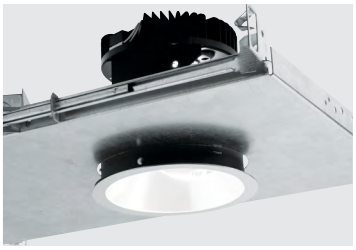
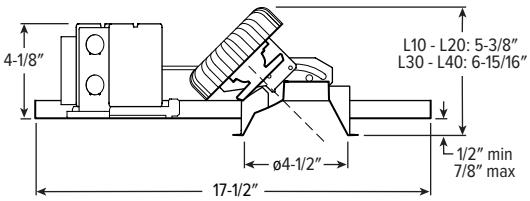
4AR LED
4.5″ Adjustable Downlight – Round





CATALOG #:

TYPE:

PROJECT:

NEW CONSTRUCTION AND REMODEL

ORDERING EXAMPLE: 4AR - L20/835 - OPTIONS - CONTROL/DIM - UNV - OW - OF - CS - TRIM OPTIONS - N - F1
(HOUSING: 4AR - L20/835 - OPTIONS - CONTROL/DIM - UNV | TRIM: OW - OF - CS - TRIM OPTIONS | MOUNT.: N - F1)

HOUSING

SERIES
4AR

LUMENS [1]
Single CCT or TW
L10 1,000lm
L15 1,500lm
Single CCT only
L20 2,000lm
L30 3,000lm
L40 4,000lm

CRI
8 80
9 90 [2]

CCT
27 2700K
30 3000K
35 3500K
40 4000K
50 5000K
TW Tunable white (80 CRI, 2700K-5000K)

OPTIONS
See page 3 for EMERGENCY BATTERY OPTIONS.
ATH Airtight construction [3]
CP Chicago plenum (CCEA)[4]
F Fuse kit
SDT Stepdown transformer [5]

CONTROL
Click HERE for control options.
– None

DRIVER
See page 6 for ADDITIONAL DRIVER OPTIONS.
DIM Dimming driver, 0-10V [6]
DIM1 1% Dimming driver, 0-10V [7]
DIM LINE Driver with line voltage dimming wires [8]

VOLTAGE
UNV 120-277V
347 347V [9]

TRIM [10]

TRIM TYPE
O Open reflector
L Flush lens
A Angled lens

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

FLANGE TYPE
OF 1/2″ standard flange
SF 1/4″ mud-in flange [11]

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 [12]
AD Diffuse acrylic lens [13]
PD Diffuse 1/8″ polycarbonate lens [14]
WET/CC Wet location, covered ceiling listed [15]
AM Anti-microbial [16]

MOUNTING

MOUNTING TYPE [17]
N Open pan for new construction
I IC-rated enclosure for new construction [19]
R Remodel kit [20]

MOUNTING HARDWARE [18]
F1 Factory-installed 2-position fixed pan bracket, universal bar hanger included [21]
BA1 Adjustable butterfly pan bracket, bar hanger not included [22]
CA1 Adjustable caterpillar pan bracket, universal bar hanger included [23]

NOTES
1. Lumen output based on O Trim Type, N Distribution and CS Reflector Finish, 80 CRI, 3500K for static white and 4000K for tunable white. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
2. Not available with tunable white.
3. I Mounting Type required.
4. I Mounting Type required.
5. Not available with R Mounting. May be required for 347V, see product builder at hew.com/product-builder
6. 0.1% Driver with tunable white.
7. Not available with tunable white.
8. Not available with tunable white.
9. Not available with Tunable White, EM batteries, or DMX Driver.
10. Trim ships separately.
11. For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 4 for FLANGE TYPE DETAILS. Not available with ATH Option.
12. Not available with WH Reflector Finish or L Trim Type.
13. L and A Trim Types only. W Distribution only.
14. L and A Trim Types only. W Distribution only.
15. L and A Trim Types only.
16. WH and BL Reflector Finishes only.
17. Mounting Hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 5 for MOUNTING TYPE DETAILS.
18. Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
19. Not available with L30 and L40 lumen packages. Not available with EM batteries.
20. Also used in new construction sheetrock ceilings. Pan-less installation.
21. N and I Mounting Types only. Universal bar hanger ships uninstalled. I Mounting requires external brackets.
22. N Mounting Type only.
23. N Mounting Type only.

