Halo Commercial

DESCRIPTION

Recessed 8-inch shallow lens LED downlight is available in multiple lumens and optical distribution combinations. Choose between 3000K, 3500K and 4000K CCT in the field with seleCCTable™ technology. Use to retrofit most nominal 7-inch, 8-inch, and 9-inch open frames and for international new construction where local codes permit. Coordinated recessed and surface mount versions are also available. Use for general area lighting where high efficiency and long life are required.

Catalog #		Type
Project		
Comments		Date
Prepared by		



PR8R10
PR8R15
PR8R20
PR8R30
PR8R40

PR8M12
PR8M34

1000, 1500, 2000, 3000 & 4000 Lumen Series

8-Inch Shallow Lens LED Recessed Downlight Retrofit

Medium, Wide & Wall Wash Distribution

seleCCTable™

SPECIFICATION FEATURES

MECHANICAL

Frame
Die formed galvanized steel frame pre-assembles to LED module providing one-piece construction for ease of retrofit / installation. UL listed or classified for useWITH Cooper/Eaton and other manufacture's housings. See Housing Compatibility Chart or consult installation instructions for specific housing types.

OPTICAL

LED Module
Self–flanged aluminum housing maximizes thermal performance. LED array uses a plurality of mid-power surface mount LED packages delivering high flux and excellent efficiency. Switch selectable 3000K, 3500K or 4000K CCT reduces ordering complexity and provides flexibility in the field. Color point accuracy within 3 SDCM and 80 CRI minimum provides color quality and uniformity. Passive thermal management achieves L70 at 50,000 hours. Integral connector allows quick connection to frame/ housing flex.

Shielding

Field interchangeable lenses available in either medium or wide distributions. Optional field installed wall wash optic provides 360° rotation, allowing for the housing to be installed in any orientation.

Retention
Module retained with two mouse trap springs holding the flange tightly to the finished ceiling surface.

ELECTRICAL

Junction Box
(3) 1/2" and (2) 3/4" trade size pry outs. Listed for (8) #12 AWG (four in, four out) 90°C conductors and feed thru branch wiring.

Driver
Integral UNV 120 - 277V 50/60 Hz constant current driver provides noise free operation. Continuous, flicker-free dimming from 100% to 1% using 0 -10V analog control.

Emergency Option
Available with Sure-Lites EBPLED 7 or 14 watt emergency battery pack with remote test switch / charge indicator light. Provides 90 minutes of standby lighting meeting most life safety codes for egress lighting.

COMPLIANCE

- cULus listed/certified, wet location labeled for covered ceilings.
- IP55 rated
- IC rated to 2000 lumens
- Thermally protected for 3000 and 4000 lumen versions. Insulation must be kept 3" from top and sides.
- Airtight per ASTM-E283
- Optional City of Chicago environmental air (CCEA) marking for plenum applications.
- EMI/RFI emissions per FCC 47CFR Part 18 non-consumer limits.
- Contains no mercury or lead and RoHS compliant.
- Photometric testing in accordance with IES LM-79-08 and TM-30-15.
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11.
- Can be used to comply with California Title 24 Non-Residential Lighting Controls requirements as a LED Luminaire.
- ENERGY STAR® Certified. See energystar.gov website for current information.

WARRANTY

Limited 5-year warranty, see website for details. www.eaton.com/lighting/legal

Lumens	1000 Series	
Input Voltage	120V	277V
Input Current	0.09A	0.04A
Input Power	10.5W	11.2W
Lumens	**1500 Series**	
Input Voltage	120V	277V
Input Current	0.125A	0.06A
Input Power	15W	15.5W

Lumens	2000 Series	
Input Voltage	120V	277V
Input Current	0.18A	0.08A
Input Power	22W	22.5W
Lumens	**3000 Series**	
Input Voltage	120V	277V
Input Current	0.24A	0.10A
Input Power	28.5W	28.5W

Lumens	4000 Series	
Input Voltage	120V	277V
Input Current	0.36A	0.16A
Input Power	43.5W	43W
THD: ≤ 20%		
PF: ≥ 0.90		
T Ambient -30 - +40°C		
Sound Rating ≤ 22dba		

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ORDERING INFORMATION

FRAME SAMPLE NUMBER: PR8R40D010
A complete luminaire consists of a frame and LED module, order separately.

