



# 2DS dim to WARM

## 2" Downlight – Square

### FEATURES

- Mimic the comfortable, welcoming glow of incandescent with warm-dimming technology
- Beam angles ranging from 20° narrow to 50° wide for tailored performance
- 2" aperture is unobtrusive in small scale spaces
- Square shape accentuates architectural styles
- Zero-flange trim options for modern ceiling
- New construction mounting pan, IC-rated, or pan-less remodel kit available
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Die-cast trim choices include flush, regressed or angled lens
- Easily adjust mounting arms below ceiling to adapt to a range of ceiling thicknesses
- Spring clip retention system eliminates trim sag
- Made Right Here® in the USA

### SPECIFICATIONS

- HOUSING** – Die-cast aluminum trim housing with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Swing-out mounting arms field adjust for ceiling thickness from 1/2" – 2-3/8".
- OPEN REFLECTOR** – Low-iridescent anodized aluminum with top diffuser.
- LENSED TRIM** – Die-cast aluminum frame with micro-prismatic, acrylic lens. Diffuse acrylic lens standard with A Trim Type.
- ELECTRICAL** – High-performance Class 2 C.O.B. LED array. Modular quick-connect plug for easy field-connection of LED light assembly to driver. Reported L70 > 55,000 hours. Reported L90=49,000 hours. Estimated L70=179,000 hours.
- MOUNTING** – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. Minimum 12-1/2" O.C. marked spacing required for L12 lumen package when specified with R Mounting Type.
- LISTINGS** –
  - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for dry and damp locations. LED light assembly conforms to UL 2108 for remote installation.
  - Suitable for wet location under covered ceiling when specified with WET/CC option.
  - IC-rated for direct contact with insulation when specified with I Mounting Type.
  - City of Chicago Environmental Air approved when specified with CP option.
  - Complies with ASTM-E283 when specified with ATH option.
  - RoHS compliant.
  - Complies with the Buy American Act and other federal regulations. Request certification at [hew.com/buy-american](http://hew.com/buy-american)
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty)

### FIXTURE PERFORMANCE DATA

	CCT AT 100% (FULL OUTPUT)	CCT AT 1% (FULL DIM)	DISTRIBUTION	WATTAGE	FLUSH LENS TRIM TYPE		OPEN REFLECTOR TRIM TYPE		REGRESSED LENS TRIM TYPE		ANGLED LENS TRIM TYPE		
					DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	
L7	3000K	1800K	W	14.8	729	49	528	36	734	50	–	–	
			M	14.8	731	49	500	34	720	49	–	–	
			N	14.8	708	48	516	35	708	48	–	–	
			WW	14.8	–	–	–	–	–	–	564	38	
L12			W	23.3	1263	54	915	39	1273	55	–	–	
			M	23.3	1267	54	867	37	1248	54	–	–	
			N	–	–	–	–	–	–	–	–	–	–
			WW	23.3	–	–	–	–	–	–	978	42	

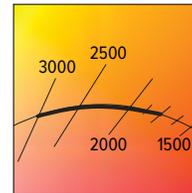
### MULTIPLIER TABLES

	REFLECTOR FINISH	
	CATALOG NUMBER	CONVERSION FACTOR
O TRIM	CS	1.00
	SG <sup>(1)</sup>	0.92
	GD	0.93
	CG	0.96
	PW	0.86
	SPC	1.02
RG	0.88	
R TRIM	WH	1.00
	CS	0.98
	BL	0.79

TRIM OPTIONS	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

### BEAM ANGLE

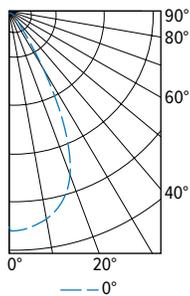
	TRIM TYPE		
	FLUSH	OPEN	REGRESSED
W	50°	50°	55°
M	30°	47°	30°
N	20°	47°	20°



- Distribution will also be affected, consult factory.
- Photometrics tested in accordance with IESNA LM-79. Results based on CS (O Trim Type) or WH (L, R and A Trim Types) Reflector Finish, 95 CRI/3000K CCT, average wattage for 120V input, and 25°C ambient temperature. Actual performance may vary +/-5%
- Beam angle based on L Trim Type and WH Reflector Finish.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier tables to calculate additional options.

