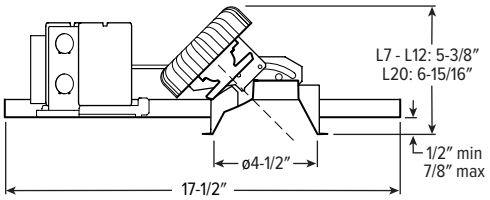
4AR dim to WARM
4.5″ Adjustable Downlight – Round



CATALOG #:

TYPE:

PROJECT:

NEW CONSTRUCTION AND REMODEL

ORDERING EXAMPLE: 4AR - L20/9DW - OPTIONS - DIM1 - UNV - OW - OF - CS - TRIM OPTIONS - N - F1
(HOUSING: 4AR - L20/9DW - OPTIONS - DIM1 - UNV | TRIM: OW - OF - CS - TRIM OPTIONS | MOUNT.: N - F1)

HOUSING

SERIES
4AR

LUMENS [1]
L7 700lm
L12 1,200lm
L20 2,000lm

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

OPTIONS
See page 3 for EMERGENCY BATTERY OPTIONS.
ATH Airtight construction [2]
CP Chicago plenum (CCEA) [3]
F Fuse kit
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
A Angled lens

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

FLANGE TYPE
OF 1/2″ standard flange
SF 1/4″ mud-in flange [9]

REFLECTOR FINISH
Open trim types
CS Clear semi-specular 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 [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
I IC-rated enclosure for new construction [17]
R Remodel kit [18]

MOUNTING HARDWARE [16]
F1 Factory-installed 2-position fixed pan bracket, universal bar hanger included [19]
BA1 Adjustable butterfly pan bracket, bar hanger not included [20]
CA1 Adjustable caterpillar pan bracket, universal bar hanger included [21]

NOTES

1 Lumen output based on full light output, O Trim Type, N 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 a hew.com/product-builder
5 Not available with I Mounting Type.
6 Not available with EM batteries.
7 Trim ships separately.
8 L and A Trim Types only.
9 For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 3 for FLANGE TYPE DETAILS. Not available with ATH Option.
10 Not available with WH Reflector Finish or L Trim Type.
11 L and A Trim Types only. W Distribution only.
12 L and A Trim Types only. W Distribution only.
13 L and A Trim Types only.
14 WH and BL Reflector Finishes only.
15 Mounting Hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 5 for MOUNTING HARDWARE DETAILS.
16 Additional mounting hardware options available. See page 4 for MOUNTING TYPE DETAILS.
17 L7 and L12 lumen packages only. Not available with EM batteries.
18 Also used in new construction sheetrock ceilings. Pan-less installation.
19 N and I Mounting Types only. Universal bar hanger ships uninstalled. I Mounting requires external brackets.
20 N Mounting Type only.
21 N Mounting Type only.

4AR dim to WARM
4.5" Adjustable Downlight – Round

FEATURES

- Mimic the comfortable, welcoming glow of incandescent with warm-dimming technology
- Adjustable aim with 0° - 45° tilt and 360° rotation
- Beam angles ranging from 25° narrow to 45° wide for tailored performance
- 4 inch aperture is unobtrusive in small scale spaces
- New construction mounting pan, IC-rated, or pan-less remodel kit available
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Choice of open reflector or die-cast lensed trims to complement interior style
- Etched degree markers and directional indicator make it simple to fine-tune the illumination angle
- Spring clip retention system eliminates trim sag
- Fully room-side accessible
- 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" - 7/8".
- OPEN REFLECTOR – Low-iridescent anodized aluminum. Clear semi-specular finish standard.
- LENSED TRIM – Die-cast aluminum frame with micro-prismatic, acrylic lens.
- 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. Remodel kit option includes receiver bracket hardware. N and R mounting types for use in non-fire rated installations only.
- 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

OPEN REFLECTOR TRIM TYPE

	DIST.	DELIVERED LUMENS	CCT AT 100% (FULL OUTPUT)	CCT AT 1% (FULL DIM)	WATTAGE	EFFICACY (lm/W)
L7	W	466	3000K	1800K	14.0	33
	M	648			14.0	46
	N	–			–	–
L12	W	818			23.4	35
	M	1136			23.4	49
	N	–			–	–
L20	W	1339			37.7	36
	M	1860			37.7	49
	N	–			–	–

