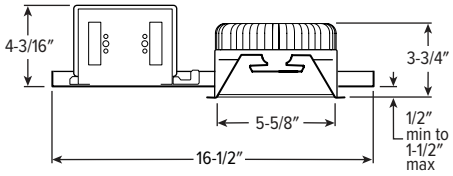
6PS LED
6" Shallow Plenum Downlight – Square

NEW CONSTRUCTION AND REMODEL



L10 – L30 Lumens shown

CATALOG #:

TYPE:

PROJECT:

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

ORDERING EXAMPLE: 6PS - L40/835 - OPTIONS - CONTROL/DIM - UNV - LW - OF - WH - TRIM OPTIONS - N - F1

HOUSING | TRIM | MOUNT.

HOUSING

SERIES
6PS

LUMENS [1]
Single CCT or TW
L10 1,000lm
L15 1,500lm
L20 2,000lm
L30 3,000lm
L40 4,000lm
Single CCT only
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.***
ATH Airtight construction
CP Chicago plenum (CCEA) [3]
F Fuse kit
SDT Stepdown transformer [4]
(L__) Additional lower lumen packages available [5] Example: 3,500 lumens = 6PS-L40/835-**(L35)**

CONTROL
*Click **HERE** for control options.*
– None

DRIVER
*See page 5 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
L Flush lens

DISTRIBUTION [11]
W 85° Wide
M 35° Medium [12]
N 30° Narrow [13]

FLANGE TYPE
OF 1/2" standard flange
SF 1/4" mud-in flange [14]

REFLECTOR FINISH
CS Clear semi-specular powder coat
WH White texture powder coat
BL Black texture powder coat

TRIM OPTIONS
IP IP65 rated trim
AD Diffuse acrylic lens [15]
PD Diffuse 1/8" polycarbonate lens [16]
WET/CC Wet location, covered ceiling listed
AM Anti-microbial [17]

MOUNTING

MOUNTING TYPE [18]
N Open pan for new construction
I IC-rated enclosure for new construction [20]
R Remodel kit [21]

MOUNTING HARDWARE [19]
F1 Integral 2-position fixed pan bracket, universal bar hanger included [22]
F1S New construction mounting pan shipped ahead, integral 2-position fixed bracket, universal bar hangers included [23]
BA1 Adjustable butterfly pan bracket, bar hanger not included [24]
CA1 Adjustable caterpillar pan bracket, universal bar hanger included [25]

NOTES

1 Lumen output based on L Trim Type, W Distribution and WH 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 May be required for 347V, see product builder at hew.com/product-builder
5 Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
6 0.1% Driver with tunable white.
7 Not available with tunable white.
8 L50 lumen package max. Not available with tunable white.
9 Not available with Tunable White, EM batteries, or DMX Drivers.
10 Trim ships separately.
11 Beam angle based on WH Reflector Finish.
12 L40 lumen package max.
13 L40 lumen package max.
14 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 or IP Options.
15 W Distribution only.
16 W Distribution only.
17 WH and BL Reflector Finishes only.
18 Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
19 Additional mounting hardware options available. See page 4 for MOUNTING HARDWARE DETAILS.
20 L30 lumen package max. Not available with EM batteries.
21 Also used in new construction sheetrock ceilings. Pan-less installation.
22 N and I Mounting Types only. I Mounting requires external brackets.
23 N Mounting Type only.
24 N Mounting Type only.
25 N Mounting Type only.

6PS LED
6" Shallow Plenum Downlight – Square

FEATURES

- Slim 5" depth for minimal plenum space applications
- Beam angles ranging from 30° narrow to 85° wide for tailored performance
- Square shape accentuates architectural styles
- Spring clip retention system eliminates trim sag
- Die-cast trim with flush lens provides glare-free illumination for a soft ceiling appearance
- Industry-leading efficacies as high as 125 lm/W
- 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
- IP65-rated die-cast trim includes easy-to-clean flush lens
- Wide range of lumen options for general illumination
- Wireless in-fixture control solutions available
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING – Formed steel housing with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Mounting clips allow for ceiling thickness from 1/2" – 1-1/2" (consult factory for additional ceiling thicknesses).
- 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.
  - 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

	DISTRIBUTION	WATTAGE	DELIVERED LUMENS	EFFICACY (lm/W)
L10	W	9.5	1056	111
	M	9.5	1004	106
	N	9.5	1027	108
L15	W	13.6	1522	112
	M	13.6	1447	106
	N	13.6	1481	109
L20	W	17.6	2034	116
	M	17.6	1934	110
	N	17.6	1979	112
L30	W	24.1	3017	125
	M	24.1	2863	119
	N	24.1	2848	118
L40	W	33.9	4045	119
	M	33.9	3839	113
	N	33.9	3818	113
L50	W	42.3	5026	119
	M	–	–	–
	N	–	–	–
L60	W	51.6	6079	118
	M	–	–	–
	N	–	–	–
L70	W	62.0	7044	114
	M	–	–	–
	N	–	–	–

