

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
- Die cast trim choices include flush, regressed or angled lens
- Beam angles ranging from 15° narrow to 70° wide for tailored performance

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. Clear semi-specular finish standard.
- **LENSED TRIM** – Die-cast aluminum frame with micro-prismatic, tempered glass 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>55,000 hours. Estimated L70 = 200,000 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 or TD options.
 - 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: 2DR - L12/9DW - OPTIONS - DIM - UNV - OW - OF - CS - TRIM OPTIONS - N - F1

HOUSING

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

TRIM ^[9]

TRIM TYPE	DISTRIBUTION ^[10]	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
O Open reflector	W 70° Wide	OF 1/2" standard flange	Open trim types	MWT Textured white trim flange ^[16]
L Flush lens	M 40° Medium	ZF Zero-flange mud-in ^[14]	CS Clear semi-specular anodize	AD Diffuse acrylic lens ^[17]
R Regressed lens	N 15° Narrow ^[12]		SG Satin-glow anodize	PD Diffuse 1/8" polycarbonate lens ^[18]
A Angled lens ^[11]	WW Wall wash ^[13]		GD Gold anodize	TD Diffuse polycarbonate lens media at top of open reflector ^[19]
			CG Champagne gold anodize	WET/CC Wet location, covered ceiling listed
			PW Pewter anodize	AM Anti-microbial ^[20]
			SPC Clear specular anodize	
			RG Rose gold anodize	
			WH White texture powder coat	
			BL Black texture powder coat	
			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 ^[15]	

MOUNTING

MOUNTING TYPE ^[21]

- N Open pan for new construction
- I IC-rated enclosure for new construction ^[23]
- R Remodel kit ^[24]

MOUNTING HARDWARE ^[22]

- F1 Integral 2-position fixed pan bracket, universal bar hanger included ^[25]
- BA1 Adjustable butterfly pan bracket, bar hanger not included ^[26]
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included ^[27]

NOTES

- Lumen output based on O trim type, W distribution and CS finish, 3000K/95CRI. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA
- N and R Mounting Types only.
- N and R Mounting Types only.
- N and R Mounting Types only.
- Not available with WET/CC or ATH options. N Mounting Type only. Top access required. See page 4 for EM BATTERY DETAILS.
- I Mounting Type required.
- May be required for 347V, see product builder at hew.com/product-builder
- Not available with EM batteries or DMX controls.
- Trim ships separately.
- Beam angle based on O Trim Type and CS Reflector Finish. Trim Type affects beam angle. See page 2 for FIXTURE PERFORMANCE DATA.
- Available with WW Distribution only.
- L12 lumen package available with O Trim Type and N or R Mounting only. L7 lumen package max for I Mounting.
- 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.
- R Trim Type only. Not available with ZF Flange Type or MWT.
- Not available with ZF Flange Type or WH Reflector Finish.
- W distribution only. Not available with O Trim Type.
- W distribution only. Not available with O Trim Type.
- O Trim Type only. WET/CC standard.
- 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.
- L7 lumen package max.
- Also used in new construction sheetrock ceilings. Not available when specified with LUT Control. 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

2DR dim to WARM 2" Downlight – Round

FIXTURE PERFORMANCE DATA

	CCT AT 100% (FULL OUTPUT)	CCT AT 1% (FULL DIM)	DISTRIBUTION	WATTAGE	OPEN REFLECTOR TRIM TYPE		FLUSH LENS 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	715	48	749	50	741	50	–	–
			M	14.8	710	48	757	51	725	49	–	–
			N	14.8	590	40	764	52	745	50	–	–
			WW	14.8	–	–	–	–	–	–	507	34
L12			W	23.3	1239	53	1297	56	1284	55	–	–
			M	23.3	1243	53	1327	57	1269	54	–	–
			N	23.3	941	40	–	–	–	–	–	–
			WW	23.3	–	–	–	–	–	–	879	38

