

CATALOG #: _____

TYPE: _____

PROJECT: _____



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
- HE option delivers superior efficacies up to 176 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. L70 > 72,000 hours per IES TM-21. L80 > 102,000 hours with HE option. 50/60 Hz constant current driver.
- 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
 - 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: LT - 24 - L52/835 - AF - OPTIONS - CONTROL/DIM - UNV

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

OPTIONS ^[3]

See page 2 for EMERGENCY BATTERY OPTIONS.
See page 3 for FLEXIBLE WHIP OPTIONS.

EQCLIPS (L___)	Earthquake clips ^[5] Additional lower lumen packages available ^[6] Example: 5,800 lumens = LT-24-L64/840-(L58)
HE	High efficacy lumen package ^[7]
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 ^[4]

See page 6 for ADDITIONAL CONTROL OPTIONS.

–	None
AVI-LVFA	Avi-on wireless fixture control ^[8]
AVI-LVFA-CS2-PIR	Avi-on wireless fixture control with PIR motion and daylight sensor ^[9]
AWNRR	Lutron Athena wireless node integral fixture control, RF only ^[10]
AWNS	Lutron Athena wireless node integral fixture control, RF with daylight and occupancy sensing ^[11]

DRIVER

See page 7 for ADDITIONAL DRIVER OPTIONS.

DIM	Driver with external 0-10V 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]

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

- 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.
- Air return through side slots. Not available with surface mount CP option. Not qualified for IP5X, ISO 5-9, or IC ratings.
- See page 4 for SURFACE MOUNT KIT DETAILS. See page 3 for DRYWALL KIT (DFK) OPTIONS.
- See page 5 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS. See page 4 for SENSOR & NODE PLACEMENT DETAILS.
- 4 per fixture. Optional for 1" grid installations. Required for 9/16" grid mounting; LT is compatible with Williams earthquake clips only.
- Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- Not available with 90 CRI or 1x4 L28 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, Lutron Athena, and ZLS05 Controls only.
- Lutron Vive and Athena Controls only.
- Not available with EM batteries, DA, or DSR drivers.



FIXTURE PERFORMANCE DATA

	LED PACKAGE	DELIVERED LUMENS	STANDARD		HE OPTION ^[1]	
			WATTAGE	EFFICACY (lm/W)	WATTAGE	EFFICACY (lm/W)
1x2	L20	2011	17.4	116	13.5	149
	L31	2985	23.5	127	20.2	148
	L40	3840	32.9	117	26.8	143
	L28	2814	21.4	131	—	—
1x4	L47	4677	33.7	139	28.5	164
	L63	6261	48.5	129	39.4	159
	L90	9060	66.8	136	56.9	159
	L27	2722	21.3	128	17.2	158
2x2	L39	3934	33.1	119	25.5	154
	L49	4869	38.1	128	32.3	151
	L61	6136	50.9	121	40.4	152
	L40	3972	32.0	124	23.1	172
2x4	L52	5202	37.2	140	29.5	176
	L64	6396	48.5	132	39.4	162
	L82	8214	64.3	128	49.9	165
	L110	11065	81.8	135	67.1	165

MULTIPLIER TABLE

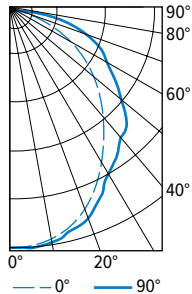
	COLOR TEMPERATURE	
	CCT	CONVERSION FACTOR
80 CRI	2700K	0.97
	3000K	0.99
	3500K	1.00
	4000K	1.03
	5000K	1.06
90 CRI	2700K	0.80
	3000K	0.82
	3500K	0.83
	4000K	0.86
	5000K	0.89

¹ Not available with 90 CRI.

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

PHOTOMETRY

LT-24-L52/835-AF-DIM-UNV Total Luminaire Output: 5202 lumens; 37 Watts | Efficacy: 140 lm/W | 80 CRI; 3500K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
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	

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

EMERGENCY BATTERY OPTIONS

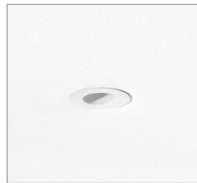
Specify CEC in the option code when California Energy Commission regulations are required.

CATALOG NUMBER	DESCRIPTION
EM/10W	10-watt emergency battery ^[1]
EM/10WRM	Remote mount 10-watt emergency battery ^[2]
EM/10WRM/RTS	Remote mount 10-watt emergency battery with regressed test switch ^[2]
EM/12W	12-watt emergency battery ^{[1] [3]}
EM/12WRM	Remote mount 12-watt emergency battery ^{[2] [3]}

- ¹ Not available with 1x2 L40 or 2x2 L61 lumen packages.
- ² Large remote box provided.
- ³ Not available when CEC regulations are required.

