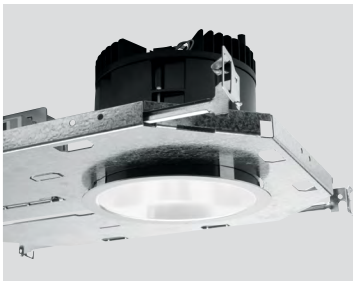
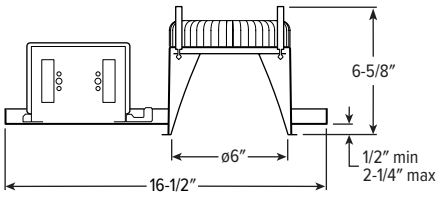
6DR dim to WARM
6" Downlight – Round





CATALOG #:

TYPE:

PROJECT:

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

NEW CONSTRUCTION AND REMODEL

ORDERING EXAMPLE: 6DR - TL - L25/9DW - OPTIONS - DIM1 - UNV - OW - OF - CS - TRIM OPTIONS - N - F1
(HOUSING | TRIM | MOUNT.)

HOUSING

SERIES
- **6DR-TL** TrimLock

LUMENS [1]
- **L8** 800lm
- **L15** 1,500lm
- **L25** 2,500lm

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

OPTIONS
See page 3 for EMERGENCY BATTERY OPTIONS.
- **SCA_ _** Sloped ceiling adapter [2]
- **ATH** Airtight construction
- **F** Fuse
- **CP** Chicago plenum (CCEA) [3]
- **SDT** Stepdown transformer [4]

DRIVER
- **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
- **F** Open reflector with frosted top diffuser
- **L** Flush lens
- **R** Regressed lens
- **A** Angled lens [8]
- **S** Non-conductive flush lens for shower applications [9]

DISTRIBUTION
See page 2 for BEAM ANGLE.
- **W** Wide
- **M** Medium
- **N** Narrow
- **WW** Wall wash [10]

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

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
- **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]
- **IP** IP65 rated trim [13]
- **AD** Diffuse acrylic lens [14]
- **PD** Diffuse 1/8" polycarbonate lens [15]
- **WET/CC** Wet location, covered ceiling listed
- **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 O Trim Type, W Distribution and CS Reflector Finish, 95CRI/3000K CCT. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
2. 11-1/2" aperture, specify degrees of slope in 5° increments, 05°-30°. Not available with I Mounting Type, S Trim Type, ATH, IP, or WET/CC Options. Painted white. Other colors available, consult factory. See page 4 for SLOPED CEILING ADAPTOR DETAILS.
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. Available with WW Distribution only.
9. W Distribution, OF Flange Type, WH Reflector Finish only. Standard with AD, IP and WET/CC Trim Options.
10. O and A Trim Types only.
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, IP, or MWT Options.
12. Not available with WH Reflector Finish, L or S Trim Types.
13. L and R Trim Types only.
14. Not available with O or F Trim Types. W and WW Distributions only.
15. Not available with O or F Trim Types. W and WW Distributions only.
16. WH and BL Reflector Finishes only. Not available with S Trim Type.
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. L8 and L15 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.

6DR dim to WARM
6" Downlight – Round

FEATURES

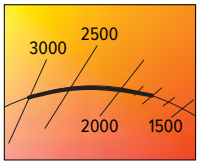
- Innovative TrimLock reflector retention system ensures trim remains flush with ceiling plane
- Mimic the comfortable, welcoming glow of incandescent with warm-dimming technology
- Beam angles ranging from 10° narrow to 65° wide for tailored performance
- Open reflector with nine finishes complements any interior style
- Die-cast trim choices include flush, regressed, or angled lens
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- New construction mounting pan, IC-rated, or pan-less remodel kit available
- Sloped adapter accommodates vaulted ceilings
- Optional non-conductive lens for shower applications
- IP65-rated die-cast trim includes easy-to-clean flush lens
- 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".
- TRIMLOCK – Innovative TrimLock reflector retention system ensures the trim remains flush with the ceiling plane.
- 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.
- 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 or F trim type.
  - 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)
L8	3000K	1800K	W	14.0	887	63	739	53	716	51
			M	14.0	860	61	797	57	775	55
			N	14.0	823	59	802	57	781	56
L15			W	23.4	1554	66	1296	55	1254	54
			M	23.4	1508	64	1397	60	1359	58
			N	23.4	1442	62	1405	60	1370	59
L25			W	37.7	2471	66	2123	56	2054	55
			M	37.7	2465	65	2284	61	2226	59
			N	37.7	2518	67	2302	61	2243	60



