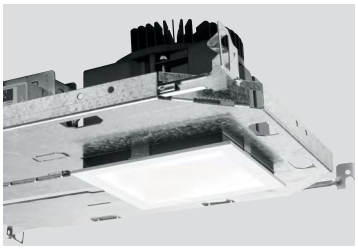
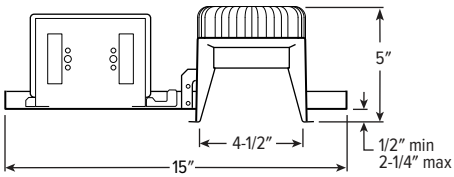
4DS dim to WARM
4.5″ Downlight – Square





CATALOG #:

TYPE:

PROJECT:

NEW CONSTRUCTION AND REMODEL

BAA & BABA COMPLIANT | CCEA Approved | IP65 Rated | WET/CC | ASTM-E283

ORDERING EXAMPLE: 4DS - L21/9DW - OPTIONS - DIM1 - UNV - LW - OF - WH - TRIM OPTIONS - N - F1
(HOUSING | TRIM | MOUNT.)

HOUSING

SERIES
4DS

LUMENS[1]
L7 700lm
L13 1,300lm
L21 2,100lm

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

OPTIONS
See page 3 for EMERGENCY BATTERY OPTIONS.
See page 3 for APERTURE ADAPTOR ORDERING INFO.
CP Chicago plenum (CCEA)[2]
F Fuse kit
ATH Airtight construction
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
L Flush lens
O Open reflector
R Regressed lens
A Angled lens[8]

DISTRIBUTION[7]
W Wide
55° Open
60° Flush
60° Regressed
M Medium
45° Open
35° Flush
35° Regressed
N Narrow
40° Open
25° Flush
25° Regressed
WW Wall wash[9]

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

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]
IP IP65 rated trim[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 Integral 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 full light output, L Trim Type, M Distribution and WH Reflector Finish, 95 CRI/3000K CCT. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
2 I Mounting Type required.
3 May be required for 347V, see product builder at hew.com/product-builder
4 Not available with I Mounting Type.
5 Not available with EM batteries.
6 Trim ships separately.
7 Beam angle based on CS or WH Reflector Finish.
8 Available with WW Distribution only.
9 A Trim Type only.
10 For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 3 for FLANGE TYPE DETAILS. Not available with O Trim Type, ATH, IP, or MWT Options.
11 Not available with WH Reflector Finish or L Trim Type.
12 L and R Trim Types only.
13 Not available with O Trim Type. W and WW Distributions only.
14 Not available with O Trim Type. W and WW Distributions only.
15 Not available with O Trim Type.
16 WH and BL Reflector Finishes only.
17 Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
18 Additional mounting hardware options available. See page 4 for MOUNTING HARDWARE DETAILS.
19 L7 and L13 lumen packages only. Not available with EM batteries.
20 Also used in new construction sheetrock ceilings. Pan-less installation.
21 N and I Mounting Types only. I Mounting requires external brackets.
22 N Mounting Type only.
23 N Mounting Type only.

4DS dim to WARM
4.5″ Downlight – Square

FEATURES

- Mimic the comfortable, welcoming glow of incandescent with warm-dimming technology
- Beam angles ranging from 25° narrow to 60° wide for tailored performance
- 4 inch aperture is unobtrusive in small scale spaces
- Square shape accentuates architectural styles
- New construction mounting pan, IC-rated, or pan-less remodel kit available
- Open reflector with 7 finishes to complement any interior style
- Die-cast trim choices include flush, regressed or angled lens
- Spring clip retention system eliminates trim sag
- Fully room-side accessible
- Made Right Here® in the USA

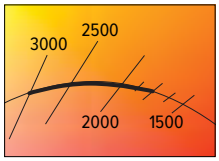
SPECIFICATIONS

- 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″ – 2-1/4″.
- OPEN REFLECTOR – Low-iridescent anodized aluminum with top diffuser.
- 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.
- 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.
  - IP65 rated trim when specified with IP 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)	DIST.	WATTAGE	OPEN REFLECTOR DELIVERED LUMENS	OPEN REFLECTOR EFFICACY (lm/W)	FLUSH LENS DELIVERED LUMENS	FLUSH LENS EFFICACY (lm/W)	REGRESSED LENS DELIVERED LUMENS	REGRESSED LENS EFFICACY (lm/W)
L7	3000K	1800K	W	14.0	629	45	681	49	654	47
			M	14.0	694	50	751	54	738	53
			N	14.0	709	51	759	54	751	54
L13			W	23.4	1102	47	1193	51	1147	49
			M	23.4	1216	52	1316	56	1293	55
			N	23.4	1243	53	1330	57	1316	56
L21			W	37.7	1805	48	1956	52	1878	50
			M	37.7	1991	53	2147	57	2116	56
			N	37.7	2035	54	2180	58	2155	57