4AR LED
4.5" Adjustable Downlight – Round

FEATURES

- Adjustable aim with 0° - 45° tilt and 360° rotation
- Beam angles ranging from 20° narrow to 45° wide for tailored performance
- 4 inch aperture is unobtrusive in small scale spaces
- 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
- New construction mounting pan, IC-rated, or pan-less remodel kit available
- Support human-centric design with adaptive, individualized lighting using tunable white light
- Low UGR meets LEED and WELL requirements
- Wireless in-fixture control solutions available
- 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. Tunable White products use LEDs of multiple CCTs and may produce a perceptibly different shade of white from single-CCT products at the same CCT. All CCTs are within 3 MacAdam ellipses.
- 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. Minimum 24" O.C. marked spacing required for L30 and L40 lumen packages.
- 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

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	690	12.1	57
	M	946	12.1	78
	N	1014	12.1	84
L15	W	1041	17.2	61
	M	1427	17.2	83
	N	1529	17.2	89
L20	W	1380	24.2	57
	M	1892	24.0	79
	N	2028	24.0	85
L30	W	1532	36.9	42
	M	2497	36.9	68
	N	2785	36.9	76
L40	W	2043	49.0	42
	M	3330	49.0	68
	N	3714	49.0	76

FLUSH LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	684	12.1	57
	M	915	12.1	76
	N	953	12.1	79
L15	W	1031	17.2	60
	M	1381	17.2	80
	N	1438	17.2	84
L20	W	1368	24.0	57
	M	1831	24.0	76
	N	1907	24.0	80
L30	W	2091	36.9	57
	M	2718	36.9	74
	N	2701	36.9	76
L40	W	2788	49.0	57
	M	3625	49.0	74
	N	3602	49.0	74

ANGLED LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	486	12.1	40
	M	712	12.1	59
	N	859	12.1	71
L15	W	733	17.2	43
	M	1074	17.2	62
	N	1295	17.2	75
L20	W	972	24.0	41
	M	1425	24.0	59
	N	1718	24.0	80
L30	W	1528	36.9	41
	M	2067	36.9	56
	N	2313	36.9	76
L40	W	2037	49.0	42
	M	2756	49.0	56
	N	3085	49.0	63

MULTIPLIER TABLES

	COLOR TEMPERATURE		
	CCT	SINGLE CCT	TW
80 CRI	2700K	0.92	0.83
	3000K	0.98	1.00
	3500K	1.00	0.99
	4000K	1.01	1.00
	5000K	1.02	0.98
90 CRI	2700K	0.76	–
	3000K	0.79	–
	3500K	0.82	–
	4000K	0.84	–
	5000K	0.88	–

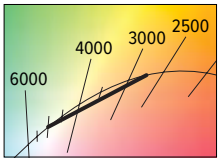
OPEN REFLECTOR FINISH	
CATALOG NUMBER	CONVERSION FACTOR
CS	1.00
WH	0.89
BL	0.79

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	20°	25°	25°

TUNABLE WHITE



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

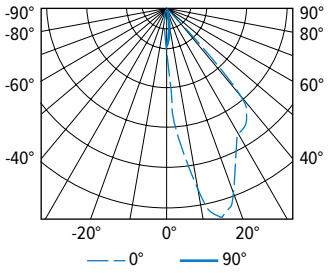
- Photometrics tested in accordance with IESNA LM-79. Results based on O Trim Type, CS Reflector Finish, 0° tilt, N Distribution, 80 CRI, 3500K for single CCT and 4000K, average wattage for 120V input, and 25°C ambient temperature. Actual performance may vary +/-5%.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier table to calculate additional options.

PHOTOMETRY CONTINUED ON NEXT PAGE

4AR LED
4.5″ Adjustable Downlight – Round

PHOTOMETRY

4AR-L20/835-DIM-UNV-OW-OF-CS (25° tilt) Report #: 20446; 05/21/18 | Total Luminaire Output: 1368 lumens; 24.2 Watts | Efficacy: 56.6 lm/W | 81.7 CRI; 3628K CCT



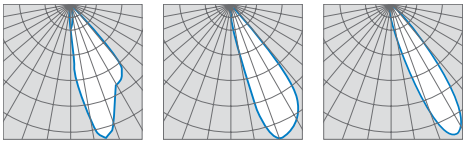
CANDLEPOWER DISTRIBUTION

VERTICAL ANGLE	HORIZONTAL ANGLE 0°	45°	90°	135°	180°	ZONAL LUMENS
0	808	808	808	808	808	
5	2450	1718	670	277	200	95
15	4432	2421	259	63	41	323
25	3338	2205	66	17	15	414
35	2889	1016	12	8	11	469
45	597	31	5	4	3	67
55	6	0	0	0	3	1
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

