luminaire
0-30	381	38.1%
0-40	589	58.9%
0-60	887	88.7%
0-90	1000	100.0%

#### CR6RLMCCT

Output lumens:	1500lm	Efficacy:	83.0 lm/w
Spacing Criterion:	1.14	CCT <sup>3</sup> :	3000K
Input Watts <sup>2</sup> :	12.0W	CRI:	90min

1. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.
2. Wattage: controlled to within 5%
3. Correlated Color Temperature: within specs as defined in ANSI\_NEMA\_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.