DLDR-O

Deep Regressed LED Downlight



Paraflex LED commercial downlights have been upgraded 4th generation since 2013. Each engine works seamlessly with the all trims, making it truly modular. It is the ideal way to upgrade virtually any existing incandescent, CFL and HID commercial open frame rough-in section to high-performance LED illumination in a matter of minutes. Light engine is mounted directly to aluminum trim providing superior thermal management to ensure long life. Spun aluminum reflector integrated with haze finish and white trim ring with shadow free.

It is available in 4", 6", 8" and 10" with up to 80w which is designed and engineered for recessed applications, which is suitable for commercial and public places, such as shopping mall, hospital, airport, hotel lobby, etc.



Feature

UL, Energy Star and Damp Rated
A smart design that one LED engine fits all trims
4", 6", 8" and 10" size, 85lm/w, up to 80W
CCT and wattage adjustable
Twist-Lock Modular design
New construction housing frame available



PERFORMANCE

Model NO.	Lumen Output			CCT Adjustable	Type	Compatible Trims
	High	Medium	Low			
DLDR-O-4 (Energy Star)	27W, 2025LM	20W, 1600LM	14W, 1200LM	3000K, 3500K, 4000K	NON-IC	Only for 4inch
DLDR-O-# (Energy Star)	40W, 3500LM	27W, 2300LM	18W, 1500LM	3000K, 3500K, 4000K	IC	Only for 6inch, 8inch and 10inch
DLDR-O-#	80W, 6800LM	65W, 5500LM	50W, 4200LM	Fixed	NON-IC	Only for 6inch, 8inch and 10inch

Above are subjuect to 3500K. All efficacy is ±5% base on different CCT and Trims. Check the IES file to gain the accurate data .

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PRODUCT ORDERING GUIDE

Example: DLDR-O-6-40W-TWS

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Cutout Size		**Wattage & CCT**
DLDR-O-4 4 Inch (27W Only)		**D27W-35T** Energy Star-Only for 4inch Wattage Selectable 27W,20W,14W & CCT Adjustable 3000K, 3500K ,4000K
DLDR-O-6 6 Inch DLDR-O-8 8 Inch DLDR-O-10 10 Inch		**40W-TWS** Energy Star-Only for 6inch, 8inch and 10inch Wattage Selectable 40W,27W,18W & CCT Adjustable 3000K, 3500K ,4000K **80W-30E** Make to Order Only for 6inch, 8inch and 10inch * Wattage Selectable 80W,65W,50W & 3000K **80W-35E** Only for 6inch, 8inch and 10inch Wattage Selectable 80W,65W,50W & 3500K **80W-40E** Only for 6inch, 8inch and 10inch Wattage Selectable 80W,65W,50W & 4000K

OPTIONAL MOUNTING ACCESSORY

Optional Spring Clips	Optional New Construction Frame Kit	Optional Emergency Function
SP6 Spring Clips For 6"	**FK4R** 4" Housing Frame Kit	Field-installed (Pre-wired option available) Only external 16w or 25w LED emergency driver with standard indicator available.
SP8 Spring Clips For 8"	**FK6R** 6" Housing Frame Kit	**EME/EM-H16170** 16W Emergency LED Driver
SP10 Spring Clips For 10"	**FK8R** 8" Housing Frame Kit	**EME/EM-H25170** 25W Emergency LED Driver
	FK10R 10" Housing Frame Kit	



*Make to Order means additional cost and /or lead time on customized fixtures may apply. Some fixtures require an MOQ. Please contact your sales rep for more information.

STRUCTURE

Optics

Spun aluminum reflector integrated with haze finish and white trim ring with shadow free, deeply regressed diffusing lens conceals the LEDs from direct view.

Electrical

LED Driver	Powered by Class 2 high efficiency LED driver, with a standard 0-10V dimming which continuous dims to 10% that works with many types of controls. Tested Dimmers: Lutron ® Diva-Dvtv, Leviton ® IP-710-DL.
THD	<20%
Power Factor	>0.9
Input Voltage	Standard electronic drivers are cULus recognized and available for 110-277V AC.