REMOTE MOUNT BATTERY DETAILS

EM/10WRM/RTS



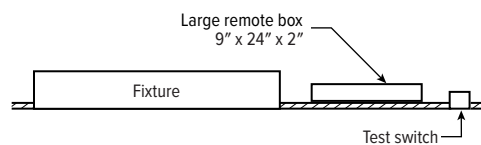
Regressed test switch
ø1-3/4"

EM/10WRM | EM/12WRM

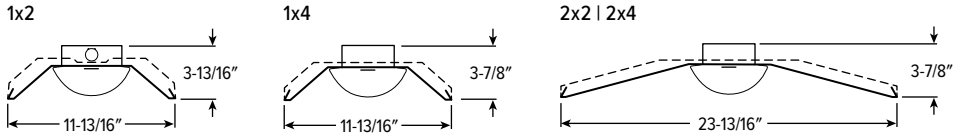


Standard test switch
2-3/4" x 4-1/2"

Max remote distance is 50', connection by others.

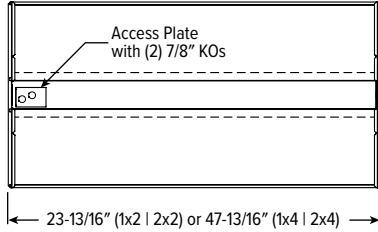


CROSS SECTIONS

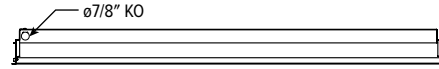


FIXTURE DETAILS

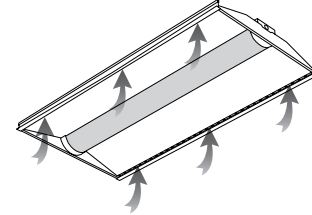
BACK VIEW



SIDE VIEW



AIR RETURN



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

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

DRYWALL KIT (DFK) OPTIONS

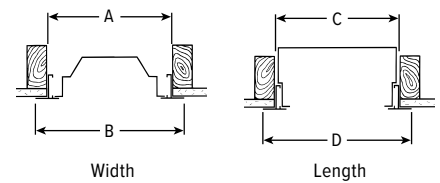
ORDERING INFO

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



SEE NEXT PAGE FOR SURFACE MOUNT KIT DETAILS

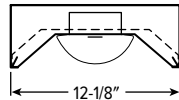


SURFACE MOUNT KIT DETAILS

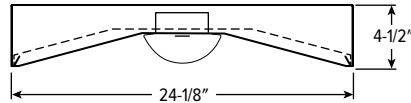


CROSS SECTIONS

1x4

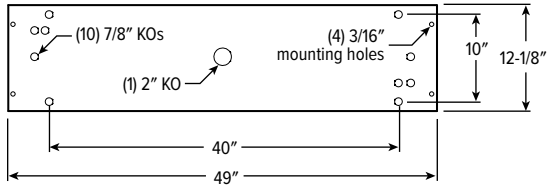


2x2 | 2x4

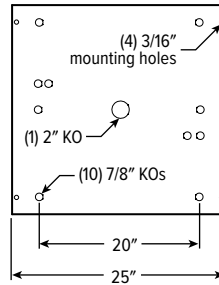


BACK VIEWS

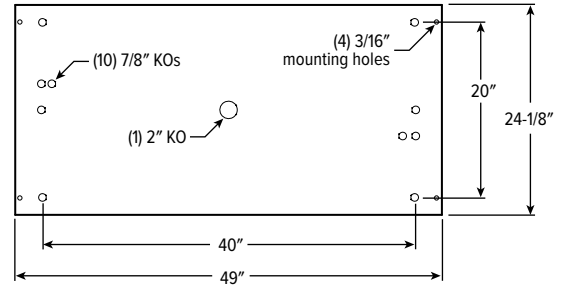
1x4



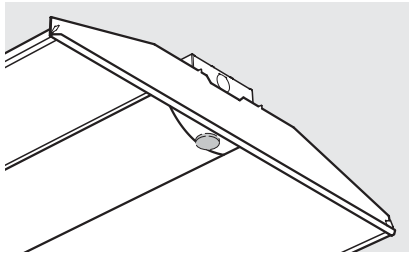
2x2



2x4



SENSOR & NODE PLACEMENT DETAILS



SEE NEXT PAGE FOR CONTROL 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

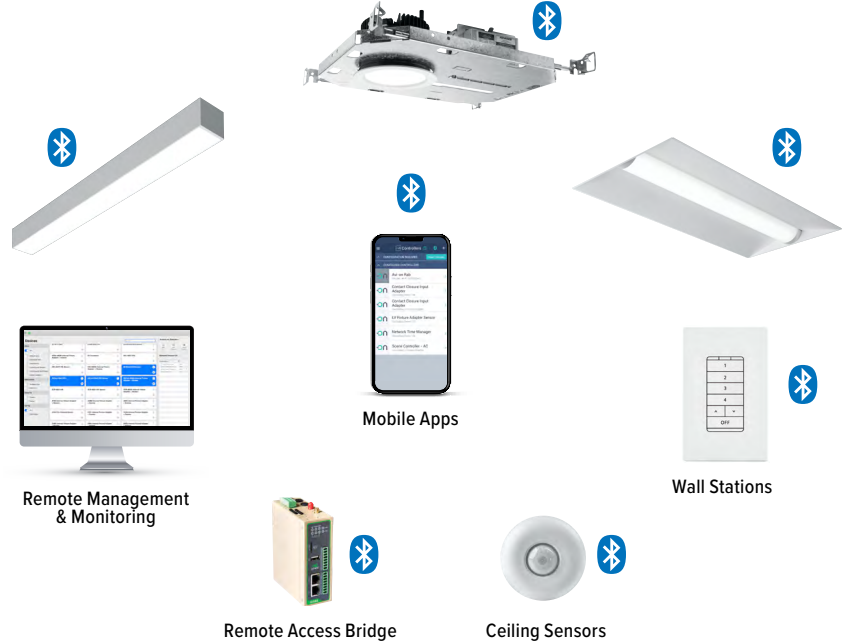


Zone Scanner
Web App



Commissioning
Pro App

SYSTEM COMPONENTS



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ACCESSORIES

WALL STATIONS	
AVI-B-2401AC-1	Scene controller - buttons numbered 1-4 and up/down/off, 120-277VAC
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

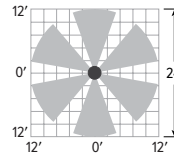
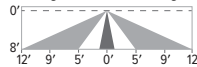
AVI-LVFA-CS2-PIR Avi-on wireless fixture control with PIR motion and daylight sensor. DA Driver only.

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

