LT LED Troffer

Williams®

CATALOG #: _____

3-7/8″

23-13/16″
2x2 | 2x4 Shown

TYPE: _____

PROJECT: _____

BUY AMERICAN ACT COMPLIANT · **DLC LISTED** · **CCEA Approved** · **IP5X Rated** · **ISO 5 Class 100**

FEATURES

- Low-profile depth for shallow plenum applications
- Diffuse lens provides smooth illumination for visual comfort
- Air return capability reduces number of unsightly ceiling vents for a cleaner appearance
- Surface mount kit preserves continuity
- Maximize energy savings with efficacies as high as 140 lm/W
- Rated for direct contact with insulation
- ISO 5-9 and IP5X rated for cleanroom applications
- Available on QuickShip
- Wireless in-fixture control solutions available
- Made Right Here® in the USA

SPECIFICATIONS

- **HOUSING/REFLECTOR** – Precision die-formed 22-gauge C.R.S.
- **SHIELDING** – Frosted 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. See fixture performance data for lumen maintenance.
- **MOUNTING** – NEMA Type "G" 15/16″ or 1″ grid standard. For NEMA Type "NFG" and "SG" 9/16″ grid installations, specify EQCLIPS option. Surface mount and drywall kit accessories available, shipped separately, see options.
- **LISTINGS** –
  - cCSAus certified as luminaire suitable for dry or damp locations.
  - IC-rated for direct contact with insulation.
  - IP5X rated.
  - ISO 5-9 rated.
  - City of Chicago Environmental Air approved when specified with CP option.
  - DesignLights Consortium qualified product. Not all versions of this product may be DLC qualified, see the DLC Qualified Products List at www.designlights.org/QPL.
  - 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.

ORDERING EXAMPLE: LT - 24 - L52/835 - AF - OPTIONS - CONTROL/DIM - UNV

ORDERING INFO

SERIES	WIDTH	LENGTH	LUMENS [1]				CRI	CCT	SHIELDING
LT Static	**1** 1′	**2** 2′	**1x2**		**2x2**		**8** 80	**27** 2700K	**AF** Frosted acrylic
LT-AR Air Return [2]	**2** 2′	**4** 4′	L20 2,000lm		L27 2,700lm		**9** 90 [3]	**30** 3000K	
			L31 3,100lm		L39 3,900lm			**35** 3500K	
			L40 4,000lm		L49 4,900lm			**40** 4000K	
			1x4		L61 6,100lm			**50** 5000K	
			L28 2,800lm		**2x4**				
			L47 4,700lm		L40 4,000lm				
			L63 6,300lm		L52 5,200lm				
			L90 9,000lm		L64 6,400lm				
					L82 8,200lm				
					L110 11,000lm				

OPTIONS [4]

EM/10W	10-watt emergency battery [6]
EM/10WRM	Remote mount 10-watt emergency battery
EM/12W	12-watt emergency battery [7]
EM/12WRM	Remote mount 12-watt emergency battery [8]
EQCLIPS	Earthquake clips [9]
(L__)	Additional lower lumen packages available. [10] Example: 5,800 lumens = LT-24-L64/840-**(L58)**
CP	Chicago Plenum (CCEA)
LT-14-SMK-W	Surface mount kit, 1′x4′, white
LT-22-SMK-W	Surface mount kit, 2′x2′, white
LT-24-SMK-W	Surface mount kit, 2′x4′, white
DFK-1224W	Drywall kit, 12″ x 24″, white
DFK-1248W	Drywall kit, 12″ x 48″, white
DFK-2424W	Drywall kit, 24″ x 24″, white
DFK-2448W	Drywall kit, 24″ x 48″, white

CONTROL [5]

See page 6 for ADDITIONAL CONTROL OPTIONS.

–	None
AVI-LVFA	Avi-on wireless fixture control [11]
AVI-LVFA-CS2-PIR	Avi-on wireless fixture control with PIR motion and daylight sensor [12]
AWNR	Lutron Athena wireless node integral fixture control, RF only [13]
AWNS	Lutron Athena wireless node integral fixture control, RF with daylight and occupancy sensing [14]

DRIVER

See page 7 for ADDITIONAL DRIVER OPTIONS.

