4DR LED
4.5" Downlight – Round

Williams®

L10 - L40: 5-3/4"
L50 - L60: 6-1/2"

ø4-1/2"

1/2" min
2-1/4" max

15"

CATALOG #: _____

TYPE: _____

PROJECT: _____

NEW CONSTRUCTION AND REMODEL

BUY AMERICAN ACT COMPLIANT · ENERGY STAR · CCEA Approved · IP65 Rated · JA8 Compliant · TITLE 24 · WET/CC · bios ILLUMINATED

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

———— HOUSING ———— | ———— TRIM ———— | MOUNT.

HOUSING

SERIES	LUMENS [1]	CRI	CCT	OPTIONS	CONTROL	DRIVER	VOLTAGE
4DR - TL TrimLock	**L10** 1,000lm [2] **L15** 1,500lm **L20** 2,000lm **L30** 3,000lm **L40** 4,000lm **L50** 5,000lm **L60** 6,000lm	**8** 80 **9** 90 [3]	**27** 2700K **30** 3000K **35** 3500K **40** 4000K **50** 5000K	*See page 3 for EMERGENCY BATTERY OPTIONS.* **SCA_ _** Sloped ceiling adapter [4] **ATH** Airtight construction **F** Fuse **CP** Chicago plenum (CCEA) [5] **SDT** Stepdown transformer [6]	*See page 6 for ADDITIONAL CONTROL/DRIVER OPTIONS.* **–** None **AVI-LVFA** Avi-on wireless fixture control [7] **AWNR** Lutron Athena wireless node integral fixture control, RF only [8]	*See page 6 for ADDITIONAL CONTROL/DRIVER OPTIONS.* **DIM** Dimming driver, 0-10V **DIM1** 1% Dimming driver, 0-10V **DA** Driver with 12V auxiliary power, without external dimming wires [9]	**UNV** 120-277V **347** 347V [10]

TRIM [11]

TRIM TYPE	DISTRIBUTION [12]	FLANGE TYPE	REFLECTOR FINISH		TRIM OPTIONS
O Open reflector **L** Flush lens **R** Regressed lens **A** Angled lens [13] **S** Non-conductive flush lens for shower applications [14]	**W** Wide 65° Open 50° Flush 50° Regressed **M** Medium [15] 45° Open 35° Flush 30° Regressed **N** Narrow [16] 10° Open 25° Flush 25° Regressed **WW** Wall wash [17]	**OF** 1/2" standard flange **SF** 1/4" mud-in flange [18]	**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 **MB** Black texture splay with white flange [19]	**MWT** Textured white trim flange [20] **IP** IP65 rated trim [21] **AD** Diffuse acrylic lens [22] **PD** Diffuse 1/8" polycarbonate lens [23] **TD** Diffuse polycarbonate lens media at top of open reflector [24] **WET/CC** Wet location, covered ceiling listed [25] **AM** Anti-microbial [26]

MOUNTING

MOUNTING TYPE [27]	MOUNTING HARDWARE [28]
N Open pan for new construction **I** IC-rated enclosure for new construction [29] **R** Remodel kit [30]	**F1** Integral 2-position fixed pan bracket, universal bar hanger included [31] **BA1** Adjustable butterfly pan bracket, bar hanger not included [32] **CA1** Adjustable caterpillar pan bracket, universal bar hanger included [33]

NOTES

[1] Lumen output based on O trim type, W distribution, CS finish, 80 CRI/3500K CCT. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
[2] Not available with EM/10W emergency batteries.
[3] Extended lead times may apply. Consult factory for availability.
[4] 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.
[5] I Mounting Type required.
[6] May be required for 347V, see product builder at hew.com/product-builder.
[7] DA Driver only. See page 6 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS.
[8] DA Driver only.
[9] Avi-on and Lutron Athena Controls only.
[10] Not available with EM batteries, DA, or DMX drivers.
[11] Trim ships separately.
[12] Beam angle based on CS or WH reflector finish.