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, W Distribution and CS 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

	REFLECTOR FINISH CATALOG NUMBER	CONVERSION FACTOR
O TRIM	CS	1.00
	SG [1]	0.92
	GD	0.93
	CG	0.96
	PW	0.86
	SPC	1.02
	RG	0.88
	WH [1]	0.89
	BL [1]	0.47
R TRIM	WH	1.00
	CS	0.98
	BL	0.79

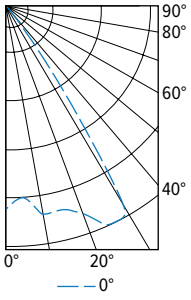
TRIM OPTIONS CATALOG NUMBER	CONVERSION FACTOR
F	0.75
S	0.85
AD	0.85
PD	0.85
WET/CC	0.85

BEAM ANGLE

	TRIM TYPE [2] O	F	L	R
W	65°	70°	55°	55°
M	35°	35°	35°	35°
N	10°	20°	25°	25°

PHOTOMETRY

6DR-TL-L25/9DW-DIM1-UNV-OW-OF-CS Total Luminaire Output: 2471 lumens; 37.7 Watts | Efficacy: 65.5 lm/W | 95.0 CRI; 3000K CCT



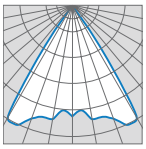
CANDLEPOWER DISTRIBUTION VERTICAL ANGLE	HORIZONTAL ANGLE 0°	ZONAL LUMENS
0	2078	
5	1963	187
15	2157	611
25	2464	1140
35	751	472
45	57	44
55	16	15
65	2	2
75	0	0
85	0	0
90	0	

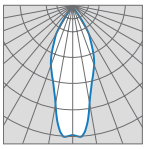
LUMEN SUMMARY ZONE	LUMENS	% FIXTURE
0 - 40	2410	98
0 - 60	2470	100
0 - 90	2471	100
0 - 180	2471	100

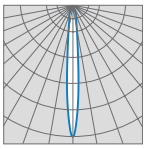
PHOTOMETRY CONTINUED ON NEXT PAGE.

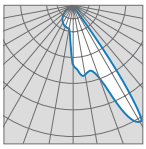
6DR dim to WARM
6″ Downlight – Round

OPEN (O)

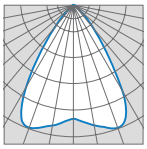

65° Wide

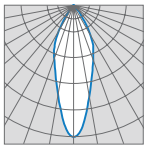

35° Medium

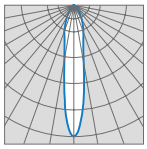

10° Narrow


Wall Wash

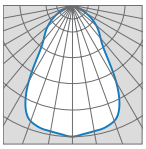
OPEN TOP DIFFUSER (F)

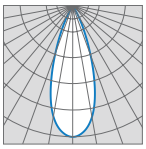

70° Wide

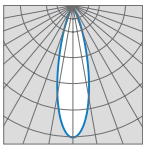

35° Medium


20° Narrow

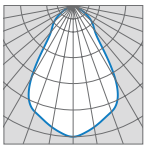
FLUSH (L)

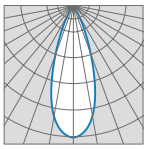

55° Wide

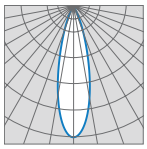

35° Medium


25° Narrow

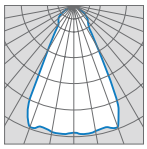
REGRESSED (R)


55° Wide


35° Medium


25° Narrow

ANGLED (A)