DIM	Driver with external dimming wires
DRV	Driver without external dimming wires
DA	Driver with 12V auxiliary power, without external dimming wires [15]
DSR	Sensor-ready driver without external dimming wires (D4i DALI-2) [16]

VOLTAGE

120	120V
277	277V
UNV	120-277V
347	347V [17]

QUICKSHIP

1x4	2x2	2x4
LT-14-L47/835-AF-QS-DIM-UNV	LT-22-L39/835-AF-QS-DIM-UNV	LT-24-L40/835-AF-QS-DIM-UNV
LT-14-L47/840-AF-QS-DIM-UNV	LT-22-L39/840-AF-QS-DIM-UNV	LT-24-L40/840-AF-QS-DIM-UNV
		LT-24-L64/835-AF-QS-DIM-UNV
		LT-24-L64/840-AF-QS-DIM-UNV

NOTES

1. Lumens based on 80 CRI/3500K CCT. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see Options.
2. Air return through side slots. Not available with surface mount or CP option. Not qualified for IP5X, ISO 5-9, or IC ratings.
3. Extended lead times may apply. Consult factory for availability.
4. See page 3 for FLEXIBLE WHIP OPTIONS. See page 3 for SURFACE MOUNT KIT DETAILS. See page 3 for SURFACE MOUNT KIT DETAILS. See Technical Info for Power Entry details.
5. See page 5 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS. See page 4 for SENSOR & NODE PLACEMENT DETAILS.
6. Not available with 1x2 L40 or 2x2 L61 lumen packages.
7. Not available with 1x2 L40 or 2x2 L61 lumen packages. Not available when CEC regulations are required.
8. Not available when CEC regulations are required.
9. 4 per fixture. Optional for 1″ grid installations. Required for 9/16″ grid mounting; LT is compatible with Williams earthquake clips only.
10. Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
11. DA Driver only.
12. DA Driver only.
13. DA and DSR Drivers only.
14. DA and DSR Drivers only.
15. Avi-on, Lutron Athena, and ZLSO5 Controls only.
16. Lutron Vive and Athena Controls only.
17. Not available with EM batteries, DA, or DSR drivers.

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FIXTURE PERFORMANCE DATA

	LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)	LUMEN MAINTENANCE [1]			
					L70	L80	L85	L90
1x2	L20	2011	17.4	116	>72,000	62,000	45,000	29,000
1x2	L31	2985	23.5	127	>72,000	>72,000	63,000	42,000
1x2	L40	3840	32.9	117	>72,000	62,000	45,000	29,000
1x4	L28	2814	21.4	131	>72,000	>72,000	63,000	42,000
1x4	L47	4677	33.7	139	>72,000	>72,000	63,000	42,000
1x4	L63	6261	48.5	129	>72,000	>72,000	63,000	42,000
1x4	L90	9060	66.8	136	>72,000	>72,000	63,000	42,000
2x2	L27	2722	21.3	128	>72,000	>72,000	63,000	42,000
2x2	L39	3934	33.1	119	>72,000	62,000	45,000	29,000
2x2	L49	4869	38.1	128	>72,000	>72,000	63,000	42,000
2x2	L61	6136	50.9	121	>72,000	62,000	45,000	29,000
2x4	L40	3972	32.0	124	>72,000	62,000	45,000	29,000
2x4	L52	5202	37.2	140	>72,000	>72,000	63,000	42,000
2x4	L64	6396	48.5	132	>72,000	>72,000	63,000	42,000
2x4	L82	8214	64.3	128	>72,000	>72,000	63,000	42,000
2x4	L110	11065	81.8	135	>72,000	>72,000	63,000	42,000

MULTIPLIER TABLE

	COLOR TEMPERATURE	
	CCT	CONVERSION FACTOR
80 CRI	2700K	0.97
80 CRI	3000K	0.99
80 CRI	3500K	1.00
80 CRI	4000K	1.03
80 CRI	5000K	1.06
90 CRI	2700K	0.80
90 CRI	3000K	0.82
90 CRI	3500K	0.83
90 CRI	4000K	0.86
90 CRI	5000K	0.89

- Photometrics tested in accordance with IESNA LM-79. Results based on 80 CRI/3500K CCT, wattage for 120V 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.