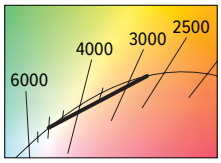
MULTIPLIER TABLES

	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	0.93	–
	3000K	0.95	–
	3500K	0.96	–
	4000K	0.97	–
	5000K	0.94	–

TRIM OPTIONS	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

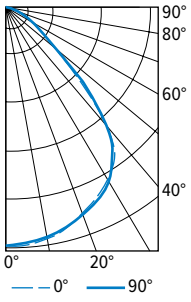
- Photometrics tested in accordance with IESNA LM-79. Results based on L trim type, W distribution and WH Reflector Finish, 80 CRI, 3500K for single CCT and 4000K for tunable white, wattage for 120V input, and 25°C ambient temperature. Actual performance may vary +/-5%.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier tables to calculate additional options.

TUNABLE WHITE



PHOTOMETRY

6PS-L10/835-DIM-UNV-LW-OF-WH Total Luminaire Output: 1056 lumens; 9.5 Watts | Efficacy: 111 lm/W | 80 CRI; 3500K CCT



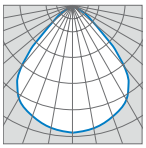
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE 0°	45°	90°	ZONAL LUMENS
	0	523	523	523	
	5	523	520	518	49
	15	504	500	502	142
	25	469	464	468	215
	35	416	415	406	255
	45	248	313	246	211
	55	94	147	90	107
	65	45	54	45	50
	75	20	21	20	22
	85	4	4	4	5
	90	0	0	0	

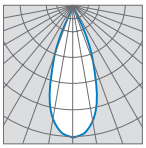
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	406	38
	0 - 40	661	63
	0 - 60	979	93
	0 - 90	1056	100
	0 - 180	1056	100

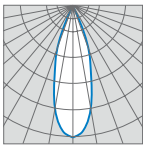
PHOTOMETRY CONTINUED ON NEXT PAGE.

6PS LED
6" Shallow Plenum Downlight – Square

FLUSH (L)


85° Wide


35° Medium


30° 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 [1]	**–** Standard [2] **/RTS** Regressed test switch [3] **/IPRTS** IP65 rated regressed test switch [4]

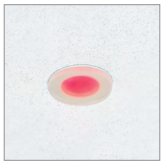
Additional limitations apply, see page 1. Specify CEC in the option code when California Energy Commission regulations are required. Max remote distance is 50', connection by others.

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 Options.

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

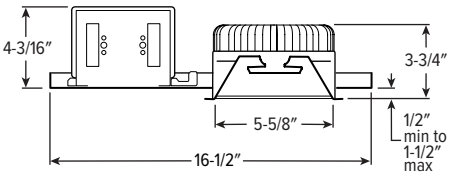
Adaptor (goof ring) corrects ceiling cutout errors during remodel downlight installation.

Additional finishes available, consult factory.

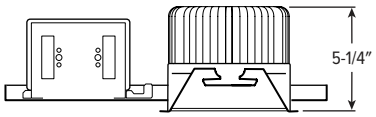
For limitations and instructions, see hew.com/aperture-adaptor.pdf

CROSS SECTIONS

L10 – L30 LUMENS

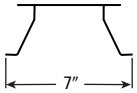


L40 – L70 LUMENS



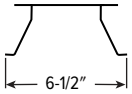
FLANGE TYPE DETAILS

1/2" STANDARD



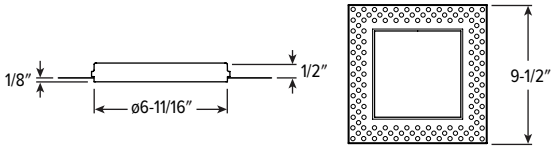
Ceiling Cutout: 6-1/2"

1/4" MUD-IN



Ceiling cutout: 7"

MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)



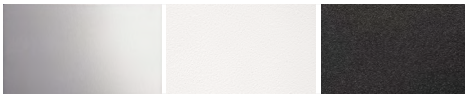
6PS LED
6" Shallow Plenum Downlight – Square

