12 LED
2' Wide Surface Mount – Solid Sides

Williams

CATALOG #: _____

3-13/16″

24-3/16″

TYPE: _____

PROJECT: _____

FEATURES

BUY AMERICAN ACT COMPLIANT

- Fully enclosed spring-loaded cam latches allow years of hassle-free maintenance
- Mitered corners provide clean, crisp appearance with no visible rivets or screws
- Heavy-gauge welded end plates and housing ensure durable, rigid construction
- Fully gasketed door minimizes contaminants
- Maximize energy savings with efficacies as high as 135 lm/W
- Available with Avi-on wireless fixture controls
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING – 20-gauge die-formed, welded C.R.S.
- DOOR FRAME – 20-gauge C.R.S. or 0.050″ extruded aluminum with mitered corners. Fully enclosed spring-loaded cam latches.
- SHIELDING – Frosted acrylic lens, pattern #12, .125″ thick.
- FINISH – 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ELECTRICAL – High quality mid-power LED boards. See fixture performance data for lumen maintenance. 25°C maximum ambient operating temperature.
- MOUNTING – Surface or suspended.
- LISTINGS –
  - cCSAus certified as luminaire suitable for dry or damp locations.
  - 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.

avi-on
Bluetooth® Lighting Controls

ORDERING EXAMPLE: 12 - 4 - L84/835 - F AF12125 - OPTIONS - CONTROL/DIM - UNV

ORDERING INFO

SERIES	LENGTH	LUMENS [1]	CRI	CCT	DOOR FRAME	SHIELDING
12	2 2′	**2′**	8 80	27 2700K	F White flat aluminum	AF12125 Frosted acrylic, pattern #12, .125″ thick
	4 4′	L43 4,300lm		30 3000K	R White regress aluminum	
		L65 6,500lm		35 3500K	S White flat steel	
		4′		40 4000K	FB Black flat aluminum	
		L84 8,400lm		50 5000K	RB Black regress aluminum	
		L130 13,000lm			SB Black flat steel	

OPTIONS [2]

EM/10W	10-watt emergency battery
(L__)	Additional lower lumen packages available. [4] Example: 7,500 nominal lumens = 12-4-L84/840-FAF12125-**(L75)**

CONTROL [3]

–	None
AVI-LVFA	Avi-on wireless fixture control [5]
AVI-LVFA-CS2-PIR	Avi-on wireless fixture control with PIR motion and daylight sensor [6]

DRIVER [7]

DIM	Driver with external dimming wires
DRV	Driver without external dimming wires
DA	Driver with 12V auxiliary power, without external dimming wires [8]

VOLTAGE

120	120V
277	277V
UNV	120-277V

NOTES

1. Lumen output based on 3500 CCT. Actual lumens may vary +/-5%, See page 2 for FIXTURE PERFORMANCE DATA.
2. See page 2 for FINISH OPTIONS. Custom colors available upon request. Suspended mounting available. See page 3 for SUSPENDED MOUNTING DETAILS.
3. See page 4 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS. See page 3 for SENSOR PLACEMENT DETAILS.
4. Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
5. DA Driver only.
6. DA Driver only.
7. See page 3 for ADDITIONAL DRIVER OPTIONS.
8. Avi-on Controls only.

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FIXTURE PERFORMANCE DATA

	LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)	LUMEN MAINTENANCE			
					L70	L80	L85	L90
2'	L43	4,214	31.2	135	>72000	>72000	>72000	50,000
	L65	6,628	51.9	128	>72000	>72000	58,000	36,000
4'	L84	8,516	62.9	135	>72000	>72000	>72000	50,000
	L130	13,116	101.2	130	>72000	>72000	58,000	36,000

MULTIPLIER TABLE

| COLOR TEMPERATURE	
CCT	CONVERSION FACTOR
2700K	0.97
3000K	0.99
3500K	1.00
4000K	1.03
5000K	1.06

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25ºC ambient temperature.
- Wattage shown is average for 120V through 277V input.
- Results based on 3500K, 80 CRI, actual lumens may vary +/-5%
- Predicted lumen maintenance calculated from LED manufacturer IES LM-80 data and In situ temperature measurement.
- Predicted lumen maintenance calculated in accordance with IES TM-21 per Energy Star (R) TM-21 Calculator rev. 02.08.16.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier table to calculate additional options.