[1] Predicted lumen maintenance calculated in accordance with IES TM-21 per Energy Star (R) TM-21 Calculator rev. 02.08.16.
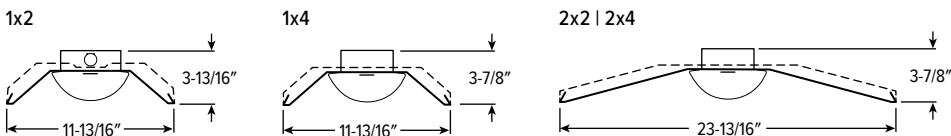
PHOTOMETRY

LT-24-L52/835-AF-DIM-UNV Total Luminare Output: 5202 lumens; 37 Watts | Efficacy: 140 lm/W | 80 CRI; 3500K CCT
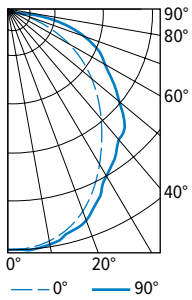
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0º	45º	90º	
0	1851	1851	1851	
5	1843	1844	1846	175
15	1745	1761	1779	499
25	1544	1589	1636	730
35	1276	1359	1440	848
45	1055	1193	1315	902
55	741	902	1044	802
65	480	667	817	647
75	241	429	544	438
85	70	174	159	161
90	0	0	0	

CANDLEPOWER DISTRIBUTION

ZONE	LUMENS	% FIXTURE
0 - 30	1404	27
0 - 40	2252	43
0 - 60	3955	76
0 - 90	5202	100
0 - 180	5202	100

LUMEN SUMMARY

CROSS SECTIONS

1x2
3-13/16″
11-13/16″

1x4
3-7/8″
11-13/16″

2x2 | 2x4
3-7/8″
23-13/16″

FIXTURE DETAILS

BACK VIEW

Access Plate with (2) 7/8″ KOs

23-13/16″ (1x2 | 2x2) or 47-13/16″ (1x4 | 2x4)

SIDE VIEW

ø7/8″ KO
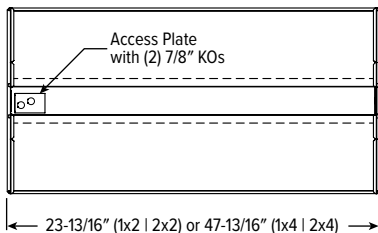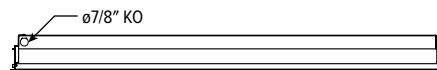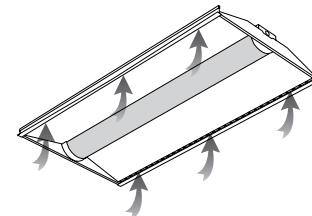
AIR RETURN

Total Air Return Space:
12-1/2″ sq. (1x2 and 2x2)
25-1/2″ sq. (1x4 and 2x4)

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FLEXIBLE WHIP OPTIONS

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

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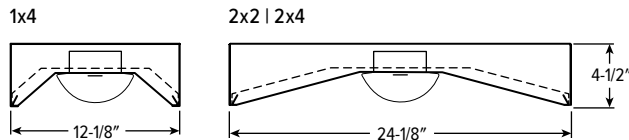
Williams fixtures are UL listed to provide factory-installation of several manufacturers' modular wiring devices. Consult factory for availability and ordering information.

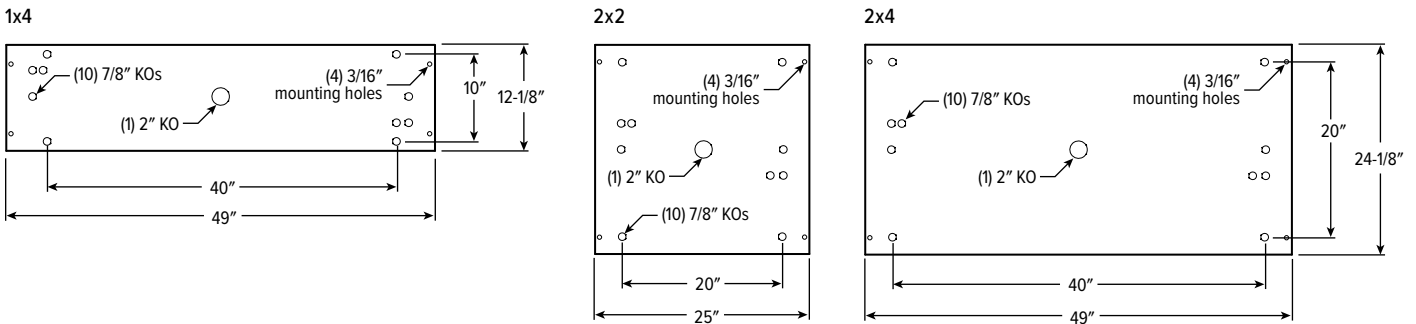| DESIGNATION	DESCRIPTION	DRIVER
F338	6' of 3/8" flex, (3) No. 18 AWG wires with (2) straight connectors	DRV, LTE LINE
F348	6' of 3/8" flex, (4) No. 18 AWG wires with (2) straight connectors	SD40
F334	6' of 3/8" flex, (3) No. 14 AWG wires with (2) straight connectors	DRV, LTE LINE
F344	6' of 3/8" flex,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

