

SD8DR / IC830

8" SD LED Downlight

JOB NAME		CATALOG NUMBER	
NOTES		TYPE	

ELECTRICAL DATA

LED Light Engine	System Wattage* @ 120V	CCT	Nominal Delivered Lumens**	Efficacy
L0	8W	3500K	750 lm	94 lm/W
L1	10W	3500K	1000 lm	100 lm/W
L2	14W	3500K	1500 lm	107 lm/W
L3	19W	3500K	2000 lm	105 lm/W
L4	23W	3500K	2500 lm	109 lm/W
L5	28W	3500K	3000 lm	107 lm/W
L6	33W	3500K	3500 lm	106 lm/W
L7	38W	3500K	4000 lm	105 lm/W

*System Wattage includes driver and LED Module consumption. | **Delivered lumen output will vary depending on CCT selection.

LED MODULE / OPTICS

- 80/90 CRI at 2700K, 3000K, 3500K, 4000K with 2 SDCM
- 70% lumen maintenance at 50,000 hours
- 30° Narrow Flood, 50° Flood or 70° Wide Flood

ELECTRICAL SYSTEM

- Dedicated voltage options of 120V, 277V or 347V must be specified in catalog code.
- Phase dimming available in 120V only
- 347V available with Osram 0-10V 1% Dimming only

FRAME CONSTRUCTION

Heavy duty galvanized steel frame with a large access junction box. ETL listed for through wiring. LED light engine and driver are accessible from above or below ceiling.

INSTALLATION

The luminaire is type Non-IC. Insulation must be kept at a minimum of 3" away from fixture. Universal mounting brackets included. Compatible with C-channel, flat bar, wood joist bar hanger and EMT. Bar hangers must be ordered separately. C-channel is recommended for T-bar ceilings. Maximum ceiling thickness is 1 1/4". Max. ambient temperature: 95°F (35°C)

REFLECTOR

Specification grade reflector with 1.2mm thickness. Architectural, discrete polished self flange standard. Optional painted white flange is available. Meets RP-1 requirements with controlled light distribution at a 50° cut off.

DIMMING

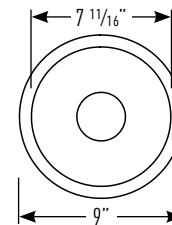
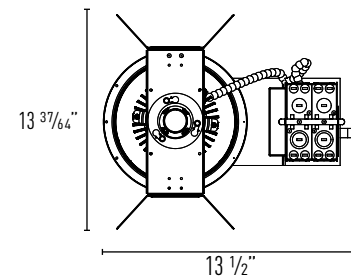
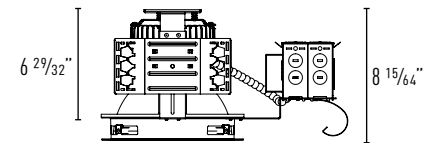
- 0-10V Dimming 1%
- Phase Dimming 120V only, Forward 1% / Reverse 5%
- EldoLED 0-10V 0.1% or 1%
- Lutron® LDE1 Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology
- DMX512 RDM 0.1%

EMERGENCY BACKUP

External battery operates LED load of up to 7W at a minimum of 800 lumens for 90 minutes (EM7), or 20W at a minimum of 2300 lumens for 90 minutes (EM20). Available with remote or integral test switch, must specify.

LISTING/WARRANTY

- ETL listed to US and Canadian standards for damp locations.
- 5-Year Intense LED Limited Warranty
- ENERGY STAR® Qualified¹⁰



Ceiling Cut Out: 8"
Maximum Ceiling Thickness: 1 1/4"

Housing Part Number (Example: SD8DRL4359-D101-NF-EM7)

Housing	LED Module	CCT / CRI	Dimming	Voltage	Optic	Options
SD8DR	L0 ¹ (8W)	27 (2700K / 80 CRI)	-D101 (Osram 0-10V 1%)	blank (120V)	-NF (30°)	EM7 (7W Emergency Backup with Remote Test Switch)
	L1 (10W)	279 (2700K / 90 CRI)	-DIM ^{3,4} (Phase Dimming)	27 (277V)	-FL (50°)	EM7T (7W Emergency Unit with Integral Test Switch)
	L2 (14W)	30 (3000K / 80 CRI)	-ED10V1 (eldoLED 0-10V 1%)	34 ⁷ (347V)	-WF (70°)	EM20 ⁸ (20W Emergency Backup with Remote Test Switch)
	L3 (19W)	309 (3000K / 90 CRI)	-ED10V01 (eldoLED 0-10V 0.1%)			
	L4 (23W)	35 (3500K / 80 CRI)	-LUT ⁵ (Lutron® LDE1 EcoSystem 1%)			
	L5 (28W)	359 (3500K / 90 CRI)				
	L6 (33W)	40 (4000K / 80 CRI)	-DMXR ⁶ (DMX512 RDM 0.1%)			
	L7 ² (38W)	409 (4000K / 90 CRI)				

