

CATALOG #: \_\_\_\_\_

TYPE: \_\_\_\_\_

PROJECT: \_\_\_\_\_

## FEATURES

- Wide, medium, and narrow distributions tailor performance to the application
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- 2" aperture is unobtrusive in small scale spaces
- Fixed or adjustable aim with 0° - 25° tilt and 360° rotation
- Open reflector with 5 finishes compliment interior style
- ENERGY STAR® certified
- Designed and manufactured in the USA

## SPECIFICATIONS

- HOUSING** – 20-gauge galvanized steel pan/plaster frame. LED assembly accepts ceiling thicknesses from 1/2" to 5/8" thick. Extruded aluminum heat sink.
- REFLECTOR** – Injection molded vacuum metalized upper optic and ceiling trim. Clear semi-specular (CS) trim standard.
- ELECTRICAL** – High quality C.O.B. LED array. Reported L70 >50,000 hours. Top access required for driver maintenance.
- MOUNTING** – Recessed.
- LISTINGS**
  - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0. Suitable for damp locations.
  - Suitable for wet location under covered ceiling when specified with DL option.
  - ENERGY STAR® certified in select configurations, see [www.energystar.gov](http://www.energystar.gov)
  - RoHS compliant
  - IC-rated for direct contact with insulation when specified with IC housing type.
  - City of Chicago Environmental Air approved when specified with CP option.
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

**ORDERING EXAMPLE: 2DR - F - D - L12C/835 - M - CS - NC - OPTIONS - HB - DIM - 120**

## ORDERING INFO

SERIES	TRIM TYPE	ADJUSTMENT	LUMENS <sup>[1]</sup>	CRI	CCT	DISTRIBUTION
2DR	F Flanged reflector	D Fixed downlight	L8C 800lm	8 80	27 2700K	N 30° Narrow
2DS		A Adjustable	L12C 1200lm	9 90	30 3000K 35 3500K 40 4000K	M 35° Medium W 40° Wide

REFLECTOR FINISH	HOUSING TYPE <sup>[2]</sup>	OPTIONS
CS Clear semi-specular	NC New construction mounting pan	DL Diffuse polycarbonate regressed lens
SG Satin-glow	IC IC-rated mounting pan <sup>[3]</sup>	EM/5W 5-watt emergency LED battery <sup>[4]</sup>
SPC Clear specular		F Fuse
WH Matte white		ATH Airtight housing <sup>[5]</sup>
BL Black		CP Chicago Plenum (CCEA) <sup>[6]</sup>
		SFA Square flush flange adapter <sup>[7]</sup>
		RFA Round flush flange adapter <sup>[8]</sup>

MOUNTING	DRIVER <sup>[9]</sup>	VOLTAGE
HB (2) Hanger brackets with (2) bar hangers <sup>[10]</sup>	DRV Non-dimming driver	120 120V
NB (2) Nailer bars <sup>[11]</sup>	DIM Dimming driver	277 277V
TB (2) T-bar hangers <sup>[12]</sup>	DIM1 1% Dimming driver	347 347V <sup>[13]</sup>
	DL2 2-wire line voltage dimming driver	



## NOTES

- Lumens based on downlight with CS reflector color and W distribution. See page 2 for fixture performance data
- See page 4 for HOUSING TYPE DETAILS
- L8C only
- 120-277V only; NC housing type
- IC housing type only; L8C only
- IC housing type only; L8C only
- For mud-in applications, shipped separately. See page 5 for FLUSH FLANGE ADAPTER DETAILS
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- Additional dimming drivers available. See page 4 for ADDITIONAL DRIVER OPTIONS
- Rigid bar mounting
- Wood joist mounting
- Grid ceiling mounting
- Not available with EM drivers