FLUSH LENS TRIM TYPE

	DIST.	DELIVERED LUMENS	CCT AT 100% (FULL OUTPUT)	CCT AT 1% (FULL DIM)	WATTAGE	EFFICACY (lm/W)
L7	W	462	3000K	1800K	14.0	33
	M	625			14.0	45
	N	656			14.0	47
L12	W	811			23.4	35
	M	1096			23.4	47
	N	1149			23.4	49
L20	W	1327			37.7	35
	M	1796			37.7	48
	N	1882			37.7	50

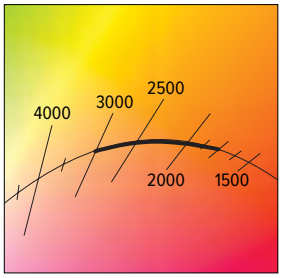
ANGLED LENS TRIM TYPE

	DIST.	DELIVERED LUMENS	CCT AT 100% (FULL OUTPUT)	CCT AT 1% (FULL DIM)	WATTAGE	EFFICACY (lm/W)
L7	W	330	3000K	1800K	14.0	24
	M	483			14.0	35
	N	586			14.0	42
L12	W	578			23.4	25
	M	846			23.4	36
	N	1027			23.4	44
L20	W	947			37.7	25
	M	1386			37.7	37
	N	1682			37.7	45

[1] Distribution will also be affected, consult factory.

[2] Beam angle based on CS or WH Reflector Finish.

- Photometrics tested in accordance with IESNA LM-79. Results based on full light output, O Trim Type, CS Reflector Finish, 0° tilt, N Distribution, 95 CRI/3000K CCT, average wattage for 120V input, and 25°C ambient temperature. Actual performance may vary +/-5%.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier tables to calculate additional options.



MULTIPLIER TABLES

OPEN REFLECTOR FINISH	
CATALOG NUMBER	CONVERSION FACTOR
CS	1.00
WH	0.89
BL	0.79

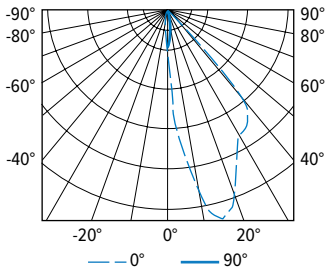
TRIM	
CATALOG NUMBER	CONVERSION FACTOR
AD [1]	0.85
PD [1]	0.85

BEAM ANGLE

	TRIM TYPE [2]		
	O	L	A
W	45°	40°	30°
M	30°	30°	25°
N	–	25°	25°

PHOTOMETRY

4AR-L20/9DW-DIM1-UNV-OW-OF-CS (25° tilt) Total Luminaire Output: 1355 lumens; 37.7 Watts | Efficacy: 35.9 lm/W | 95.0 CRI; 3000K CCT



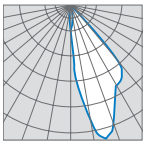
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE 0°	45°	90°	135°	180°	ZONAL LUMENS
	0	788	788	788	788	788	
	5	2389	1675	653	270	195	97
	15	4321	2360	253	61	40	319
	25	3255	2150	64	17	15	425
	35	2817	991	12	8	11	399
	45	582	30	5	4	3	112
	55	6	0	0	0	3	2
	65	1	0	0	0	0	0
	75	0	0	0	0	0	0
	85	0	0	0	0	0	0
	90	0	0	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1240	92
	0 - 60	1354	100
	0 - 90	1355	100
	0 - 180	1355	100

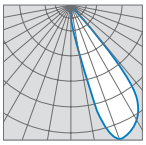
PHOTOMETRY CONTINUED ON NEXT PAGE

4AR dim to WARM
4.5″ Adjustable Downlight – Round

OPEN (O)

