

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

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

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

### NEW CONSTRUCTION AND REMODEL

#### FEATURES

- Beam angles ranging from 25° narrow to 60° wide for tailored performance
- Die cast trim choices include flush, regressed or angled lens
- Spring clip retention system eliminates trim sag
- Industry-leading efficacies as high as 97 lm/W
- Fully room-side accessible

#### 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" – 2-1/4".
- **OPEN REFLECTOR** – Low-iridescent anodized aluminum with top diffuser.
- **LENSED TRIM** – Die-cast aluminum frame with micro-prismatic, acrylic lens.
- **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>55,000 hours. Estimated L70 = 200,000 hours.
- **MOUNTING** – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. Remodel kit option includes receiver bracket hardware. Minimum 24" O.C. marked spacing required for L40 lumen package.
- **LISTINGS** –
  - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for 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.
  - Title 24 (JAB) compliant in select configurations, see [www.cacertappliances.energy.ca.gov](http://www.cacertappliances.energy.ca.gov).
- **WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

ORDERING EXAMPLE: 4DS - L20/835 - OPTIONS - DIM - UNV - LW - OF - WH - TRIM OPTIONS - N - F1

HOUSING TRIM MOUNT.

#### HOUSING

SERIES	LUMENS <sup>[1]</sup>	CRI	CCT	OPTIONS	CONTROL <sup>[2]</sup>	VOLTAGE
4DS	L10 1,000lm	8 80	27 2700K	ATH Airtight construction	DIM Dimming driver, 0-10V	UNV 120-277V
	L15 1,500lm	9 90 <sup>[3]</sup>	30 3000K	F Fuse kit	DIM1 1% Dimming driver, 0-10V	347 347V <sup>[6]</sup>
	L20 2,000lm		35 3500K	SDT Stepdown transformer <sup>[4]</sup>		
	L30 3,000lm		40 4000K	CP Chicago plenum (CCEA) <sup>[5]</sup>		
	L40 4,000lm		50 5000K	EM/7W 7-watt emergency battery <sup>[7]</sup>		
				EM/10W 10-watt emergency battery <sup>[8]</sup>		
				EM/10W/RTS 10-watt emergency battery with regressed test switch <sup>[9]</sup>		

#### TRIM<sup>[10]</sup>

TRIM TYPE	DISTRIBUTION <sup>[11]</sup>	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
L Flush lens	W Wide	OF 1/2" standard flange	Open trim types	MWT Textured white trim flange <sup>[17]</sup>
O Open reflector	55° Open	SF 1/4" mud-in flange <sup>[16]</sup>	CS Clear semi-specular anodize	IP IP65 rated trim <sup>[18]</sup>
R Regressed lens	60° Flush		SG Satin-glow anodize	AD Diffuse acrylic lens <sup>[19]</sup>
A Angled lens <sup>[12]</sup>	60° Regressed		GD Gold anodize	PD Diffuse 1/8" polycarbonate lens <sup>[20]</sup>
	M Medium <sup>[13]</sup>		CG Champagne gold anodize	WET/CC Wet location, covered ceiling listed <sup>[21]</sup>
	45° Open		PW Pewter anodize	AM Anti-microbial <sup>[22]</sup>
	35° Flush		SPC Clear specular anodize	
	35° Regressed		RG Rose gold anodize	
	N Narrow <sup>[14]</sup>		Lens trim types	
	40° Open		CS Clear semi-specular powder coat	
	25° Flush		WH White texture powder coat	
	25° Regressed		BL Black texture powder coat	
	WW Wall wash <sup>[15]</sup>		MB Black texture splay with white flange <sup>[23]</sup>	

#### MOUNTING

##### MOUNTING TYPE<sup>[24]</sup>

- N Open pan for new construction
- I IC-rated enclosure for new construction<sup>[26]</sup>
- R Remodel kit<sup>[27]</sup>

##### MOUNTING HARDWARE<sup>[25]</sup>

- F1 Integral 2-position fixed pan bracket, universal bar hanger included<sup>[28]</sup>
- BA1 Adjustable butterfly pan bracket, bar hanger not included<sup>[29]</sup>
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included<sup>[30]</sup>