Reflector Part Number (Example: IC830HZ-SF)

Reflector	Reflector / Flange Finish	Option
IC830	C-SF (Clear, Self-Flanged)	EM7T (Integral Test Switch)
	C-SFW (Clear, Self-Flanged White)	
	HZ-SF (Haze, Self-Flanged)	
	HZ-SFW (Haze, Self-Flanged White)	
	W-SF (White, Self-Flanged)	

Accessories

- I100 (C-Channel Bar Hangers)
- I200 (Flat Bar Hangers)
- I400 (Wood Joist Bar Hangers)

Notes:

- L0 only available with -D101
- 347V Not available with L7 option
- Not available in L1 or L2
- Not available in 277V
- Lutron not available in L1 or L7
- DMX512 RDM not available in L1 or L2
- 347V only available with Osram 0-10V 1% Dimming
- 20W emergency not available in L1, L2 or L3

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Electrical Table					
Lumen Package	Voltage	Wattage	VA	Input Current	Power Factor
L0	120	7.43	7.99	0.07	0.930
	277	8.41	11.87	0.04	0.709
L1	120	9.75	10.37	0.09	0.94
	277	10.82	14.18	0.05	0.76
L2	120	13.71	14.35	0.12	0.96
	277	14.85	18.06	0.07	0.82
L3	120	18.27	18.54	0.15	0.99
	277	19.77	22.92	0.08	0.86
L4	120	22.74	23.04	0.19	0.99
	277	24.09	27.31	0.10	0.88
L5	120	27.18	27.44	0.23	0.99
	277	28.93	32.00	0.12	0.90
L6	120	32.76	32.84	0.27	1.00
	277	34.09	36.72	0.13	0.93
L7	120	37.71	37.79	0.31	1.00
	277	38.86	41.77	0.15	0.93

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JOB NAME		CATALOG NUMBER	
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SD8DRL1358 IC830C

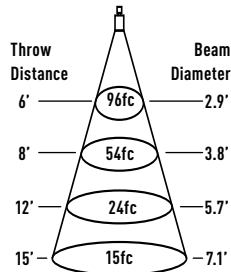
CCT MULTIPLIERS:

	80 CRI	90 CRI
2700K	(x 0.92)	(x 0.79)
3000K	(x 0.98)	(x 0.79)
3500K	(x 1.00)	(x 0.82)
4000K	(x 1.01)	(x 0.84)

FINISH MULTIPLIERS

	30°	50°	70°
Clear	(x 1.00)	(x 1.00)	(x 1.00)
Haze	(x 0.96)	(x 0.96)	(x 0.88)
White	(x 0.96)	(x 0.97)	(x 0.90)

-NF (30° Narrow Flood)



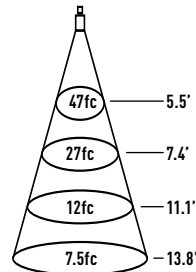
Footcandles at Nadir

Watts: 10 LPW: 99.1
Lumens: 991 CCT: 3500K

Luminance

Degree	CBCP
0°	3439
5°	3047
15°	1453
25°	424
35°	136
45°	15

-FL (50° Flood)



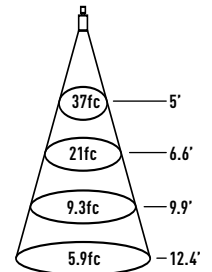
Footcandles at Nadir

Watts: 10 LPW: 106
Lumens: 1060 CCT: 3500K

Luminance

Degree	CBCP
0°	1696
5°	1600
15°	1421
25°	826
35°	176
45°	15

-WF (70° Wide Flood)



Footcandles at Nadir

Watts: 10 LPW: 102
Lumens: 1020 CCT: 3500K

Luminance

Degree	CBCP
0°	1338
5°	1223
15°	889
25°	609
35°	458
45°	112

SD8DRL2358 IC830C

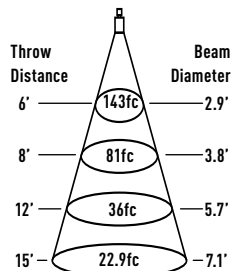
CCT MULTIPLIERS:

	80 CRI	90 CRI
2700K	(x 0.92)	(x 0.79)
3000K	(x 0.98)	(x 0.79)
3500K	(x 1.00)	(x 0.82)
4000K	(x 1.01)	(x 0.84)

FINISH MULTIPLIERS

	30°	50°	70°
Clear	(x 1.00)	(x 1.00)	(x 1.00)
Haze	(x 0.96)	(x 0.96)	(x 0.88)
White	(x 0.96)	(x 0.97)	(x 0.90)

-NF (30° Narrow Flood)



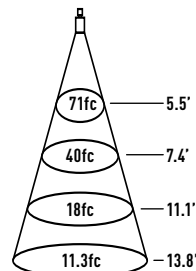
Footcandles at Nadir

Watts: 14 LPW: 106.1
Lumens: 1486 CCT: 3500K

Luminance

Degree	CBCP
0°	5159
5°	4571
15°	2179
25°	636
35°	204
45°	23

-FL (50° Flood)