## FIXTURE PERFORMANCE DATA

### ROUND

	LED PACKAGE	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (LM/W)
DOWNLIGHT	L8C	W	988	14	72
		M	971	14	71
		N	922	14	67
DOWNLIGHT	L12C	W	1361	21	68
		M	1338	20	67
		N	1271	21	63
ADJUSTABLE	L8C	W	481	14	35
		M	513	14	37
		N	430	14	31
ADJUSTABLE	L12C	W	663	20	33
		M	707	21	35
		N	593	20	29

### SQUARE

	LED PACKAGE	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (Lm/W)
DOWNLIGHT	L8C	W	937	14	68
		M	927	14	68
		N	841	14	61
DOWNLIGHT	L12C	W	1291	20	65
		M	1277	20	64
		N	1159	20	58
ADJUSTABLE	L8C	W	660	14	48
		M	551	14	40
		N	398	14	29
ADJUSTABLE	L12C	W	910	20	46
		M	760	21	38
		N	548	21	27

### MULTIPLIER TABLES

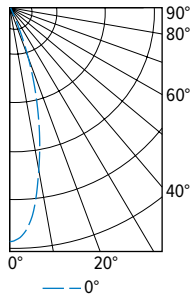
	COLOR TEMPERATURE	
	CCT	CONVERSION FACTOR
80 CRI	2700K	1.00
	3000K	1.05
	3500K	1.07
	4000K	1.08
90 CRI	2700K	0.83
	3000K	0.86
	3500K	0.90
	4000K	0.93

REFLECTOR FINISH		
CATALOG NUMBER	REFLECTOR FINISH	CONVERSION FACTOR
CS	Clear semi-specular	1.00
SG	Satin-glow	0.97
SPC	Specular	1.07
WH	Matte white	1.00
BL	Black	0.80

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is based on 120V input.
- Results based on 2700K, 80 CRI.
- Use multiplier tables to calculate additional options.

### PHOTOMETRY

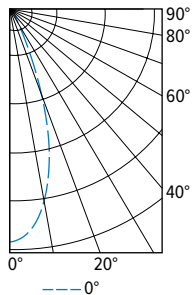
2DR-F-D-L12C/827-N-CS-NC-DRV-120 Report #: 11394407.07; 10/17/16 Total Luminaire Output: 1271 lumens; 21 Watts | Efficacy: 63.3 lm/W | 82 CRI; 2809K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS
		0°	
	0	5234	
	5	4864	121
	15	2342	352
	25	250	127
	35	42	16
	45	21	9
	55	8	4
	65	5	3
	75	3	2
	85	1	1
	90	3	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1239	98
	0 - 60	1262	99
	0 - 90	1271	100

2DR-F-D-L12C/827-M-CS-NC-DRV-120 Report #: 11394407.05; 10/17/16 Total Luminaire Output: 1343 lumens; 20 Watts | Efficacy: 67.4 lm/W | 83 CRI; 2776K CCT

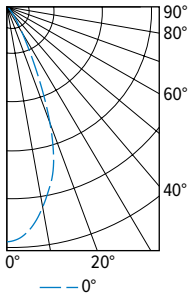


CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS
		0°	
	0	3860	
	5	3687	90
	15	2412	332
	25	488	183
	35	77	32
	45	29	14
	55	16	78
	65	10	5
	75	5	3
	85	1	1
	90	3	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1283	96
	0 - 60	1321	99
	0 - 90	1338	100



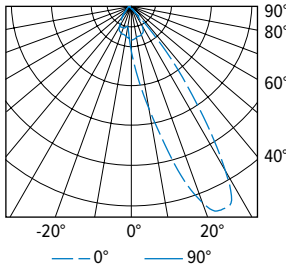
**ZDR-F-D-L12C/827-W-CS-NC-DRV-120** Report #: 11394407.01; 10/05/16 Total Luminaire Output: 1361 lumens; 21 Watts | Efficacy: 67.7 lm/W | 82 CRI; 2418K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS
		0°	
	0	3000	
	5	2882	70
	15	2168	280
	25	722	223
	35	161	68
	45	32	17
	55	17	8
	65	10	6
	75	6	4
	85	2	1
	90	2	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1300	96
	0 - 60	1343	99
	0 - 90	1361	100

