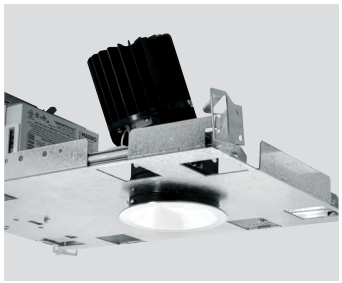
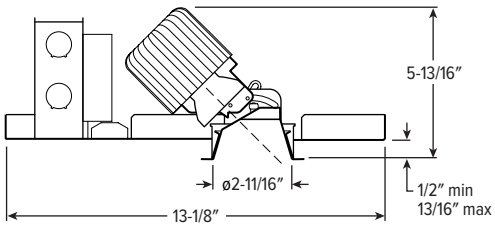
2AR dim to WARM
2″ Adjustable Downlight – Round



NEW CONSTRUCTION AND REMODEL



CATALOG #: _____

TYPE: _____

PROJECT: _____

BAA & BABA COMPLIANT | CCEA Approved | WET/CC

ORDERING EXAMPLE: 2AR - L7/9DW - OPTIONS - DIM1 - UNV - OW - OF - CS - TRIM OPTIONS - N - F1
(HOUSING | TRIM | MOUNT.)

HOUSING

SERIES
2AR

LUMENS [1]
L5 500lm
L7 700lm

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

OPTIONS
See page 4 for EMERGENCY BATTERY OPTIONS.
ATH Airtight construction [2]
F Fuse
CP Chicago plenum (CCEA) [3]
SDT Stepdown transformer [4]

CONTROL
DIM1 1% dimming driver (0-10V signal to control dimming and CCT)
LUT Lutron Ecosystem enabled [5]

VOLTAGE
UNV 120-277V
347 347V [6]

TRIM [7]

TRIM TYPE
O Open reflector
L Flush lens
R Regressed lens
A Angled lens

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

FLANGE TYPE
OF 1/2″ standard flange
ZF Zero-flange mud-in [9]

REFLECTOR FINISH
CS Clear semi-specular anodize
WH White texture powder coat
BL Black texture powder coat

TRIM OPTIONS
MWT Smooth matte white trim flange [10]
AD Diffuse acrylic lens [11]
PD Diffuse 1/8″ polycarbonate lens [12]
WET/CC Wet location, covered ceiling listed [13]
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 I Mounting Type required.
4 Not available with R Mounting. May be required for 347V, see product builder at hew.com/product-builder
5 N Mounting Type only, top access required.
6 Not available with EM batteries or DMX Driver.
7 Trim ships separately.
8 L5 lumen package max.
9 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, ATH, or WET/CC options.
10 Not available with L Trim Type, ZF Flange Type or WH Reflector Finish.
11 W distribution only. Not available with O Trim Type.
12 W Distribution only. Not available with O Trim Type.
13 Not available with O Trim Type or ZF Flange Type.
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.
18 L5 lumen package max. Top access required. Not available with EM batteries.
19 Not available with tunable white. Also used in new construction sheetrock ceilings. Pan-less installation. Not available when specified with LUT Control. Additional plenum space required for R mounting when specified with EM battery. See page 4 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.

2AR dim to WARM
2" Adjustable Downlight – Round

FEATURES

- Mimic the comfortable, welcoming glow of incandescent with warm-dimming technology
- Beam angles ranging from 20° narrow to 35° wide for tailored performance
- Adjustable aim with 0° - 45° tilt and 360° rotation
- 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
- Etched degree markers and directional indicator make it simple to fine-tune the illumination angle
- Die-cast trim choices include flush, regressed or angled lens
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING – Die-cast aluminum spun and stamped articulating mechanism with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Mounting clips allow for ceiling thickness from 1/2" – 13/16".
- 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 > 44,000 hours. Reported L90 = 28,000 hours. Estimated L70 = 117,000 hours.
- MOUNTING – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. N and R mounting types for use in non-fire rated installations only. Minimum 17" O.C. marked spacing required when specified with R Mounting Type. N or I mounting: top access required. R mounting: top access required when specified with EM battery.
- 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.
  - 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)
L5	3000K	1800K	W	15.1	570	38	476	32	463	31	378	25
			M	15.1	444	29	345	23	332	22	221	15
			N	15.1	460	30	402	27	395	26	294	20
L7			W	23.8	826	35	690	29	671	28	548	23
			M	23.8	671	28	521	22	502	21	334	14
			N	–	–	–	–	–	–	–	–	–

