6AR LED
6" Adjustable Downlight – Round

Williams

CATALOG #: _____

L10 - L30: 5-1/4"
L40: 6-3/4"

ø6"

1/2" min
7/8" max

17-1/2"

TYPE: _____

PROJECT: _____

BUY AMERICAN ACT COMPLIANT

NEW CONSTRUCTION AND REMODEL

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

TRIM [11]

TRIM TYPE	DISTRIBUTION [12]	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
O Open reflector	**W** Wide	OF 1/2" standard flange	**Open trim types**	MWT Textured white trim flange [14]
L Flush lens	55° Open	SF 1/4" mud-in flange [13]	CS Clear semi-specular anodize	AD Diffuse acrylic lens [15]
A Angled lens	55° Flush		WH White texture powder coat	PD Diffuse 1/8" polycarbonate lens [16]
	50° Angled		BL Black texture powder coat	WET/CC Wet location, covered ceiling listed [17]
	M Medium		**Lens trim types**	AM Anti-microbial [18]
	35° Open		CS Clear semi-specular powder coat	
	35° Flush		WH White texture powder coat	
	35° Angled		BL Black texture powder coat	
	N Narrow			
	25° Open			
	25° Flush			
	30° Angled			

MOUNTING

MOUNTING TYPE [19]

N Open pan for new construction
I IC-rated enclosure for new construction [21]
R Remodel kit [22]

MOUNTING HARDWARE [20]

F1 Factory-installed 2-position fixed pan bracket, universal bar hanger 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 O trim type, W distribution and CS finish, 3500K/80CRI. Actual lumens 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. I Mounting Type required.
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. 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 option.
14. Not available with WH Reflector Finish or L Trim Type.
15. L and A Trim Types only. W distribution only.
16. L and A Trim Types only. W distribution only.
17. L and A Trim Types only. Not available with PD trim option.
18. WH and BL Reflector Finishes only.
19. Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 5 for MOUNTING TYPE DETAILS.
20. Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
21. Not available with L40 lumen package. Not available with EM batteries.
22. Also used in new construction sheetrock ceilings. Pan-less installation.
23. N and I Mounting Types only. Universal bar hanger ships uninstalled. I Mounting requires external brackets.
24. N Mounting Type only.
25. N Mounting Type only.

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Downlights
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6AR LED
6" Adjustable Downlight – Round

FEATURES

- Adjustable aim with 0° - 45° tilt and 360° rotation
- Beam angles ranging from 25° narrow to 55° wide for tailored performance
- Spring clip retention system eliminates trim sag
- Etched degree markers and directional indicator make it simple to fine-tune the illumination angle
- Choice of open reflector or die-cast lensed trims to complement interior style
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Fully room-side accessible
- Wireless in-fixture control solutions available

SPECIFICATIONS

- HOUSING – Die-cast aluminum spun and stamped articulating mechanism with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Mounting clips allow for ceiling thickness from 1/2" - 7/8".
- 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. N and R mounting types for use in non-fire rated installations only. Minimum 24" O.C. marked spacing required for L30 and L40 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.
  - Complies with ASTM-E283 when specified with ATH option.
  - RoHS compliant.
  - 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

OPEN REFLECTOR TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	1020	10.5	97
L10	M	1023	10.5	97
L10	N	1022	10.5	97
L15	W	1537	15.1	102
L15	M	1542	15.1	102
L15	N	1541	15.1	102
L20	W	2039	21.0	97
L20	M	2045	21.0	97
L20	N	2044	21.0	97
L30	W	2917	31.3	93
L30	M	2915	31.3	93
L30	N	2790	31.3	89
L40	W	3889	42.0	93
L40	M	3886	42.0	93
L40	N	3720	42.0	89