[13] Available with WW Distribution only.
[14] W Distribution, OF Flange Type, WH Reflector Finish only. Standard with AD diffuse acrylic lens. IP and WET/CC options standard.
[15] Not available with lumen stops L50 and higher when specified with flush or regressed trim types.
[16] Not available with lumen stops L50 and higher when specified with flush or regressed 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 or IP options.
[19] R Trim Type only. Not available with MWT.
[20] Not available with WH Reflector Finish, L or S Trim Types.
[21] L and R Trim Types only.
[22] Not available with O trim type. W and WW distributions only.
[23] Not available with O trim type. W and WW distributions only.
[24] O Trim Type only. WET/CC standard unless ordered with EM/RTS. L50 lumen package max.

[25] L50 lumen package max with O Trim Type. Not available with PD trim option.
[26] WH and BL Reflector Finishes only. Not available with S Trim Type.
[27] Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 5 for MOUNTING TYPE DETAILS.
[28] Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
[29] L20 lumen package max. L30 available, wide distribution only for lensed trims. Not available with EM batteries or Lutron Athena Controls.
[30] Also used in new construction sheetrock ceilings. Pan-less installation.
[31] N and I Mounting Types only. I Mounting requires external brackets.
[32] N Mounting Type only.
[33] N Mounting Type only.

4DR LED
4.5" Downlight – Round

FEATURES

TrimLock®

- Innovative TrimLock reflector retention system ensures trim remains flush with ceiling plane
- Beam angles ranging from 10º narrow to 65º wide for tailored performance
- Die-cast trim choices include flush, regressed or angled lens
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Fully room-side accessible
- Industry-leading efficacies as high as 114 lm/W – ENERGY STAR® certified
- 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
- Available on QuickShip
- Wireless in-fixture control solutions available

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. Minimum 24" O.C. marked spacing required for L50 and L60 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 or TD options.
  - ENERGY STAR® certified in select configurations, see www.energystar.gov
  - 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.
  - Title 24 (JA8) compliant in select configurations, see www.cacertappliances.energy.ca.gov.
  - Complies with the Buy American Act and other federal regulations. Request certification at hew.com/baa.
- WARRANTY – 5-year limited warranty, see hew.com/warranty.

FIXTURE PERFORMANCE DATA

	DISTRIBUTION	WATTAGE	OPEN REFLECTOR TRIM TYPE		FLUSH LENS TRIM TYPE		REGRESSED LENS TRIM TYPE	
			DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)
L10	W	9.0	1027	114	674	75	660	73
	M	9.0	999	111	895	99	895	99
	N	9.0	1000	111	914	102	882	98
L15	W	13.9	1466	106	994	72	972	70
	M	13.9	1471	106	1319	95	1319	95
	N	13.9	1473	106	1347	97	1300	94
L20	W	19.8	2005	101	1352	68	1323	67
	M	19.8	2002	101	1794	91	1795	91
	N	19.8	2004	101	1833	93	1769	89
L30	W	27.8	2985	107	2022	73	1979	71
	M	27.8	2900	104	2683	97	2685	97
	N	27.8	2734	98	2741	99	2646	95
L40	W	38.0	3979	105	2695	71	2638	69
	M	38.0	3865	102	3577	94	3579	94
	N	38.0	3644	96	3654	96	3527	93
L50	W	45.2	5124	113	3364	74	3292	73
	M	45.2	4956	110	–	–	–	–
	N	45.1	4818	107	–	–	–	–
L60	W	57.6	6035	105	4016	70	3933	68
	M	57.6	6026	105	–	–	–	–
	N	57.6	6032	105	–	–	–	–

MULTIPLIER TABLES

COLOR TEMPERATURE		
	CCT	CONVERSION FACTOR
80 CRI	2700K	0.92
	3000K	0.98
	3500K	1.00
	4000K	1.01
	5000K	1.02
90 CRI	2700K	0.76
	3000K	0.79
	3500K	0.82
	4000K	0.84
	5000K	0.88

