

CATALOG #: _ TYPF. PROJECT: _







NEW CONSTRUCTION AND REMODEL

ORDERING EXAMPLE: 2DS - L12/9DW - OPTIONS - DIM1 - UNV | - | LW - OF - WH - TRIM OPTIONS | - | N - F1 – HOUSING – - TRIM

OPTIONS

HOUSING

LUMENS[1] SERIES COLOR 700lm 2DS L7 L12 1,200lm

9DW Dim to warm (95 CRI, 1800K - 3000K)

See page 3 for EMERGENCY BATTERY OPTIONS.

ATH Airtight construction

Fuse kit SDT Stepdown transformer [2]

Chicago plenum (CCEA)[3]

CONTROL

DIM1 1% dimming driver (0-10V signal to control dimming and CCT) LUT Lutron Ecosystem enabled [4]

VOLTAGE

UNV 120-277V **347** 347V [5]

TRIM [6]

TRIM TYPE DISTRIBUTION [7] L Flush lens w 50° Wide O Open reflector 30° Medium 20° Narrow [9] R Regressed lens A Angled lens [8] ww Wall wash [10]

FLANGE TYPE

OF 1/2" standard flange ZF Zero-flange mud-in [11]

REFLECTOR FINISH

Open trim types Clear semi-specular CS anodize

Satin-glow anodize

GD Gold anodize

CG Champagne gold anodize PW Pewter anodize

SPC Clear specular anodize

RG Rose gold anodize

Lens trim types

Clear semi-specular CS powder coat

WH White texture powder coat Black texture powder coat BL

Black texture splay with white flange [12]

TRIM OPTIONS

Textured white trim flange [13] Diffuse acrylic lens [14] ΑD Diffuse 1/8" polycarbonate lens [15] PD WET/CC Wet location, covered ceiling listed [16]
AM Anti-microbial [17]

MOUNTING

MOUNTING TYPE [18]

N Open pan for new construction [20]

I IC-rated enclosure for new construction [21]

R Remodel kit [22]

MOUNTING HARDWARE [19]

Integral 2-position fixed pan bracket, universal bar hanger included [23]

BA1 Adjustable butterfly pan bracket, bar hanger not included [24]

CA1 Adjustable caterpillar pan bracket, universal bar hanger included [25]

NOTES

- Lumen output based on O Trim Type, W Distribution, and WH Reflector Finish, 95 CRI/3000K CCT. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- May be required for 347V, see product builder at
- hew.com/product-builder. I Mounting Type required.
- N Mounting Type only, top access required.

 Not available with EM batteries or DMX Driver.
- Trim ships separately.
- Beam angle based on L Trim Type and WH Reflector Finish. Trim Type affects beam angle. See page 2 for FIXTURE PERFORMANCE DATA.
- Available with WW Distribution only.
- L7 lumen package max.

- 10 A Trim Type only.
 11 For use with mud-in plaster construction only, supplied with
- mud flange installation kit. See page 4 for TRIM TYPE
 DETAILS. Not available with O Trim Type or ATH Option.

 R Trim Type only. Not available with ZF Flange Type or MWT.

 Not available with L Trim Type, ZF Flange Type or WH
 Reflector Finish.
- W distribution only. Not available with O Trim Type.
- W and WW distributions only. Not available with O Trim Type.
 Not available with O Trim Type. Not available with PD trim
- option.
 WH and BL Reflector Finishes only.
 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.
- Top access required when specified with EM battery or when specified using LUT Control with L12 lumen package. L7 lumen package max. Not available with EM batteries.
- 22 Also used in new construction sheetrock ceilings. Panless installation. Additional plenum space required for R mounting when specified with EM battery. See page 3 for REGRESSED TEST SWITCH DETAILS.
- N and I Mounting Types only. I Mounting requires external
- N Mounting Type only.
- 25 N Mounting Type only.

DS 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

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 microprismatic, 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/baa
- WARRANTY 5-year limited warranty, see hew.com/warranty

FIXTURE PERFORMANCE DATA

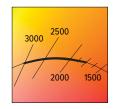
					FLUSH LENS	TRIM TYPE	OPEN REFLECT	OR TRIM TYPE	REGRESSED LE	NS TRIM TYPE	ANGLED LEN	S TRIM TYPE
	CCT AT 100% (FULL OUTPUT)	CCT AT 1% (FULL DIM)	DISTRIBUTION	WATTAGE	DELIVERED LUMENS	EFFICACY (Im/W)	DELIVERED LUMENS	EFFICACY (Im/W)	DELIVERED LUMENS	EFFICACY (Im/W)	DELIVERED LUMENS	EFFICACY (Im/W)
			W	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	-	-
	20001	1800K	WW	14.8	-	-	-	-	-	-	564	38
	3000K	1800K	W	23.3	1263	54	915	39	1273	55	-	-
2			M	23.3	1267	54	867	37	1248	54	-	-
-	i		N	_	-	-	-	-	-	-	-	-
			ww	23.3	_	_	_	_	_	_	978	42

MULTIPLIER TABLES

	REFLECTOR FINISH				
	CATALOG NUMBER	CONVERSION FACTOR			
	CS	1.00			
	SG [1]	0.92			
Σ	GD	0.93			
O TRIM	CG	0.96			
0	PW	0.86			
	SPC	1.02			
	RG	0.88			
Σ	WH	1.00			
R TRIM	CS	0.98			
~	BL	0.79			

BEAM ANGLE

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



CONVERSION

0.85

0.85

TRIM OPTIONS

CATALOG

NUMBER

AD

PD

- 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%

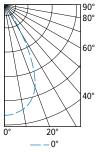
 Beam angle based on L Trim Type and WH Reflector Finish.