FLUSH LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	896	10.5	85
L10	M	956	10.5	91
L10	N	951	10.5	91
L15	W	1350	15.1	89
L15	M	1442	15.1	96
L15	N	1433	15.1	95
L20	W	1791	21.0	85
L20	M	1912	21.0	91
L20	N	1901	21.0	91
L30	W	2559	31.3	82
L30	M	2717	31.3	87
L30	N	2609	31.3	83
L40	W	3411	42.0	81
L40	M	3622	42.0	86
L40	N	3478	42.0	83

ANGLED LENS TRIM TYPE

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	744	10.5	71
L10	M	889	10.5	85
L10	N	907	10.5	86
L15	W	1122	15.1	74
L15	M	1340	15.1	89
L15	N	1368	15.1	91
L20	W	1488	21.0	71
L20	M	1777	21.0	85
L20	N	1814	21.0	86
L30	W	2144	31.3	69
L30	M	2507	31.3	80
L30	N	2441	31.3	78
L40	W	2858	42.0	68
L40	M	3342	42.0	80
L40	N	3254	42.0	78

MULTIPLIER TABLES

COLOR TEMPERATURE

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

OPEN REFLECTOR FINISH

CATALOG NUMBER	CONVERSION FACTOR
CS	1.00
WH	0.89
BL	0.79

TRIM

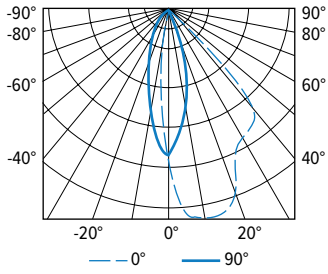| CATALOG NUMBER	CONVERSION FACTOR
AD [1]	0.85
PD [1]	0.85

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25ºC ambient temperature.
- Wattage shown is based on 120V input.
- Results based on 3500K, 80 CRI, 0° tilt, actual lumens may vary +/-5%
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy
- Use multiplier table to calculate additional options.

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Downlights
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6AR LED
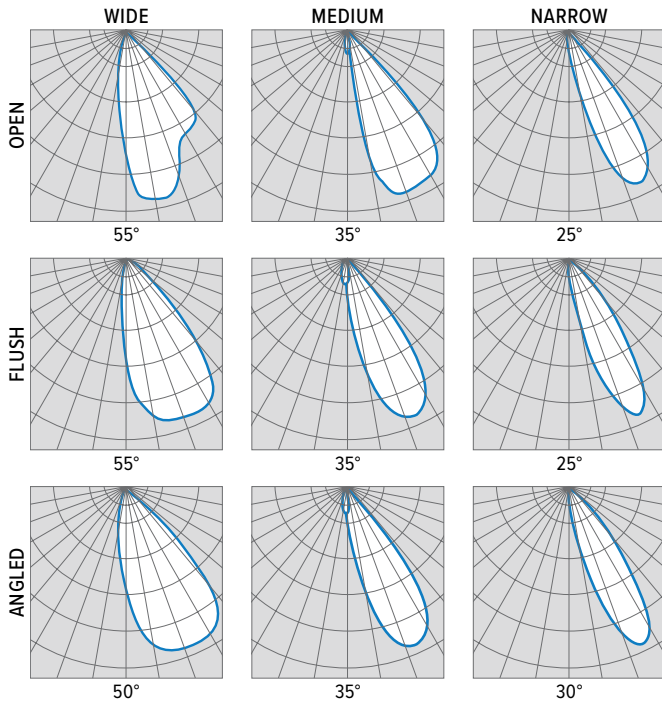## 6" Adjustable Downlight – Round