Frame	Lumens	Driver	Options[1, 2]
PR8R = 8" aperture LED downlight frame **PR8RCP** = 8" aperture LED downlight frame, CCEA listed for City of Chicago plenum requirements	**10** = 1,000 lumens (nominal) **15** = 1,500 lumens (nominal) **20** = 2,000 lumens (nominal) **30** = 3,000 lumens (nominal) **40** = 4,000 lumens (nominal)	**D010** = 120-277V 50/60Hz, 0-10V 100% to 1% dimming	**REM7** = 7W emergency battery pack with remote test switch and charge indicator light **REM14** = 14W emergency battery pack with remote test switch and charge indicator light

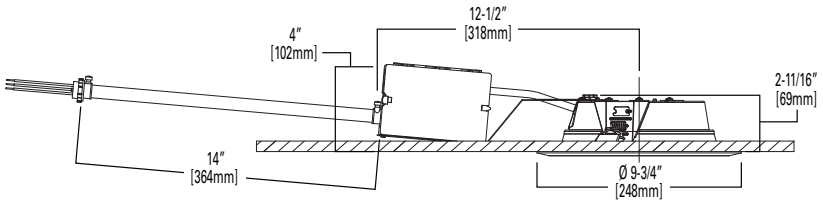
MODULE SAMPLE NUMBER: PR8M34MDMW
A complete luminaire consists of a frame and LED module, order separately.

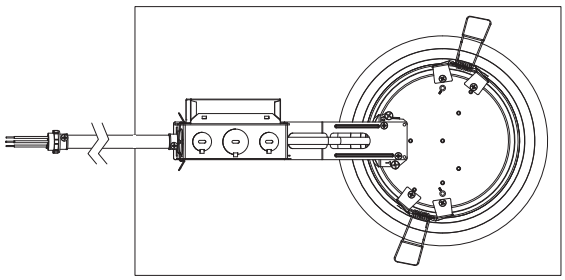
LED Module	Shielding	Flange Finish
PR8M12 = Downlight LED module for PR8 series, provides 1000, 1500 or 2000 lumens (nominal) depending on connected frame type **PR8M34** = Downlight LED module for PR8 series, provides 3000 or 4000 lumens (nominal) depending on connected frame type	**MD** = Medium distribution plastic lens **WD** = Wide distribution plastic lens	**MW** = Matte White **MB** = Matte Black **MMS** = Matte Metallic Silver

Accessories
PR8WW = Field Installed wall wash optic for PR8M12 and PR834 modules **PR8MD** = Replacement 8" medium distribution lens for PR8M12 and PR8M34 modules **PR8WD** = Replacement 8" wide distribution lens for PR8M12 and PR8M34 modules **PR8TC** = Specular clear trim insert for PR8M12 and PR8M34 modules **PR8TH** = Semi-specular clear trim insert for PR8M12 and PR8M34 modules **ABR10P** = Oversize trim ring for max 10" ceiling opening - 11.3" flange **PORLWTPD1** = LumaWatt Pro Wireless Sensor Kit (0-10V only)

Notes: 1. REM not available with CP version.
2. REM UL qualified for US only (not Canada).

