

CATALOG #: __ TYPE: _ PROJECT: __







ORDERING EXAMPLE: 2DS - L15/9TW - OPTIONS - DIM - UNV ;-,LW - OF - WH - TRIM OPTIONS ;-, N - F1 — HOUSING —

HOUSING

SERIES	LUMEN	NS ^[1]	COLOR	OPTIONS	CONTROL	VOLTAGE			
2DS		00lm	9TW Tunable white (90 CRI,	See page 4 for EMERGENCY BATTERY OPTIONS.	See page 3 for CONTROL DETAILS.	UNV 120-277V			
		00lm	2700K-5000K)	BATTERT OPTIONS.	DALI Driver prewired for DALI applications				
	L9 90	00lm	2700K-5000K)	ATH Airtight construction	DIM Dimming driver with (1) 0-10V signal to control				
	L12 1,2	200lm		F Fuse kit	dimming and (1) 0-10V signal to control CCT				
	L15 1,5	500lm		CP Chicago plenum (CCEA)[2]	DMX Driver prewired for DMX applications				
					PSQ Lutron T-Series 2-channel tunable white 1%. [3]				

TDIM [4]

TRIM TYPE	DISTRIBUTION [5]	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
L Flush lens O Open reflector R Regressed lens A Angled lens [6]	W 50° Wide M 30° Medium N 20° Narrow (7) WW Wall wash [8]	OF 1/2" standard flange ZF Zero-flange mud-in ^[9]	Open trim types CS Clear semi-specular anodize SG Satin-glow anodize GD Gold anodize CG Champagne gold anodize PW Pewter anodize SPC Clear specular anodize RG Rose gold anodize Lens trim types CS Clear semi-specular powder coat WH White texture powder coat BL Black texture splay with white flange [10]	MWT Textured white trim flange [11] AD Diffuse acrylic lens [12] PD Diffuse 1/8" polycarbonate lens [13] WET/CC Wet location, covered ceiling listed [14] AM Anti-microbial [15]

MOUNTING

MOUNTING	TYPE [16]
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N Open pan for new construction [18]

I IC-rated enclosure for new construction [19]

MOUNTING HARDWARE [17]

- F1 Integral 2-position fixed pan bracket, universal bar hanger included [20]
- BA1 Adjustable butterfly pan bracket, bar hanger not included [21]
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included [22]

NOTES

- Lumen output based on O Trim Type, W Distribution, and WH Reflector Finish, 90 CRI/4000K CCT. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE
- I Mounting Type required.
- N Mounting Type only, top access required.
- 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. L12 lumen package max for N Mounting. L7 lumen package max for I Mounting.
- For use with mud-in plasted construction only, supplied with mud flange installation kit. See page 4 for TRIM TYPE DETAILS. Not available with 0 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, ordered separately, see MOUNTING HARDWARE ordering info. See page 5 for MOUNTING TYPE DETAILS.
- See page 5 for MOUNTING 11FE DETAILS.
 Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
- Top access required when specified with EM battery.
- 19 L9 lumen package max. Not available with EM batteries.
- 21 N Mounting Type only.
 22 N Mounting Type only.



FEATURES

- Support human-centric design with adaptive, individualized lighting using tunable white light
- 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
- Spring clip retention system eliminates trim sag New construction mounting pan or IC-rated enclosure
- Open reflector with seven finishes complements any interior style
- Die-cast trim choices include flush, regressed or angled lens
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Easily adjust mounting arms below ceiling to adapt to a range of ceiling thicknesses

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
- 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. Tunable White products use LEDs of multiple CCTs and may produce a perceptibly different shade of white from single-CCT products at the same CCT. All CCTs are within 3 MacAdam ellipses.
- MOUNTING Recessed. 20 ga. galvanized steel mounting pan. Top access required for driver maintenance.

- 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.
- 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 REFLECTOR TRIM TYPE		REGRESSED LENS TRIM TYPE		ANGLED LENS TRIM TYPE				
	DISTRIBUTION	WATTAGE	DELIVERED LUMENS	EFFICACY (Im/W)	DELIVERED LUMENS	EFFICACY (Im/W)	DELIVERED LUMENS	EFFICACY (Im/W)	DELIVERED LUMENS	EFFICACY (Im/W)
	W	10.5	581	55	421	40	586	56	_	_
ഥ	М	10.5	609	58	416	40	600	57	_	_
_	N	10.5	552	53	402	38	553	53	_	_
	WW	10.5	_	_	_	_	_	_	450	43
	W	13.5	776	57	562	42	782	58	_	_
2	M	13.5	813	60	556	41	801	59	_	_
_	N	13.5	737	55	537	40	738	55	_	_
	WW	13.5	_	_	_	_	_	_	601	44
	W	18.3	1083	59	784	43	1091	60	_	_
6	M	18.3	1134	62	776	42	1117	61	_	_
_	N	18.3	1029	56	750	41	1030	56	_	_
	WW	18.3	_	_	_	_	_	_	838	46
	W	22.5	1332	59	964	43	1342	60	_	_
12	M	22.5	1395	62	954	42	1374	61	_	_
1	N	22.5	1265	56	922	41	1266	56	_	_
	ww	22.5	_	_	_	_	_		1031	46
	W	28.4	1570	55	1137	40	1582	56	_	_
듄	M	28.4	1645	58	1125	40	1620	57	_	_
	N	_	_	_	_	_	_		_	_
	ww	28.4	_	_	_	_	_	_	1216	43