PHOTOMETRY

6AR-L20/835-DIM-UNV-OW-OF-CS (25° tilt) Report #: 20390; 05/16/18 | Total Luminaire Output: 1958 lumens; 21.2 Watts | Efficacy: 92.5 lm/W | 82.3 CRI; 3571K CCT
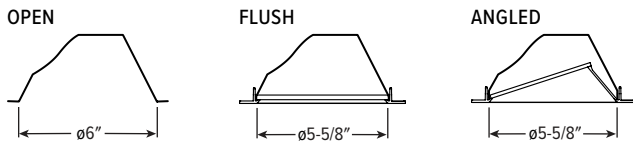
VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	2605	2605	2605	2605	2605	
5	3639	3208	2308	1607	1297	227
15	3810	2844	1321	442	310	469
25	2919	2543	541	122	92	548
35	2592	1908	109	26	20	499
45	1695	212	11	6	6	212
55	20	2	0	0	2	3
65	0	0	0	0	0	0
75	0	0	0	0	0	0
85	0	0	0	0	0	0
90	0	0	0	0	0	

CANDLEPOWER DISTRIBUTION

ZONE	LUMENS	% FIXTURE
0 - 30	1244	64
0 - 40	1743	89
0 - 60	1958	100
0 - 90	1958	100
0 - 180	1958	100

LUMEN SUMMARY

— 0°   — 90°

WIDE — OPEN 55°
MEDIUM — OPEN 35°
NARROW — OPEN 25°

FLUSH 55°
FLUSH 35°
FLUSH 25°

ANGLED 50°
ANGLED 35°
ANGLED 30°

TRIM TYPE DETAILS

OPEN — ø6"
FLUSH — ø5-5/8"
ANGLED — ø5-5/8"

FLANGE TYPE DETAILS

1/2" STANDARD — ø7"
Ceiling Cutout: ø6-1/2"

1/4" MUD-IN — ø6-3/8"
Ceiling cutout: ø6-3/4"

MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)
1/8"   1/2"   ø6-9/16"   ø9-1/2"

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Downlights
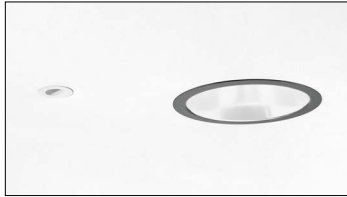Page 3 of 6

6AR LED
6″ Adjustable Downlight – Round

EMERGENCY BATTERY OPTIONS

Additional limitations apply, see page 1. Specify CEC in the option code when California Energy Commission regulations are required.
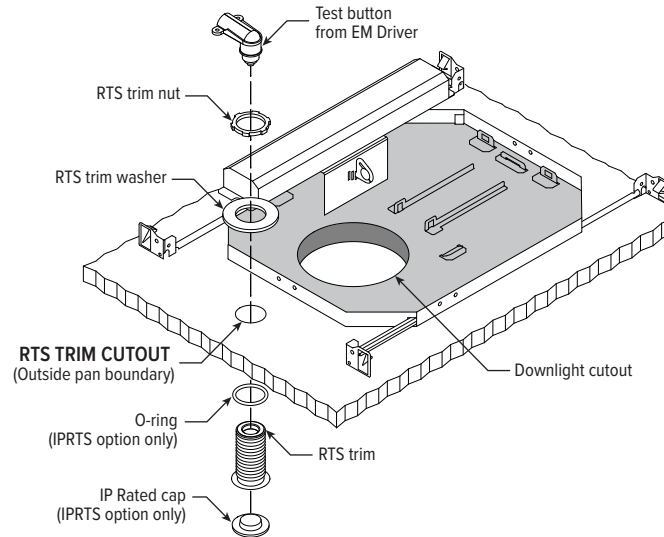
CATALOG NUMBER	DESCRIPTION
EM/7W	7-watt emergency battery
EM/7W/RTS	7-watt emergency battery with regressed test switch [1]
EM/7W/IPRTS	7-watt emergency battery with IP65 rated regressed test switch
EM/10W	10-watt emergency battery
EM/10W/RTS	10-watt emergency battery with regressed test switch [1]
EM/10W/IPRTS	10-watt emergency battery with IP65 rated regressed test switch

