



# 2AS<sup>LED</sup> 2" Adjustable Downlight – Square

## FEATURES

- Beam angles ranging from 15° narrow to 35° wide for tailored performance
- Adjustable aim with 0° - 45° tilt and 360° rotation
- 2" aperture is unobtrusive in small scale spaces
- Zero-flange trim options for modern ceiling
- Etched degree markers and directional indicator make it simple to fine-tune the illumination angle
- Die-cast trim choices include flush or regressed lens
- Square shape accentuates architectural styles
- New construction mounting pan, IC-rated, or pan-less remodel kit available
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- 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" – 13/16".
- **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 > 44,000 hours. Reported L90 = 28,000 hours. Estimated L70 = 117,000 hours.
- **MOUNTING** – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. N and R mounting types for use in non-fire rated installations only. Minimum 17" O.C. marked spacing required for L12 and L15 lumen packages when specified with R Mounting Type.

- **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](http://hew.com/baa).
- **WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

## FIXTURE PERFORMANCE DATA

	DISTRIBUTION	WATTAGE	FLUSH LENS TRIM TYPE		REGRESSED LENS TRIM TYPE	
			DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)
L5	W	8.2	503	61	480	59
	M	8.2	408	50	372	45
	N	8.2	463	57	449	55
L7	W	11.5	714	62	681	59
	M	11.5	578	50	527	46
	N	11.5	656	57	636	55
L9	W	14.5	885	61	845	58
	M	14.5	717	49	654	45
	N	14.5	814	56	789	54
L12	W	21.3	1179	55	1125	53
	M	21.3	955	45	871	41
	N	21.3	1084	51	1051	49
L15	W	27.9	1331	48	1270	46
	M	27.9	1078	39	983	35
	N	27.9	1224	44	1187	43

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

## 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

REFLECTOR FINISH	
CATALOG NUMBER	CONVERSION FACTOR
WH	1.00
CS	0.98
BL	0.79

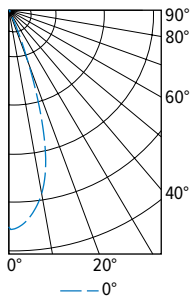
TRIM OPTIONS	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

## BEAM ANGLE

	TRIM TYPE	
	FLUSH	REGRESSED
W	35°	35°
M	20°	20°
N	15°	15°

## PHOTOMETRY

2AS-L12/835-DIM-UNV-LW-OF-WH 0° TILT Report #: 13257190; 03/19/20 | Total Luminaire Output: 1179 lumens; 21.3 Watts | Efficacy: 55.4 lm/W | 80 CRI; 3500K CCT