MULTIPLIER TABLES

COLOR TEMPERATURE						
ССТ	LUMENS	WATTS				
2700K	0.87	1.05				
3000K	0.96	1.11				
3500K	1.02	1.06				
4000K	1.00	1.00				
5000K	1.02	1.06				

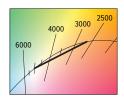
	REFLECTOR FINISH						
	CATALOG NUMBER	CONVERSION FACTOR					
	CS	1.00					
	SG [1]	0.92					
Σ	GD	0.93					
O TRIM	CG	0.96					
0	PW	0.86					
	SPC	1.02					
	RG	0.88					

⋝	WH	1.00
TR	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°			
М	30°	47°	30°			
N	20°	47°	20°			



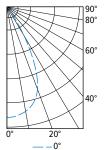
- Distribution will also be affected, consult factory.

 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, 90 CRI/4000K 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.



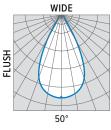
PHOTOMETRY

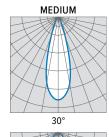
2DS-L15/9TW-DIM-UNV-LW-OF-WH Total Luminaire Output: 1570 lumens; 28.4 Watts | Efficacy: 55 lm/W | 90 CRI; 4000K CCT

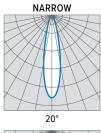


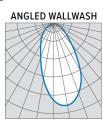
	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS	
	VERTICAL ANGLE	0°	ZUNAL LUMENS	
ᅙ	0	1815		
5	5	1832	170	
문	15	1656	454	
CANDLEPOWER DISTRIBUTION	25	1044	487	
곮	35	264	223	
<u>S</u>	45	107	95	
픏	55	70	67	
ᅙ	65	45	46	
5	75	22	23	
	85	4	5	
	90	0		

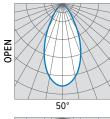
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
≦	0 - 40	1333	85
S	0 - 60	1495	95
뿔	0 - 90	1570	100
=	0-180	1570	100

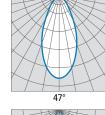


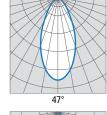


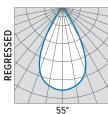


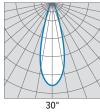


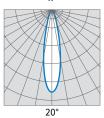












CONTROL DETAILS

DIM DIM (Int) + DIM (CCT) + Fixture 1 DIM -









T1	
1.1	 Fixture 1
T2	rixture i

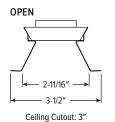
REFLECTOR FINISH DETAILS

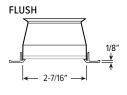
SPC Clear specular	SG Satin glow	PW Pewter	GD Gold	CG Champagne gold	RG Rose gold	CS WH Clear semi-specular White	BL Black

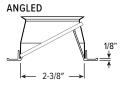


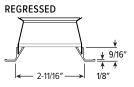
TRIM TYPE DETAILS

1/2" STANDARD FLANGE TYPE









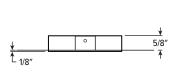
ZERO-FLANGE MUD-IN

FLUSH 2-15/16 3-1/16"

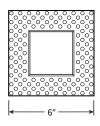
Ceiling Cutout: 3-1/2"







MUD FLANGE MOUNTING KIT



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 ³			
EM/10W/RTS	10-watt emergency battery with regressed test switch ⁴			
EM/10W/IPRTS	10-watt emergency battery with IP65 rated regressed test switch 5			

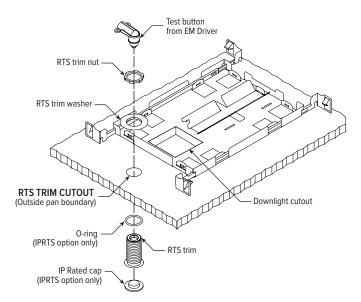
- Not available with WET/CC Option. N Mounting Type only. Top access required. N Mounting Type only. Top access required. Not available with L5 lumen package.

 Not available with L5 lumen package or WET/CC Option. N Mounting Type only. Top
- Not available with L5 lumen package. N Mounting Type only. Top access required.

REGRESSED TEST SWITCH DETAILS

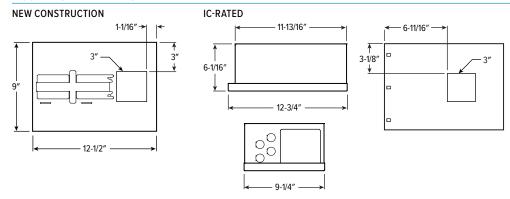


Shown Installed





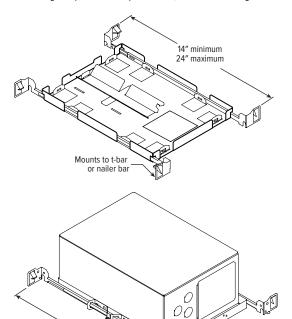
MOUNTING TYPE DETAILS



Mounts to t-bar or nailer bar

MOUNTING HARDWARE DETAILS

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



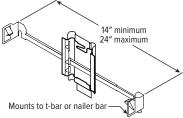
F1 with I Mounting Type

14" minimum 24" maximum

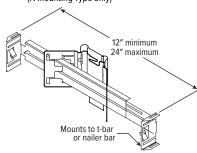
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



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)