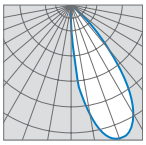


45° Wide

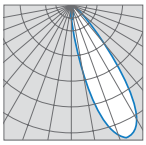


30° Medium

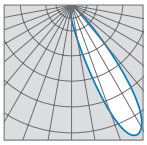
FLUSH (L)



40° Wide

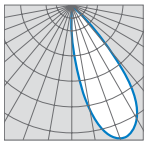


30° Medium

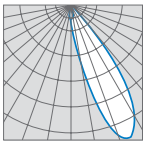


25° Narrow

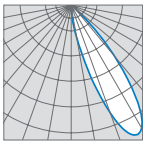
ANGLED (A)



30° Wide



25° Medium



25° Narrow

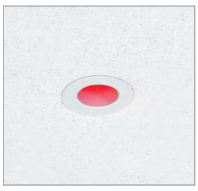
EMERGENCY BATTERY OPTIONS

Additional limitations apply, see page 1. Specify CEC in the option code when California Energy Commission regulations are required.

CATALOG NUMBER	DESCRIPTION
EM/7W	7-watt emergency battery
EM/7W/RTS	7-watt emergency battery with regressed test switch [1]
EM/10W	10-watt emergency battery
EM/10W/RTS	10-watt emergency battery with regressed test switch [1]

1 Not available with WET/CC Trim Option.

TEST SWITCH DETAILS

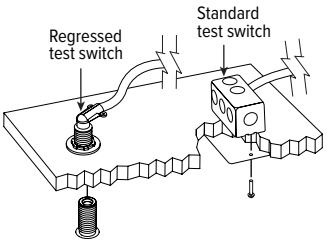


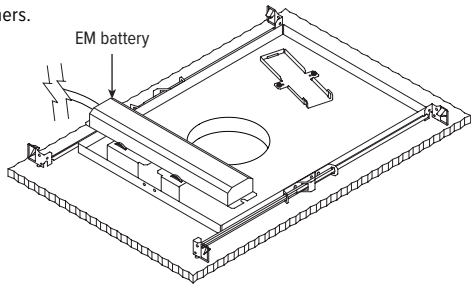
Regressed
ø1-3/4″

Standard
2-3/4″ x 4-1/2″

MOUNTING DETAILS

Max remote distance is 50′, connection by others.





APERTURE ADAPTOR ORDERING INFO

ORDERING EXAMPLE: 4DR - GR - 0575 - WHT			
SERIES	CATALOG NUMBER	CEILING CUTOUT	FINISH
4AR 6AR 4DR 6DR 4DS 6DS 4FDR 6DFR 4PR 6PR 4PS 6PS 8DR	GR	Specify ceiling cutout in 1/8″ increments. Example: 5.75″ = **0575** See Kit Components for application limits.	**CS** Clear semi-specular powder coat **WH** White texture powder coat **BL** Black texture powder coat

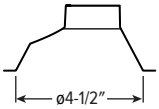
Adaptor (goof ring) corrects ceiling cutout errors during remodel downlight installation.

Additional finishes available, consult factory.

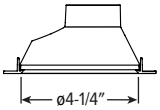
For limitations and instructions, see hew.com/aperture-adaptor.pdf

TRIM TYPE DETAILS

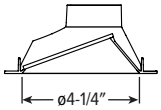
OPEN



FLUSH

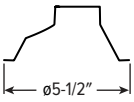


ANGLED



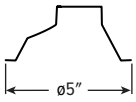
FLANGE TYPE DETAILS

1/2″ STANDARD



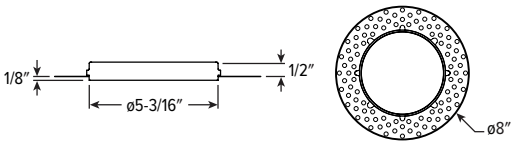
Ceiling Cutout: ø5″

1/4″ MUD-IN



Ceiling cutout: ø5-1/2″

MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)



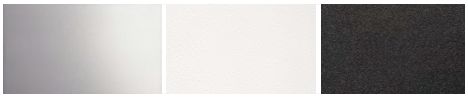
4AR dim to WARM
4.5″ Adjustable Downlight – Round