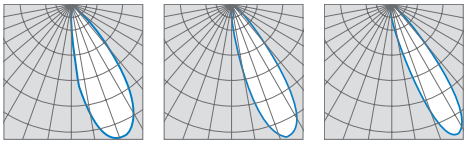
ZONE	LUMENS	% FIXTURE
0 - 30	832	61
0 - 40	1301	95
0 - 60	1368	100
0 - 90	1368	100
0 - 180	1368	100

OPEN (O)



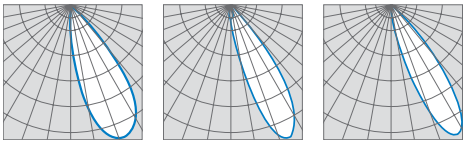
45° Wide | 30° Medium | 20° Narrow

FLUSH (L)



40° Wide | 30° Medium | 25° Narrow

ANGLED (A)



30° Wide | 25° Medium | 25° Narrow

EMERGENCY BATTERY OPTIONS

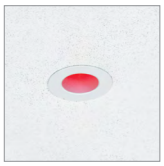
ORDERING EXAMPLE: EM/7W/RTS	
EMERGENCY BATTERY	**TEST SWITCH**
EM/7W 7-watt emergency battery **EM/10W** 10-watt emergency battery	**–** Standard **/RTS** Regressed test switch [1]

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″

4AR LED
4.5″ Adjustable Downlight – Round

APERTURE ADAPTOR ORDERING INFO

ORDERING EXAMPLE: 4DR - GR - 0575 - WHT			
SERIES	CATALOG #	CEILING CUTOUT	FINISH
4AR **6AR** **8DR** **4DR** **6DR** **4DS** **6DS** **4PR** **6PR** **4PS** **6PS**	**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

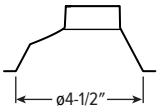
Adaptor (goof ring) corrects ceiling cutout errors during remodel downlight installation.

Additional finishes available, consult factory.

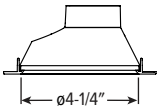
For limitations and instructions, see hew.com/aperture-adaptor.pdf

TRIM TYPE DETAILS

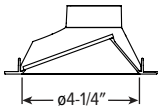
OPEN



FLUSH



ANGLED



FLANGE TYPE DETAILS

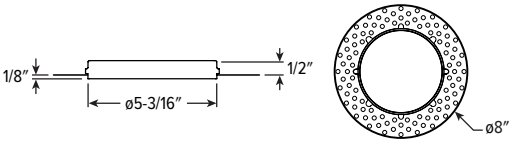
1/2″ STANDARD

Ceiling Cutout: ø5″

1/4″ MUD-IN

Ceiling cutout: ø5-1/2″

MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)



REFLECTOR FINISH DETAILS

CS
Clear semi-specular

WH
White

BL
Black

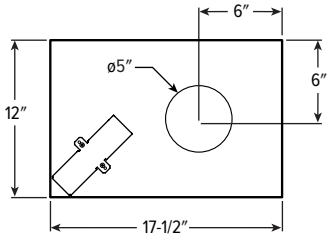
SEE NEXT PAGE FOR MOUNTING DETAIL.

4AR LED
4.5″ Adjustable Downlight – Round

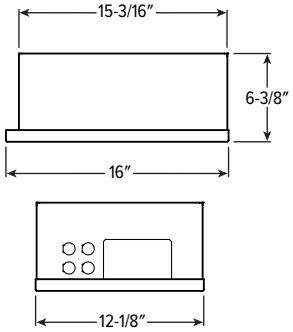
MOUNTING TYPE DETAILS

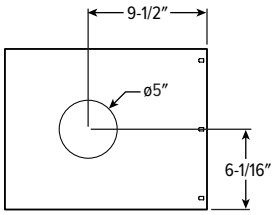
Flex conduit is recommended for installation.