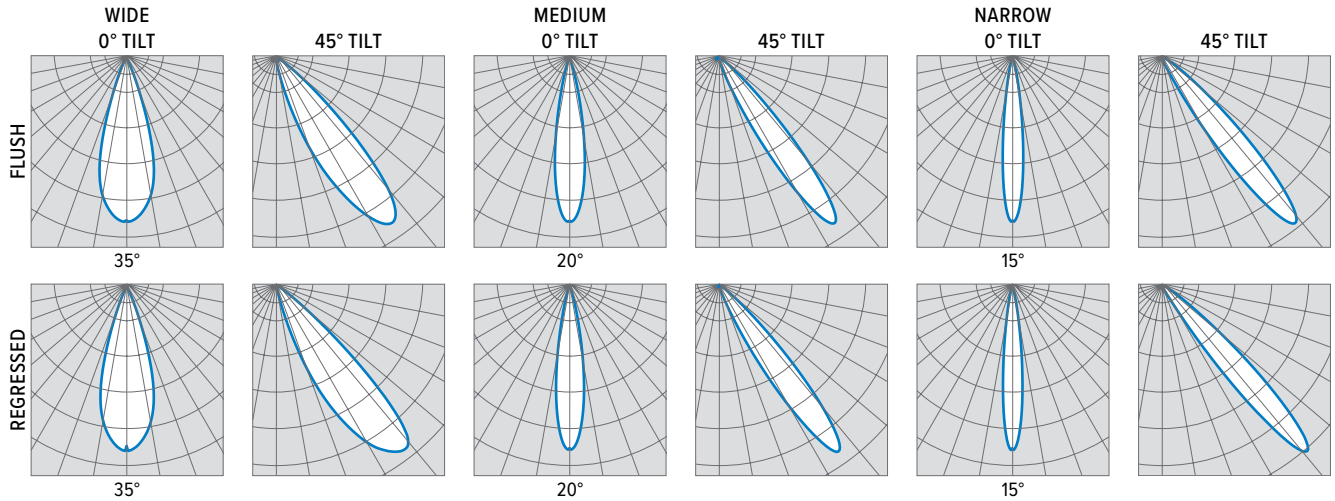


CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS
		0°	
	0	3527	
	5	3424	227
	15	2151	269
	25	179	47
	35	30	11
	45	24	10
	55	24	11
	65	20	9
	75	12	5
	85	3	1
	90	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1101	93
	0 - 60	1144	97
	0 - 90	1179	100
	0-180	1179	100



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## 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/5W	5-watt emergency battery
EM/7W	7-watt emergency battery
EM/7W/RTS	7-watt emergency battery with regressed test switch <sup>1</sup>
EM/7W/IPRTS	7-watt emergency battery with IP65 rated regressed test switch <sup>2</sup>
EM/10W	10-watt emergency battery <sup>3</sup>
EM/10W/RTS	10-watt emergency battery with regressed test switch <sup>4</sup>
EM/10W/IPRTS	10-watt emergency battery with IP65 rated regressed test switch <sup>5</sup>

- <sup>1</sup> Not available with WET/CC Option. N Mounting Type only. Top access required.
- <sup>2</sup> N Mounting Type only. Top access required.
- <sup>3</sup> Not available with L5 lumen package.
- <sup>4</sup> Not available with L5 lumen package or WET/CC Option. N Mounting Type only. Top access required.
- <sup>5</sup> Not available with L5 lumen package. N Mounting Type only. Top access required.

## REMODEL MOUNTING DETAILS

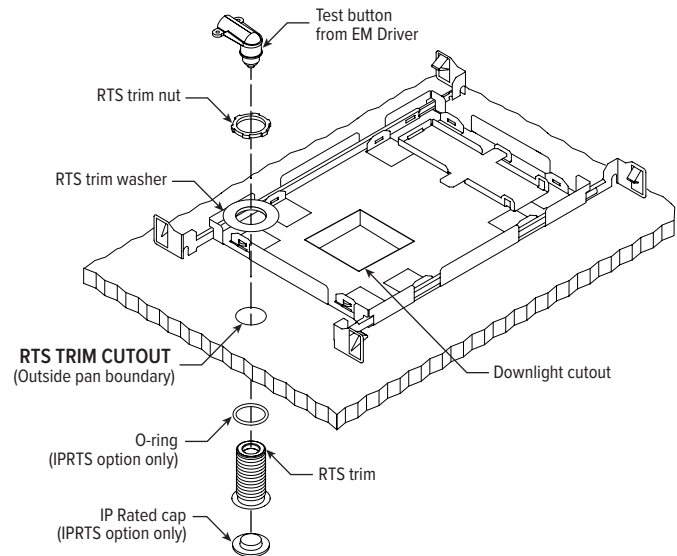
Additional plenum space required for R mounting when specified with EM battery.

PLENUM RESTRICTIONS	
CATALOG NUMBER	MINIMUM HEIGHT
EM/5W	7"
EM/7W	9"
EM/10W	11"