- Photometrics tested in accordance with IESNA LM-79. Results based on full light output, L Trim Type, M Distribution and WH Reflector Finish, 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
SG	0.92
GD	0.93
CG	0.96
PW	0.86
SPC	1.02
RG	0.88
WH	0.89

TRIM OPTIONS	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

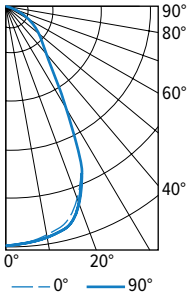
BEAM ANGLE

	TRIM TYPE [1]		
	O	L	R
W	55°	60°	60°
M	45°	35°	35°
N	40°	25°	25°

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

PHOTOMETRY

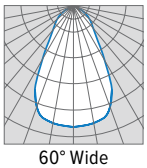
4DS-L21/9DW-DIM1-UNV-LW-OF-WH Total Luminaire Output: 1956 lumens; 37.7 Watts | Efficacy: 51.9 lm/W | 95.0 CRI; 3000K CCT

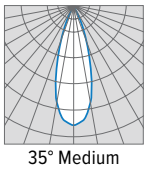


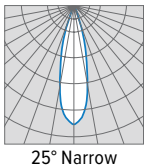
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE 0°	45°	90°	ZONAL LUMENS
	0	1454	1454	1454	
	5	1441	1441	1442	137
	15	1359	1379	1388	386
	25	1055	1194	1058	502
	35	477	726	468	368
	45	302	328	299	246
	55	183	188	182	169
	65	96	93	94	97
	75	40	39	40	43
	85	5	4	6	8
	90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1025	52
	0 - 40	1393	71
	0 - 60	1807	92
	0 - 90	1956	100
	0 - 180	1956	100

FLUSH (L)

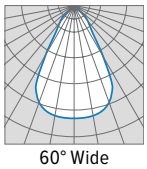

60° Wide


35° Medium


25° Narrow

OPEN (O)

REGRESSED (R)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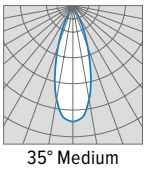
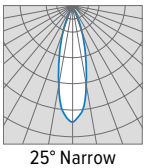
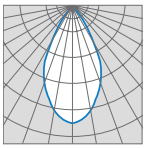
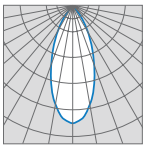

35° Medium

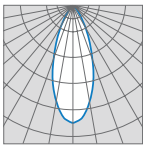

25° Narrow

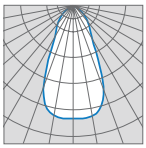
ANGLED (A)

4DS dim to WARM
4.5″ Downlight – Square


55° Wide


45° Medium


40° Narrow


Wall Wash

EMERGENCY BATTERY OPTIONS

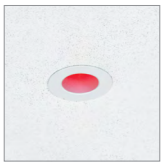
ORDERING EXAMPLE: EM/7W/RTS	
EMERGENCY BATTERY	**TEST SWITCH**
EM/7W 7-watt emergency battery	**–** Standard [2]
EM/10W 10-watt emergency battery [1]	**/RTS** Regressed test switch [3]
	/IPRTS IP65 rated regressed test switch [4]

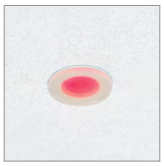
Additional limitations apply, see page 1. Specify CEC in the option code when California Energy Commission regulations are required. Max remote distance is 50′, connection by others.

1 Not available with L10 lumen package.
2 Not available with IP Trim Option.
3 Not available with IP or WET/CC Trim Options.
4 Must specify IP or WET/CC Trim Option.

TEST SWITCH DETAILS

Standard
2-3/4″ x 4-1/2″


Regressed
ø1-3/4″


IP-Rated
ø1-3/4″

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

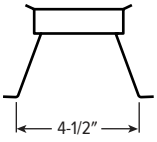
Adaptor (goof ring) corrects ceiling cutout errors during remodel downlight installation.

Additional finishes available, consult factory.

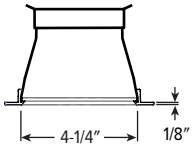
For limitations and instructions, see hew.com/aperture-adaptor.pdf

TRIM TYPE DETAILS

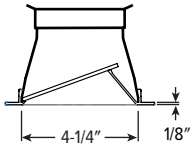
OPEN



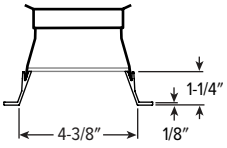
FLUSH



ANGLED

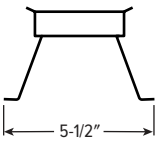


REGRESSED



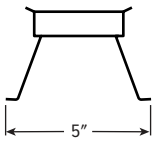
FLANGE TYPE DETAILS

1/2″ STANDARD



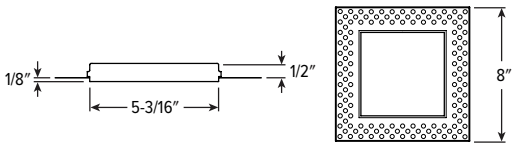
Ceiling Cutout: 5″

1/4″ MUD-IN



Ceiling cutout: 5-1/2″

MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)