TRIM		
	CATALOG NUMBER	CONVERSION FACTOR
	S	0.85
	AD	0.85
	PD	0.85
	TD	0.75
	WET/CC [2]	0.85

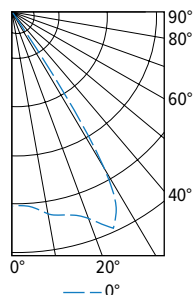| REFLECTOR FINISH		
	CATALOG NUMBER	CONVERSION FACTOR
O TRIM	CS	1.00
	SG [1]	0.92
	GD	0.93
	CG	0.96
	PW	0.86
	SPC	1.02
	RG	0.88
	WH [1]	0.89
	BL [1]	0.47
R TRIM	WH	1.00
	CS	0.98
	BL	0.79

- Photometrics tested in accordance with IESNA LM-79. Results based on O trim type, W distribution, CS finish, 80 CRI/3500K CCT, wattage for 120V input, and 25ºC 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.

[1] Distribution will also be affected, consult factory.
[2] Use multiplier when specified with O Trim Type.
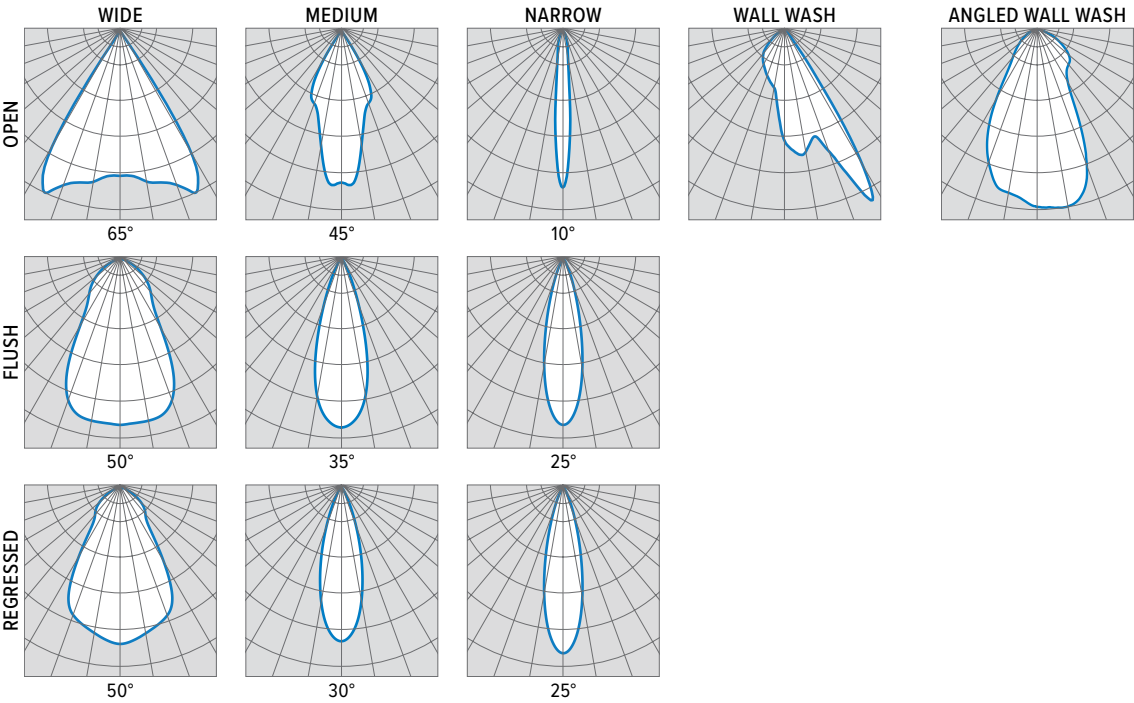
PHOTOMETRY