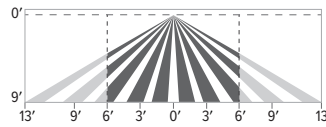
AWNS Lutron Athena wireless node integral fixture control, RF with daylight and occupancy sensing. DA and DSR Drivers only.

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



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

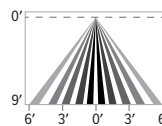
CATALOG NUMBER	DESCRIPTION
AWNDR	Lutron Athena wireless node integral fixture control, RF only, for use with D4i DALI-2 or driver with 12V auxiliary power.
AWNS	Lutron Athena wireless node integral fixture control, RF with daylight and occupancy sensing, for use with D4i DALI-2 or driver with 12V auxiliary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

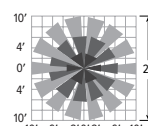
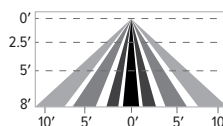
CATALOG NUMBER	DESCRIPTION
VRF	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), for use with sensor-ready driver
VDO	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC), for use with sensor-ready driver
VRF/DBI	Lutron Vive integral fixture control, 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

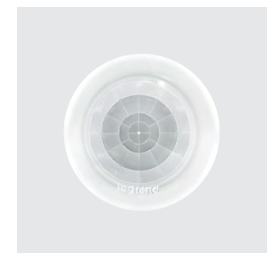
SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 12'
LENS	Up to 300 sq/ft coverage
DETECTION ANGLE	360°
TEMPERATURE RANGE	0° to 50°C
RELATIVE HUMIDITY	0 to 90%, non-condensing
COMMISSIONING	App (iOS or Android)

SENSOR COVERAGE PATTERNS

8' height: ø20' coverage



SENSOR DETAIL



Dimensions: ø1-5/16"

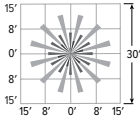


LV-ZLS05-ILW Leviton PIR motion and daylight sensor. DA Driver only. Adjustable via remote. Optional ZLSOR-RA1 remote controller available.
ZLSOR-RA1 Remote controller for ZLS05 sensor. Please specify quantity required per project. Ordered and shipped separately.

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