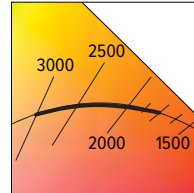
MULTIPLIER TABLES

	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
	WH ¹	0.89
BL ¹	0.47	
R TRIM	WH	1.00
	CS	0.98
	BL	0.79

TRIM OPTIONS	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85
TD	0.67
WET/CC ²	0.85

BEAM ANGLE

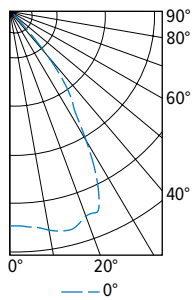
	TRIM TYPE		
	OPEN	FLUSH	REGRESSED
W	70°	50°	55°
M	40°	30°	30°
N	15°	20°	20°



- Distribution will also be affected, consult factory.
 - Use multiplier only when specified with O Trim Type.
- 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 lumen output may vary +/-5%.
 - Beam angle based on O Trim Type and CS Reflector Finish.
 - Use multiplier tables to calculate additional options.

PHOTOMETRY

2DR-L12/9DW-DIM-UNV-OW-OF-CS Report #: 13131414; 12/02/19 | Total Luminaire Output: 1239 lumens; 23.3 Watts | Efficacy: 53.1 lm/W | 95 CRI; 3000K CCT

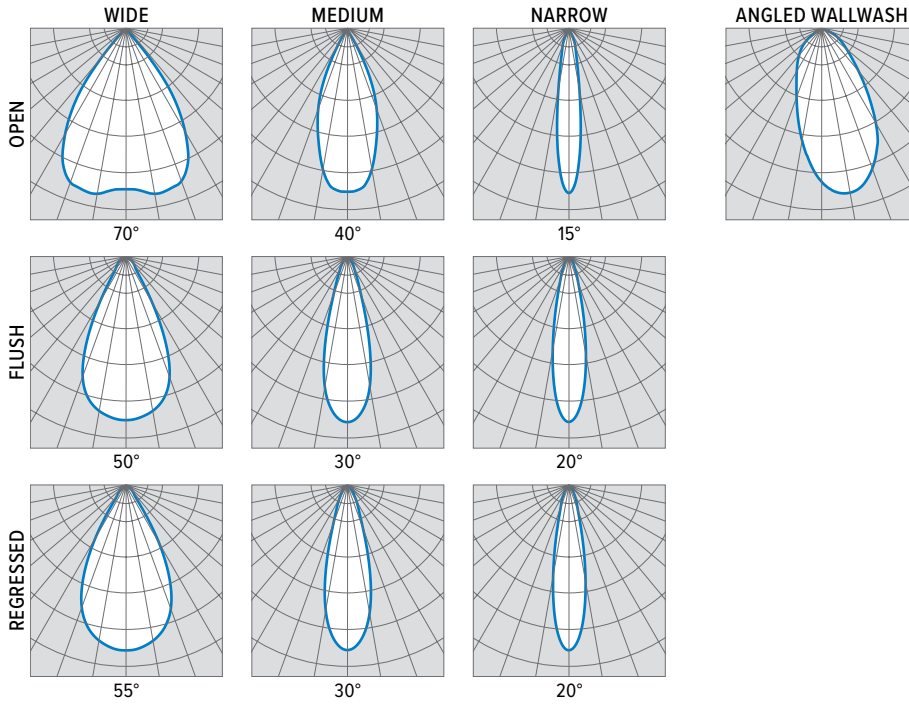


CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS
		0°	
	0	1076	
	5	1086	79
	15	1132	183
	25	1006	218
	35	487	122
	45	63	17
	55	17	6
	65	6	2
	75	1	0
	85	0	0
	90	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1154	93
	0 - 60	1231	99
	0 - 90	1239	100
	0-180	1239	100