### PHOTOMETRY

2DS-L12/9DW-DIM1-UNV-LW-OF-WH Total Luminaire Output: 1263 lumens; 23.3 Watts | Efficacy: 54 lm/W | 95 CRI; 3000K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS
		0°	
	0	1460	
	5	1474	137
	15	1332	366
	25	840	391
	35	212	179
	45	86	77
	55	56	54
	65	36	37
	75	18	19
	85	4	4
	90	0	

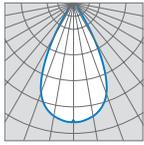
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1073	85
	0 - 60	1203	95
	0 - 90	1263	100
	0-180	1263	100

PHOTOMETRY CONTINUED ON NEXT PAGE

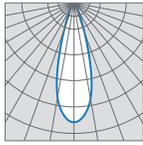


# 2DS dim to WARM 2" Downlight – Square

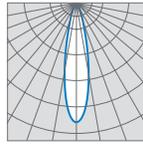
## FLUSH (L)



50° Wide

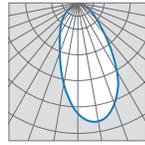


30° Medium



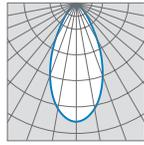
20° Narrow

## ANGLED (A)

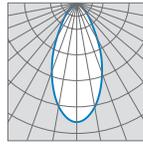


Wall Wash

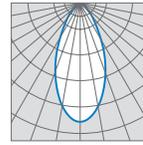
## OPEN (O)



50° Wide

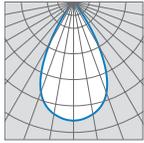


47° Medium

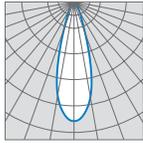


47° Narrow

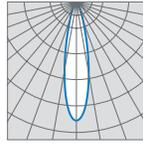
## REGRESSED (R)



55° Wide



30° Medium



20° Narrow

## EMERGENCY BATTERY OPTIONS

Additional limitations apply, see page 1. Specify CEC in the option code when California Energy Commission regulations are required.

CATALOG NUMBER	DESCRIPTION
EM/5W	5-watt emergency battery
EM/7W	7-watt emergency battery
EM/7W/RTS	7-watt emergency battery with regressed test switch <sup>[1]</sup>
EM/7W/IPRTS	7-watt emergency battery with IP65 rated regressed test switch <sup>[2]</sup>
EM/10W	10-watt emergency battery
EM/10W/RTS	10-watt emergency battery with regressed test switch <sup>[1]</sup>
EM/10W/IPRTS	10-watt emergency battery with IP65 rated regressed test switch <sup>[2]</sup>

- <sup>1</sup> Not available with WET/CC Trim Option. N Mounting Type only. Top access required.
- <sup>2</sup> Must specify IP Trim Option. N Mounting Type only. Top access required.

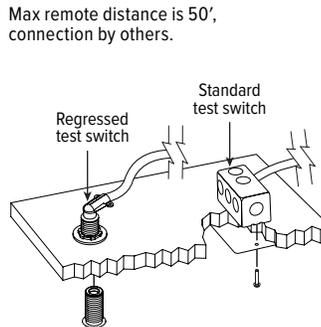
## MOUNTING DETAILS



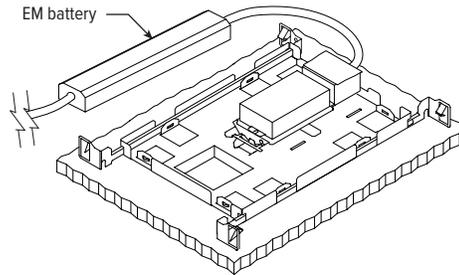
Regressed test switch  
ø1-3/4"



Standard test switch  
2-3/4" x 4-1/2"



Max remote distance is 50',  
connection by others.



## REMODEL MOUNTING PLENUM RESTRICTIONS

Additional plenum space required for R mounting when specified with EM battery.

CATALOG NUMBER	MINIMUM HEIGHT
EM/5W	9"
EM/7W	11"
EM/10W	12"

## REFLECTOR FINISH DETAILS

**SPC**  
Clear specular



**SG**  
Satin glow



**PW**  
Pewter



**GD**  
Gold



**CG**  
Champagne gold



**RG**  
Rose gold



**CS**  
Clear semi-specular



**WH**  
White



**BL**  
Black



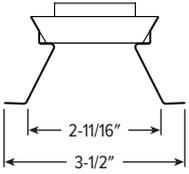
# 2DS dim to WARM

2" Downlight – Square

## TRIM TYPE DETAILS

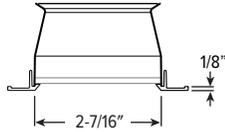
### 1/2" STANDARD FLANGE TYPE

OPEN

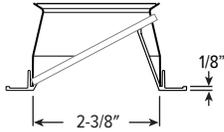


Ceiling Cutout: 3"