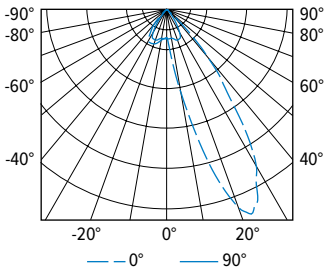
**ZDR-F-A-L12C/827-N-CS-NC-DRV-120** Report #: 11394407.22; 10/11/16 Total Luminaire Output: 593.4 lumens; 20 Watts | Efficacy: 29.7 lm/W | 82 CRI; 2832K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE				ZONAL LUMENS	
		0°	45°	90°	180°		
	0	287	287	287	287	287	
	5	528	446	273	199	179	7
	15	1407	776	255	215	198	55
	25	1996	597	224	226	199	177
	35	902	128	102	130	117	83
	45	66	10	23	41	45	20
	55	4	5	11	16	16	5
	65	3	4	6	9	9	4
	75	2	2	3	5	4	2
	85	1	1	1	1	1	1
	90	0	19	1	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	543	92
	0 - 60	581	98
	0 - 90	593	100

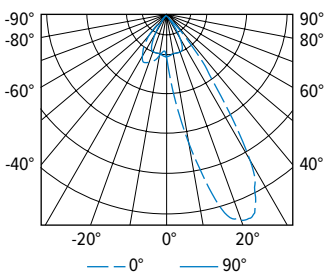
**ZDR-F-A-L12C/827-M-CS-NC-DRV-120** Report #: 11394407.21; 10/06/16 Total Luminaire Output: 703 lumens; 21 Watts | Efficacy: 34.9 lm/W | 83 CRI; 2788K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE				ZONAL LUMENS	
		0°	45°	90°	180°		
	0	263	263	263	263	263	
	5	425	359	264	262	262	7
	15	1434	743	278	307	311	57
	25	1892	643	284	325	329	133
	35	960	58	140	224	232	105
	45	185	10	28	74	83	33
	55	5	6	13	24	26	8
	65	4	4	8	13	14	5
	75	2	3	4	6	7	3
	85	1	1	1	2	1	1
	90	1	3	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	632	89
	0 - 60	692	98
	0 - 90	707	100

**ZDR-F-A-L12C/827-W-CS-NC-DRV-120** Report #: 11394407.19; 10/06/16 Total Luminaire Output: 663.1 lumens; 21 Watts | Efficacy: 33.1 lm/W | 82 CRI; 2845K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE				ZONAL LUMENS	
		0°	45°	90°	180°		
	0	311	311	311	311	311	
	5	570	475	301	272	271	8
	15	1472	855	289	334	349	65
	25	1543	605	265	363	387	126
	35	574	103	105	248	290	90
	45	78	10	23	65	86	29
	55	5	6	11	19	21	6
	65	4	4	6	10	11	4
	75	2	2	3	5	5	2
	85	1	1	1	1	1	1
	90	1	23	0	1	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	600	91
	0 - 60	651	98
	0 - 90	663	100

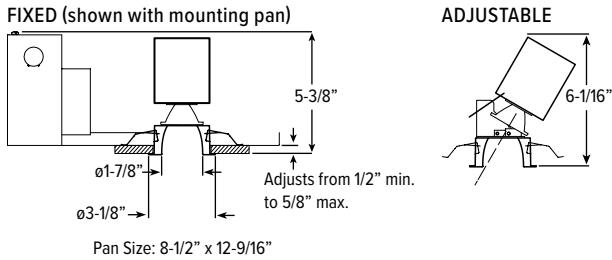


## ADDITIONAL DRIVER OPTIONS

Lumen restrictions apply and 347V may require stepdown transformer, see product builder at hew.com.