Approvals

- cULus listed for damp locations
- Energy Star Listed
- Tested to IESNA LM-79 and LM-80
- 5 years limited warranty

LED System

CRI	Minimum 80 color rendering index
CCT	The choice of 3000K, 3500K, 4000K and 5000K color temperature with a great color consistency, or CCT adjustable from 3000K, 3500K and 4000K.
LED	Life Minimum 50,000h with 87.8% of lumen maintenance in 25℃ ambient temperature, in compliance with IES LM-80 testing measurements.
Thermal Management	Aluminum housing acting as the heat sink to maximize life.
Environment	Damp rated in operating ambient temperatures of -20℃~40℃ .

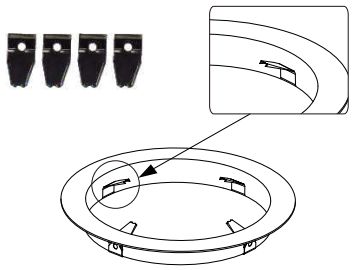
Mounting

It is provided with spring steel friction clips allowing for installation in a variety of commercial recessed open frame rough-in sections.

DLDR-O
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MOUNTING ACCESSORY

Standard - Clips



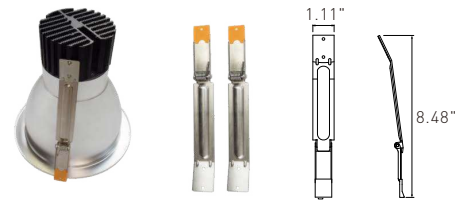
Optional - Spring Clips

Designed for DLDR-O downlight fixation, this spring clip can be used to secure the light to the housing frame kit if the existing clips could not match the mounting diameters. Made of premium material for long time and durable use.

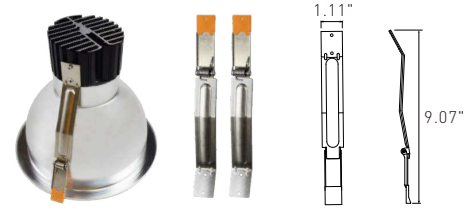
6inch **SP6**



8inch **SP8**



10inch **SP10**



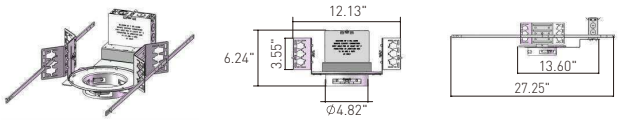
Optional New Construction Frame Kit

The frame kit was specifically designed for the DLDR-O, it delivers the perfect aperture for a tight, seamless fit. This minimizes the space and materials required for installation. Steel housing frames are suitable for new construction. They are available in 6inch, 8inch and 10inch.

