

CATALOG #: \_ TYPF. PROJECT: \_



## **FEATURES**

- Room-side access
- Ultra slim 60mm for minimal plenum space
- Round or square diffuse ribbed acrylic lens options enhance the space
- Uniform ambient illumination
- Companion surface and retrofit kit preserve continuity, see hew.com
- HE option delivers superior efficacies up to 173 lm/W
- Rated for direct contact with insulation
- Heavy duty C.R.S. construction
- Anti-microbial finish option suppresses the spread of dangerous microorganisms, mold, and bacterial growth
- Wireless in-fixture control solutions available
- Made Right Here® in the USA

### **SPECIFICATIONS**

- HOUSING/REFLECTOR Precision dieformed 22-gauge C.R.S.
- SHIELDING Diffuse ribbed acrylic.
- FINISH Highly reflective non-glare matte 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. L70 > 72,000 hours per IES TM-21. L80 > 102,000 hours with HE option. 50/60 Hz constant current driver.
- MOUNTING Designed for NEMA Type "G" 1" grid ceiling standard.
- LISTINGS
  - cCSAus certified as luminaire suitable for dry or damp locations.
  - IC-rated for direct contact with insulation.
  - City of Chicago Environmental Air approved when specified with CP option.
  - 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

## ORDERING EXAMPLE: PT - MET612 - L90/835 - RA - OPTIONS - CONTROL/DIM - UNV

#### **ORDERING INFO**

SERIES	WIDTH	LENGTH	LUMENS [1]	CRI	CCT	SHIELDING
PT	<b>MET6</b> 600mm	6 600mm <b>12</b> 1200mm	MET66 L26 2,600lm L43 4,300lm L52 5,200lm L61 6,100lm MET612 L38 3,800lm L49 4,900lm L61 6,100lm L90 9,000lm L110 11,000lm	<b>8</b> 80 <b>9</b> 90	27 2700K 30 3000K 35 3500K 40 4000K 50 5000K	RA Diffuse ribbed acrylic, round SA Diffuse ribbed acrylic, square [2]

#### **OPTIONS**

See page 3 for FLEXIBLE WHIP OPTIONS.

EM/10W 10-watt emergency battery 12-watt emergency battery [4] EM/12W Earthquake clips [5] **EQCLIPS** 

Additional lower lumen packages available <sup>[6]</sup> Example: 8,000 lumens = PT-MET612-L90/835-**(L80)** (L\_\_)

High efficacy lumen package [7] ΗE Anti-microbial white finish AMW Chicago Plenum (CCEA)

CONTROL [3]

See page 5 for ADDITIONAL CONTROL OPTIONS.

AVI-LVFA Avi-on wireless fixture control [8]

AVI-LVFA-CS2-PIR

**AWNS** 

Avi-on wireless fixture control with PIR motion and daylight sensor [9] Lutron Athena wireless node **AWNR** 

integral fixture control, RF only [10] Lutron Athena wireless node

integral fixture control, RF with daylight and occupancy sensing [11]

#### DRIVER

CP

See page 5 for ADDITIONAL DRIVER OPTIONS.

**DIM** Driver with 0-10V external dimming wires **DRV** Driver without external dimming wires

**DA** Driver with 12V auxiliary power without external dimming wires [12] DSR Sensor-ready driver without external dimming wires (D4i DALI-2) [13] **VOLTAGE** 

120 120V 277 277V **UNV** 120-277V 347 347V [14]

#### **NOTES**

- Lumen output based on RA Shielding, 80 CRI/3500K CCT. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see OPTIONS.
- Increases lumen output by 3%.
  See page 3 for SENSOR & NODE PLACEMENT DETAILS.
  See page 4 for AVI-ON BLUETOOTH WIRELESS CONTROL
- Not available when CEC regulations are required.
- 4 per fixture.

- Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package. See page 2 for FIXTURE PERFORMANCE DATA.
- DA Driver only.
- DA Driver only. DA and DSR Drivers only.
- DA and DSR Drivers only.

  Avi-on and Lutron Athena Controls only.

  Lutron Vive and Athena Controls Only.
- Not available with EM batteries, DA, or DSR drivers.