 To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.

- Use multiplier tables to calculate additional options.

PHOTOMETRY

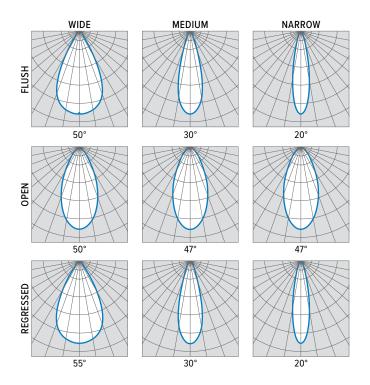
2DS-L12/9DW-DIM1-UNV-LW-OF-WH Total Luminaire Output: 1263 lumens; 23.3 Watts | Efficacy: 54 lm/W | 95 CRI; 3000K CCT

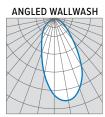


	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS	
_		0°		
≦	0	1460		
5	5	1474	137	
	15	1332	366	
S	25	840	391	
2	35	212	179	
<u>≅</u>	45	86	77	
CANDLEPOWER DISTRIBUTION	55	56	54	
ᅙ	65	36	37	
S	75	18	19	
	85	4	4	
	90	0		

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
5	0 - 40	1073	85
SN	0 - 60	1203	95
뿔	0 - 90	1263	100
3	0-180	1263	100







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 ¹
EM/7W/IPRTS	7-watt emergency battery with IP65 rated regressed test switch ²
EM/10W	10-watt emergency battery
EM/10W/RTS	10-watt emergency battery with regressed test switch ¹
EM/10W/IPRTS	10-watt emergency battery with IP65 rated regressed test switch ²

- Not available with WET/CC Option. N Mounting Type only. Top access required. N Mounting Type only. Top access required.

REMODEL MOUNTING DETAILS

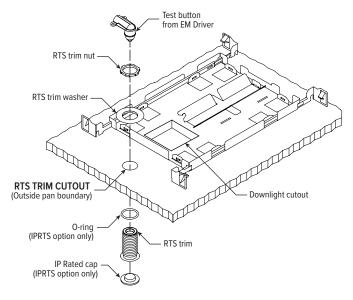
Additional plenum space required for R mounting when specified with EM battery.

PLENUM RESTRICTIONS			
CATALOG NUMBER	MINIMUM HEIGHT		
EM/5W	7"		
EM/7W	9″		
EM/10W	11"		

REGRESSED TEST SWITCH DETAILS



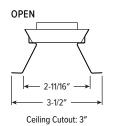
Shown Installed

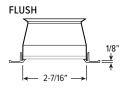


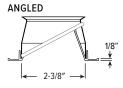


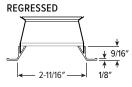
TRIM TYPE DETAILS

1/2" STANDARD FLANGE TYPE







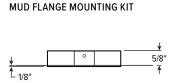


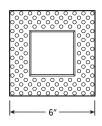
ZERO-FLANGE MUD-IN







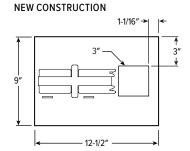


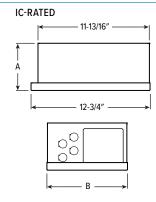


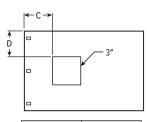
REFLECTOR FINISH DETAILS

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

MOUNTING TYPE DETAILS







	DIM CONTROL	LUT CONTROL
Α	5″	6-1/16"
В	8-9/16"	9-1/4"
С	3-1/16"	6-11/16"
D	2-3/4"	3-1/8"

Cross Section

→ 2-11/16" ←

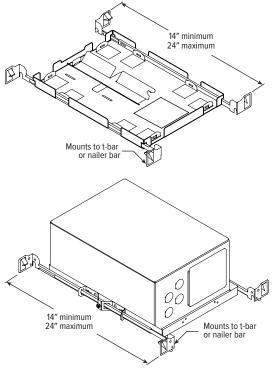
REMODEL

Driver and Junction Box 2-1/16" - 7-1/4"



MOUNTING HARDWARE DETAILS

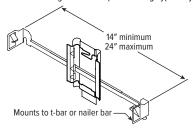
Integral 2-position fixed pan bracket, universal bar hanger included



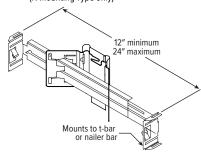
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



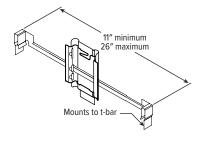
CA1 Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)



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