4DR-TL-L20/835-DIM-UNV-OW-OF-CS Report #: 20685; 12/13/18 | Total Luminaire Output: 2005 lumens; 19.8 Watts | Efficacy: 101.0 lm/W | 83.1 CRI; 3472K CCT

VERTICAL ANGLE	HORIZONTAL ANGLE 0º	ZONAL LUMENS
0	1810	
5	1864	178
15	1960	556
25	2231	1033
35	307	193
45	44	35
55	11	10
65	1	1
75	0	0
85	0	0
90	0	

ZONE	LUMENS	% FIXTURE
0 - 40	1959	98
0 - 60	2004	100
0 - 90	2005	100
0-180	2005	100

H.E. Williams, Inc. ▪ Carthage, Missouri ▪ www.hew.com ▪ 417-358-4065 ▪ Designed and Manufactured in the USA
Information contained herein is subject to change without notice. REV.11/14/23.LA

Downlights
Page 2 of 6

4DR LED
4.5″ Downlight – Round

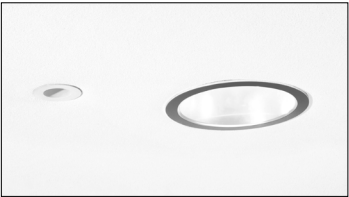|	WIDE	MEDIUM	NARROW	WALL WASH	ANGLED WALL WASH
OPEN	65°	45°	10°		
FLUSH	50°	35°	25°		
REGRESSED	50°	30°	25°		

EMERGENCY BATTERY OPTIONS

Additional limitations apply, see page 1. Specify CEC in the option code when California Energy Commission regulations are required.

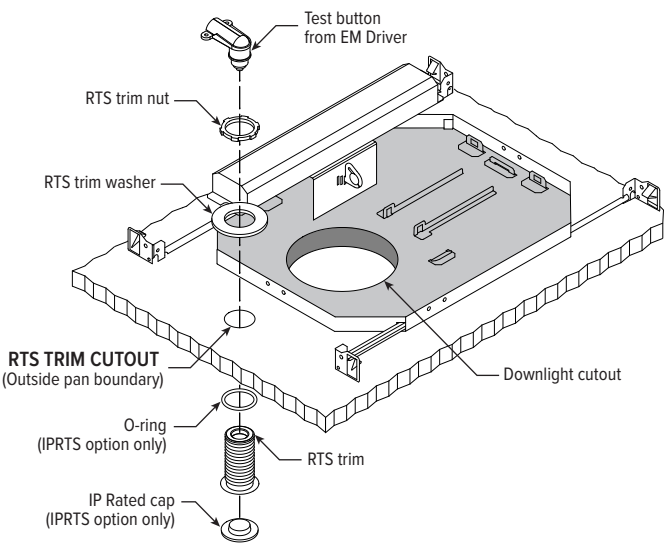| CATALOG NUMBER	DESCRIPTION
EM/7W	7-watt emergency battery [1]
EM/7W/RTS	7-watt emergency battery with regressed test switch [2]
EM/7W/IPRTS	7-watt emergency battery with IP65 rated regressed test switch
EM/10W	10-watt emergency battery [1]
EM/10W/RTS	10-watt emergency battery with regressed test switch [2]
EM/10W/IPRTS	10-watt emergency battery with IP65 rated regressed test switch

[1] Not available with S Trim Type or IP Option.
[2] Not available with S Trim Type, IP or WET/CC Options.
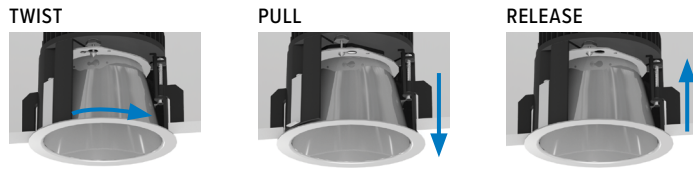
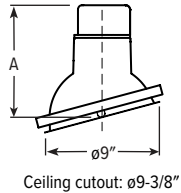## REGRESSED TEST SWITCH DETAILS

