

CATALOG #: _____

TYPE: _____

PROJECT: _____

NEW CONSTRUCTION AND REMODEL

FEATURES

- Dim to warm from 1800K to 3000K CCT, minimum 95 CRI
- 2" aperture is unobtrusive in small scale spaces
- Zero-flange trim options for modern ceiling
- Beam angles ranging from 20° narrow to 50° wide for tailored performance
- Die cast trim choices include flush, regressed or angled lens
- 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 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 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.
- WARRANTY** – 5-year limited warranty, see hew.com/warranty.

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

HOUSING

SERIES	LUMENS ⁽¹⁾	COLOR	OPTIONS	CONTROL	VOLTAGE
2DS	L7 700lm	9DW Dim to warm (95 CRI, 1800K – 3000K)	ATH Airtight construction	DIM1 1% dimming driver (0-10V signal to control dimming and CCT)	UNV 120-277V
	L12 1,200lm		F Fuse kit		
			SDT Stepdown transformer [2]	LUT Lutron Ecosystem enabled [4]	347 347V [5]
			CP Chicago plenum (CCEA)[3]		
			EM/5W 5-watt emergency battery [6]		
			EM/7W 7-watt emergency battery [7]		
			EM/10W 10-watt emergency battery [8]		
			EM/10W/RTS 10-watt emergency battery with regressed test switch [9]		

TRIM [10]

TRIM TYPE	DISTRIBUTION [11]	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
L Flush lens	W 50° Wide	OF 1/2" standard flange	Open trim types	MWT Textured white trim flange [16]
O Open reflector	M 30° Medium	ZF Zero-flange mud-in [15]	CS Clear semi-specular anodize	AD Diffuse acrylic lens [17]
R Regressed lens	N 20° Narrow [13]		SG Satin-glow anodize	PD Diffuse 1/8" polycarbonate lens [18]
A Angled lens [12]	WW Wall wash [14]		GD Gold anodize	WET/CC Wet location, covered ceiling listed [19]
			CG Champagne gold anodize	AM Anti-microbial [20]
			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 powder coat	
			MB Black texture splay with white flange [21]	

MOUNTING

MOUNTING TYPE [22]

- N Open pan for new construction [24]
- I IC-rated enclosure for new construction [25]
- R Remodel kit [26]

MOUNTING HARDWARE [23]

- F1 Integral 2-position fixed pan bracket, universal bar hanger included [27]
- BA1 Adjustable butterfly pan bracket, bar hanger not included [28]
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included [29]

NOTES

- Lumen output based on L trim type, W distribution and WH finish, 3000K/95CRI. Actual lumens 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 controls.
- N and R Mounting Types only. Not available with ATH option.
- N and R Mounting Types only. Not available with ATH option.
- N and R Mounting Types only. Not available with ATH option.
- Not available with ATH option.
- Not available with WET/CC or ATH options. N and Type only. Ceiling access required. See page 4 for EM BATTERY DETAILS.
- 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.
- A Trim Type only.
- For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 3 for TRIM TYPE DETAILS. Not available with O Trim Type or ATH Option.
- Not available with 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.
- R Trim Type only. Not available with ZF Flange Type or 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.
- Top access required when specified with EM battery or when specified using LUT Control with L12 lumen package.
- L7 lumen package max.
- Also used in new construction sheetrock ceilings. Additional plenum space required for R mounting when specified with EM battery. See page 4 for EM BATTERY DETAILS.
- N and I Mounting Types only. I Mounting requires external brackets.
- N Mounting Type only.
- N Mounting Type only.



2DS dim to WARM

2" Downlight – Square

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	

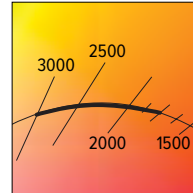
MULTIPLIER TABLES

	REFLECTOR FINISH	
	CATALOG NUMBER	CONVERSION FACTOR
O TRIM	CS	1.00
	SG ¹	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

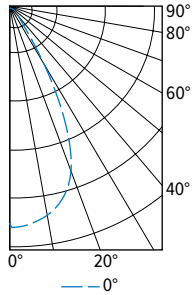
	TRIM TYPE		
	FLUSH	OPEN	REGRESSED
W	50°	50°	55°
M	30°	47°	30°
N	20°	47°	20°



- Distribution will also be affected, consult factory.
- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is based on 120V input.
- Results based on 3000K/95CRI and CS (O Trim Type) or WH (L, R and A Trim Types) Reflector finish. Actual lumens may vary +/-5%
- Beam angle based on L Trim Type and WH Reflector Finish.
- 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