1 Not available with WET/CC Option.

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

REFLECTOR FINISH DETAILS

CS
Clear semi-specular

**WH**
White

BL
Black
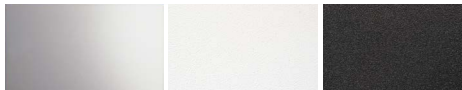
APERTURE ADAPTOR ORDERING INFO

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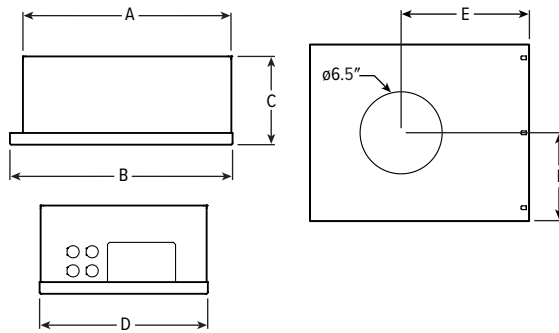For limitations and instructions, see hew.com/aperture-adaptor.pdf

6AR LED
6″ Adjustable Downlight – Round
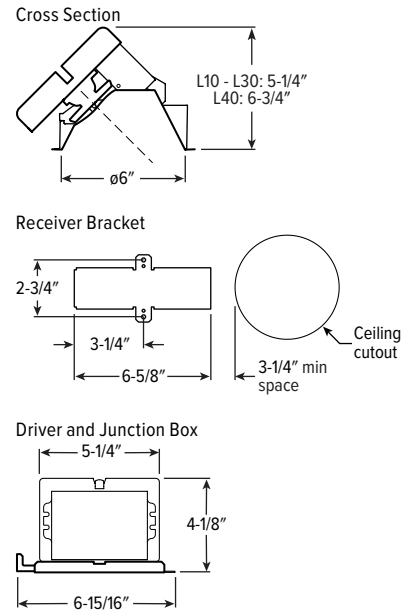
MOUNTING TYPE DETAILS

NEW CONSTRUCTION
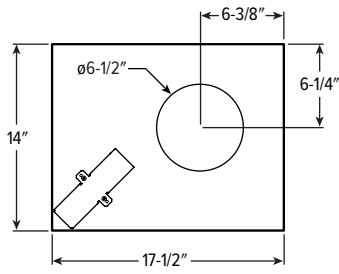
IC-RATED

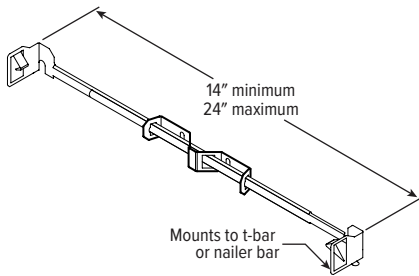|	LENGTH					
LUMENS	A	B	C	D	E	F
L10 - L20	15-3/16″	16″	6-3/8″	12-1/8″	9-1/2″	6-1/16″
L30	16-5/8″	17-1/2″	7-7/8″	14″	10-1/4″	7″

REMODEL

Cross Section

L10 - L30: 5-1/4″
L40: 6-3/4″

ø6″

Receiver Bracket

2-3/4″
3-1/4″
6-5/8″
3-1/4″ min space
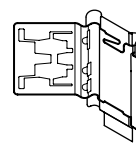Ceiling cutout

Driver and Junction Box

5-1/4″
4-1/8″
6-15/16″

MOUNTING HARDWARE DETAILS

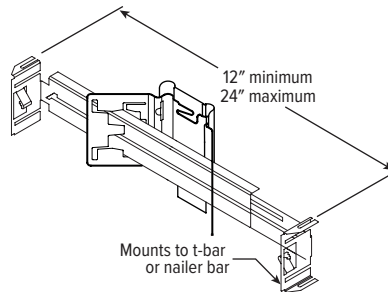**F1** Factory-installed 2-position fixed pan bracket, universal bar hanger included, ships uninstalled

