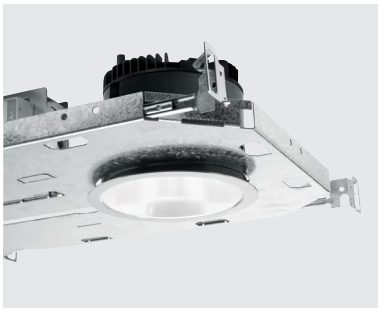
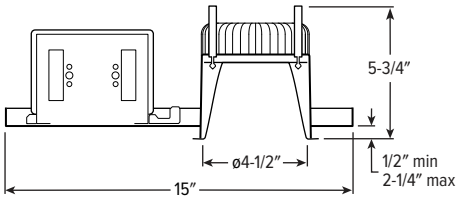
4DR LED
4.5″ Downlight – Round



NEW CONSTRUCTION AND REMODEL



L30 – L40 Lumens shown

CATALOG #:

TYPE:

PROJECT:

BAA & BABA COMPLIANT · CCEA Approved · Low UGR · IP65 Rated · JA8 Compliant · TITLE 24 · WET/CC · ASTM-E283 · TW TrimLock®

ORDERING EXAMPLE: 4DR - TL - L20/835 - OPTIONS - CONTROL/DIM - UNV - OW - OF - CS - TRIM OPTIONS - N - F1
(HOUSING: 4DR - TL - L20/835 - OPTIONS - CONTROL/DIM - UNV; TRIM: OW - OF - CS - TRIM OPTIONS; MOUNT: N - F1)

HOUSING

SERIES
4DR - TL TrimLock

LUMENS [1]
Single CCT or TW
- **L10** 1,000lm
- **L15** 1,500lm
- **L20** 2,000lm

Single CCT only
- **L30** 3,000lm
- **L40** 4,000lm
- **L50** 5,000lm
- **L60** 6,000lm
- **L70** 7,000lm

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.***
*See page 3 for **APERTURE ADAPTOR ORDERING INFO.***

- **SCA_ _** Sloped ceiling adapter [3]
- **ATH** Airtight construction
- **F** Fuse
- **CP** Chicago plenum (CCEA) [4]
- **SDT** Stepdown transformer [5]
- **(L__)** Additional lower lumen packages available. [6] Example: 5,500 lumens = 4DR-TL-L60/835-**(L55)**

CONTROL
*Click **HERE** for control options.*

- **–** None

DRIVER
*See page 6 for **ADDITIONAL DRIVER OPTIONS.***

- **DIM** Dimming driver, 0-10V [7]
- **DIM1** 1% Dimming driver, 0-10V [8]
- **DIM LINE** Driver with line voltage dimming wires [9]

VOLTAGE
- **UNV** 120-277V
- **347** 347V [10]

TRIM [11]

TRIM TYPE
- **O** Open reflector
- **F** Open reflector with polycarbonate frosted top diffuser [12]
- **L** Flush lens
- **R** Regressed lens
- **A** Angled lens [13]
- **S** Non-conductive flush lens for shower applications [14]

DISTRIBUTION
See page 2 for BEAM ANGLE.

- **W** Wide
- **M** Medium [15]
- **N** Narrow [16]
- **WW** Wall wash [17]

FLANGE TYPE
- **OF** 1/2″ standard flange
- **SF** 1/4″ mud-in flange [18]

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 [19]
- **IP** IP65 rated trim [20]
- **AD** Diffuse acrylic lens [21]
- **PD** Diffuse 1/8″ polycarbonate lens [22]
- **WET/CC** Wet location, covered ceiling listed [23]
- **AM** Anti-microbial [24]

MOUNTING

MOUNTING TYPE [25]
- **N** Open pan for new construction
- **I** IC-rated enclosure for new construction [27]
- **R** Remodel kit [28]

MOUNTING HARDWARE [26]
- **F1** Integral 2-position fixed pan bracket, universal bar hanger included [29]
- **F1S** New construction mounting pan shipped ahead, integral 2-position fixed bracket, universal bar hangers included [30]
- **BA1** Adjustable butterfly pan bracket, bar hanger not included [31]
- **CA1** Adjustable caterpillar pan bracket, universal bar hanger included [32]