DIMENSIONS





HOUSING COMPATIBILITY

Manufacturer	Series	Nom. Size	Housing Aperture	Housing Catalog #	Ceiling Aperture	Retrofit Kit	Oversize Trim Ring
Cooper	PDS	7	7.625	PD7	7.7" MIN 9" MAX	PR8R	None
Cooper	Portfolio	7	7.700	C7, CLW7, HD7, MD7			
Juno	Indy Performance Series (Elate)	8	7.813	A8, C8, M8			
Juno		8	7.813	CH8 and CV8			
Juno		8	8.188	MX8 and TC908			
Lithonia	Gotham	8	8.438	AF-8 and LG-8			
Lithonia	Gotham	8	8.563	GRSF			
Philips	Omega	8	8.563	OM8			
Lithonia	Commercial	8	8.563	LF8, LP8			
Cooper/Eaton	Portfolio	8	8.730	C8			
Philips	Lightolier Calculite	8	8.750	S8			
Philips	Capri	8	8.875	CM8			
Cooper/Eaton	PDS	8	8.875	PD8			
Juno		9	8.938	C9H			
Juno	Indy Performance Series (Elate)	9	9.000	C9 and M9			
Philips	Capri	10	9.625	CM10	9" MIN 10.3" MAX	PR8R	ABR10 (accessory)
Philips	Omega	10	9.813	OM10 and S10			
Juno	Indy Performance Series (Elate)	10	9.875	M10			
Cooper/Eaton	Portfolio	9	10.000	C9			
Lithonia	Gotham	10	10.125	GRSF			
Lithonia	Gotham	10	10.125	AF, LGF, LGH, AH, A			
Lithonia	Gotham	10	10.250	GRSH			

LUMEN TABLES

1000 Lumen, 10.5W	3000K		3500K		4000K	
	Lumens	LPW	Lumens	LPW	Lumens	LPW
Medium Distribution Lens, Matte White Trim	1176	112	1326	126	1245	119
Medium Distribution Lens, Matte Black Trim	1072	102	1209	115	1134	108
Medium Distribution Lens, Matte Metallic Silver Trim	1137	108	1282	122	1203	115
Wide Distribution Lens, Matte White Trim	1172	112	1322	126	1240	118
Wide Distribution Lens, Matte Black Trim	1063	101	1198	114	1125	107
Wide Distribution Lens, Matte Metallic Silver Trim	1126	107	1270	121	1192	114
Wall Wash Optic, Matte White Trim	996	95	1130	108	1061	101

1500 Lumen, 15W	3000K		3500K		4000K	
	Lumens	LPW	Lumens	LPW	Lumens	LPW
Medium Distribution Lens, Matte White Trim	1597	106	1800	120	1690	113
Medium Distribution Lens, Matte Black Trim	1455	97	1641	109	1540	103
Medium Distribution Lens, Matte Metallic Silver Trim	1543	103	1740	116	1633	109
Wide Distribution Lens, Matte White Trim	1591	106	1794	120	1684	112
Wide Distribution Lens, Matte Black Trim	1443	96	1627	108	1527	102
Wide Distribution Lens, Matte Metallic Silver Trim	1529	102	1724	115	1618	108
Wall Wash Optic, Matte White Trim	1349	90	1534	102	1440	96

2000 Lumen, 22W	3000K		3500K		4000K	
	Lumens	LPW	Lumens	LPW	Lumens	LPW
Medium Distribution Lens, Matte White Trim	2186	99	2465	112	2313	105
Medium Distribution Lens, Matte Black Trim	1992	91	2246	102	2108	96
Medium Distribution Lens, Matte Metallic Silver Trim	2113	96	2382	108	2236	102
Wide Distribution Lens, Matte White Trim	2179	99	2456	112	2305	105
Wide Distribution Lens, Matte Black Trim	1975	90	2227	101	2090	95
Wide Distribution Lens, Matte Metallic Silver Trim	2093	95	2360	107	2215	101
Wall Wash Optic, Matte White Trim	1847	84	2100	95	1971	90