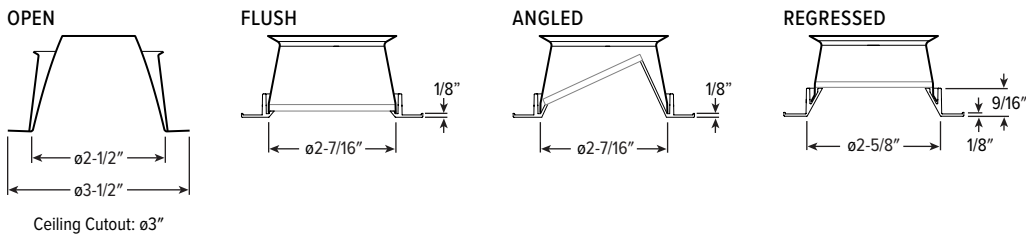


2DR dim to WARM 2" Downlight – Round

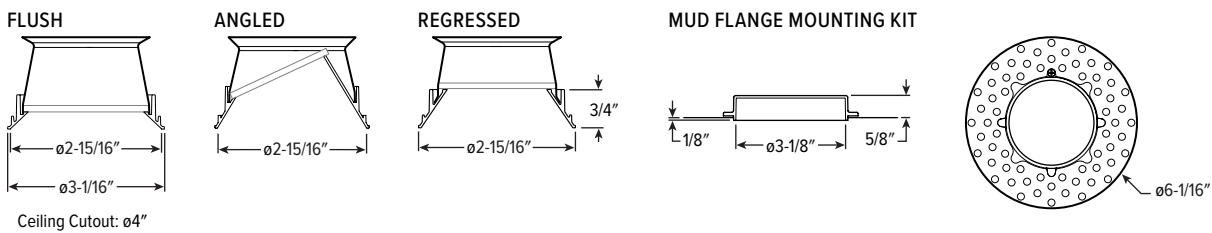


TRIM TYPE DETAILS

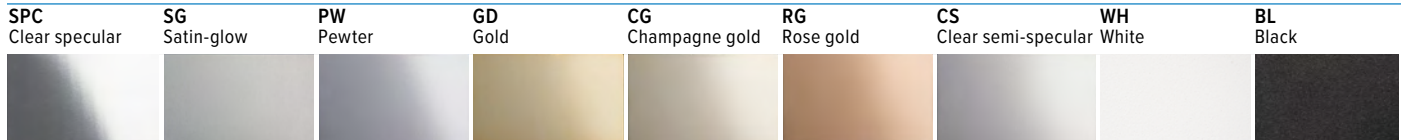
1/2" STANDARD FLANGE TYPE



ZERO-FLANGE MUD-IN



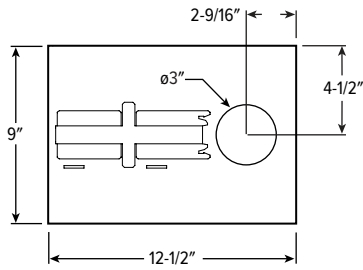
REFLECTOR FINISH DETAILS



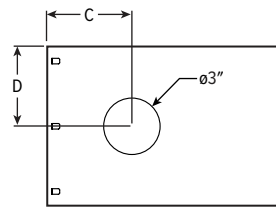
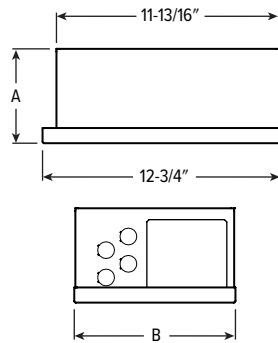
2DR dim to **WARM** 2" Downlight – Round

MOUNTING TYPE DETAILS

NEW CONSTRUCTION



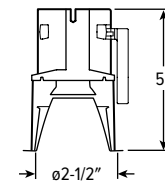
IC-RATED



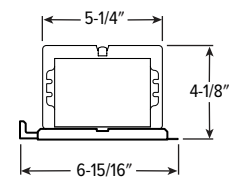
	DIM CONTROL	LUT CONTROL
A	5"	6-1/16"
B	8-9/16"	9-1/4"
C	4-9/16"	8-3/16"
D	4-5/16"	4-5/8"