PHOTOMETRY

12-4-L84/835-SAF12125-DIM-UNV Total Luminaire Output: 8516 lumens; 62.9 Watts | Efficacy: 135 lm/W | 80 CRI; 3500K CCT
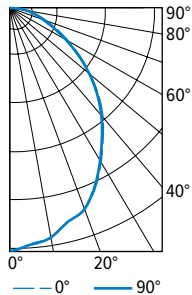
| VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0º	45º	90º	
0º	3891	3891	3891	
5º	3799	3794	3794	361
15º	3557	3548	3548	1009
25º	3175	3164	3164	1459
35º	2609	2584	2577	1615
45º	1978	1933	1911	1493
55º	1341	1289	1267	1164
65º	817	782	774	790
75º	425	416	442	459
85º	149	151	175	165
90º	0	0	0	

LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0 - 30	2830	33
0 - 40	4445	52
0 - 60	7101	83
0 - 90	8516	100
0 - 180	8516	100

FIXTURE DETAILS

BACKVIEWS
2'

4'
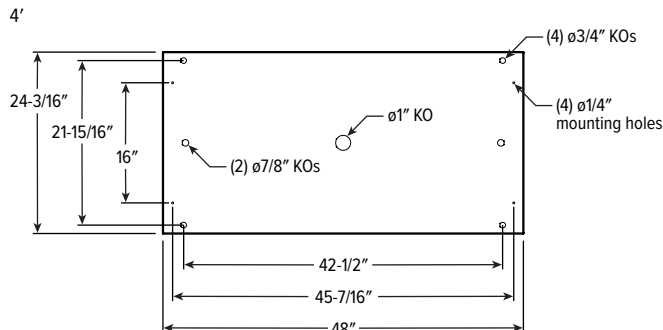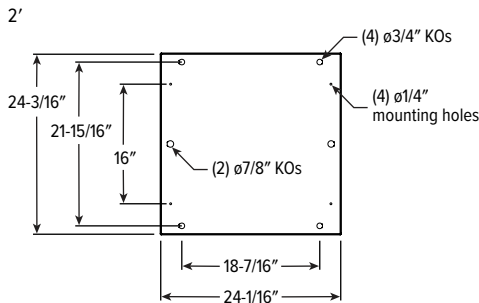
FINISH OPTIONS

WHITE   BLACK   BRONZE   NICKEL   SILVER   ALUM

For custom color, please specify RAL code or a manufacturer code with description. All custom colors other than RAL require two sample swatches, minimum 1" square.

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SUSPENDED MOUNTING DETAILS

AIRCRAFT CABLE

| ORDERING EXAMPLE: ACF*4P/D48		
PREFIX	TYPE	LENGTH
ACF*4P Four point mount adjustable aircraft cable	D 1″ grid & hardpan N 9/16″ grid S Slot grid	24 24″ 48 48″ 96 96″ 144 144″ 192 192″ 240 240″ 300 300″

CORD OPTIONS

Units specified with aircraft cable require cord. Please specify cord type using ordering information below. Long fixture rows may require multiple feed points based on 18ga conductor size.