3000 Lumen, 28.5W	3000K		3500K		4000K	
	Lumens	LPW	Lumens	LPW	Lumens	LPW
Medium Distribution Lens, Matte White Trim	3217	113	3630	127	3376	118
Medium Distribution Lens, Matte Black Trim	2917	102	3292	116	3062	107
Medium Distribution Lens, Matte Metallic Silver Trim	3092	108	3488	122	3244	114
Wide Distribution Lens, Matte White Trim	3200	112	3610	127	3358	118
Wide Distribution Lens, Matte Black Trim	2901	102	3274	115	3045	107
Wide Distribution Lens, Matte Metallic Silver Trim	3075	108	3469	122	3227	113
Wall Wash Optic, Matte White Trim	2702	95	3053	107	2840	100

4000 Lumen, 43.5W	3000K		3500K		4000K	
	Lumens	LPW	Lumens	LPW	Lumens	LPW
Medium Distribution Lens, Matte White Trim	4397	101	4961	114	4614	106
Medium Distribution Lens, Matte Black Trim	3987	92	4498	103	4184	96
Medium Distribution Lens, Matte Metallic Silver Trim	4225	97	4767	110	4433	102
Wide Distribution Lens, Matte White Trim	4372	101	4933	113	4588	105
Wide Distribution Lens, Matte Black Trim	3965	91	4473	103	4161	96
Wide Distribution Lens, Matte Metallic Silver Trim	4201	97	4740	109	4409	101
Wall Wash Optic, Matte White Trim	3698	85	4172	96	3880	89

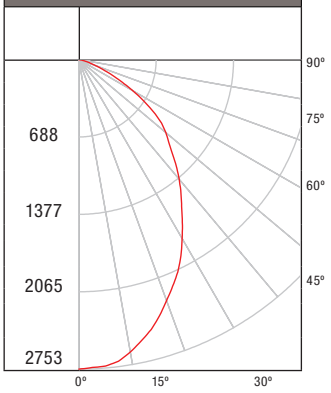
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MEDIUM DISTRIBUTION PHOTOMETRY

PR8R40D010 - PR8M34MDMW - 3500K
Spacing Criteria = 1.04
Lumens per Watt = 114 Lm/W
Test No. P210425
Test Model: PR8R40D010-PR8M34MDMW-3500K

Zonal Lumen Summary		
Zone	**Lumens**	**% Fixture**
0-30	1909	38.5
0-40	2911	58.7
0-60	4540	91.5
0-90	4961	100

Candlepower Distribution



Candela Distribution	
Degrees Vertical	**Candela**
0*	2753
5	2737
10	2642
20	2281
30	1838
40	1388
50	1011
60	553
70	168
80	13
90	0

Luminance	
(Average Candela/M²)	
Degree	**Avg. 0° Luminance**
45	51175
55	43697
65	24049
75	8495
85	0

Cone of Light Footcandles			
Distance to Illuminated Plane	**Initial Nadir Footcandles**	**Beam (ft.)**	
		L Length	**W** Width
5.5	91	5.6	5.6
7	56.2	7.2	7.2
8	43	8.2	8.2
9	34	9.2	9.2
10	27.5	10.2	10.2
12	19.1	12.4	12.4

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.
Footcandle values are initial, apply appropriate light loss factors where necessary.

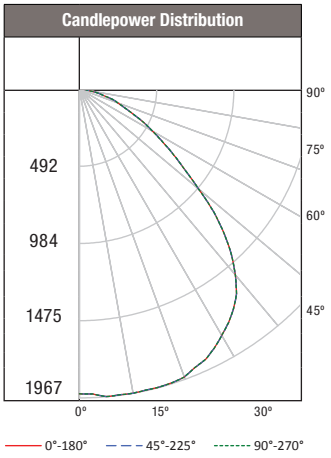
*CBCP

WIDE DISTRIBUTION PHOTOMETRY

PR8R40D010 - PR8M34WDMW - 3500K
Spacing Criteria = 1.37
Lumens per Watt = 113.4 Lm/W
Test No. P210455
Test Model: PR8R40D010-PR8M34WDMW-3500K