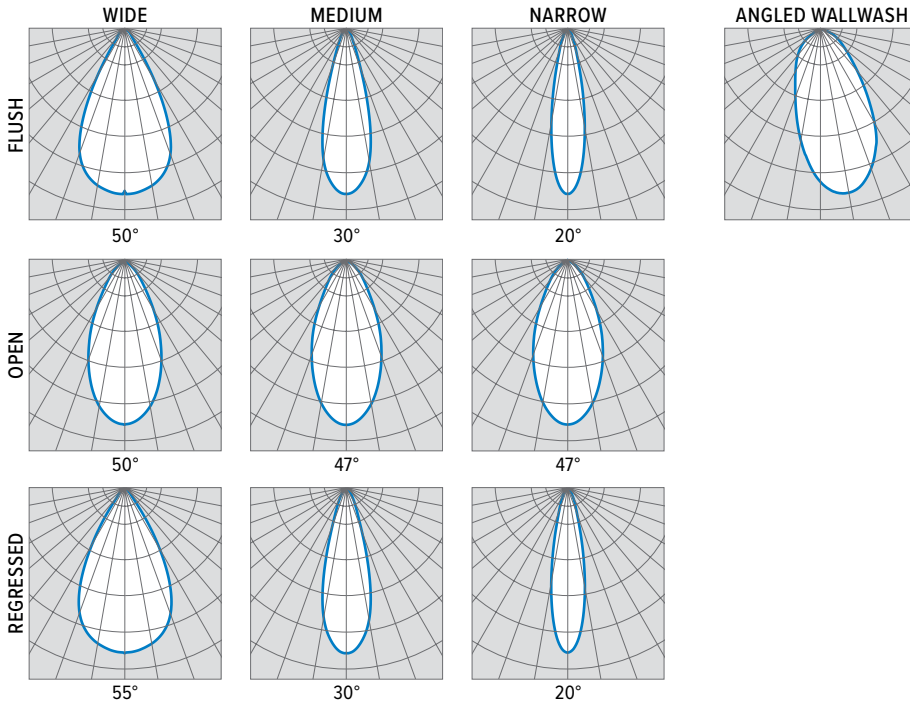
	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS
		0°	
CANDLEPOWER DISTRIBUTION	0	1460	
	5	1474	137
	15	1332	366
	25	840	391
	35	212	179
	45	86	77
	55	56	54
	65	36	37
	75	18	19
	85	4	4
	90	0	

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



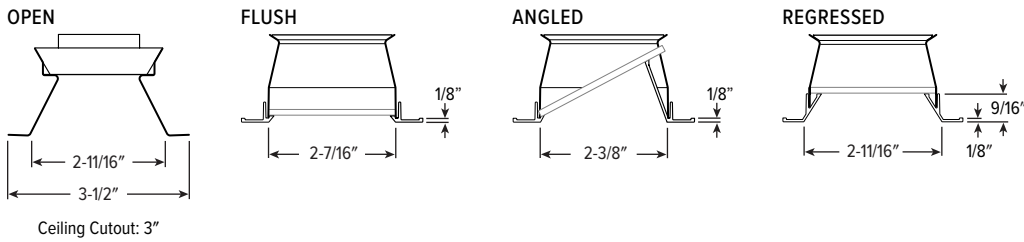
2DS dim to WARM

2" Downlight – Square

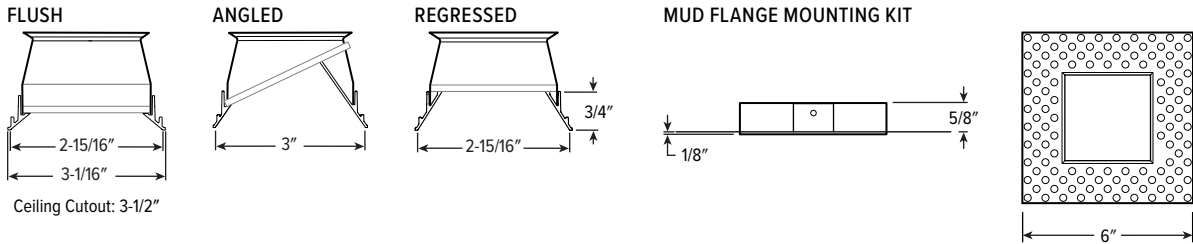


TRIM TYPE DETAILS

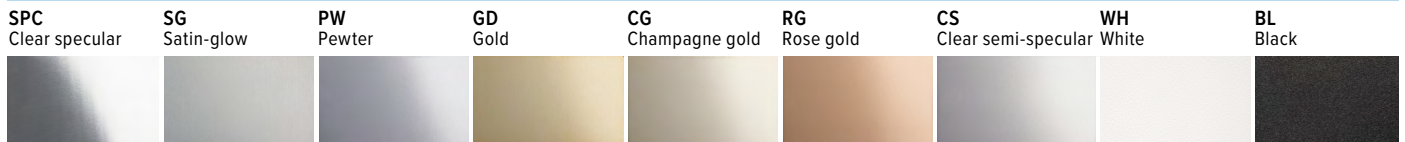
1/2" STANDARD FLANGE TYPE



ZERO-FLANGE MUD-IN



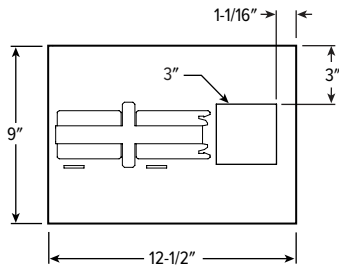
REFLECTOR FINISH DETAILS



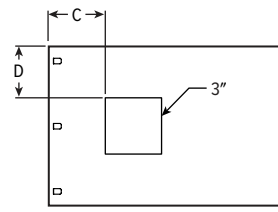
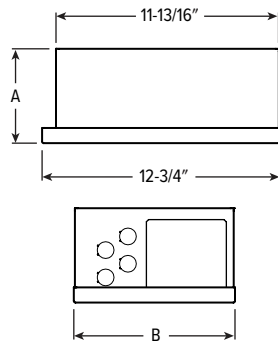
2DS dim to WARM 2" Downlight – Square