REMODEL

Cross Section



Driver and Junction Box



EM BATTERY DETAILS

REMODEL MOUNTING

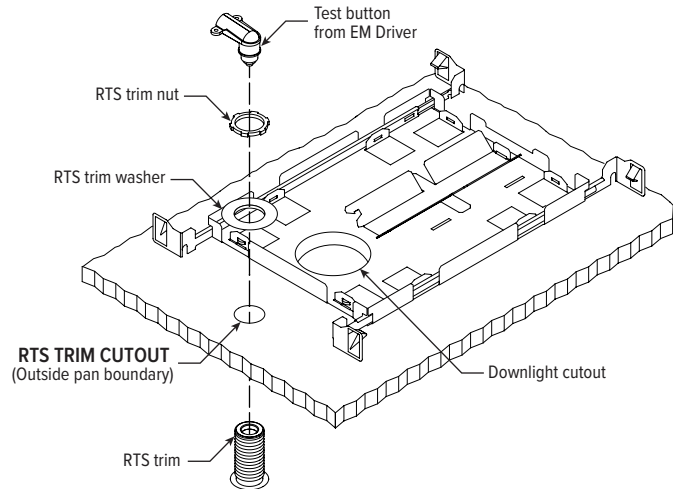
Additional plenum space required for R mounting when specified with EM battery.

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

EM/10W/RTS MOUNTING



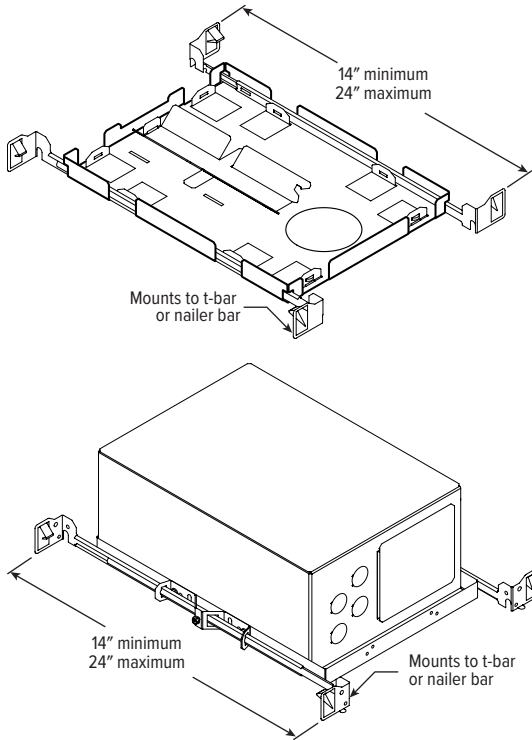
Shown Installed



2DR dim to WARM 2" Downlight – Round

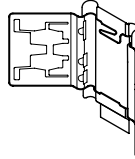
MOUNTING HARDWARE DETAILS

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

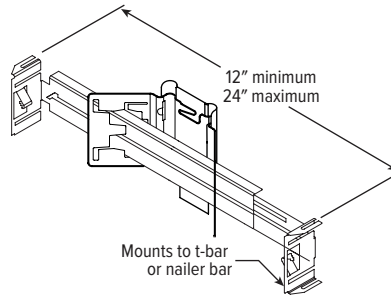


F1 with I Mounting Type

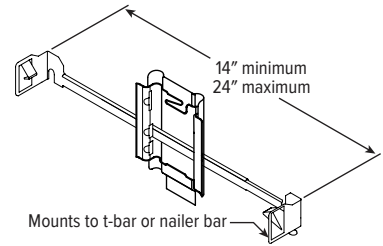
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



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)