## FIXTURE PERFORMANCE DATA

		S	TANDARD	HE OPTION		
	LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (Im/W)	WATTAGE	EFFICACY (Im/W)
	L26	2924	21.5	136	17.2	170
MET66	L43	4194	32.2	130	27.2	154
뿔	L52	5331	41.6	128	34.5	155
	L61	6073	50.2	121	41.1	148
	L38	3782	28.5	133	23.1	164
2	L49	5078	36.7	138	29.5	172
MET612	L61	6181	45.5	136	35.8	173
Σ	L90	9060	66.6	136	56.9	159
	L110	11086	83.7	132	69.4	160

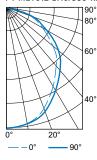
- Photometrics tested in accordance with IESNA LM-79. Results based on RA Shielding, 80 CRI/3500K CCT, average wattage for 120V through 277V input, and 25°C ambient temperature. Actual performance may vary +/-5%. To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy. Use multiplier table to calculate additional options.

#### **MULTIPLIER TABLE**

	COLOR TEMPERATURE		
	CCT	CONVERSION FACTOR	
	2700K	0.97	
≂	3000K	0.99	
80 CRI	3500K	1.00	
8	4000K	1.03	
	5000K	1.06	
	27001/	0.00	
	2700K	0.82	
≂	3000K	0.83	
90 CRI	3500K	0.84	
	4000K	0.86	
	5000K	0.90	

## **PHOTOMETRY**

## PT-MET612-L110/835-RA-DIM-UNV Total Luminaire Output: 11086 lumens; 83.7 Watts | Efficacy: 132 lm/W | 82.7 CRI; 3494K CCT

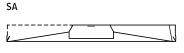


	VEDTICAL ANCLE	НО	ZONAL LUMENC		
	VERTICAL ANGLE	0°	45°	90°	ZONAL LUMENS
NO	0	4241	4241	4241	
CANDLEPOWER DISTRIBUTION	5	4177	4171	4149	399
E.	15	4054	4067	4084	1139
ISI	25	3572	3620	3664	1649
2	35	2887	2979	3055	1859
Mo	45	2347	2477	2603	1896
Œ,	55	1707	1868	2018	1675
₫	65	1105	1310	1488	1293
S	75	524	805	996	846
	85	106	355	407	332
	90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
Σ	0 - 30	3186	29
SU	0 - 40	5045	46
핕	0 - 60	8616	78
育	0 - 90	11086	100
	0 - 180	11086	100

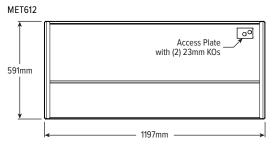
## **CROSS SECTIONS**

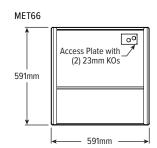




## **FIXTURE DETAILS**

## **BACKVIEW**







## **FLEXIBLE WHIP OPTIONS**

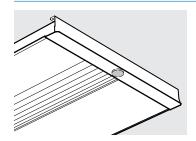
All Williams recessed troffers are available with a flexible metallic wiring harness, factory-attached and hard-wired to the luminaire.

Straight connectors are a snap-in type. Consult factory for wiring harness utilizing connectors secured by lock nuts, optional flex size, lengths, and other wire sizes or circuitry. Three-wire flex utilizes black, white, and green wire. Four-wire flex utilizes black, white, red, and green wire. Adding an emergency option requires an additional wire.

Williams fixtures are UL listed to provide factory-installation of several manufacturers' modular wiring devices, consult factory for availability and ordering information.

DESIGNATION	DESCRIPTION	DRIVER
F338	6' of 3/8" flex, (3) No. 18 AWG wires with (2) straight connectors	DRV, LTE LINE
F348	6' of 3/8" flex, (4) No. 18 AWG wires with (2) straight connectors	DRV + EM, SD40
F334	6' of 3/8" flex, (3) No. 14 AWG wires with (2) straight connectors	DRV, LTE LINE
F344	6' of 3/8" flex, (4) No. 14 AWG wires with (2) straight connectors	SD40
F358	6' of 3/8" flex, (5) No. 18 AWG wires with (2) straight connectors	DIM, DALI
F368Y	6' of 3/8" flex, (6) No. 18 AWG wires with (2) straight connectors	DIM, DIM + EM, DALI

#### **SENSOR & NODE PLACEMENT DETAILS**



#### **AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS**

#### **FEATURES**

#### Simple

- Gateway-free distributed control
- 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 Commissioning Web App Pro App