## REGRESSED TEST SWITCH DETAILS



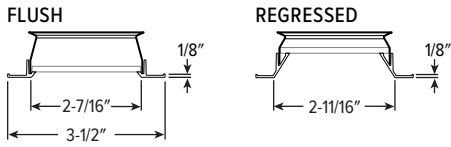
Shown Installed



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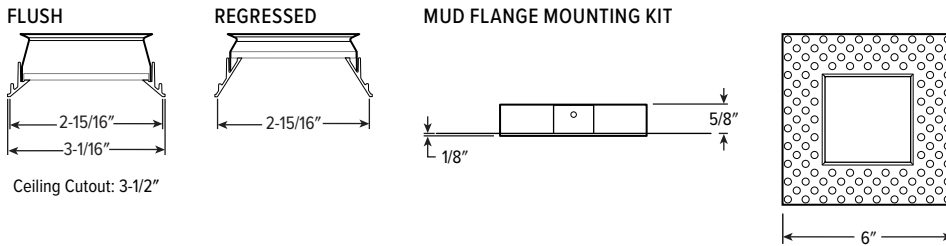
## TRIM TYPE DETAILS

### 1/2" STANDARD FLANGE TYPE



Ceiling Cutout: 3"

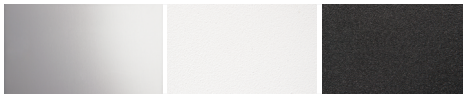
### ZERO-FLANGE MUD-IN



Ceiling Cutout: 3-1/2"

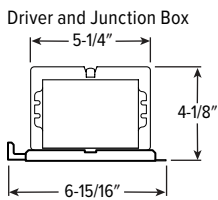
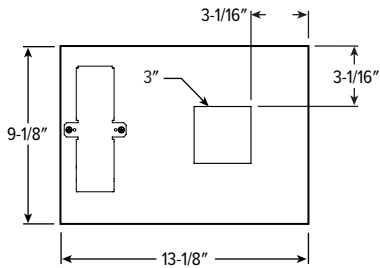
## REFLECTOR FINISH DETAILS

**CS** Clear semi-specular  
**WH** White  
**BL** Black

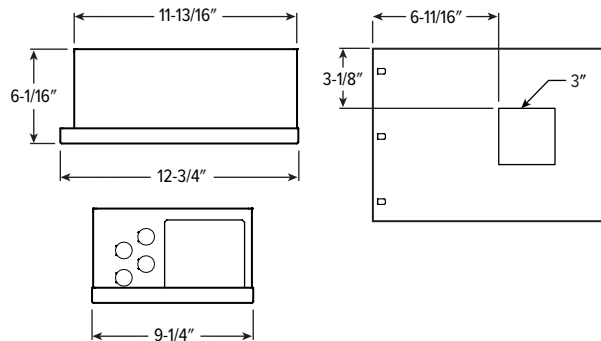


## MOUNTING TYPE DETAILS

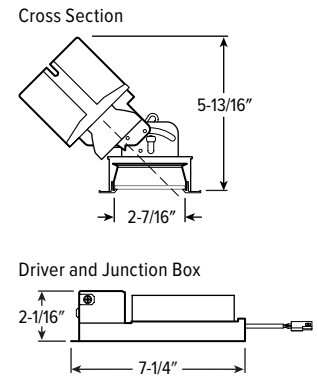
### NEW CONSTRUCTION



### IC-RATED



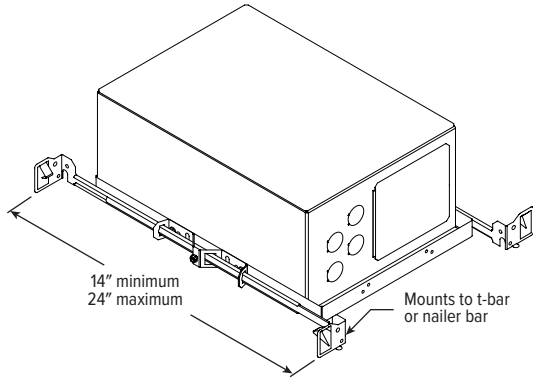
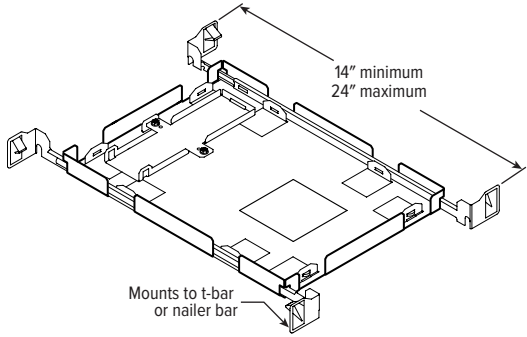
### REMODEL



