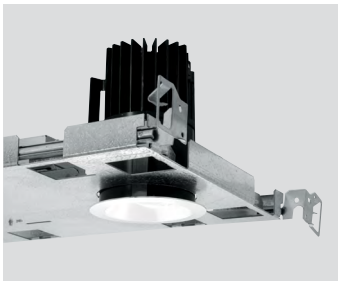
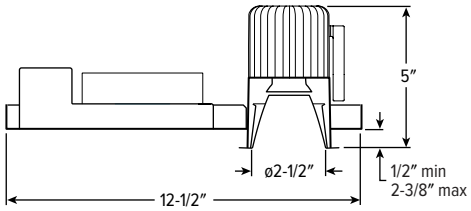
2DR dim to WARM
2″ Downlight – Round



NEW CONSTRUCTION AND REMODEL



CATALOG #:

TYPE:

PROJECT:

BAA & BABA COMPLIANT | CCEA Approved | WET/CC | ASTM-E283

ORDERING EXAMPLE: 2DR - L12/9DW - OPTIONS - DIM1 - UNV - OW - OF - CS - TRIM OPTIONS - N - F1
(HOUSING | TRIM | MOUNT.)

HOUSING

SERIES
2DR

LUMENS [1]
L7 700lm
L12 1,200lm

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

OPTIONS
See page 3 for EMERGENCY BATTERY OPTIONS.
ATH Airtight construction
F Fuse
CP Chicago plenum (CCEA) [2]
SDT Stepdown transformer [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
O Open reflector
F Open reflector with frosted top diffuser
L Flush lens
R Regressed lens
A Angled lens [7]

DISTRIBUTION
See page 2 for BEAM ANGLE.
W Wide
M Medium
N Narrow [8]
WW Wall wash [9]

FLANGE TYPE
OF 1/2″ standard flange
ZF Zero-flange mud-in [10]

REFLECTOR FINISH
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
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

TRIM OPTIONS
MWT Smooth matte white trim flange [11]
AD Diffuse acrylic lens [12]
PD Diffuse 1/8″ polycarbonate lens [13]
WET/CC Wet location, covered ceiling listed
AM Anti-microbial [14]

MOUNTING

MOUNTING TYPE [15]
N Open pan for new construction [17]
I IC-rated enclosure for new construction [18]
R Remodel kit [19]

MOUNTING HARDWARE [16]
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

1 Lumen output based on O Trim Type, W Distribution, and CS Reflector Finish, 95 CRI/3000K CCT. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
2 I Mounting Type required.
3 Not available with R Mounting. May be required for 347V, see product builder at hew.com/product-builder
4 N Mounting Type only, top access required.
5 Not available with EM batteries or DMX Driver.
6 Trim ships separately.
7 Available with WW Distribution only.
8 When specified with L or R Trim Types: L7 lumen package max.
9 A Trim Type only.
10 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 or F Trim Types or ATH Option.
11 Not available with L Trim Type, ZF Flange Type or WH Reflector Finish.
12 W Distribution only. Not available with O or F Trim Types.
13 W and WW Distributions only. Not available with O or F Trim Types.
14 WH and BL Reflector Finishes only.
15 Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
16 Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
17 Top access required when specified with EM battery or when specified using LUT Control with L12 lumen package.
18 L7 lumen package max. Not available with EM batteries.
19 Not available with tunable white. Also used in new construction sheetrock ceilings. Pan-less installation. Additional plenum space required for R mounting when specified with EM battery. See page 3 for REMODEL MOUNTING PLENUM RESTRICTIONS.
20 N and I Mounting Types only. I Mounting requires external brackets.
21 N Mounting Type only.
22 N Mounting Type only.

2DR dim to WARM
2" Downlight – Round

FEATURES

- Mimic the comfortable, welcoming glow of incandescent with warm-dimming technology
- Beam angles ranging from 15° narrow to 70° wide for tailored performance
- 2" aperture is unobtrusive in small scale spaces
- 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
- Open reflector with nine finishes complements any interior style
- Easily adjust mounting arms below ceiling to adapt to a range of ceiling thicknesses
- Made Right Here® in the USA

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, 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 or F trim type.
  - 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.
  - Build America, Buy America (BABA) and Buy American Act (BAA) compliant. Request certification at hew.com/buy-american
- WARRANTY – 5-year limited warranty, see hew.com/warranty

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

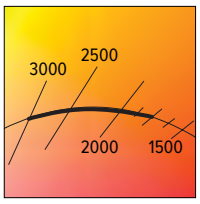
	REFLECTOR FINISH	
	CATALOG NUMBER	CONVERSION FACTOR
O TRIM	CS	1.00
	SG [1]	0.92
	GD	0.93
	CG	0.96
	PW	0.86
	SPC	1.02
	RG	0.88
	WH [1]	0.89
	BL [1]	0.47

R TRIM	WH	1.00
	CS	0.98
	BL	0.79

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

BEAM ANGLE

	TRIM TYPE [2]			
	O	F	L	R
W	70°	Consult Factory	50°	55°
M	40°		30°	30°
N	15°		20°	20°

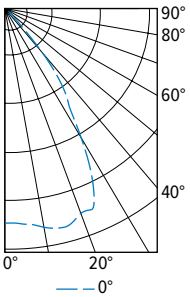


1 Distribution will also be affected, consult factory.
2 Beam angle based on CS Reflector Finish.

- 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 O Trim Type and CS Reflector Finish.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier tables to calculate additional options.