Zonal Lumen Summary		
Zone	**Lumens**	**% Fixture**
0-30	1617	32.8
0-40	2681	54.3
0-60	4340	88
0-90	4933	100

Candlepower Distribution



Candela Distribution	
Degrees Vertical	**Candela**
0*	1941
5	1966
10	1967
20	1952
30	1813
40	1544
50	991
60	539
70	262
80	72
90	0

Luminance	
(Average Candela/M²)	
Degree	**Avg. 0° Luminance**
45	56914
55	39531
65	27449
75	18527
85	13480

Cone of Light Footcandles			
Distance to Illuminated Plane	**Initial Nadir Footcandles**	**Beam (ft.)**	
		L Length	**W** Width
5.5'	64.3	7.4	7.4
7'	39.7	9.4	9.4
8'	30.4	10.8	10.8
9'	24	12.2	12.2
10'	19.4	13.6	13.6
12'	13.5	16.2	16.2

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.
Footcandle values are initial, apply appropriate light loss factors where necessary.

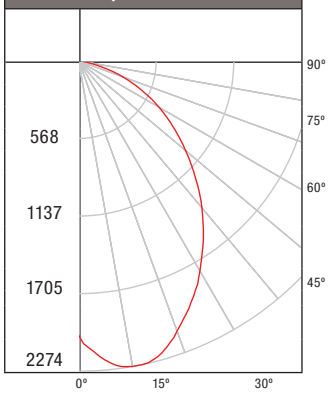
*CBCP

WALL WASH PHOTOMETRY

PR8R40D010 - PR8M34WW - 3500K
Spacing Criteria = 0.99
Lumens per Watt = 95.9 Lm/W
Test No. P210485
Test Model: PR8R40D010-PR8M34WW-3500K

Zonal Lumen Summary		
Zone	**Lumens**	**% Fixture**
0-30	1427	34.2
0-40	2210	53
0-60	3546	85
0-90	4172	100

Candlepower Distribution



Candela Distribution	
Degrees Vertical	**Candela**
0*	2009
5	2199
10	2274
20	2107
30	1776
40	1406
50	1024
60	681
70	345
80	72
90	0

Luminance	
(Average Candela/M²)	
Degree	**Avg. 0° Luminance**
45	52789
55	45584
65	37270
75	21422
85	6156

Single Unit Footcandles

	2.5' from wall (distance from fixture along wall)						
1	51.9	37.7	17.1	6.8	2.8	1.2	0.6
2	74.3	60.1	34.4	17.2	8.3	4.1	2.1
3	59.3	51.2	34.3	20.1	11.3	6.4	3.6
4	40.5	36.4	27.4	18.3	11.5	7.1	4.4
5	27.2	25.1	20.2	14.8	10.3	6.9	4.6
6	18.5	17.4	14.8	11.5	8.6	6.2	4.4
7	12.9	12.3	10.8	8.9	7	5.3	3.9
8	9.3	8.9	8	6.8	5.6	4.4	3.5
9	6.9	6.6	6	5.3	4.5	3.7	3
10	5.2	5	4.6	4.1	3.6	3.1	2.5

Multiple Unit Footcandles

	2.5' from wall (spacing between fixtures) 3		
1	58.6	52.6	58.6
2	91.5	94	91.5
3	79.5	86	79.5
4	58.8	64.4	58.8
5	42	45.8	42
6	30	32.4	30
7	21.8	23.2	21.8
8	16.1	17	16.1
9	12.1	12.7	12.1
10	9.3	9.7	9.3

Multiple Unit Footcandles

	2.5' from wall (spacing between fixtures) 4		
1	54.7	34.1	54.7
2	82.7	68.8	82.7
3	70.6	68.6	70.6
4	52	54.7	52
5	37.5	40.5	37.5
6	27	29.5	27
7	19.9	21.6	19.9
8	14.9	16	14.9
9	11.3	12.1	11.3
10	8.7	9.3	8.7

Specifications and dimensions subject to change without notice.

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