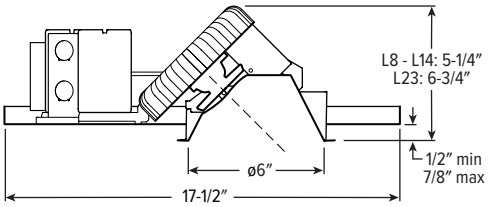
6AR dim to WARM
6" Adjustable Downlight – Round



CATALOG #:

TYPE:

PROJECT:

NEW CONSTRUCTION AND REMODEL

ORDERING EXAMPLE: 6AR - L23/9DW - OPTIONS - DIM1 - UNV - OW - OF - CS - TRIM OPTIONS - N - F1
(HOUSING | TRIM | MOUNT.)

HOUSING

SERIES
6AR

LUMENS [1]
L8 800lm
L14 1,400lm
L23 2,300lm

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

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, 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 May be required for 347V, see product builder at 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 4 for MOUNTING TYPE DETAILS.
16 Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
17 L8 and L14 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.

6AR dim to WARM
6" 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 55° wide for tailored performance
- Etched degree markers and directional indicator make it simple to fine-tune the illumination angle
- Spring clip retention system eliminates trim sag
- Choice of open reflector or die-cast lensed trims to complement interior style
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Fully room-side accessible
- New construction mounting pan, IC-rated, or pan-less remodel kit 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.
- 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

	DISTRIBUTION	DELIVERED LUMENS	CCT AT 100% (FULL OUTPUT)	CCT AT 1% (FULL DIM)	WATTAGE	EFFICACY (lm/W)
L8	W	768	3000K	1800K	14.0	55
	M	800			14.0	57
	N	–			–	–
L14	W	1347			23.4	58
	M	1402			23.4	60
	N	–			–	–
L23	W	2206			37.7	59
	M	2296			37.7	61
	N	–			–	–

FLUSH LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	CCT AT 100% (FULL OUTPUT)	CCT AT 1% (FULL DIM)	WATTAGE	EFFICACY (lm/W)
L8	W	694	3000K	1800K	14.0	50
	M	744			14.0	53
	N	738			14.0	53
L14	W	1216			23.4	52
	M	1304			23.4	56
	N	1294			23.4	55
L23	W	1991			37.7	53
	M	2135			37.7	57
	N	2119			37.7	56

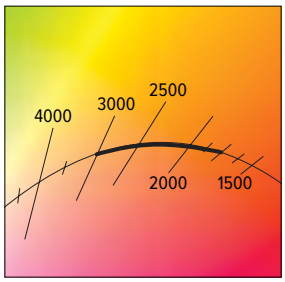
ANGLED LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	CCT AT 100% (FULL OUTPUT)	CCT AT 1% (FULL DIM)	WATTAGE	EFFICACY (lm/W)
L8	W	578	3000K	1800K	14.0	41
	M	689			14.0	49
	N	703			14.0	50
L14	W	1013			23.4	43
	M	1208			23.4	52
	N	1233			23.4	53
L23	W	1659			37.7	44
	M	1978			37.7	53
	N	2019			37.7	54

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

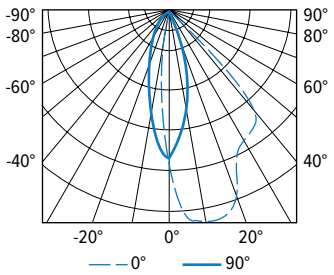


[1] Distribution will also be affected, consult factory.

- Photometrics tested in accordance with IESNA LM-79. Results based on full light output, O Trim Type, CS Reflector Finish, 0° tilt, W 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.