REFLECTOR FINISH DETAILS

CS
Clear semi-specular

WH
White

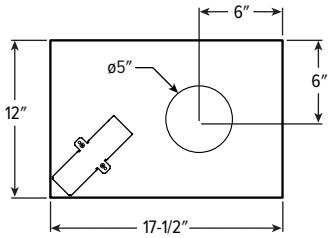
BL
Black



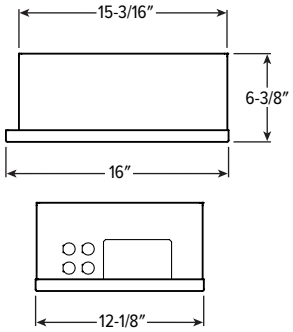
MOUNTING TYPE DETAILS

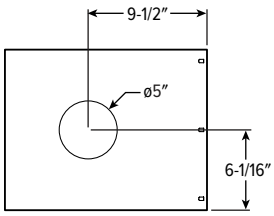
Flex conduit is recommended for installation.

NEW CONSTRUCTION



IC-RATED

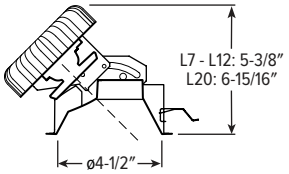




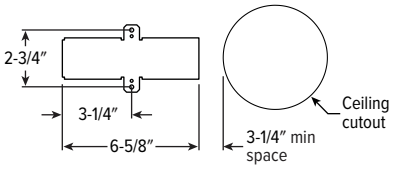
REMODEL

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

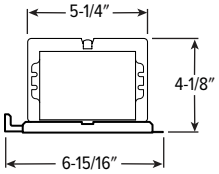
Cross Section



Receiver Bracket



Driver and Junction Box

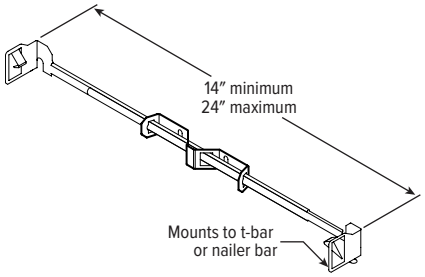


MOUNTING DETAILS CONTINUED ON NEXT PAGE.

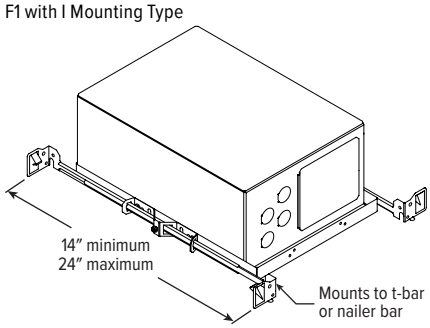
4AR dim to WARM
4.5″ Adjustable Downlight – Round

MOUNTING HARDWARE DETAILS

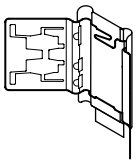
F1 Factory-installed 2-position fixed pan bracket, universal bar hanger included, ships uninstalled



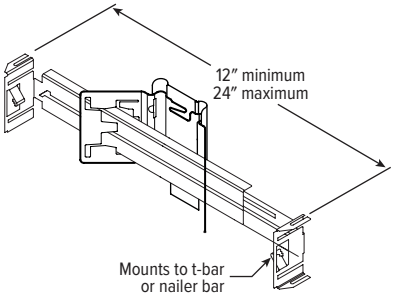
F1 with I Mounting Type



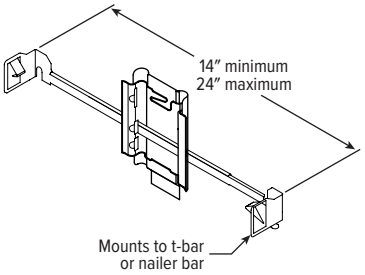
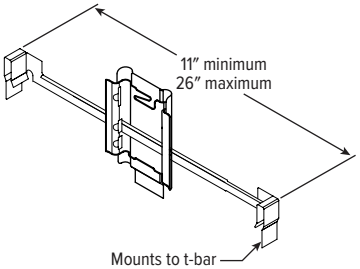
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



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)