









# **Description:**

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. pun aluminum reflector integrated with haze finish and white trim ring with shadow free t 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



#### Model:DNLR-27/40/80-OK

Optical:

CCT: 3K,35K,4K CCT selectable

Efficacy: 85lm/w CRI: >80



Rated Power: 14 - 80 W Input voltage: 100-277V AC



Life:

Lumen maintenance: 50,000hurs Warranty: 2 Years

General:

Dimmable Solution:

Enviroment:

Operating temperature:

Finish color Availability:

1-10V Dimming

Damp Location

-20°C~40°C

White /Black /Silver

Material: White /Black /Silver
Die Casting ADC12

Certification: cULus



















# Performance:

M-d-lN-	Ci	Lumen Output			CCT Adinostalia	T
Model No. Size		High	High Medium Low		CCT Adjustable	Туре
DNLR27-OK	4"	14W,1148LM	20W,1600LM	27W,2025LM	3000K,3500K,4000K	IC
DNLR40-OK	6"-8"-10"	40W,3500LM	27W,2300LM	18W, 1500LM	3000K,3500K,4000K	IC
DNLR80-OK	6"-8"-10"	80W.6800LM	65W, 5500LM	50W, 4200LM	N/A	NON-IC

# **Ordering Table:**

# EXAMPLE:DNLR-40-27-06-NC-UNV-3C-EM-OK

Model	Watt	Input VAC	Size	Туре	DIM	сст	Option
DNLR-OK	27 40 80	120 :11 100-277:27	4": 04 6": 06 8": 08 10":10	New Construction : NC Remodel : R	Triac: T 1-10V :UNV	3CCT:3C 3000K:3K 4000K:4K 5000K:5K	Emergency Driver:EM











# **Specification:**

# **Optics**

Spun aluminum reflector integrated with haze finish and white trim ing 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 1-10V 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.

# LED System

CRI Minimum 80 color rendering index

CCT color temperature with a great color consistency,

or CCT adjustable from 3000K,3500K and 4000K @27 and 40

LED Life Minimum 50,000h with 87.8% of lumen

maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements

Thermal Aluminum housing acting as the heat sink to

Management maximize life.

Environment Damp rated in operating ambient

temperatures of -20°C~40°C.

### Mounting

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

### Certifications:

cULus listed for damp locations Energy Star Listed Tested to IESNA LM-79 and LM-80 2 years limited warranty

### **Optional Function**

Emergency Option Optional low voltage emergency LED driver EM-L series can be provided. When AC power fails, it immediately switches to the emergency mode, operating for lighting up to 120 minutes. When AC power is restored, it automatically returns to the charging mode which meets critical life-safety lighting requirements.

For more info or spec sheet, please visit our website or contact sales.











# Twist And Lock Engine - Lower Stock Risk Allow Easy Modifications On Site

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. Deeply regressed diffusing lens conceals the LEDs from direct view.



### **LED DIVER**

Isolated and class 2 output led driver that accommodates input voltages from 110-277 volts AC or110-347 volts AC, dimming with the use of most 1-10V dimmers









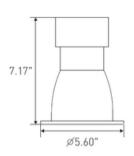


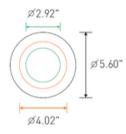




# **DIMENTIONS**

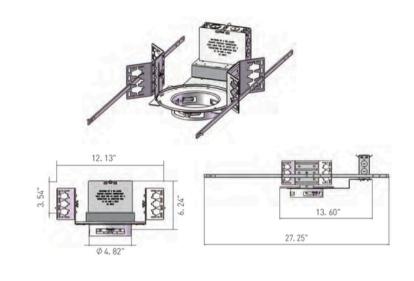
4"



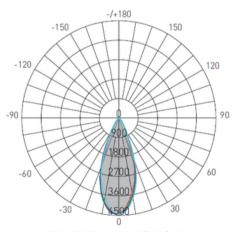


Mounting Diameters: 4"-4.7"