NOTES
1. Lumen output based on CS (O and F Trim Types), or WH (L, R and A Trim Types) Reflector Finish, W Distribution, 80 CRI, 3500K for static white and 4000K for tunable white. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see Options
2. Not available with tunable white.
3. 9″ 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.
4. I Mounting Type required.
5. May be required for 347V, see product builder at hew.com/product-builder
6. Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
7. 0.1% Driver with tunable white.
8. Not available with tunable white.
9. L15 min to L60 max lumen packages. Not available with tunable white.
10. Not available with Tunable White, EM batteries, or DMX Driver.
11. Trim ships separately
12. L50 lumen package max.
13. Available with WW Distribution only.
14. W Distribution, OF Flange Type, WH Reflector Finish only. Standard with AD, IP and WET/CC Trim Options.
15. Not available with lumen stops L50 and higher when specified with L or R Trim Types.
16. Not available with lumen stops L50 and higher when specified with L or R Trim Types.
17. O and A Trim Types only.
18. 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.
19. Not available with WH Reflector Finish, L or S Trim Types.
20. L and R Trim Types only.
21. Not available with O or F Trim Types. W and WW Distributions only.
22. Not available with O or F Trim Types. W and WW Distributions only.
23. L50 lumen package max with O Trim Type.
24. WH and BL Reflector Finishes only. Not available with S Trim Type.
25. Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 5 for MOUNTING TYPE DETAILS.
26. Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
27. L30 lumen package max. W Distribution only for L, R, and S Trim Types when specified with L30 lumen package. Not available with EM batteries.
28. Also used in new construction sheetrock ceilings. Pan-less installation.
29. N and I Mounting Types only. I Mounting requires external brackets.
30. N Mounting Type only.
31. N Mounting Type only.
32. N Mounting Type only.

4DR LED
4.5" Downlight – Round

FEATURES

- Innovative TrimLock reflector retention system ensures trim remains flush with ceiling plane
- Beam angles ranging from 10° narrow to 65° wide for tailored performance
- Die-cast trim choices include flush, regressed or angled lens
- Fully room-side accessible
- Industry-leading efficacies as high as 130 lm/W
- New construction mounting pan, IC-rated, or pan-less remodel kit available
- Sloped adapter accommodates vaulted ceilings
- Optional non-conductive lens for shower applications
- Support human-centric design with adaptive, individualized lighting using tunable white light
- IP65-rated die-cast trim includes easy-to-clean flush lens
- Low UGR meets LEED and WELL requirements
- Wireless in-fixture control solutions available
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING – Die-cast aluminum trim housing and 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. 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. Minimum 24" O.C. marked spacing required for L50 – L70 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.
  - IP65 rated trim when specified with IP option.
  - Complies with ASTM-E283 when specified with ATH option.
  - RoHS compliant.
  - Title 24 (JA8) compliant in select configurations, see cacertappliances.energy.ca.gov
  - 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 (O)		OPEN TOP DIFFUSER (F)		FLUSH (L)		REGRESSED (R)	
	DISTRIBUTION	WATTAGE	DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)
L10	W	9.5	1054	111	884	93	727	77	715	75
	M	9.5	1109	117	931	98	971	102	965	102
	N	9.5	1030	108	857	90	1019	107	1012	107
L15	W	13.7	1564	114	1312	96	1079	79	1060	77
	M	13.7	1647	120	1381	101	1440	105	1433	105
	N	13.7	1528	112	1272	93	1512	110	1503	110
L20	W	18.0	2104	117	1765	98	1452	81	1427	79
	M	18.0	2216	123	1858	103	1938	108	1927	107
	N	18.0	2056	114	1711	95	2035	113	2022	112
L30	W	24.9	3061	123	2583	104	2103	84	2045	82
	M	24.9	3214	129	2709	109	2749	110	2749	110
	N	24.9	2957	119	2519	101	2782	112	2767	111
L40	W	34.4	4113	120	3471	101	2826	82	2747	80
	M	34.4	4319	126	3640	106	3693	107	3693	107
	N	34.4	3973	115	3385	98	3739	109	3718	108
L50	W	42.1	5036	120	4219	100	3837	91	3732	89
	M	42.1	5318	126	4455	106	–	–	–	–
	N	42.1	5031	120	4131	98	–	–	–	–
L60	W	51.1	6109	120	–	–	4655	91	4527	89
	M	51.1	6451	126	–	–	–	–	–	–
	N	51.1	6103	119	–	–	–	–	–	–
L70	W	58.4	7216	124	–	–	5499	94	5347	92
	M	58.4	7620	130	–	–	–	–	–	–
	N	58.4	7209	123	–	–	–	–	–	–

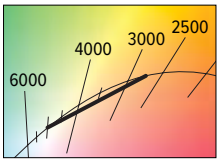
1 Distribution will also be affected, consult factory.
2 Beam angle based on CS or WH Reflector Finish.