#### NOTES

- Lumen output based on L trim type, W distribution and WH finish, 3500K/80CRI. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- See page 3 for ADDITIONAL CONTROL OPTIONS.
- Extended lead times may apply. Consult factory for availability.
- May be required for 347V, see product builder at [hew.com/product-builder](http://hew.com/product-builder).
- I Mounting Type required.
- Not available with EM batteries or DMX controls.
- N and R Mounting Types only. Not available with ATH or IP options.
- N and R Mounting Types only. Not available with ATH or IP options.
- Not available with WET/CC, ATH or IP options. N and R Mounting Types only. See page 4 for EM/10W/RTS DETAILS.
- Trim ships separately.
- Beam angle based on CS or WH reflector finish.
- Available with WW Distribution only.
- Not available with L40.
- Not available with L40.
- O and A Trim Types only.
- For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 3 for FLANGE TYPE DETAILS. Not available with ATH or IP option.
- Not available with WH Reflector Finish or L Trim Type.
- L and R trim types only.
- Not available with O trim type. W and WW distributions only.
- Not available with O trim type. W and WW distributions only.
- Not available with O Trim Type. Not available with PD trim option.
- WH and BL Reflector Finishes only.
- R Trim Type only. Not available with MWT.
- Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
- Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
- Not available with L30 or L40 lumen packages.
- Also used in new construction sheetrock ceilings.
- N and I Mounting Types only. I Mounting requires external brackets.
- N Mounting Type only.
- N Mounting Type only.



# 4DS LED 4.5" Downlight – Square

## FIXTURE PERFORMANCE DATA

### OPEN REFLECTOR TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	947	12.0	78.6
	M	1045	12.0	86.7
	N	1067	12.0	88.6
L15	W	1395	17.4	80.1
	M	1540	17.4	88.4
	N	1573	17.4	90.3
L20	W	1893	25.0	75.7
	M	2089	25.0	83.6
	N	2134	25.0	85.4
L30	W	2839	36.0	78.9
	M	3090	36.0	85.8
	N	2999	36.0	83.3
L40	W	3739	45.0	83.1
	M	-	-	-
	N	-	-	-

### FLUSH LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	1026	12.0	85.2
	M	1127	12.0	93.5
	N	1144	12.0	94.9
L15	W	1511	17.4	86.7
	M	1666	17.4	95.6
	N	1684	17.4	96.6
L20	W	2050	25.0	82.1
	M	2261	25.0	90.5
	N	2285	25.0	91.5
L30	W	3077	36.0	85.5
	M	3333	36.0	92.6
	N	3214	36.0	89.3
L40	W	4053	45.0	90.1
	M	-	-	-
	N	-	-	-

### REGRESSED LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	986	12.0	81.8
	M	1111	12.0	92.2
	N	1127	12.0	93.5
L15	W	1453	17.4	83.4
	M	1637	17.4	93.9
	N	1660	17.4	95.3
L20	W	1972	25.0	78.9
	M	2221	25.0	88.9
	N	2253	25.0	90.1
L30	W	2957	36.0	82.2
	M	3285	36.0	91.3
	N	3166	36.0	88.0
L40	W	3895	45.0	86.6
	M	-	-	-
	N	-	-	-

### MULTIPLIER TABLES

		COLOR TEMPERATURE	
		CCT	CONVERSION FACTOR
80 CRI	2700K	0.92	
	3000K	0.98	
	3500K	1.00	
	4000K	1.01	
	5000K	1.02	
90 CRI	2700K	0.76	
	3000K	0.79	
	3500K	0.82	
	4000K	0.84	
	5000K	0.88	

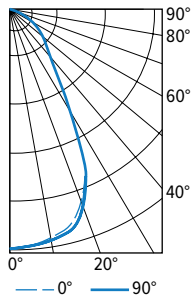
OPEN REFLECTOR FINISH		
CATALOG NUMBER	REFLECTOR FINISH	CONVERSION FACTOR
CS	Clear semi-specular	1.00
SG	Satin-glow	0.83
GD	Gold	0.93
CG	Champagne Gold	0.96
PW	Pewter	0.86
SPC	Specular	1.02
RG	Rose Gold	0.88
WH	White, textured	0.99
BL	Black, textured	0.79

TRIM	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

- 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 3500K, 80 CRI, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.