MOUNTING TYPE DETAILS

NEW CONSTRUCTION

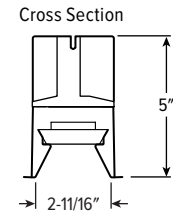


IC-RATED

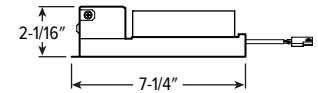


	DIM CONTROL	LUT CONTROL
A	5"	6-1/16"
B	8-9/16"	9-1/4"
C	3-1/16"	6-11/16"
D	2-3/4"	3-1/8"

REMODEL



Driver and Junction Box



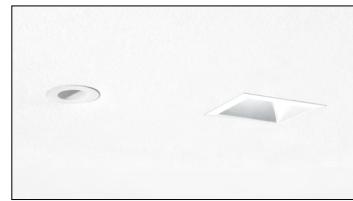
EM BATTERY DETAILS

REMODEL MOUNTING

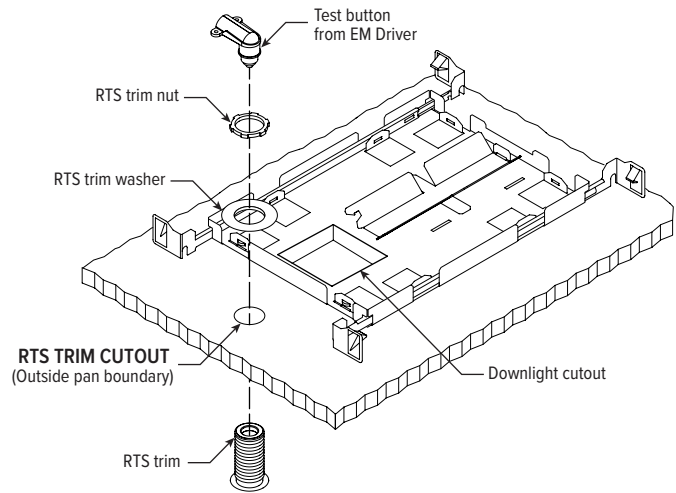
Additional plenum space required for R mounting when specified with EM battery.

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

EM/10W/RTS MOUNTING

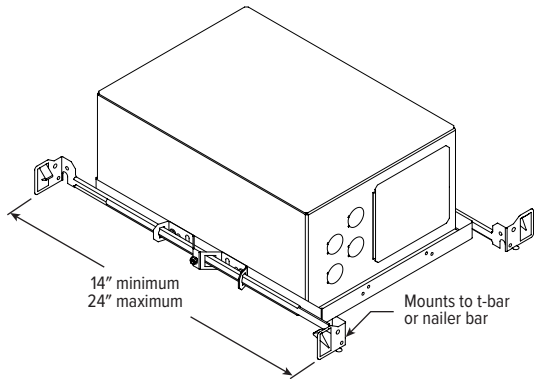
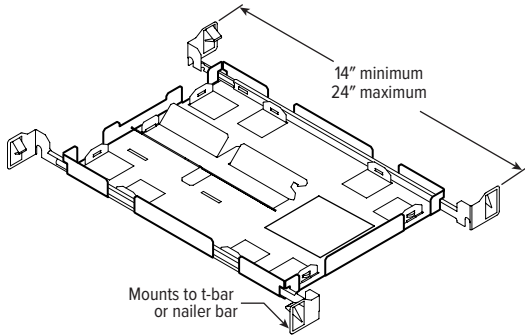


Shown Installed



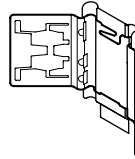
MOUNTING HARDWARE DETAILS

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

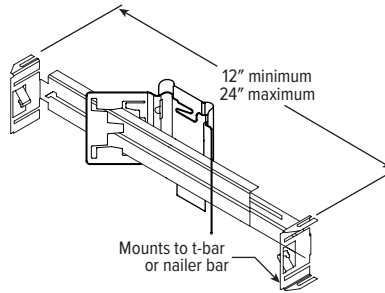


F1 with I Mounting Type

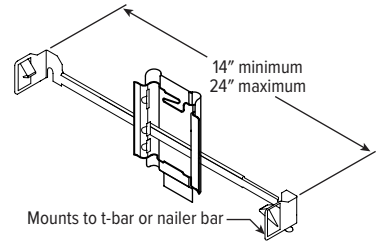
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



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)