PHOTOMETRY

2DR-L12/9DW-DIM1-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



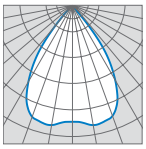
CANDLEPOWER DISTRIBUTION		
VERTICAL ANGLE	HORIZONTAL ANGLE 0°	ZONAL LUMENS
0	1076	
5	1086	79
15	1132	183
25	1006	218
35	487	122
45	63	17
55	17	6
65	6	2
75	1	0
85	0	0
90	0	

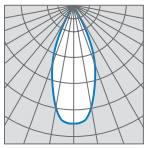
LUMEN SUMMARY		
ZONE	LUMENS	% FIXTURE
0 - 40	1154	93
0 - 60	1231	99
0 - 90	1239	100
0-180	1239	100

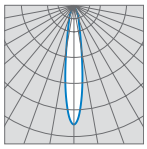
PHOTOMETRY CONTINUED ON NEXT PAGE

2DR dim to WARM
2″ Downlight – Round

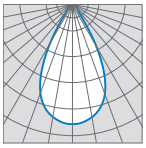
OPEN (O)

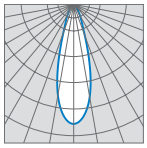

70° Wide

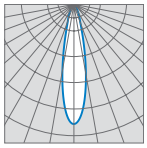

40° Medium


15° Narrow

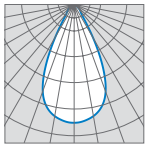
REGRESSED (R)

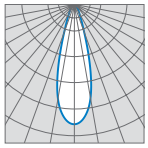

55° Wide

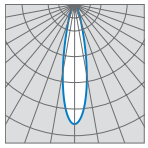

30° Medium


20° Narrow

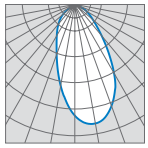
FLUSH (L)


50° Wide


30° Medium


20° Narrow

ANGLED (A)


Wall Wash

EMERGENCY BATTERY OPTIONS

ORDERING EXAMPLE: EM/7W/RTS	
EMERGENCY BATTERY	**TEST SWITCH**
EM/5W 5-watt emergency battery **EM/7W** 7-watt emergency battery **EM/10W** 10-watt emergency battery	**–** Standard **/RTS** Regressed test switch [1]

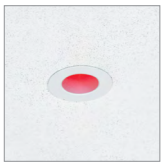
Top access required.

Additional limitations apply, see page 1. Specify CEC in the option code when California Energy Commission regulations are required. Max remote distance is 50′, connection by others.

[1] Not available with WET/CC Trim Option.

TEST SWITCH DETAILS

Standard
2-3/4″ x 4-1/2″


Regressed
ø1-3/4″

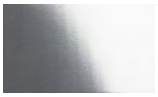
REMODEL MOUNTING PLENUM RESTRICTIONS

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

CATALOG NUMBER	MINIMUM HEIGHT
EM/5W	9″
EM/7W	11″
EM/10W	12″

REFLECTOR FINISH DETAILS

SPC Clear specular



SG Satin glow

PW Pewter

GD Gold

CG Champagne gold

RG Rose gold

CS Clear semi-specular

WH White

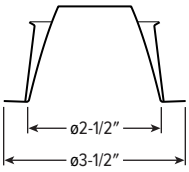
BL Black

2DR dim to WARM
2" Downlight – Round

TRIM TYPE DETAILS

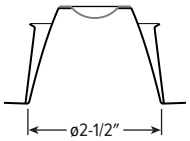
1/2" STANDARD FLANGE TYPE

OPEN (O)

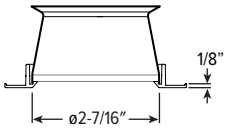


Ceiling Cutout: ø3"

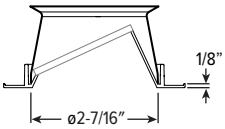
OPEN TOP DIFFUSER (F)



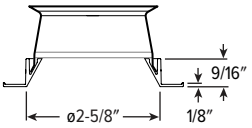
FLUSH (L)



ANGLED (A)

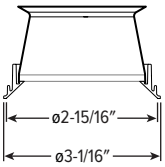


REGRESSED (R)