- Photometrics tested in accordance with IESNA LM-79. Results based on O Trim Type, W Distribution, CS Reflector Finish, 80 CRI, 3500K for single CCT and 4000K for tunable white, 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.

BEAM ANGLE

	TRIM TYPE [2]			
	O	F	L	R
W	65°	60°	50°	50°
M	45°	50°	35°	30°
N	10°	25°	25°	25°

TUNABLE WHITE



MULTIPLIER TABLES

	COLOR TEMPERATURE		
	CCT	SINGLE CCT	TW
80 CRI	2700K	0.98	0.83
	3000K	1.00	1.00
	3500K	1.00	0.99
	4000K	1.01	1.00
	5000K	0.99	0.98
90 CRI	2700K	0.94	–
	3000K	0.96	–
	3500K	0.97	–
	4000K	0.97	–
	5000K	0.95	–

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

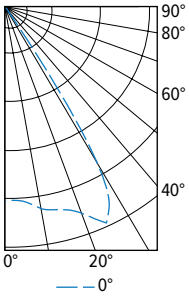
TRIM OPTIONS	
CATALOG NUMBER	CONVERSION FACTOR
F	0.75
S	0.85
AD	0.85
PD	0.85
WET/CC	0.85

PHOTOMETRY CONTINUED ON NEXT PAGE.

4DR LED
4.5″ Downlight – Round

PHOTOMETRY

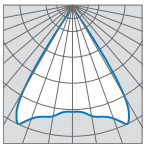
4DR-TL-L10/835-DIM-UNV-OW-OF-CS Total Luminaire Output: 1054 lumens; 9.5 Watts | Efficacy: 111.0 lm/W | 80 CRI; 3500K CCT

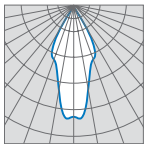


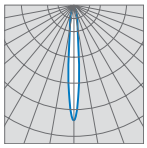
CANDLEPOWER DISTRIBUTION		
VERTICAL ANGLE	HORIZONTAL ANGLE 0°	ZONAL LUMENS
0	905	
5	932	90
15	980	280
25	1116	476
35	154	184
45	22	18
55	6	6
65	1	1
75	0	0
85	0	0
90	0	

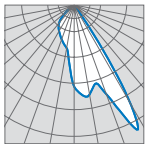
LUMEN SUMMARY		
ZONE	LUMENS	% FIXTURE
0 - 40	1030	98
0 - 60	1053	100
0 - 90	1054	100
0-180	1054	100

OPEN (O)

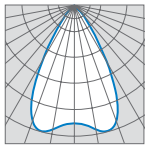

65° Wide

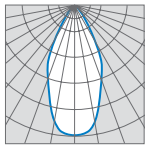

45° Medium

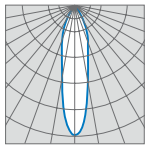

10° Narrow


Wall Wash

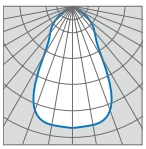
OPEN TOP DIFFUSER (F)

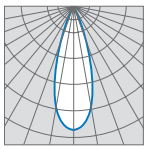

60° Wide

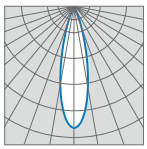

50° Medium


25° Narrow

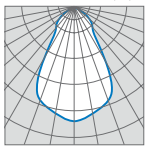
FLUSH (L)

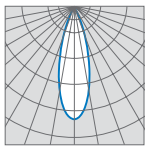

50° Wide

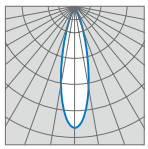

35° Medium


25° Narrow

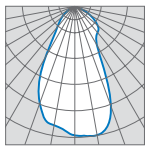
REGRESSED (R)


50° Wide


30° Medium


25° Narrow

ANGLED (A)


Wall Wash

EMERGENCY BATTERY OPTIONS

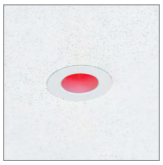
ORDERING EXAMPLE: EM/7W/RTS	
EMERGENCY BATTERY	TEST SWITCH
EM/7W 7-watt emergency battery **EM/10W** 10-watt emergency battery [1]	– Standard [2] **/RTS** Regressed test switch [3] **/IPRTS** IP65 rated regressed test switch [4] **/ITS** Integral test switch [5]

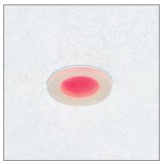
Additional limitations apply, see page 1. Specify CEC in the option code when California Energy Commission regulations are required. Max remote distance is 50′, connection by others.