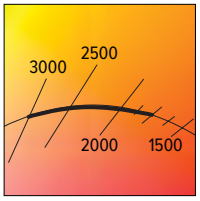
MULTIPLIER TABLES

REFLECTOR FINISH	
CATALOG NUMBER	CONVERSION FACTOR
CS	1.00
WH	0.89
BL	0.47

TRIM OPTIONS	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

BEAM ANGLE

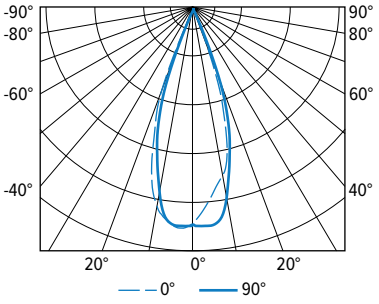
	TRIM TYPE			
	O	L	R	A
W	35°	40°	40°	35°
M	30°	30°	30°	35°
N	20°	20°	20°	25°



- Photometrics tested in accordance with IESNA LM-79. Results based on O trim type, W distribution, CS 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 Finish.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier tables to calculate additional options.

PHOTOMETRY

2AR-L7/9DW-DIM1-UNV-OW-OF-CS (0° tilt) Total Luminaire Output: 826 lumens; 23.8 Watts | Efficacy: 35 lm/W | 95 CRI; 3000K CCT



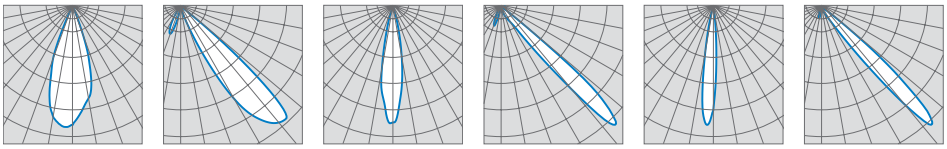
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE 0°	45°	90°	135°	180°	ZONAL LUMENS
	0	2418	2418	2418	2418	2418	
	5	2473	2381	2341	2313	2343	213
	15	1359	1313	1351	1377	1402	388
	25	465	408	442	434	435	205
	35	17	17	19	18	19	14
	45	3	3	6	5	5	4
	55	1	1	2	2	2	2
	65	1	0	0	1	1	1
	75	0	0	0	0	0	0
	85	0	0	0	0	0	0
	90	0	0	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	806	96
	0 - 40	819	99
	0 - 60	825	100
	0 - 90	826	100
	0 - 180	826	100

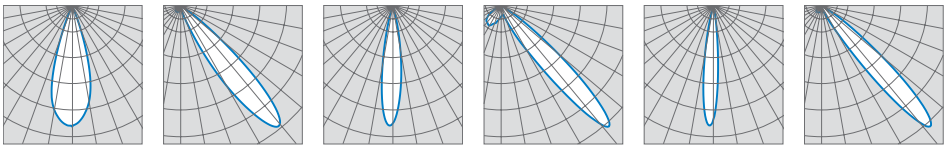
PHOTOMETRY CONTINUED ON NEXT PAGE

2AR dim to WARM
2″ Adjustable Downlight – Round

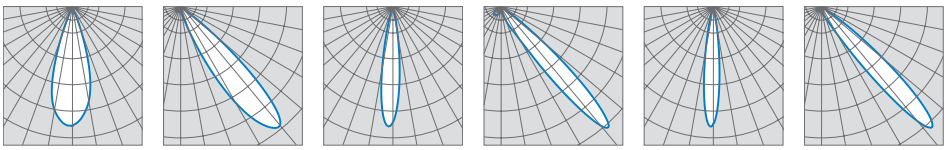
OPEN (O)



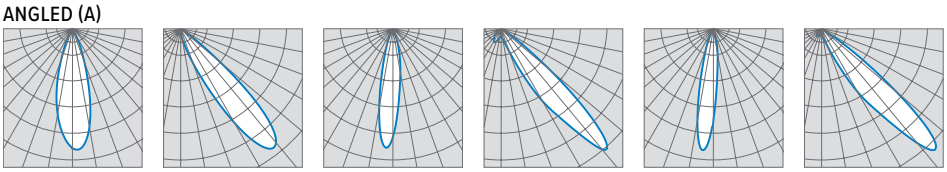
FLUSH (L)



REGRESSED (R)



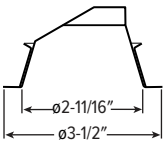
ANGLED (A)



TRIM TYPE DETAILS

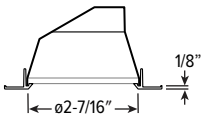
1/2″ STANDARD FLANGE TYPE

OPEN



Ceiling Cutout: ø3″

FLUSH



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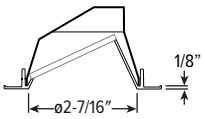

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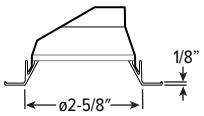
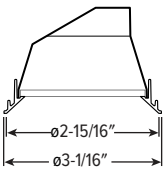


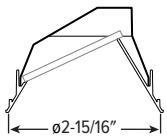
ZERO-FLANGE MUD-IN

FLUSH

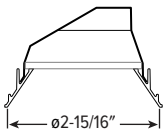


Ceiling Cutout: ø4″

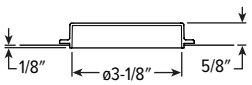
ANGLED

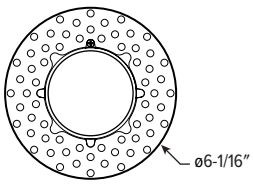


REGRESSED



MUD FLANGE MOUNTING KIT





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]

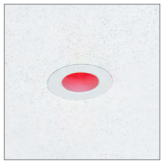
Top access required.