Shown Installed

Test button from EM Driver

RTS trim nut

RTS trim washer

RTS TRIM CUTOUT
(Outside pan boundary)

O-ring
(IPRTS option only)

IP Rated cap
(IPRTS option only)

RTS trim

Downlight cutout

H.E. Williams, Inc. ▪ Carthage, Missouri ▪ www.hew.com ▪ 417-358-4065 ▪ Designed and Manufactured in the USA
Information contained herein is subject to change without notice.   REV.11/14/23.LA

Downlights
Page 3 of 6

4DR LED
4.5″ Downlight – Round

TRIMLOCK DETAILS

TWIST

PULL

RELEASE

SLOPED CEILING ADAPTOR DETAILS

LUMENS	A (HEIGHT)						PLENUM HEIGHT
	5°	10°	15°	20°	25°	30°	
L10 - L30	8-13/16″	8-15/16″	9″	8-15/16″	8-7/8″	8-11/16″	9-1/4″
L40 - L60	9-9/16″	9-11/16″	9-11/16″	9-5/8″	9-1/2″	9-5/16″	10″

15° Shown

ø9″

Ceiling cutout: ø9-3/8″

APERTURE ADAPTOR ORDERING INFO

ORDERING EXAMPLE: 4DR - GR - 0575 - WHT			
SERIES	CATALOG NUMBER	CEILING CUTOUT	FINISH
4AR 6AR 4DR 6DR 4DS 6DS 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

For use with remodel downlights. Additional finishes available, consult factory.
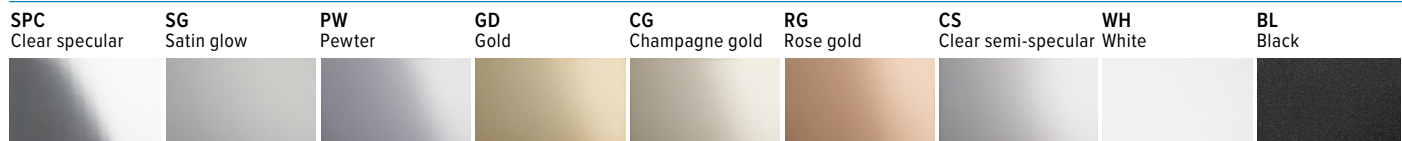For limitations and instructions, see hew.com/aperture-adaptor.pdf