PHOTOMETRY

6AR-L23/9DW-DIM1-UNV-OW-OF-CS (25° tilt) Total Luminaire Output: 2192 lumens; 37.7 Watts | Efficacy: 58.1 lm/W | 95.0 CRI; 3000K CCT



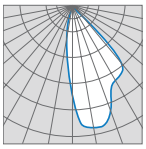
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE 0°	45°	90°	135°	180°	ZONAL LUMENS
	0	2897	2897	2897	2897	2897	
	5	4047	3567	2566	1787	1442	241
	15	4237	3163	1469	492	345	522
	25	3246	2828	602	136	102	607
	35	2882	2122	121	29	22	559
	45	1885	236	12	7	7	251
	55	22	2	0	0	2	13
	65	0	0	0	0	0	0
	75	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	1928	88
	0 - 60	2192	100
	0 - 90	2192	100
	0 - 180	2192	100

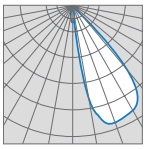
PHOTOMETRY CONTINUED ON NEXT PAGE

6AR dim to WARM
6" Adjustable Downlight – Round

OPEN (O)

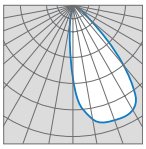


55° Wide



35° Medium

FLUSH (L)



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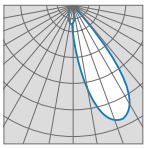
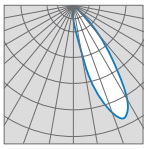
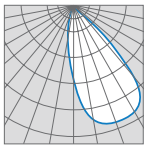


35° Medium

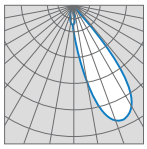


25° Narrow

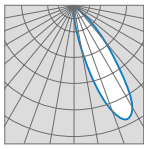
ANGLED (A)



50° Wide



35° Medium



30° Narrow

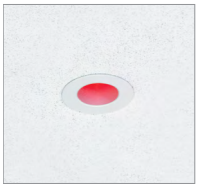
EMERGENCY BATTERY OPTIONS

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.

MOUNTING DETAILS
TEST SWITCH DETAILS

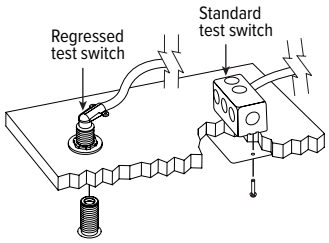


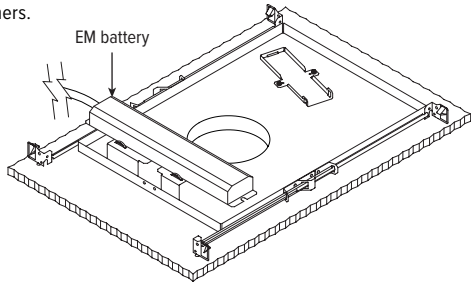
Regressed
ø1-3/4"

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

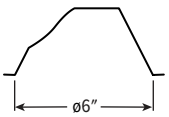
Adaptor (goof ring) corrects ceiling cutout errors during remodel downlight installation.

Additional finishes available, consult factory.

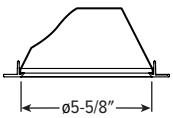
For limitations and instructions, see hew.com/aperture-adaptor.pdf

TRIM TYPE DETAILS

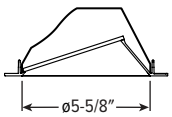
OPEN



FLUSH

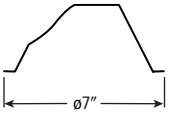


ANGLED



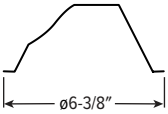
FLANGE TYPE DETAILS

1/2" STANDARD



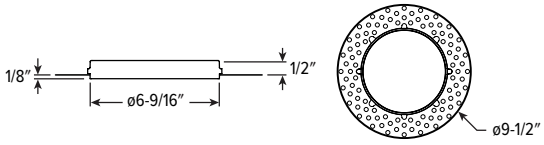
Ceiling Cutout: ø6-1/2"

1/4" MUD-IN



Ceiling cutout: ø6-3/4"

MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)



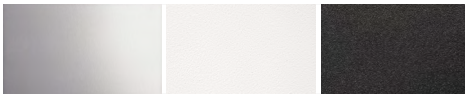
6AR dim to WARM
6″ Adjustable Downlight – Round