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

CS
Clear semi-specular

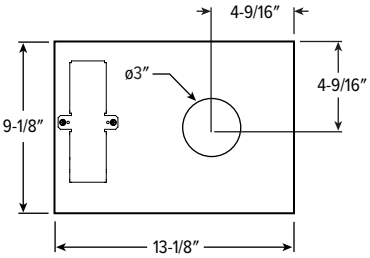
WH
White

BL
Black

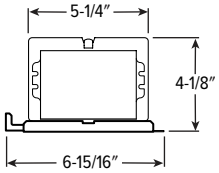
MOUNTING TYPE DETAILS

Flex conduit is recommended for installation.

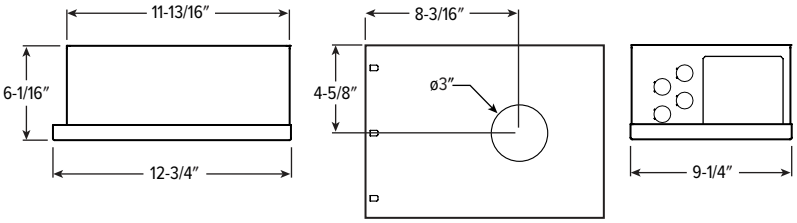
NEW CONSTRUCTION



Driver and Junction Box



IC-RATED

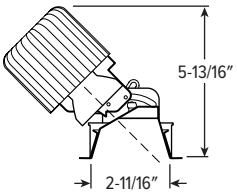


REMODEL

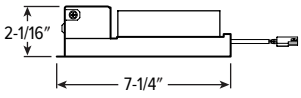
Not available in tunable white.

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

Cross Section



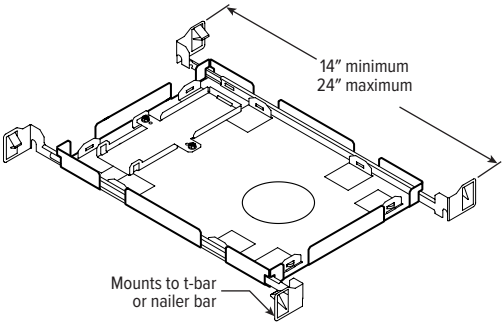
Driver and Junction Box



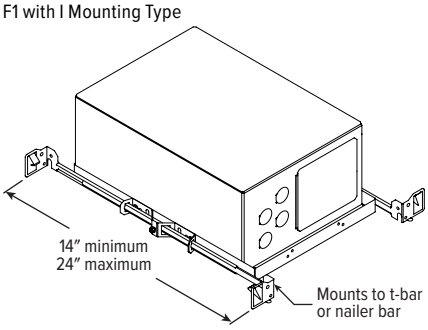
2AR dim to WARM
2″ Adjustable Downlight – Round

MOUNTING HARDWARE DETAILS

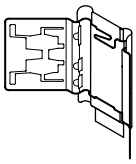
F1 Integral 2-position fixed pan bracket, universal bar hanger included



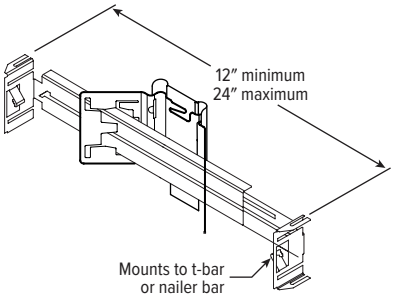
F1 with I Mounting Type



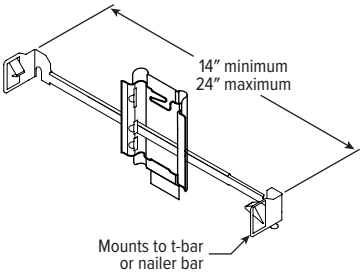
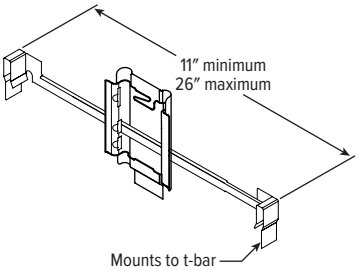
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



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)