TRIM TYPE DETAILS

OPEN
ø4-1/2″
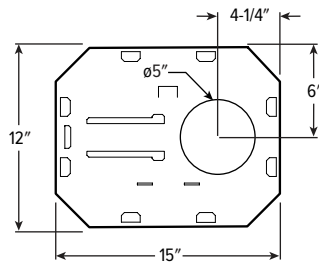
OPEN (WALL WASH)
ø4-1/2″

FLUSH
ø4-1/4″ · 1/8″

SHOWER
ø4-1/4″ · 1/8″

ANGLED
ø4-1/4″ · 1/8″

REGRESSED
1-1/4″ · ø4-3/8″ · 1/8″

FLANGE TYPE DETAILS

1/2″ STANDARD
ø5-1/2″
Ceiling Cutout: ø5″

1/4″ MUD-IN
ø5″
Ceiling cutout: ø5-1/2″

MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)
1/8″ · ø5-3/16″ · 1/2″
ø8″
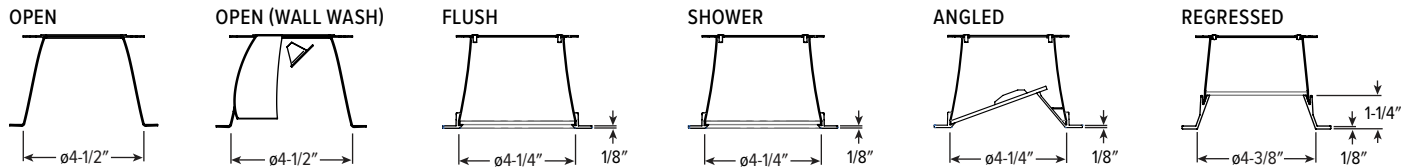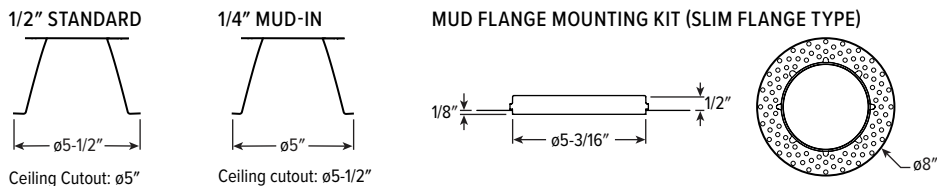
REFLECTOR FINISH DETAILS

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

H.E. Williams, Inc. ▪ Carthage, Missouri ▪ www.hew.com ▪ 417-358-4065 ▪ Designed and Manufactured in the USA
Information contained herein is subject to change without notice.　REV.11/14/23.LA

Downlights
Page 4 of 6

4DR LED
4.5″ Downlight – Round

MOUNTING TYPE DETAILS

NEW CONSTRUCTION

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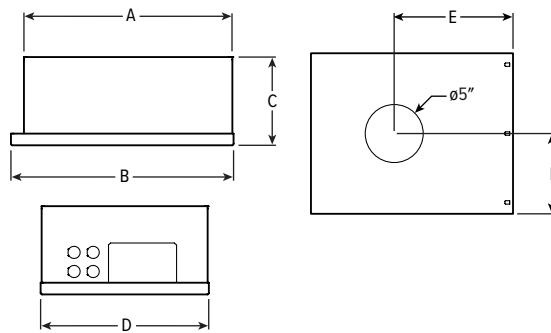
	LENGTH					
LUMENS	A	B	C	D	E	F
L10 - L20	15-3/16″	16″	6-3/8″	12-1/8″	9-1/2″	6-1/16″
L30	16-5/8″	17-1/2″	7-7/8″	14″	10-1/4″	7″

REMODEL

Cross Section

L10 - L40: 5-3/4″
L50 - L60: 6-1/2″

ø4-1/2″

Receiver Bracket
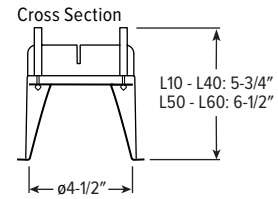
2-3/4″
3-1/4″
6-5/8″
1-1/8″ min space
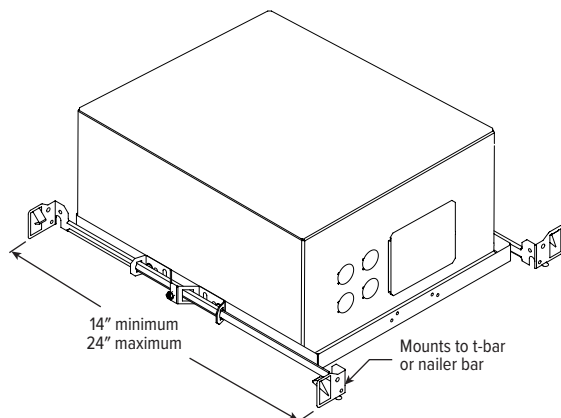Ceiling cutout
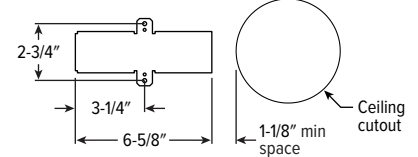
Driver and Junction Box