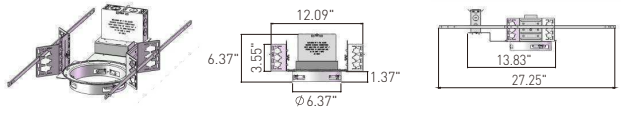


An Ideal Match,
DLDR-O Downlight + Frame Kits

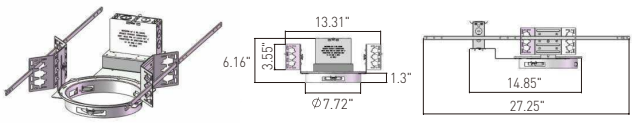
4inch **FK4R**



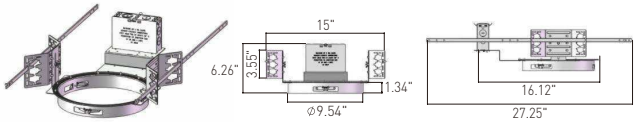
6inch **FK6R**



8inch **FK8R**



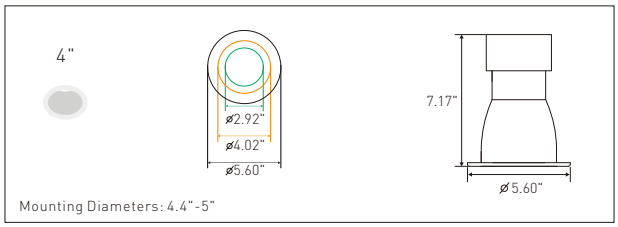
10inch **FK10R**

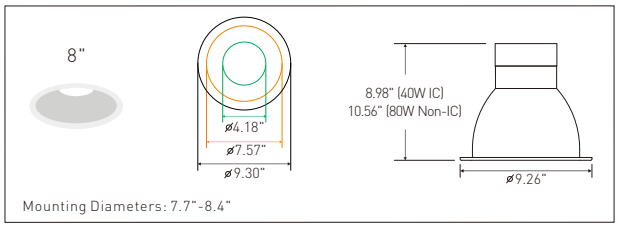


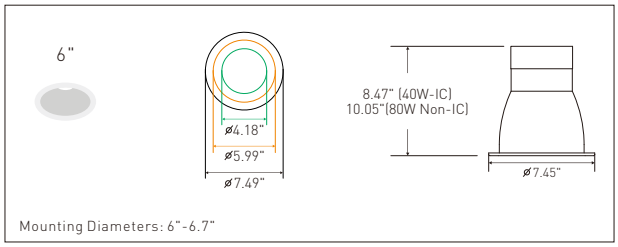
DLDR-O

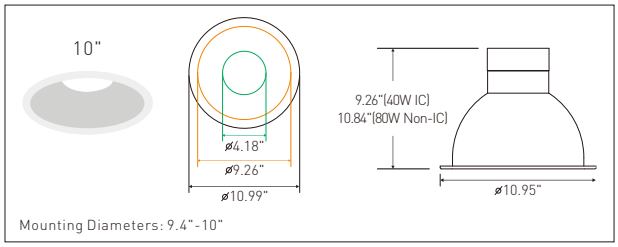
Deep Regressed LED Downlight

DIMENSIONS



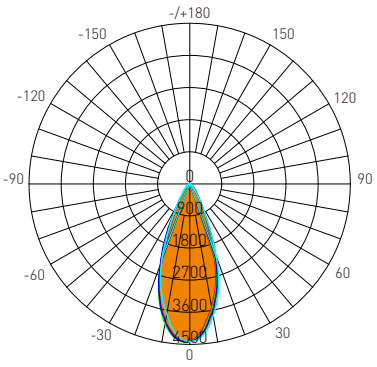






DISTRIBUTION DIAGRAM

4"-27W



AVERAGE BEAM ANGLE(50%): 39.8°

Lumens: 2277.5 Lm
Watts: 25.99 W
LPW: 87.64 Lm/W
CCT: 3500K

UNIT: cd
C0/180,38.5°
C30/210,39.6°
C60/240,40.5°
C90/270,40.5°

Zonal Flux Diagram

T	C0	C45	C90	C135	C180
10	3526	3614	3773	3777	3951
20	1840	2066	2173	2290	2289
30	642.7	620.7	633.2	645.9	650.1
40	267.3	232.0	212.4	186.8	208.2
50	104.0	90.10	77.47	62.39	72.44
60	39.11	33.57	28.98	23.40	26.49
70	13.31	12.29	11.50	9.398	10.05
80	2.398	2.615	3.295	2.316	2.221
90	0.1544	0.0725	0.0700	0.0748	0.0755
100	0.0794	0.0794	0.0934	0.0864	0.0794
110	0.0794	0.1074	0.1401	0.1260	0.1335
120	0.1587	0.2077	0.2662	0.2522	0.2522
130	0.3638	0.4527	0.5326	0.5250	0.4906
140	1.012	1.181	1.243	1.153	1.084
150	2.687	2.862	2.845	2.633	2.519
160	4.998	5.053	5.034	4.790	4.666
170	7.029	7.112	7.158	6.916	6.752
180	8.081	8.177	8.179	8.207	8.086
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens

T	ϕ total
0-10	386.8
10-20	1227
20-30	1816
30-40	2068
40-50	2187
50-60	2240
60-70	2262
70-80	2270
80-90	2271
90-100	2271
100-110	2271
110-120	2271
120-130	2272
130-140	2272
140-150	2273
150-160	2275
160-170	2277
170-180	2278
UNIT: lm	

Luminance cd/(m2)

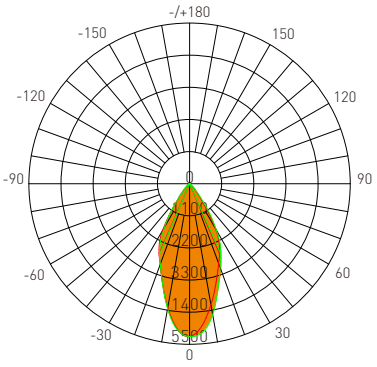
G(DEG)	C0/180	C90/270
85	863	1168
80	1748	2402
75	3276	3333
70	4927	4256
65	7042	5477
60	9902	7336
55	14117	10335
50	20479	15256
45	30007	23078