SURFACE MOUNT KIT DETAILS

CROSS SECTIONS

1x4

12-1/8"

2x2 | 2x4

24-1/8"

4-1/2"

BACK VIEWS

1x4

(10) 7/8" KOs
(4) 3/16" mounting holes
(1) 2" KO
10"
12-1/8"
40"
49"

2x2

(4) 3/16" mounting holes
(1) 2" KO
(10) 7/8" KOs
20"
25"

2x4

(10) 7/8" KOs
(4) 3/16" mounting holes
(1) 2" KO
20"
24-1/8"
40"
49"

DRYWALL KIT (DFK) OPTIONS

ORDERING INFO

EXAMPLE: DFK - 24 48 W			
SERIES	**WIDTH**	**LENGTH**	**FINISH**
DFK Drywall kit	**12** 1'	**24** 2'	**W** White
	12 1'	**48** 4'	**AMW** Anti-microbial white
	24 2'	**24** 2'	
	24 2'	**48** 4'	

INSTALLATION DIMENSIONS

NOMINAL SIZE	ROUGH-IN		FINISH TRIM SIZE	
	WIDTH (A)	LENGTH (C)	WIDTH (B)	LENGTH (D)
1' x 2'	12-3/8"	24-3/8"	13-5/16"	49-5/16"
1' x 4'	12-3/8"	48-3/8"	13-5/16"	49-5/16"
2' x 2'	24-3/8"	24-3/8"	25-5/16"	25-5/16"
2' x 4'	24-3/8"	48-3/8"	25-5/16"	49-5/16"

TYPICAL INSTALLATION

Refer to table for dimensions.

A
B
Width

C
D
Length

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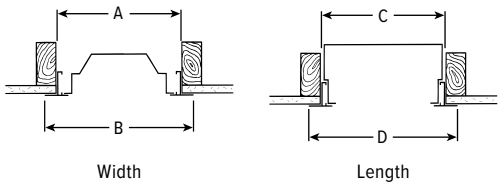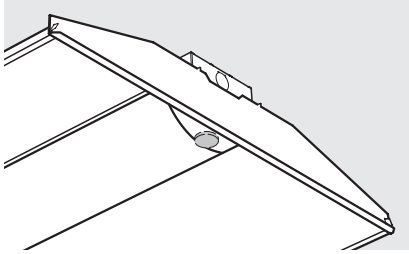
SEE NEXT PAGE FOR CONTROL DETAILS.