5-1/4″
4-1/8″
6-15/16″
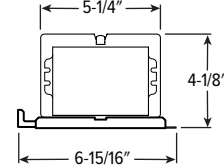
MOUNTING HARDWARE DETAILS

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

14″ minimum
24″ maximum

Mounts to t-bar or nailer bar

14″ minimum
24″ maximum
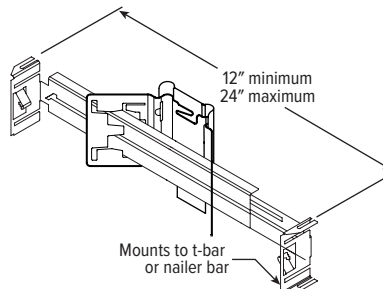
Mounts to t-bar or nailer bar
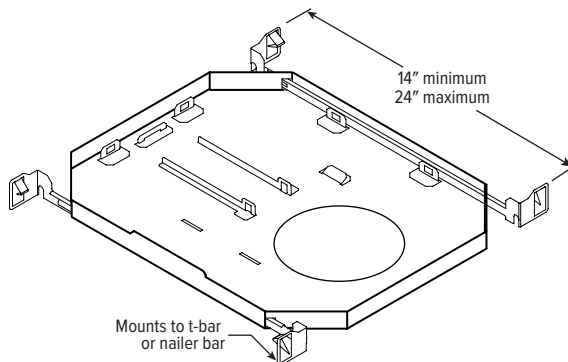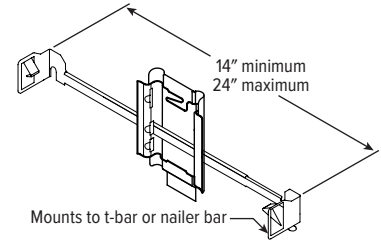
F1 with I Mounting Type

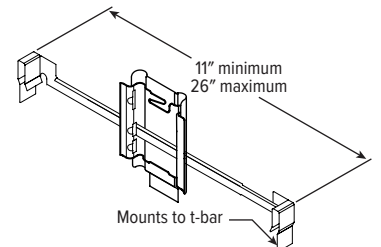**BA1** Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)
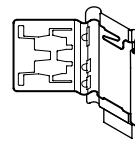
BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)

12″ minimum
24″ maximum

Mounts to t-bar or nailer bar

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

14″ minimum
24″ maximum

Mounts to t-bar or nailer bar

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

11″ minimum
26″ maximum

Mounts to t-bar

H.E. Williams, Inc. ▪ Carthage, Missouri ▪ www.hew.com ▪ 417-358-4065 ▪ Designed and Manufactured in the USA
Information contained herein is subject to change without notice. REV.11/14/23.LA

Downlights
Page 5 of 6

4DR LED
4.5″ Downlight – Round

AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS

FEATURES

Simple

- Gateway-free distributed control
- Factory pre-commissioning
- Contractor friendly installation
- Occupancy/vacancy/daylight sensing

Scalable

- Virtually unlimited network size
- Spans small offices to large warehouses
- Flexible control strategies

Secure

- Optional cloud connectivity
- UL IoT platinum security rating
- DLC 5.0 compliant