14″ minimum
24″ maximum

Mounts to t-bar or nailer bar

14″ minimum
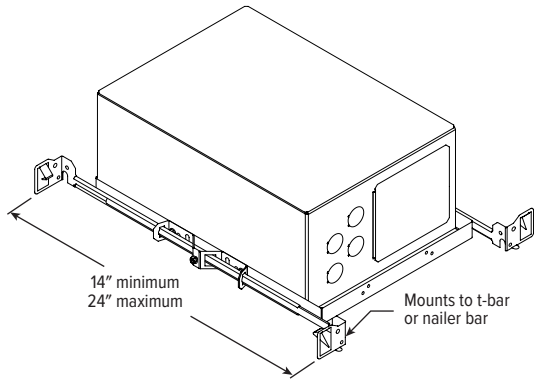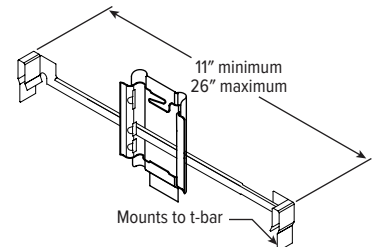24″ maximum

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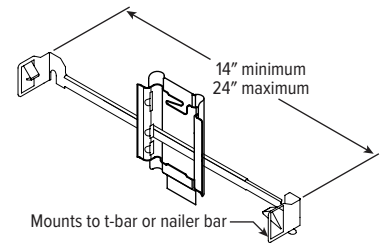
BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)

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

SEE NEXT PAGE FOR CONTROL DETAILS.

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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.
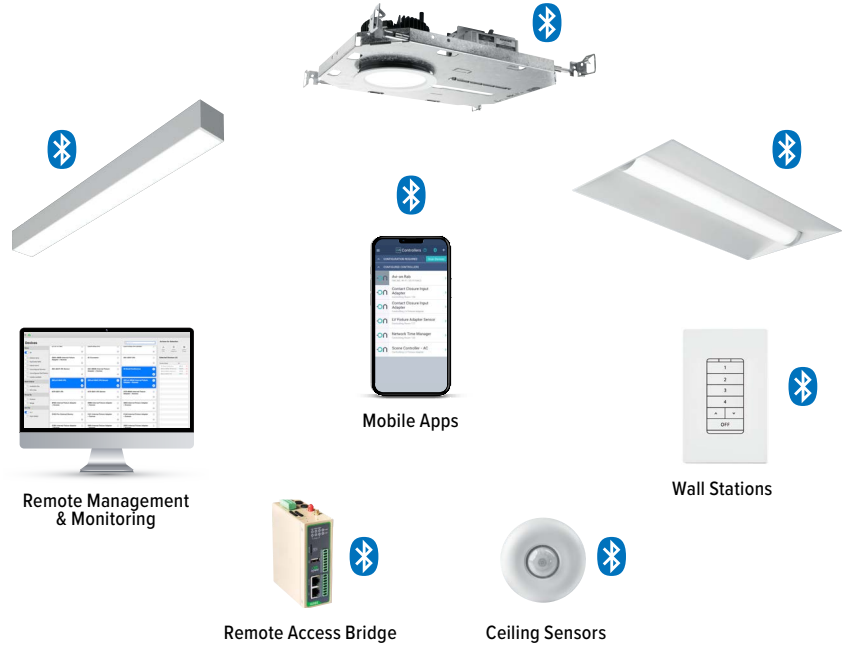
Commissioning Mobile App

Zone Scanner Web App

Commissioning Pro App

SYSTEM COMPONENTS

Mobile Apps

Wall Stations

Remote Management & Monitoring

Remote Access Bridge

Ceiling Sensors

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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 – LTE connection
AVI-2001RAB-01-C	Remote access bridge – Wifi connection
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: L30 max for DMX driver, L40 max for Lutron drivers, L40 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
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