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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.
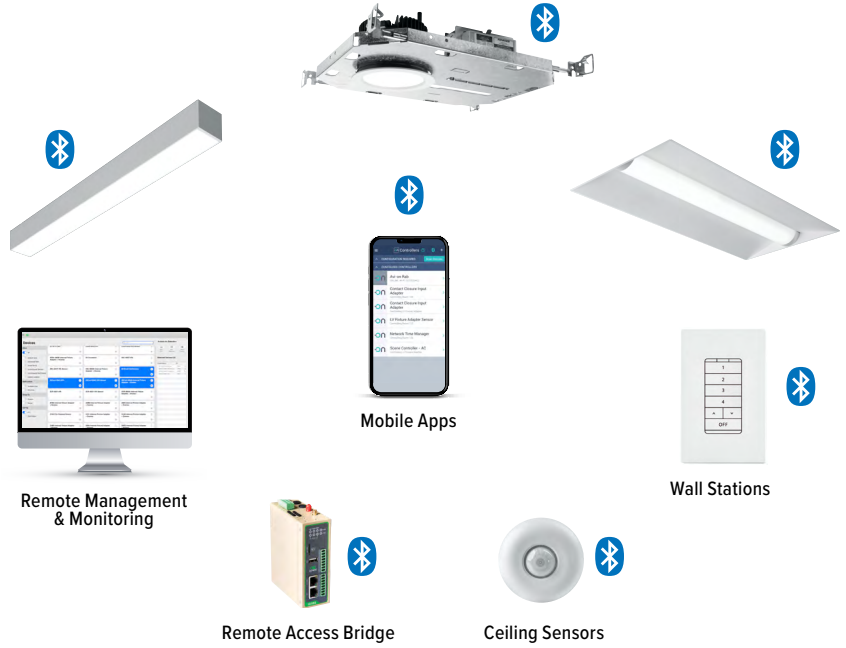
Commissioning Mobile App

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
AVI-KIT-NTM	Network time manager with battery backup

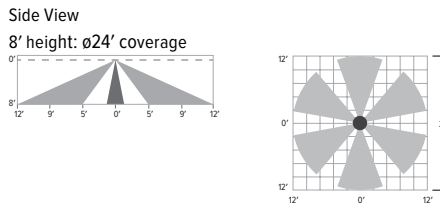| CEILING MOUNT SENSORS	
AVI-KIT-SEN-DUCM	PIR motion and ultrasonic sensor kit
AVI-KIT-SEN-ICM	PIR motion and photocell sensor kit

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℃
RELATIVE HUMIDITY	10 to 80% non-condensing
IP RATING	IP20
MANUFACTURER	Avi-On

Bluetooth® Lighting Controls

SENSOR COVERAGE PATTERNS

Side View

8' height: ø24' coverage

SENSOR DETAIL

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

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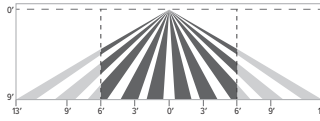
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ADDITIONAL CONTROL OPTIONS

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

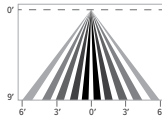Dimensions: ø1-1/8″

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

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

SENSOR DETAIL

Dimensions: 2-11/16″ x 1″
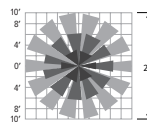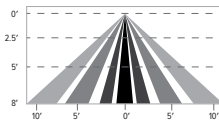
VIVE CONTROL OPTIONS

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

OCCWS-LMFS-601-PP-120/277 Wattstopper PIR motion and daylight sensor with power pack, 120/277V

SPECIFICATIONS

TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8′ – 12′
LENS	Up to 300 sq/ft coverage
DETECTION ANGLE	360°
TEMPERATURE RANGE	0° to 50°C
RELATIVE HUMIDITY	0 to 90%, non-condensing
COMMISSIONING	App (iOS or Android)

SENSOR COVERAGE PATTERNS

8′ height: ø20′ coverage

SENSOR DETAIL

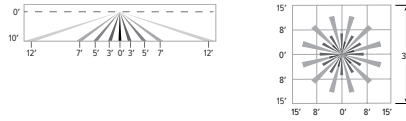Dimensions: ø1-5/16″

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LV-ZLS05-ILW Leviton PIR motion and daylight sensor. DA Driver only. Adjustable via remote. Optional ZLS0R-RA1 remote controller available.
ZLSOR-RA1 Remote controller for ZLS05 sensor. Please specify quantity required per project. Ordered and shipped separately.
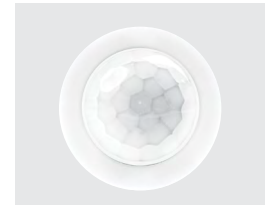
SPECIFICATIONS

TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 10'
DETECTION ANGLE	120°
TEMPERATURE RANGE	-20° to 70°C
COMMISSIONING	DIP switches or optional remote: ZLS0R-RA1

SENSOR COVERAGE PATTERNS

10' height: ø24' coverage

SENSOR DETAIL

Dimensions: ø1-5/16"

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	Driver with 12V auxiliary power
DSR	Sensor-ready driver (D4i DALI-2)
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
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.
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