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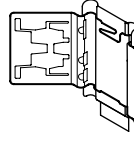
## MOUNTING HARDWARE DETAILS

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

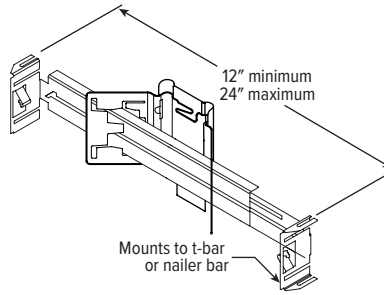


F1 with I Mounting Type

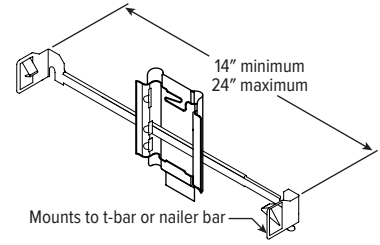
**BA1** Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



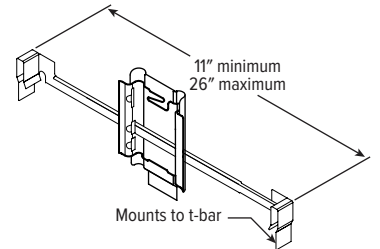
**BA2** Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)



**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)



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

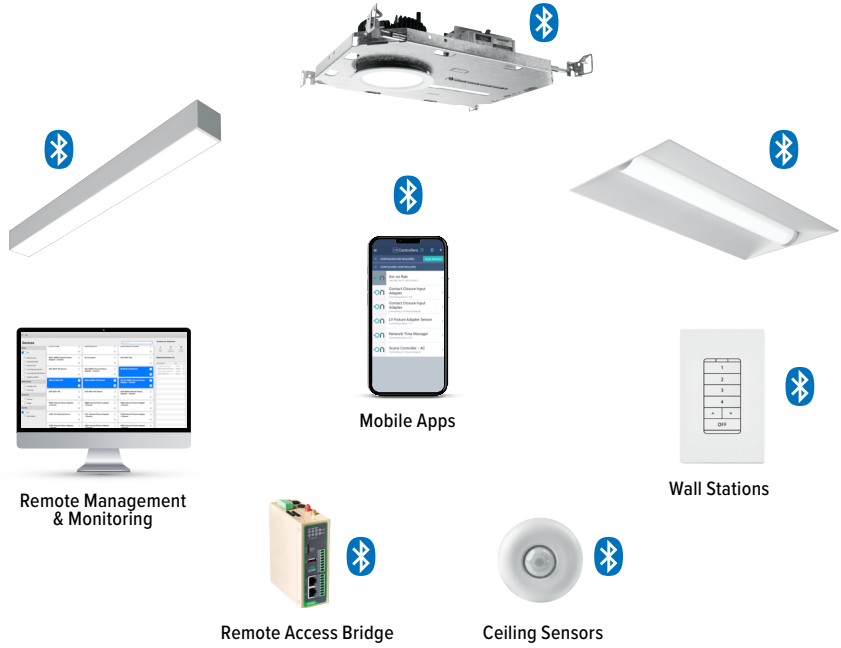


Zone Scanner Web App



Commissioning Pro App

### SYSTEM COMPONENTS



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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
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](http://hew.com/avi-on)

### ADDITIONAL CONTROL/DRIVER OPTIONS

Lumen restrictions apply: L7 minimum for DIM LINE driver. 347V may require stepdown transformer, see product builder at [hew.com/product-builder](http://hew.com/product-builder). R Mounting Type only available with DIM, DIM1, and DIM LINE controls. Lutron controls available with N Mounting Type only, top access required.

CATALOG NUMBER	DESCRIPTION
AVI-LVFA/DA	Avi-on wireless fixture control for use with driver with 12V auxiliary power
AWNRR/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