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DISTRIBUTION DIAGRAM

8"-40W



AVERAGE BEAM ANGLE(50%): 46.9°

Lumens: 3454.8 Lm
Watts: 40 W
LPW: 86.37 Lm/W
CCT: 3000K

UNIT: cd
C0/180,23.6,23.1
C90/270,23.2,24.0

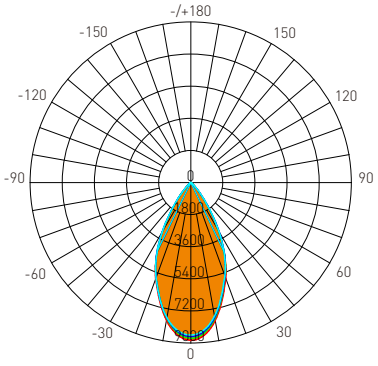
Zonal Flux Diagram

T	C0	C45	C90	C135	C180
10	4207	4415	4558	4486	4303
20	2908	2989	3048	3017	2951
30	1783	1845	1841	1886	1860
40	404.4	449.3	484.6	473.0	456.1
50	86.32	93.34	102.6	97.79	98.80
60	28.65	31.97	35.80	31.96	31.76
70	11.68	13.27	14.63	12.86	12.69
80	4.325	4.949	5.424	4.908	4.774
90	0.0042	0.0048	0.0057	0.0085	0.0064
100	0.0030	0.0028	0.0022	0.0028	0.0042
110	0.0069	0.0047	0.0056	0.0044	0.0083
120	0.0130	0.0125	0.0130	0.0125	0.0155
130	0.0296	0.0321	0.0255	0.0322	0.0305
140	0.0873	0.0858	0.0741	0.0856	0.0737
150	0.1587	0.1440	0.1159	0.1539	0.1406
160	0.1934	0.2072	0.1962	0.2238	0.2125
170	0.1596	0.2089	0.2004	0.2279	0.2055
180	0.1087	0.1105	0.1023	0.0966	0.1065
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens

T	ϕ total
0-10	456.9
10-20	1464
20-30	2576
30-40	3195
40-50	3372
50-60	3423
60-70	3443
70-80	3452
80-90	3454
90-100	3454
100-110	3454
110-120	3455
120-130	3455
130-140	3455
140-150	3455
150-160	3455
160-170	3455
170-180	3455
UNIT: lm	

8"-80W



AVERAGE BEAM ANGLE(50%): 51.6°

Lumens: 6288.5 Lm
Watts: 80 W
LPW: 78.61Lm/W
CCT: 3000K

UNIT: cd
C0/180,51.0 °
C30/210,51.4 °
C60/240,51.9 °
C90/270,52.0 °

Zonal Flux Diagram

T	C0	C45	C90	C135	C180
10	7872	7743	7625	7552	7858
20	5741	5648	5579	5538	5777
30	3072	3196	3154	3133	3168
40	863.6	934.3	953.4	979.2	923.3
50	154.7	156.7	165.2	184.7	180.9
60	31.91	32.07	35.00	42.64	40.87
70	11.69	11.21	11.99	13.96	13.43
80	4.327	4.261	4.534	4.810	4.632
90	0.1629	0.1966	0.1448	0.1684	0.1504
100	0.1616	0.1471	0.1497	0.1443	0.1623
110	0.2522	0.2166	0.2029	0.2166	0.2211
120	0.5132	0.4694	0.4464	0.4604	0.4604
130	1.495	1.490	1.513	1.454	1.427
140	4.095	4.071	4.131	3.953	4.054
150	8.045	7.940	7.982	7.733	7.987
160	12.49	12.36	12.22	11.98	12.40
170	16.29	16.02	15.74	15.54	16.30
180	17.76	17.60	17.17	17.10	17.83
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens

T	ϕ total
0-10	775.2
10-20	2630
20-30	4656
30-40	5823
40-50	6169
50-60	6241
60-70	6261
70-80	6269
80-90	6271
90-100	6271
100-110	6272
110-120	6272
120-130	6273
130-140	6275
140-150	6278
150-160	6283
160-170	6287
170-180	6288
UNIT: lm	

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	466	681
80	880	923
75	1033	1049
70	1207	1239
65	1530	1617
60	2255	2474
55	4114	4540
50	8505	9079
45	18529	21493

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