Wall Wash

EMERGENCY BATTERY OPTIONS

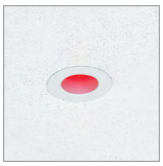
ORDERING EXAMPLE: EM/7W/RTS	
EMERGENCY BATTERY	**TEST SWITCH**
EM/7W 7-watt emergency battery **EM/10W** 10-watt emergency battery [1]	**–** Standard [2] **/RTS** Regressed test switch [3] **/IPRTS** IP65 rated regressed test switch [4] **/ITS** Integral test switch [5]

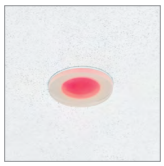
Additional limitations apply, see page 1. Specify CEC in the option code when California Energy Commission regulations are required. Max remote distance is 50′, connection by others.

1 Not available with L10 lumen package.
2 Not available with S Trim Type or IP Trim Option.
3 Not available with S Trim Type, IP or WET/CC Trim Options.
4 Must specify IP or WET/CC Trim Options.
5 O and F Trim Types only. N Mounting Type and OF Flange Type only. Top access required. Not available with WW Distribution, WET/CC Trim Option, ATH, CP or SCA Options. 3/8″ to 1-1/4" ceiling thickness only.

TEST SWITCH DETAILS

Standard
2-3/4″ x 4-1/2″


Regressed
ø1-3/4″


IP-Rated
ø1-3/4″

Integral
ø3/4″

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

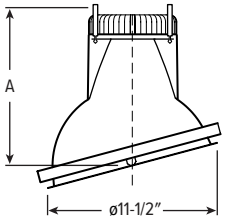
Adaptor (goof ring) corrects ceiling cutout errors during remodel downlight installation.

Additional finishes available, consult factory.

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

6DR dim to WARM
6″ Downlight – Round

SLOPED CEILING ADAPTOR DETAILS



Ceiling cutout: ø11-7/8″

A (HEIGHT)						PLENUM HEIGHT
5°	10°	15°	20°	25°	30°	
10-11/16″	10-7/8″	10-15/16″	10-7/8″	10-13/16″	10-5/8″	11-1/4″

15° Shown

TRIMLOCK INSTALLATION DETAILS

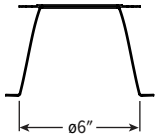
TWIST

PULL

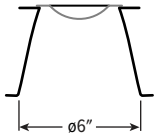
RELEASE

TRIM TYPE DETAILS

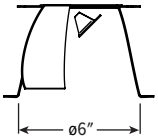
OPEN



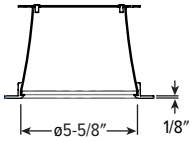
OPEN TOP DIFFUSER



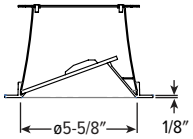
OPEN (WALL WASH)



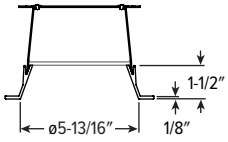
FLUSH | SHOWER



ANGLED

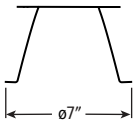


REGRESSED



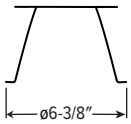
FLANGE TYPE DETAILS

1/2″ STANDARD



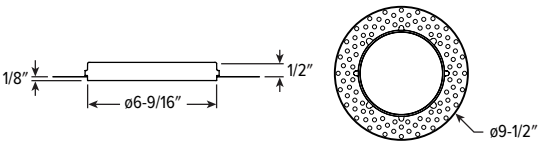
Ceiling Cutout: ø6-1/2″

1/4″ MUD-IN



Ceiling cutout: ø7″

MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)



REFLECTOR FINISH DETAILS

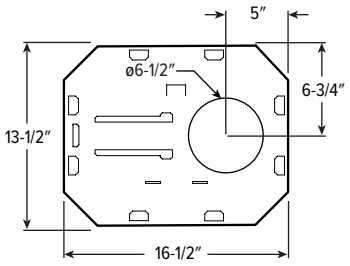
SPC	SG	PW	GD	CG	RG	CS	WH	BL
Clear specular	Satin glow	Pewter	Gold	Champagne gold	Rose gold	Clear semi-specular	White	Black