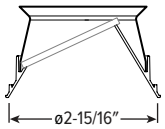
ZERO-FLANGE MUD-IN

FLUSH (L)

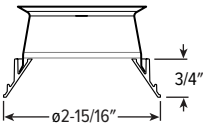


Ceiling Cutout: ø4"

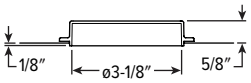
ANGLED (A)

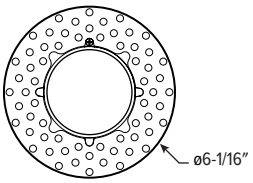


REGRESSED (R)



MUD FLANGE MOUNTING KIT

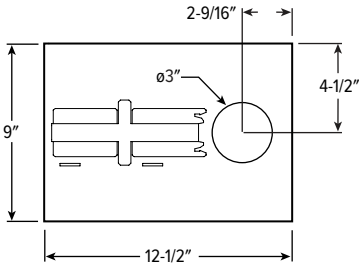




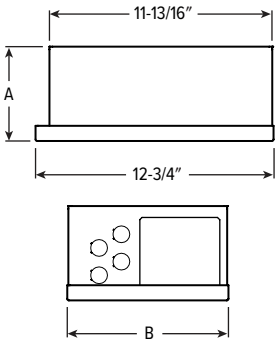
MOUNTING TYPE DETAILS

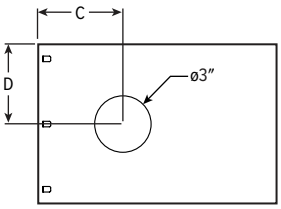
Flex conduit is recommended for installation.

NEW CONSTRUCTION



IC-RATED





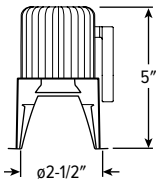
	DIM CONTROL	LUT CONTROL
A	5"	6-1/16"
B	8-9/16"	9-1/4"
C	4-9/16"	8-3/16"
D	4-5/16"	4-5/8"

REMODEL

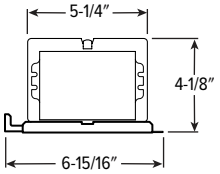
Not available in tunable white.

H.E. Williams Inc. strongly recommends installing a trial fixture to confirm fitment on-site prior to ordering full project quantities.

CROSS SECTION



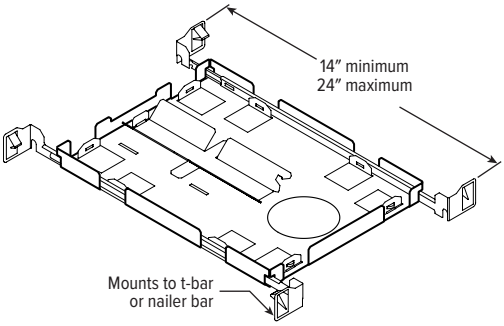
DRIVER & JUNCTION BOX



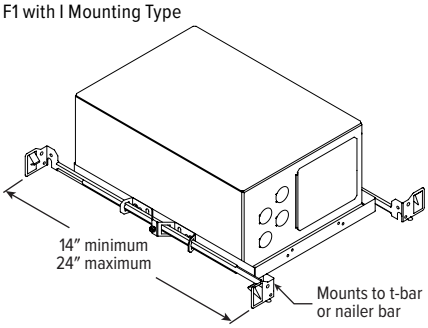
MOUNTING HARDWARE CONTINUED ON NEXT PAGE.

MOUNTING HARDWARE DETAILS

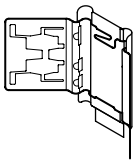
F1 Integral 2-position fixed pan bracket, universal bar hanger included



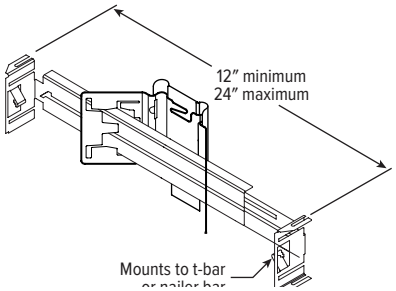
F1 with I Mounting Type



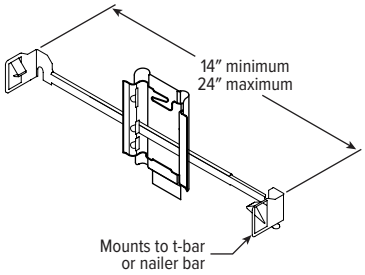
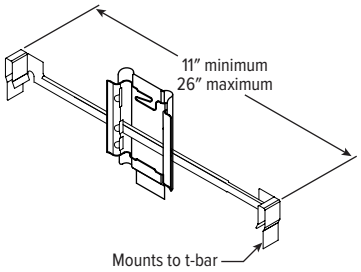
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



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)