COMMISSIONING & INSTALLATION TOOLS

Avi-on mobile apps provide intuitive, quick installation and commissioning. Pro tools are available to qualified installers. Live commissioning training and on-site or remote support by Avi-on must be ordered separately through Avi-on.
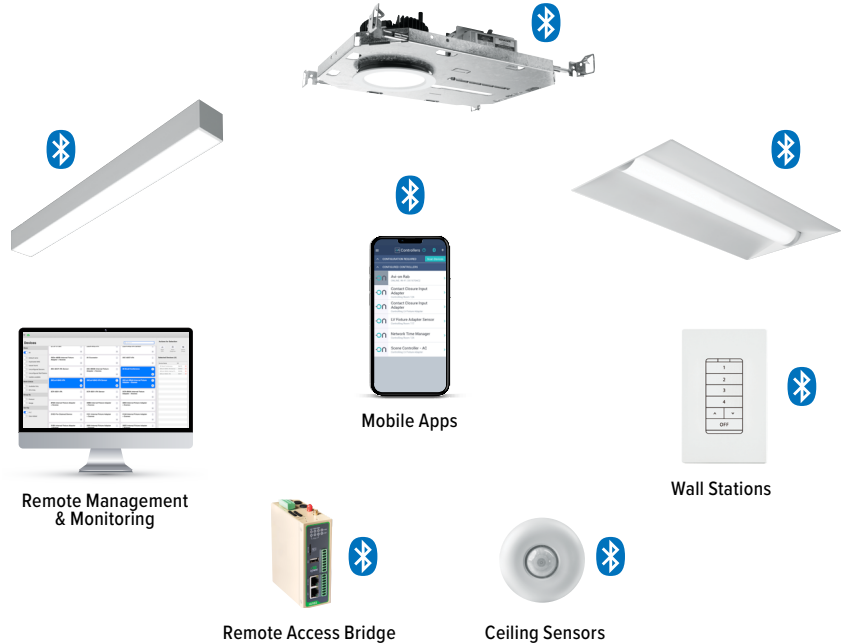

Commissioning Mobile App

Zone Scanner Web App

Commissioning Pro App

SYSTEM COMPONENTS

Mobile Apps

Remote Management & Monitoring

Wall Stations

Remote Access Bridge

Ceiling Sensors

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Avi-on is under license. Other trademarks and trade names are those of their respective owners.

ACCESSORIES

WALL STATIONS	
AVI-2401AC	Scene controller - numbered 1-4, 120-277VAC
AVI-2402BAT	Scene controller - numbered 1-4, battery powered
AVI-2401AC-2	Dimmer with presets - percentages, 120-277VAC
AVI-2402BAT-2	Dimmer with presets - percentages, battery powered
AVI-2401AC-3	On/off/dimming, 120-277VAC
AVI-2402BAT-3	On/off/dimming, battery powered

NETWORK	
AVI-RAB-LTE	Remote access bridge
AVI-KIT-NTM	Network time manager with battery backup

CEILING MOUNT SENSORS	
AVI-KIT-SEN-DUCM	PIR motion and ultrasonic sensor kit
AVI-KIT-SEN-ICM	PIR motion and photocell sensor kit

For load controllers and additional accessory info, see hew.com/avi-on

ADDITIONAL CONTROL/DRIVER OPTIONS

Lumen restrictions apply: L40 max for DMX driver, L40 max for Lutron drivers, L50 max for DALI driver, L15 min to L60 max for DIM LINE driver. R mounting type requires top access with DMX controls. R Mounting Type not available with FCJS controls. R Mounting Type requires 12″ minimum plenum depth when specified with VRF/DBI controls. 347V may require stepdown transformer, see product builder at hew.com/product-builder. I Mounting Type not available with Lutron controls.

CATALOG NUMBER	DESCRIPTION
AVI-LVFA/DA	Avi-on wireless fixture control for use with driver with 12V auxiliary power
AWNR/DA	Lutron Athena wireless node integral fixture control, RF only, for use with driver with 12V auxiliary power
VRF/DBI/LDE1	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and digital link interface, with Lutron Hi-lume 1% EcoSystem dimming LED driver
FCJS/DIM	Lutron Vive PowPak wireless fixture control with dimming driver
FCJS/DIM1	Lutron Vive PowPak wireless fixture control with 1% dimming driver
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible at 120V only)
DALI	DALI dimming driver
DMX	0.1% dimming driver for DMX controls
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver

H.E. Williams, Inc. ▪ Carthage, Missouri ▪ www.hew.com ▪ 417-358-4065 ▪ Designed and Manufactured in the USA
Information contained herein is subject to change without notice.
REV.11/14/23.LA
Downlights
Page 6 of 6