## PHOTOMETRY

4DS-L20/835-DIM-UNV-LW-OF-WH Report #: 20316; 04/16/18 | Total Luminaire Output: 2050 lumens; 25.0 Watts | Efficacy: 82.1 lm/W | 83.8 CRI; 3478K CCT



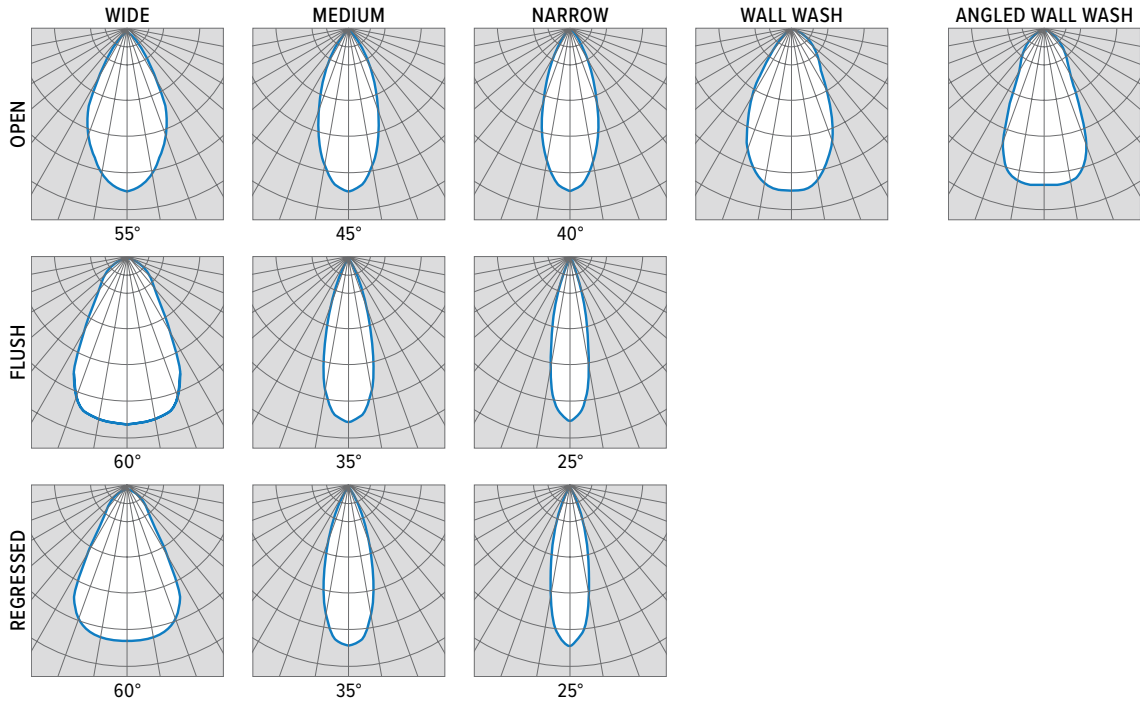
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
		0	1526	1526	
5	1512	1512	1513	144	
15	1426	1447	1456	410	
25	1107	1253	1110	546	
35	501	762	491	372	
45	317	344	314	254	
55	192	197	191	175	
65	101	98	99	100	
75	42	41	42	44	
85	5	4	6	5	
90	0	0	0		

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1100	54
	0 - 40	1472	72
	0 - 60	1902	93
	0 - 90	2050	100
	0 - 180	2050	100