4DS dim to WARM
4.5″ Downlight – Square

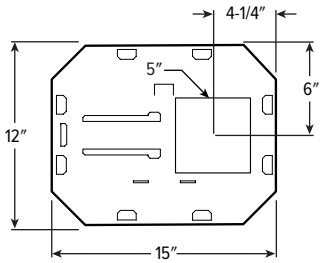
REFLECTOR FINISH DETAILS

SPC	SG	PW	GD	CG	RG	CS	WH	BL
Clear specular	Satin glow	Pewter	Gold	Champagne gold	Rose gold	Clear semi-specular	White	Black

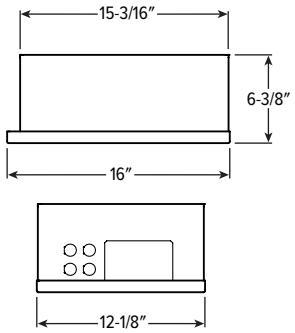
MOUNTING TYPE DETAILS

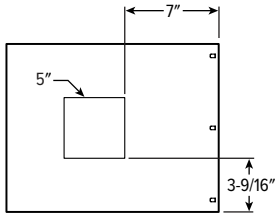
Flex conduit is recommended for installation.

NEW CONSTRUCTION



IC-RATED

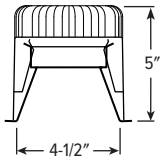




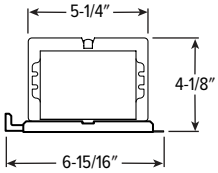
REMODEL

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

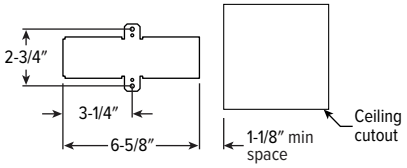
CROSS SECTION



DRIVER & JUNCTION BOX

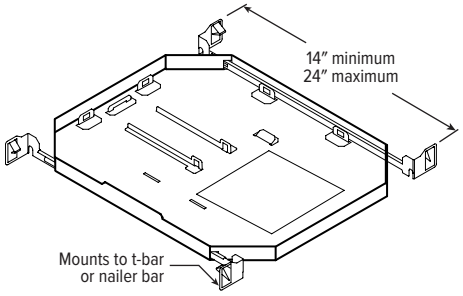


RECEIVER BRACKET

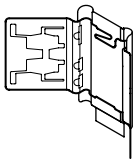


MOUNTING HARDWARE DETAILS

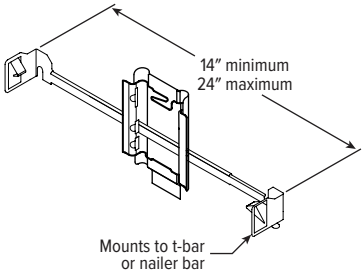
F1 Integral 2-position fixed pan bracket, universal bar hanger included



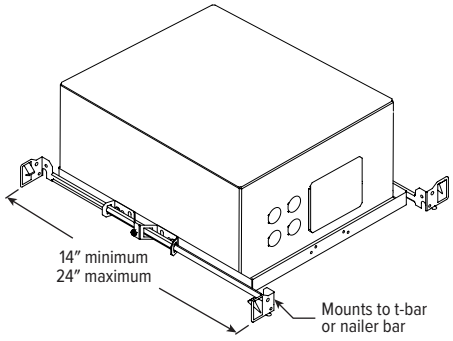
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



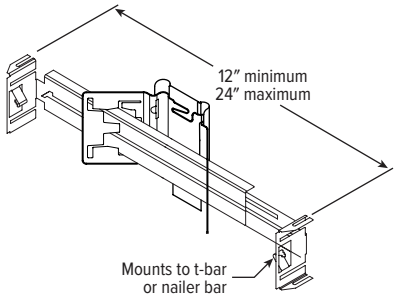
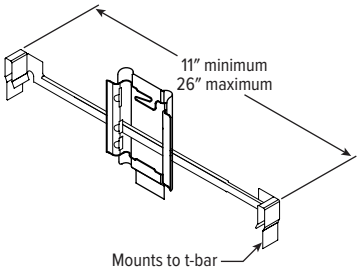
CA1 Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)



F1 with I Mounting Type



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



CA2 Adjustable caterpillar pan bracket, t-bar hanger included (N Mounting Type only)