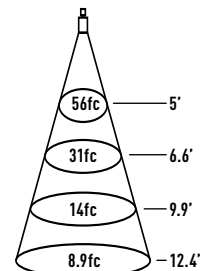
Footcandles at Nadir

Watts: 14 LPW: 113.6
Lumens: 1590 CCT: 3500K

Luminance

Degree	CBCP
0°	2544
5°	2400
15°	2131
25°	1239
35°	264
45°	23

-WF (70° Wide Flood)



Footcandles at Nadir

Watts: 14 LPW: 109.3
Lumens: 1530 CCT: 3500K

Luminance

Degree	CBCP
0°	2006
5°	1834
15°	1333
25°	913
35°	686
45°	168

SD8DR / IC830

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NOTES		TYPE	

SD8DRL3358 IC830C

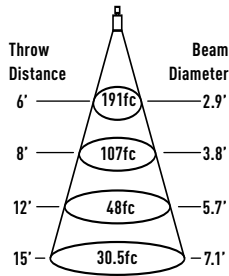
CCT MULTIPLIERS:

	80 CRI	90 CRI
2700K	(x 0.92)	(x 0.79)
3000K	(x 0.98)	(x 0.79)
3500K	(x 1.00)	(x 0.82)
4000K	(x 1.01)	(x 0.84)

FINISH MULTIPLIERS

	30°	50°	70°
Clear	(x 1.00)	(x 1.00)	(x 1.00)
Haze	(x 0.96)	(x 0.96)	(x 0.88)
White	(x 0.96)	(x 0.97)	(x 0.90)

-NF (30° Narrow Flood)

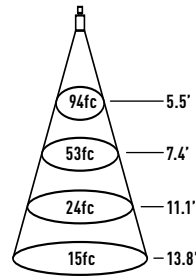


Footcandles at Nadir

Watts: 19 LPW: 104.2
Lumens: 1979 CCT: 3500K

Luminance	
Degree	CBCP
0°	6866
5°	6083
15°	2900
25°	846
35°	271
45°	30

-FL (50° Flood)

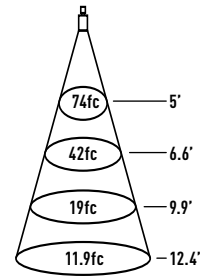


Footcandles at Nadir

Watts: 19 LPW: 111.4
Lumens: 2117 CCT: 3500K

Luminance	
Degree	CBCP
0°	3386
5°	3194
15°	2837
25°	1649
35°	351
45°	30

-WF (70° Wide Flood)



Footcandles at Nadir

Watts: 19 LPW: 107.2
Lumens: 2037 CCT: 3500K

Luminance	
Degree	CBCP
0°	2671
5°	2442
15°	1775
25°	1216
35°	914
45°	224

SD8DRL4358 IC830C

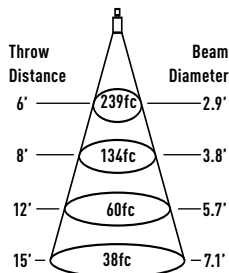
CCT MULTIPLIERS:

	80 CRI	90 CRI
2700K	(x 0.92)	(x 0.79)
3000K	(x 0.98)	(x 0.79)
3500K	(x 1.00)	(x 0.82)
4000K	(x 1.01)	(x 0.84)

FINISH MULTIPLIERS

	30°	50°	70°
Clear	(x 1.00)	(x 1.00)	(x 1.00)
Haze	(x 0.96)	(x 0.96)	(x 0.88)
White	(x 0.96)	(x 0.97)	(x 0.90)

-NF (30° Narrow Flood)

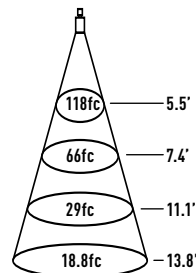


Footcandles at Nadir

Watts: 23 LPW: 107.6
Lumens: 2474 CCT: 3500K

Luminance	
Degree	CBCP
0°	8586
5°	7670
15°	3626
25°	1058
35°	339
45°	38

-FL (50° Flood)

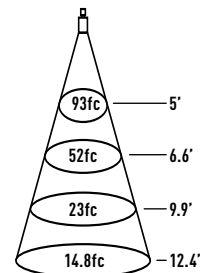


Footcandles at Nadir

Watts: 23 LPW: 115.1
Lumens: 2647 CCT: 3500K

Luminance	
Degree	CBCP
0°	4234
5°	3994
15°	3547
25°	2062
35°	439
45°	37

-WF (70° Wide Flood)



Footcandles at Nadir

Watts: 23 LPW: 110.7
Lumens: 2547 CCT: 3500K

Luminance	
Degree	CBCP
0°	3339
5°	3053
15°	2219
25°	1520
35°	1142
45°	280