# 4DS LED

## 4.5" Downlight – Square

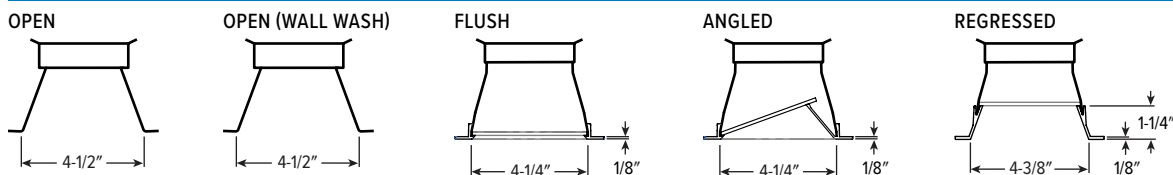


### ADDITIONAL CONTROL OPTIONS

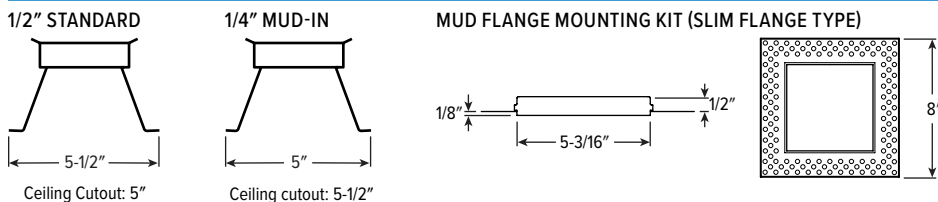
Lumen restrictions apply: L30 max for DMX driver, L30 max for Lutron drivers, L40 max for DIM LINE driver. R Mounting Type not available with DMX or FCJS controls. R Mounting Type requires 12" minimum plenum depth when specified with VRF/DBI controls. 347V may require stepdown transformer, see product builder at [hew.com/product-builder](http://hew.com/product-builder). I Mounting Type not available with Lutron controls.

CATALOG NUMBER	DESCRIPTION
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible at 120V only)
DMX	0.1% dimming driver for DMX controls
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
VRF/DBI/LDE1	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron Hi-lume 1% EcoSystem dimming LED driver, and digital link interface
FCJS/DIM	Lutron Vive PowPak wireless fixture control with dimming driver
FCJS/DIM1	Lutron Vive PowPak wireless fixture control with 1% dimming driver
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls

### TRIM TYPE DETAILS




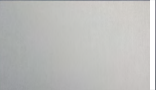
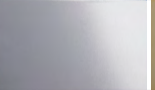

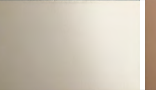
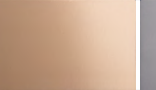
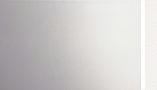
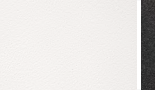

### FLANGE TYPE DETAILS



# 4DS LED

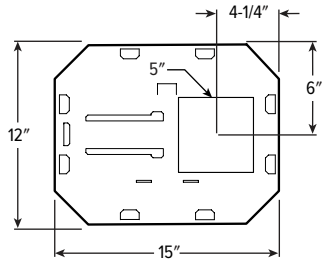
## 4.5" Downlight – Square

### REFLECTOR FINISH DETAILS

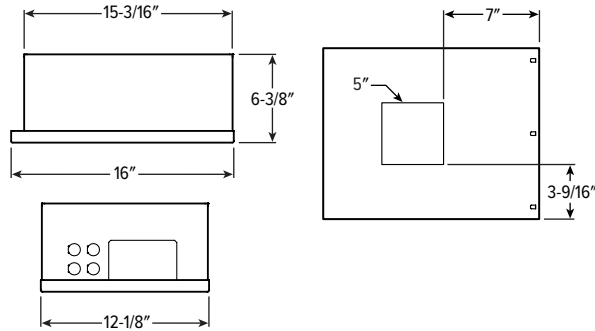
SPC	SG	PW	GD	CG	RG	CS	WH	BL
Clear specular	Satin-glow	Pewter	Gold	Champagne gold	Rose gold	Clear semi-specular	White	Black
								