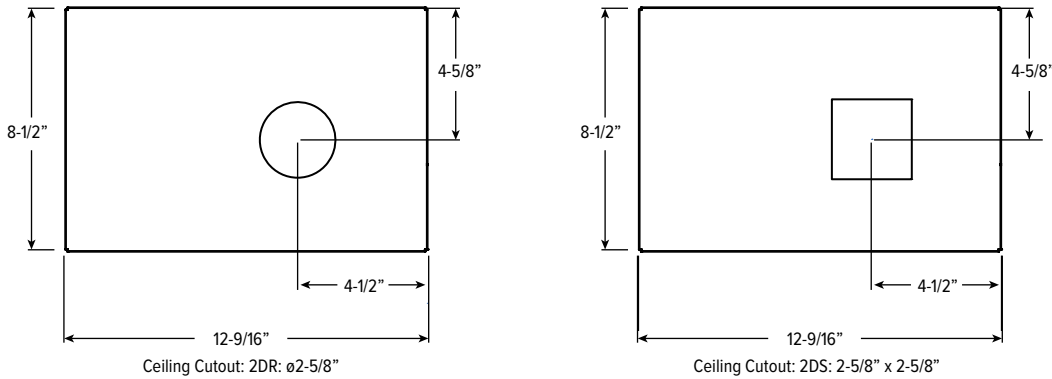
CATALOG NUMBER	DESCRIPTION
<b>DIM</b>	Dimming driver prewired for 0-10V low voltage applications
<b>DIM1</b>	1% dimming driver prewired for 0-10V low voltage applications
<b>DMX</b>	0.1% dimming driver for DMX controls
<b>LTE LINE</b>	Lutron Hi-Lume® A-Series 1% dimming driver for forward phase line voltage controls (120V only)
<b>LDE1</b>	Lutron EcoSystem® H-Series 1% dimming driver for EcoSystem® controls
<b>LDE5</b>	Lutron EcoSystem® 5-Series 5% dimming driver for EcoSystem® controls
<b>ELDO SOLOB</b>	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
<b>ELDO SOLOB DALI</b>	EldoLED Solodrive, 0.1% dimming driver for DALI controls
<b>ELDO ECO1</b>	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
<b>ELDO ECO1 DALI</b>	EldoLED Ecodrive, 1% dimming driver for DALI controls

## CROSS SECTIONS

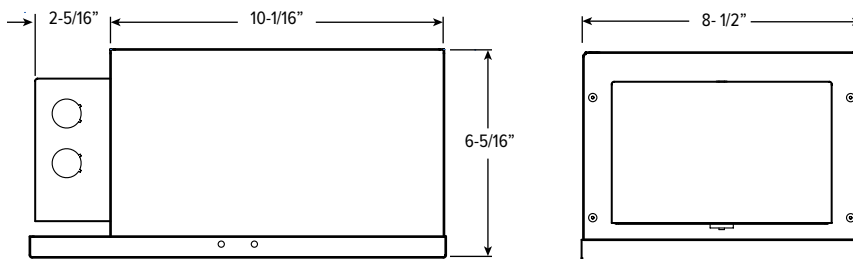


## HOUSING TYPE DETAILS

### NEW CONSTRUCTION



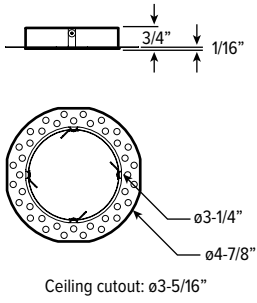
### IC-RATED



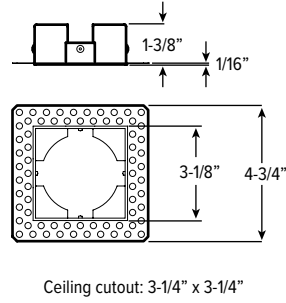
# 2D<sup>LED</sup> 2" Downlight

## FLUSH FLANGE ADAPTER DETAILS

### ROUND



### SQUARE



## TRIM FINISH DETAILS