NEW CONSTRUCTION



IC-RATED

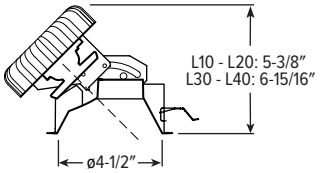




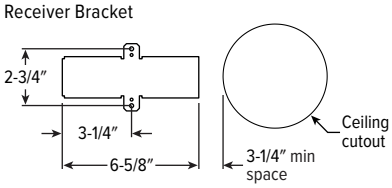
REMODEL

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

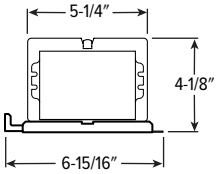
Cross Section



Receiver Bracket

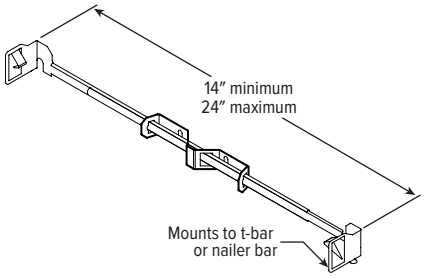


Driver and Junction Box

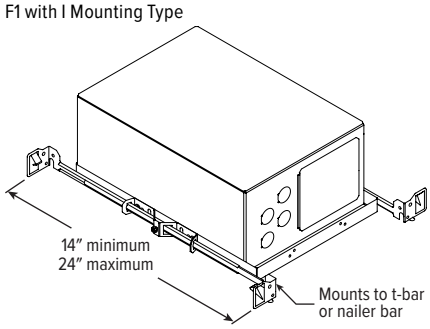


MOUNTING HARDWARE DETAILS

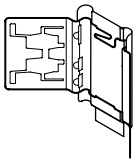
F1 Factory-installed 2-position fixed pan bracket, universal bar hanger included, ships uninstalled



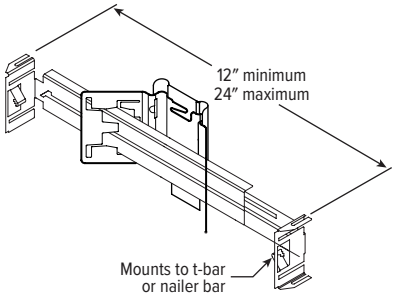
F1 with I Mounting Type



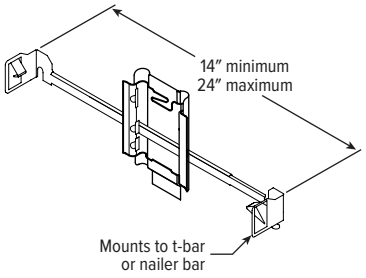
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



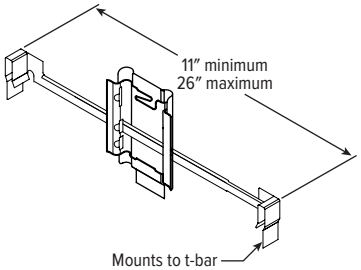
BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)



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)

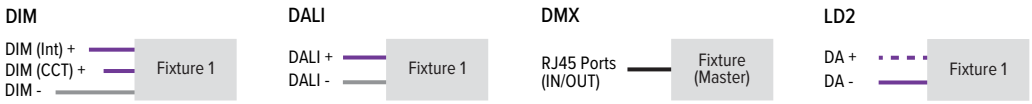


4AR LED
4.5" Adjustable Downlight – Round

ADDITIONAL DRIVER OPTIONS

Lumen restrictions apply: L30 max for DMX driver and Lutron drivers, L40 max for DIM LINE driver. R mounting type requires top access with DMX controls. R Mounting Type not available with FCJS controls. R Mounting Type requires 12" minimum plenum depth when specified with VRF/DBI controls. I Mounting Type not available with Lutron controls. 347V may require stepdown transformer, see product builder at hew.com/product-builder

CATALOG NUMBER	DESCRIPTION
DIM	Driver with external dimming wires prewired for 0-10V low voltage applications (tunable white: (1) 0-10V signal controls 0.1% dimming and (1) 0-10V signal controls CCT)
DIM1 [1]	1% driver with external dimming wires prewired for 0-10V low voltage applications
DIM LINE [1]	Line voltage dimming driver (TRIAC and ELV compatible, 120V only)
DA	Driver with 12V auxiliary power, without external dimming wires (not available with 347V)
DALI	DALI dimming driver
DMX	Driver prewired for DMX applications
LDE1 [1]	Lutron Hi-lume 1% EcoSystem dimming driver
LD2	Lutron DALI-2 digital driver, 1%
DCC	Remote UL Class 2 DC constant current supply, UL- or CSA-listed, by others

1 Single CCT only.

TUNABLE WHITE DRIVER DETAILS