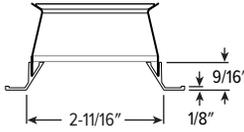
FLUSH



ANGLED

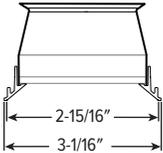


REGRESSED



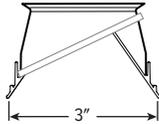
### ZERO-FLANGE MUD-IN

FLUSH

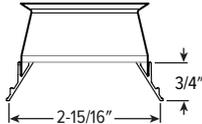


Ceiling Cutout: 3-1/2"

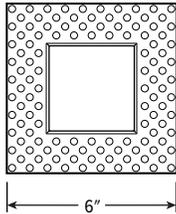
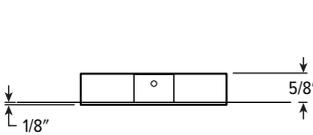
ANGLED



REGRESSED



MUD FLANGE MOUNTING KIT



SEE NEXT PAGE FOR MOUNTING DETAILS

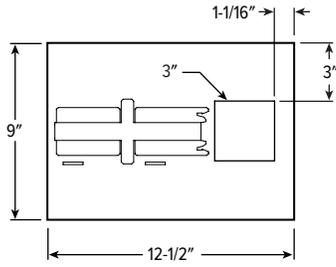


# 2DS dim to WARM

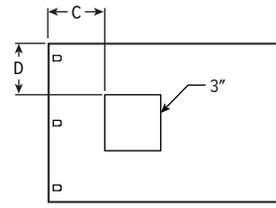
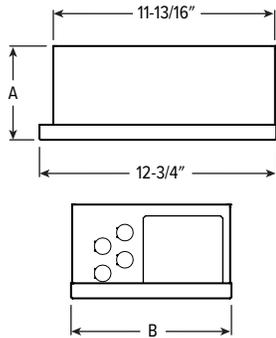
## 2" Downlight – Square

### MOUNTING TYPE DETAILS

#### NEW CONSTRUCTION



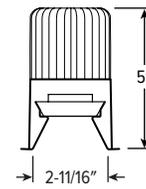
#### IC-RATED



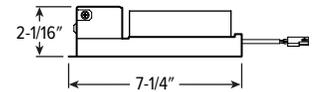
	DIM CONTROL	LUT CONTROL
A	5"	6-1/16"
B	8-9/16"	9-1/4"
C	3-1/16"	6-11/16"
D	2-3/4"	3-1/8"

#### REMODEL

##### Cross Section

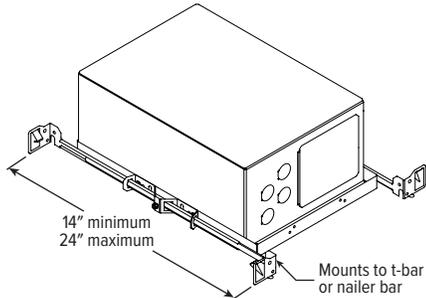
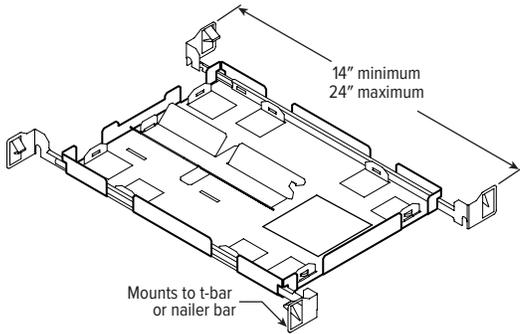


##### Driver and Junction Box



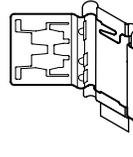
### MOUNTING HARDWARE DETAILS

**F1** Integral 2-position fixed pan bracket, universal bar hanger included

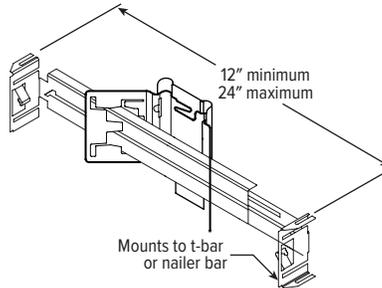


F1 with I Mounting Type

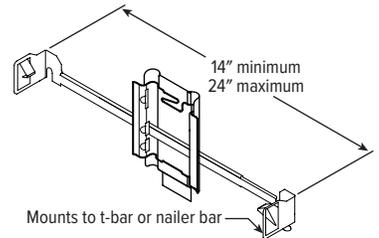
**BA1** Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



**BA2** Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)



**CA1** Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)



**CA2** Adjustable caterpillar pan bracket, t-bar hanger included (N Mounting Type only)