EXAMPLE: S2438D/W				
CORD TYPE	LENGTH	# OF COND. [1]	WIRE SIZE	COLOR
S	24 24″ 48 48″ 96 96″	3 4 5 6	8D 18ga	/W White /B Black

1 Includes (2) 22ga purple & pink dimming conductors
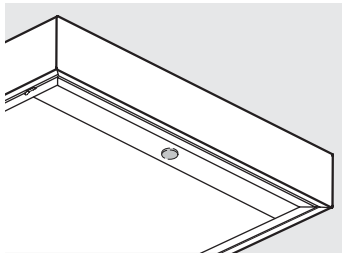
STANDARD HARDWARE (Grid & Hardpan)
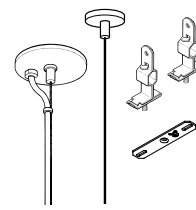
- Fixtures are provided with adjustable length aircraft cables and mounting hardware, must specify.
- One 5″ canopy used at power feed location to cover the junction box. Three other suspension points use 2″ canopy at the non-feed point. No J-box is required at non-feed points.

ADDITIONAL DRIVER OPTIONS

Note: Lumen restrictions apply, consult product builder at hew.com/product-builder.

CATALOG NUMBER	DESCRIPTION
DRV	Driver prewired for non-dimming applications
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, 120V only)
DIM TRC	Line voltage dimming driver (TRIAC compatible, 120V only)
DA	Dimming driver with 12V auxiliary
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver

SENSOR PLACEMENT DETAILS

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
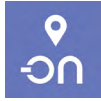- Flexible control strategies

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

DIGITAL INSTALLATION TOOLS

Avi-On mobile apps provide intuitive, quick installation and commissioning. Pro tools are available to qualified installers.
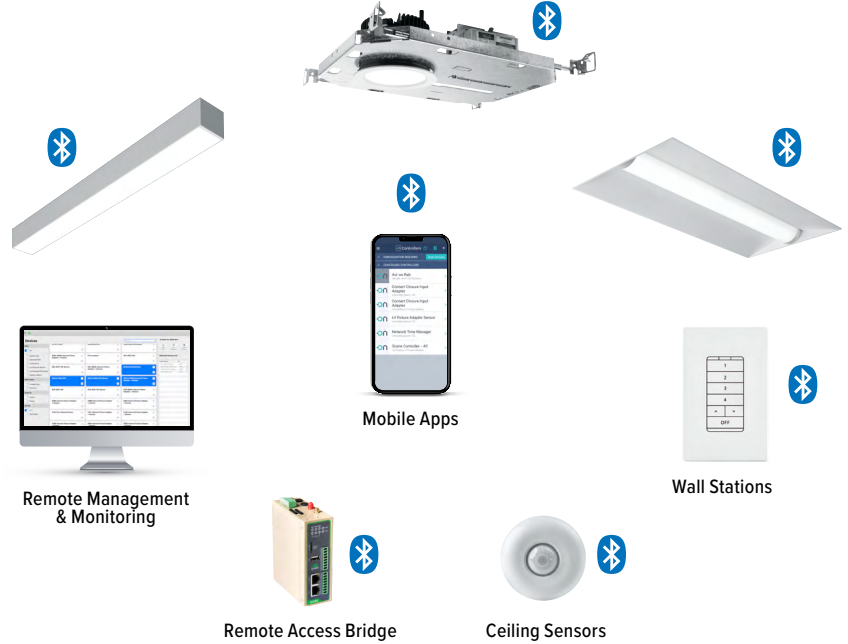
Commissioning Mobile App

Zone Scanner Web App

Commissioning Pro App

SYSTEM COMPONENTS

Mobile Apps

Remote Management & Monitoring

Wall Stations

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

AVI-LVFA-CS2-PIR Avi-on wireless fixture control with PIR motion and daylight sensor. DA Driver only.

SPECIFICATIONS

TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 10'
DETECTION ANGLE	360°
TEMPERATURE RANGE	-30° to 50°C
RELATIVE HUMIDITY	10 to 80% non-condensing
IP RATING	IP20
MANUFACTURER	Avi-On

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SENSOR COVERAGE PATTERNS

Side View
8' height: ø24' coverage
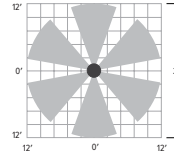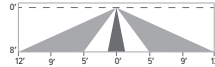
SENSOR DETAIL

Dimensions: 13/16" x 2-1/4"