### MOUNTING TYPE DETAILS

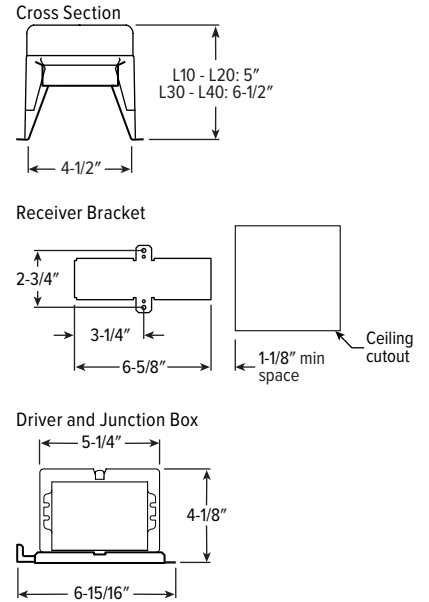
#### NEW CONSTRUCTION



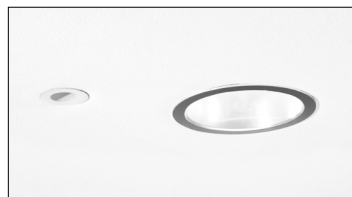
#### IC-RATED



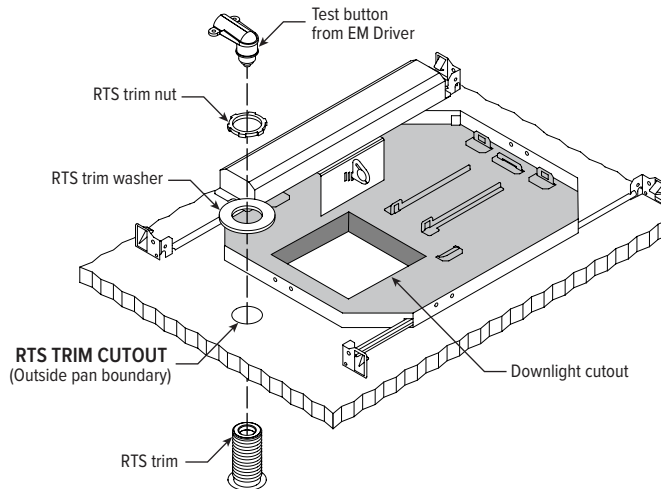
#### REMODEL



### EM/10W/RTS DETAILS



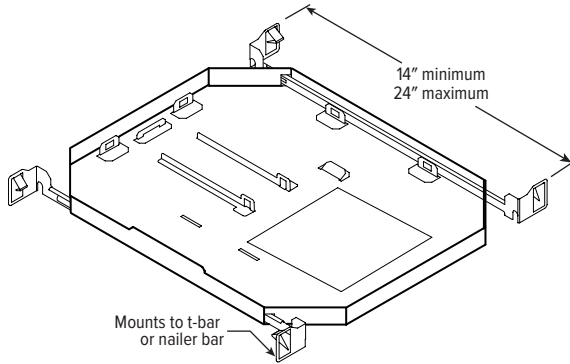
Shown Installed



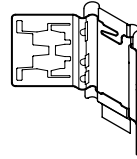
# 4DS<sup>LED</sup> 4.5" Downlight – Square

## MOUNTING HARDWARE DETAILS

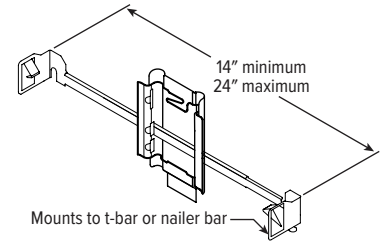
**F1** Integral 2-position fixed pan bracket, universal bar hanger included



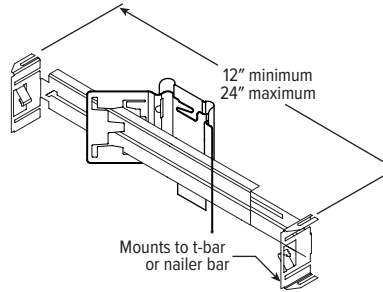
**BA1** Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



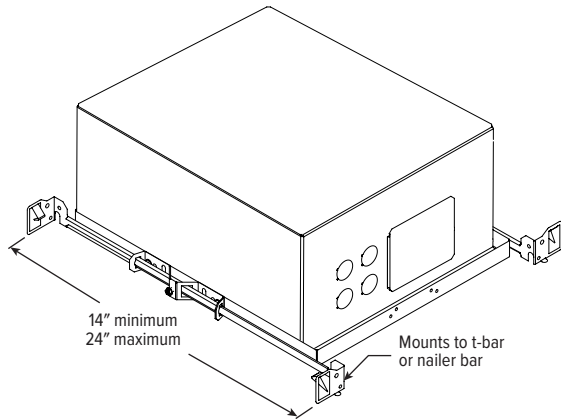
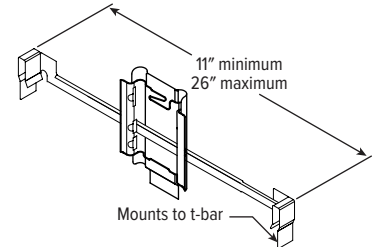
**CA1** Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)



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



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



F1 with I Mounting Type