REFLECTOR FINISH DETAILS

CS Clear semi-specular

WH White

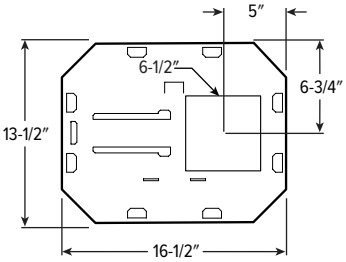
BL Black



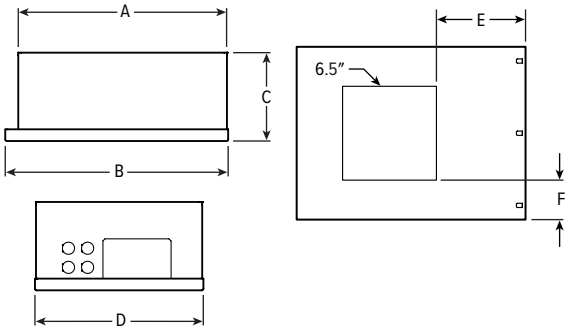
MOUNTING TYPE DETAILS

Flex conduit is recommended for installation.

NEW CONSTRUCTION



IC-RATED



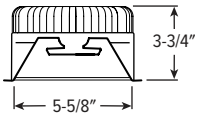
	LENGTH					
LUMENS	A	B	C	D	E	F
L10 - L20	15-3/16″	16″	4-1/2″	12-1/8″	6-1/4″	2-13/16″
L30			6-3/8″			

REMODEL

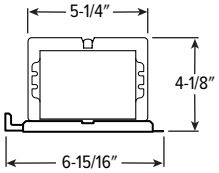
H.E. Williams Inc. strongly recommends installing a trial fixture to confirm fitment on-site prior to ordering full project quantities.

CROSS SECTION

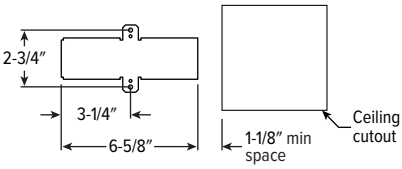
L10 – L30 lumens shown



DRIVER & JUNCTION BOX

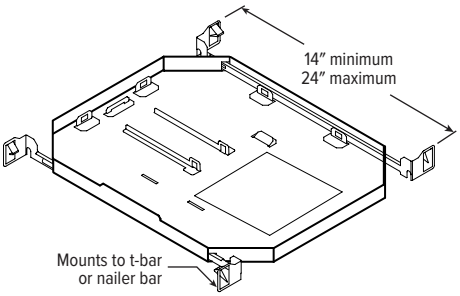


RECEIVER BRACKET

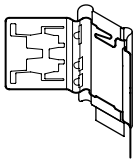


MOUNTING HARDWARE DETAILS

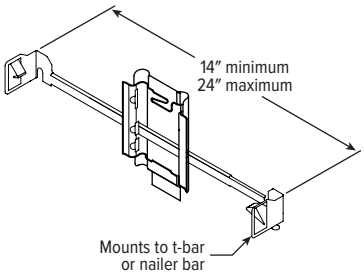
F1 Integral 2-position fixed pan bracket, universal bar hanger included



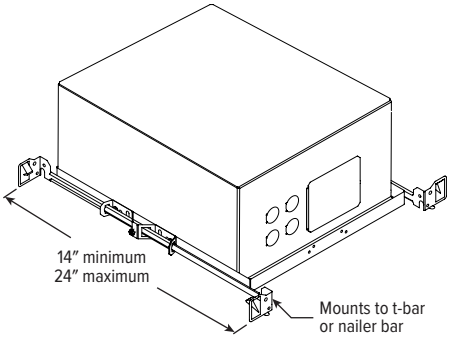
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



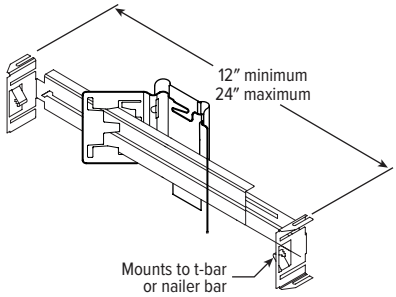
CA1 Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)



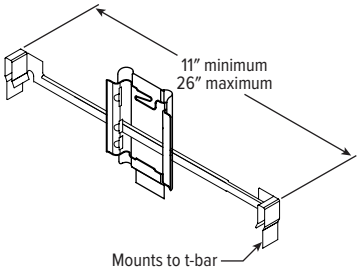
F1 with I Mounting Type



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)



ADDITIONAL DRIVER OPTIONS

Lumen restrictions apply: L30 max for DMX driver, L30 max for Lutron drivers, L50 max for DIM LINE driver. L15 min for LDE1 driver. I Mounting Type not available with Lutron driver. 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

DIM

DALI

DMX

LD2