REFLECTOR FINISH DETAILS

CS
Clear semi-specular

WH
White

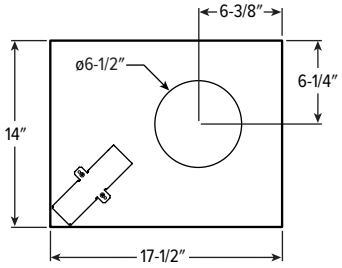
BL
Black



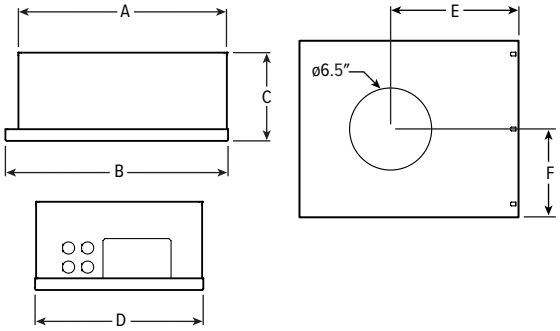
MOUNTING TYPE DETAILS

Flex conduit is recommended for installation.

NEW CONSTRUCTION



IC-RATED

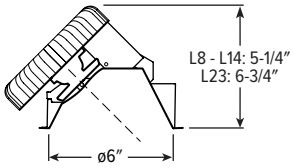


	LENGTH					
LUMENS	A	B	C	D	E	F
L8	15-3/16″	16″	6-3/8″	12-1/8″	9-1/2″	6-1/16″
L14	16-5/8″	17-1/2″	7-7/8″	14″	10-1/4″	7″

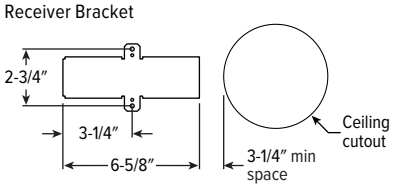
REMODEL

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

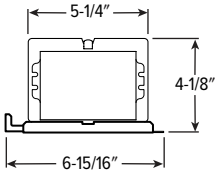
Cross Section



Receiver Bracket

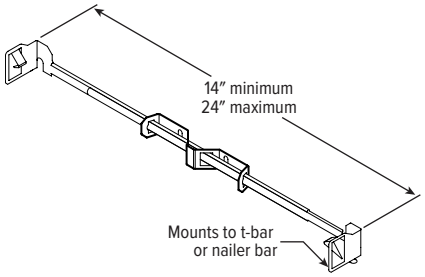


Driver and Junction Box

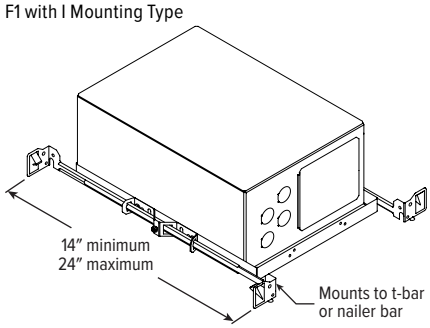


MOUNTING HARDWARE DETAILS

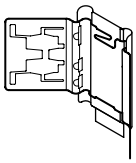
F1 Factory-installed 2-position fixed pan bracket, universal bar hanger included, ships uninstalled



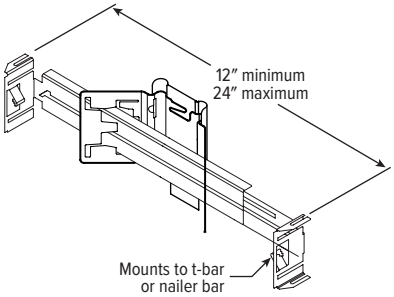
F1 with I Mounting Type



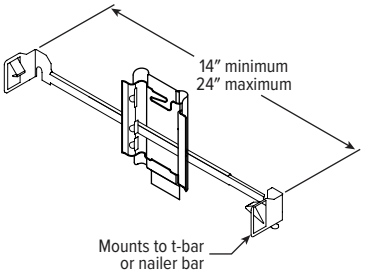
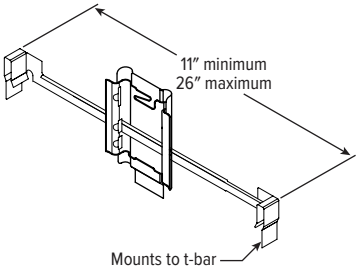
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



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)