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.

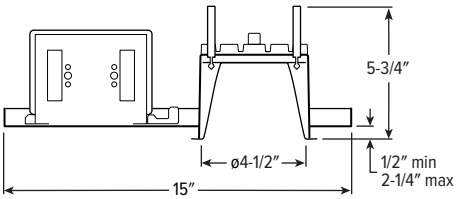
Additional finishes available, consult factory.

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

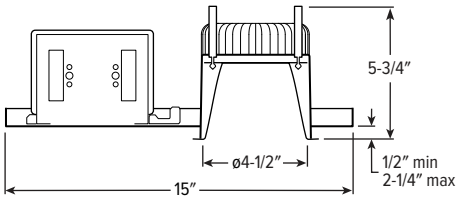
4DR LED
4.5″ Downlight – Round

CROSS SECTIONS

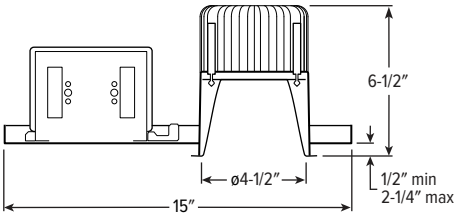
L10 – L20 LUMENS



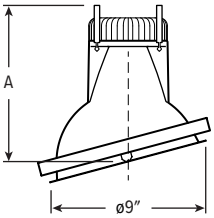
L30 – L40 LUMENS



L50 – L70 LUMENS



SLOPED CEILING ADAPTOR DETAILS



Ceiling cutout: ø9-3/8″

LUMENS	A (HEIGHT) 5°	10°	15°	20°	25°	30°	PLENUM HEIGHT
L10 - L30	8-13/16″	8-15/16″	9″	8-15/16″	8-7/8″	8-11/16″	9-1/4″
L40 - L70	9-9/16″	9-11/16″	9-11/16″	9-5/8″	9-1/2″	9-5/16″	10″

15° Shown

TRIMLOCK INSTALLATION DETAILS

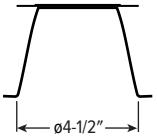
TWIST

PULL

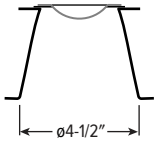
RELEASE

TRIM TYPE DETAILS

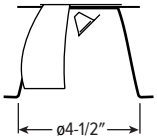
OPEN



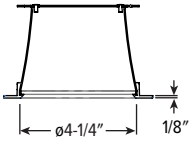
OPEN TOP DIFFUSER



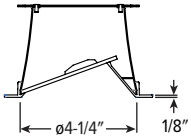
OPEN (WALL WASH)



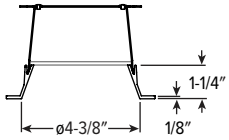
FLUSH | SHOWER



ANGLED

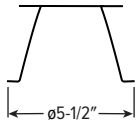


REGRESSED



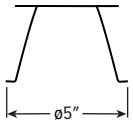
FLANGE TYPE DETAILS

1/2″ STANDARD



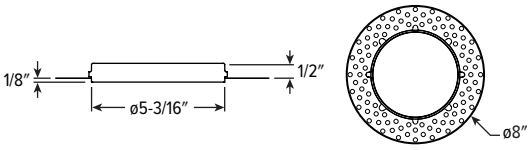
Ceiling Cutout: ø5″

1/4″ MUD-IN



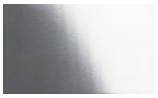
Ceiling cutout: ø5-1/2″

MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)



REFLECTOR FINISH DETAILS

SPC Clear specular



SG Satin glow

PW Pewter

GD Gold

CG Champagne gold

RG Rose gold

CS Clear semi-specular

WH White

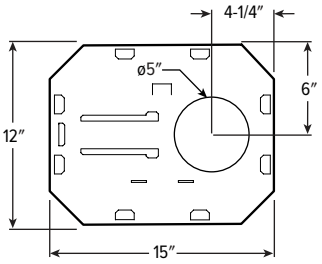
BL Black

4DR LED
4.5″ Downlight – Round

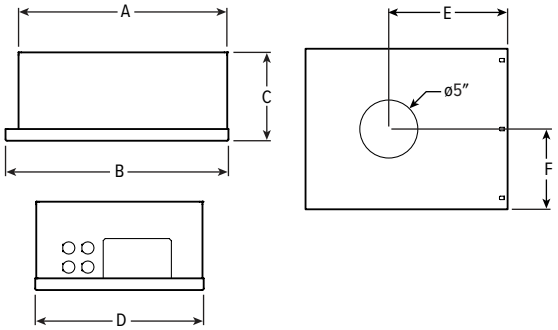
MOUNTING TYPE DETAILS

Flex conduit is recommended for installation.