#### SYSTEM COMPONENTS





Remote Management & Monitoring



Remote Access Bridge







**Ceiling Sensors** 

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## **ACCESSORIES**

## WALL STATIONS

Scene controller - buttons numbered 1-4 and up/down/off, 120-277VAC AVI-B-2401AC-1 AVI-B-2402BAT-1 Scene controller - buttons numbered 1-4 and up/down/off, battery powered

AVI-B-2401AC-2 Dimmer with presets - buttons with percentages and up/down/off, 120-277VAC AVI-B-2402BAT-2 Dimmer with presets - buttons with percentages and up/down/off, battery powered

AVI-B-2401AC-3 Two button control on/off or hold to dim up/down, 120-277VAC AVI-B-2402BAT-3 Two button control on/off or hold to dim up/down, battery powered NETWORK

AVI-RAB-LTE Remote access bridge

AVI-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

### SENSOR COVERAGE PATTERNS

Side View

8' height: ø24' coverage



## **SENSOR DETAIL**



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

## ADDITIONAL CONTROL OPTIONS

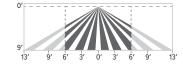
AWNS Lutron Athena wireless node integral fixture control, RF with daylight and occupancy sensing. DA and DSR Drivers only.

	· ·
SPECIFICATIONS	
TYPE	Radio Frequency
MOUNTING HEIGHT	8' – 12'
DETECTION ANGLE	360°
TEMPERATURE RANGE	0° to 55°C
RELATIVE HUMIDITY	0 to 90%, non-condensing
COMMISSIONING	Clear Connect gateway – Type X with app (iOS or Android)
MANUFACTURER	Lutron

**\$LUTRON** 

#### SENSOR COVERAGE PATTERNS

9' height: ø12' coverage



## Motion Sensor Coverage

CEILING HEIGHT	COVERAGE AREA (SQ FT)
8′	114
9′	144
10'	178
12′	256

#### SENSOR DETAIL



Dimensions: ø1-1/8"

## ATHENA CONTROL OPTIONS

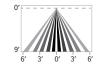
CATALOG NUMBER	DESCRIPTION
AWNR	Lutron Athena wireless node integral fixture control, RF only, for use with D4i DALI-2 or driver with 12V auxiliary power.
AWNS	Lutron Athena wireless node integral fixture control, RF with daylight and occupancy sensing, for use with D4i DALI-2 or driver with 12V auxiliary power.
AWNR-BL	Lutron Athena wireless node integral fixture control, RF only, for use with D4i DALI-2 or driver with 12V auxiliary power, black finish.
AWNS-BL	Lutron Athena wireless node integral fixture control, RF with daylight and occupancy sensing, for use with D4i DALI-2 or driver with 12V auxiliary power, black finish.

VDO Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC). DSR or LDE Drivers only. LDE drivers require driver interface

SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 12'
DETECTION ANGLE	360°
TEMPERATURE RANGE	0° to 55°C
RELATIVE HUMIDITY	0 to 90%, non-condensing
COMMISSIONING	App (iOS or Android)
MANUFACTURER	Lutron

#### SENSOR COVERAGE PATTERNS

9' height: ø12' coverage



#### Motion Sensor Coverage

	COVERAGE AREA (SQ FT)
8′	114
9′	144
10′	178
12/	256

#### SENSOR DETAIL



Dimensions: 2-11/16" x 1"

## **VIVE CONTROL OPTIONS**

CATALOG NUMBER	DESCRIPTION
VRF	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), for use with sensor-ready driver
VDO	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC), for use with sensor-ready driver
VRF/DBI	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and digital link interface, for use with Lutron Hi-lume 1% EcoSystem dimming LED driver
VDO/DBI	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC) and digital link interface, for use with Lutron Hi-lume 1% EcoSystem dimming LED driver

## ADDITIONAL DRIVER OPTIONS

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

CATALOG NUMBER	DESCRIPTION
DRV	Driver without external dimming wires prewired for non-dimming applications
DIM	Driver with external dimming wires prewired for 0-10V low voltage applications
DIM1	1% driver with external dimming wires 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	Driver with 12V auxiliary power, without external dimming wires
DSR	Sensor-ready driver without external dimming wires (D4i DALI-2)
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LDE1	Lutron Hi-lume 1% EcoSystem dimming driver