6DR dim to WARM
6″ Downlight – Round

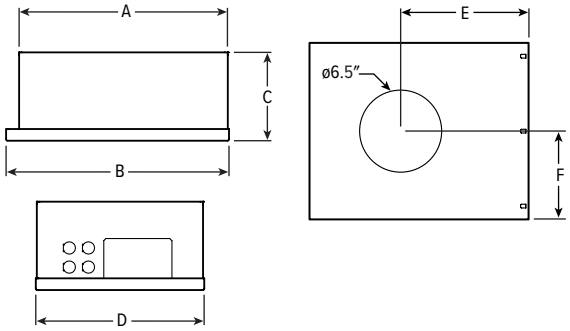
MOUNTING TYPE DETAILS

Flex conduit is recommended for installation.

NEW CONSTRUCTION



IC-RATED

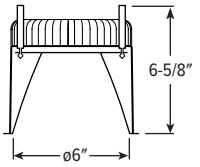


	LENGTH					
LUMENS	A	B	C	D	E	F
L8 - L15	15-3/16″	16″	6-3/8″	12-1/8″	9-1/2″	6-1/16″

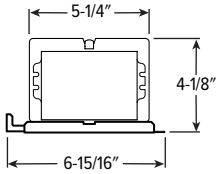
REMODEL

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

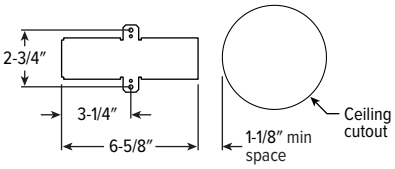
CROSS SECTION



DRIVER & JUNCTION BOX

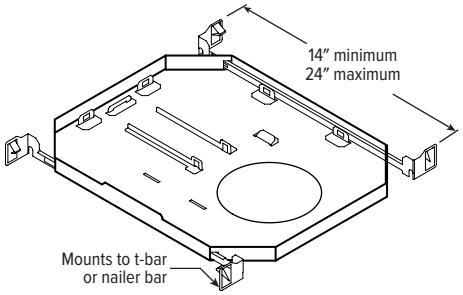


RECEIVER BRACKET

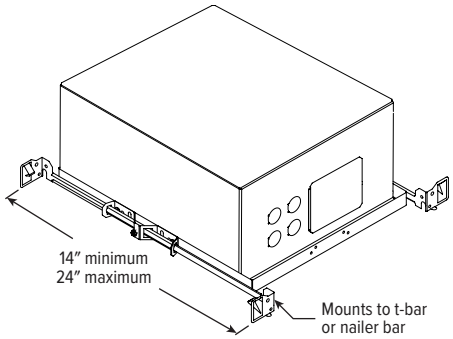


MOUNTING HARDWARE DETAILS

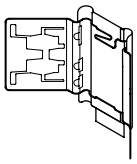
F1 Integral 2-position fixed pan bracket, universal bar hanger included



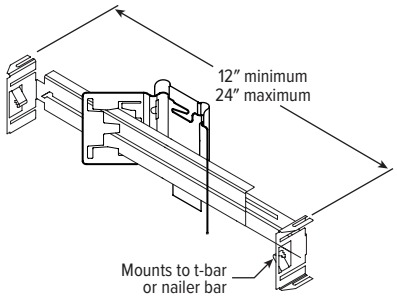
F1 with I Mounting Type



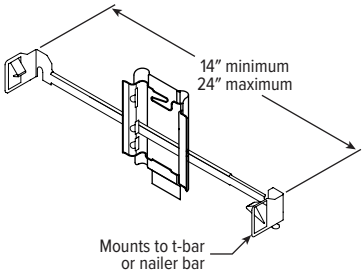
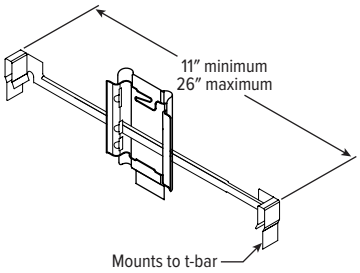
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



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)