NEW CONSTRUCTION



IC-RATED



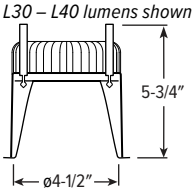
	LENGTH					
LUMENS	A	B	C	D	E	F
L10 - L20	15-3/16″	16″	6-3/8″	12-1/8″	9-1/2″	6-1/16″
L30	16-5/8″	17-1/2″	7-7/8″	14″	10-1/4″	7″

REMODEL

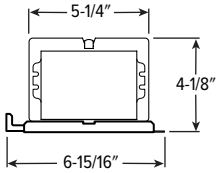
H.E. Williams Inc. strongly recommends installing a trial fixture to confirm fitment on-site prior to ordering full project quantities.

CROSS SECTION

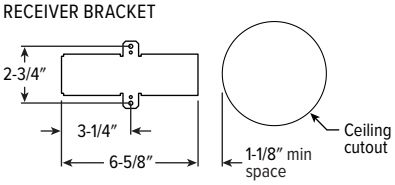
L30 – L40 lumens shown



DRIVER & JUNCTION BOX

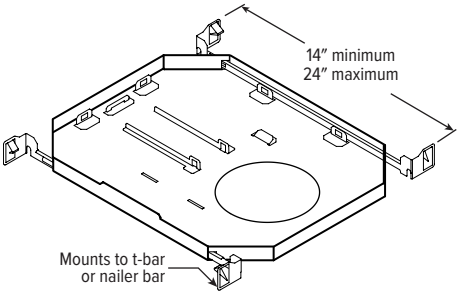


RECEIVER BRACKET

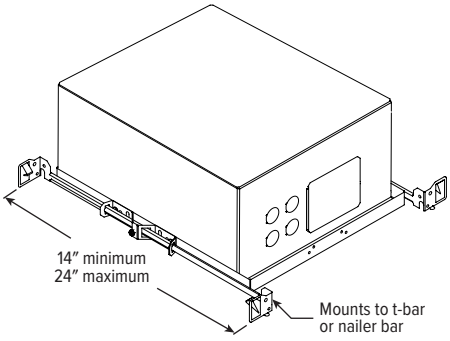


MOUNTING HARDWARE DETAILS

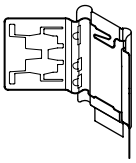
F1 Integral 2-position fixed pan bracket, universal bar hanger included



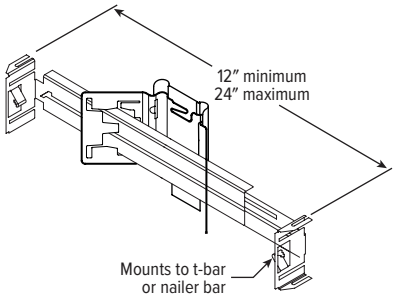
F1 with I Mounting Type



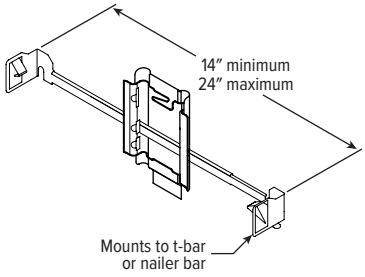
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



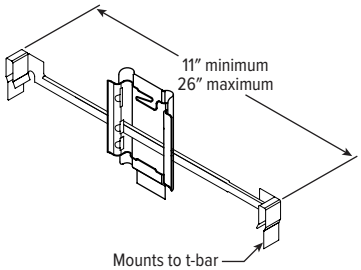
BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included. (N Mounting Type only)



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)



4DR LED
4.5″ Downlight – Round

ADDITIONAL DRIVER OPTIONS

Lumen restrictions apply: L40 max for DMX driver, L40 max for Lutron driver, L50 max for DALI driver, L15 min to L60 max for DIM LINE driver. L15 min for LDE1 driver. R mounting type requires top access with DMX driver. R Mounting Type not available with FCJS drivers. 347V may require stepdown transformer, see product builder at hew.com/product-builder. I Mounting Type not available with Lutron driver.

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

DIM

DALI

DMX

LD2