### **OPTIONAL NEW COSTRACTION FRAME**



# **DISTRIBUTION DIAGRAM**



AVERAGE BEAM ANGLE[50%]: 39.8°	A۷	'ERAGE	BEAM	ANGLE	(50%)	l: 39.8°
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Test Number: C4-D27W-35T 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

Υ	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	





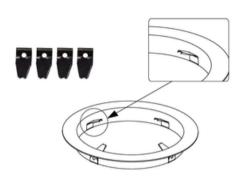






#### **MOUNTING ACCESSORY**

# STANDARD-CLIPS

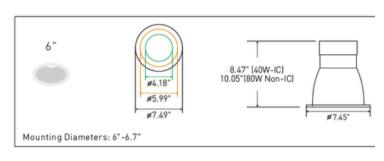


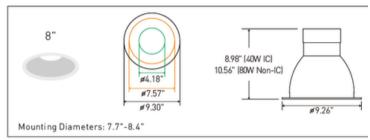
# **OPTIONAL-SPRING CLIPS**

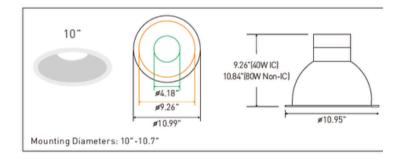
Designed for CES downlight fixation, this spring clip can be used to secure the light to the housing frame kit if the existing clips could not match the mounting diameters. Made of premium material for long time and durable use.



# **DIMENTIONS**

















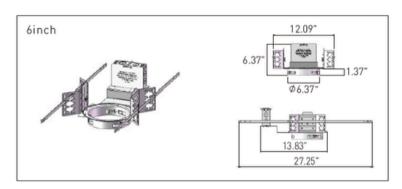


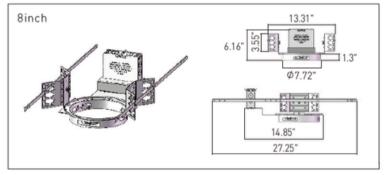
### **OPTIONAL NEW COSTRACTION FRAME**

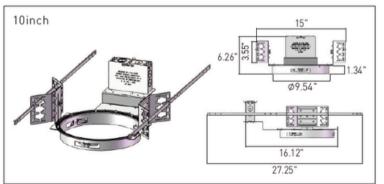
The frame kit was specifically designed for the CES series, it delivers the perfect aperture for a tight, seamless fit. This minimizes the apace and materials required for installation. steel housing frames are suitable for new construction. They are available in 6 inch,8inch and10 inch















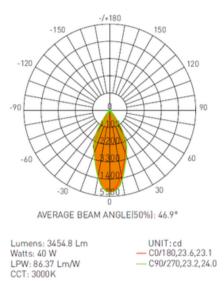






### **DISTRIBUTION DIAGRAM**

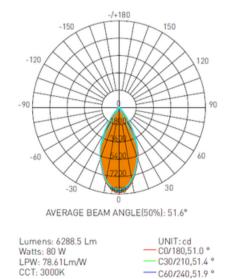
8"-40W



Zonal Flux Diagram							
T	CO	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					
τ	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



C90/270,52.0 °

Zonal Flux Diagram							
T	CO	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		Luminance cd/(m2)			
φ total	G(DEG)	C0/180	C90/270		
775.2	85	466	681		
2630	80	880	923		
4656	75	1033	1049		
5823	70	1207	1239		
6169	65	1530	1617		
6241	60	2255	2474		
6261	55	4114	4540		
6269	50	8505	9079		
6271	45	18529	21493		
6271					
6272					
6272					
6273					
6275					
6278					
6283					
6287					
6288					
	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$\phi\$ total         G(DEG)           775.2         85           2630         80           4656         75           5823         70           6169         65           6241         60           6261         55           6269         50           6271         45           6272         6272           6273         6275           6278         6283           6287         6287	\$\psi\$ total         G(DEG)         C0/180           775.2         85         466           2630         80         880           4656         75         1033           5823         70         1207           6169         65         1530           6241         60         2255           6261         55         4114           6269         50         8505           6271         45         18529           6271         6272         6273           6275         6278         6283           6287         6287		

















