DIL
LED
Recessed Direct/Indirect Lensed

Williams

4-7/16″

23-3/4″

2x2 | 2x4 AD Shown

CATALOG #: _____

TYPE: _____

PROJECT: _____

BUY AMERICAN ACT COMPLIANT

CCEA Approved

FEATURES

- Transparent lensed door provides a barrier between the room and the diffuser to discourage vandals and minimize contaminants
- Double or triple gasketing options available
- Ribbed acrylic diffuser shields LEDs from direct view
- Fully enclosed spring-loaded cam latches allow years of hassle-free maintenance
- T-slot steel hinge allows reversible hinging and latching and ensures positive retention when door is opened
- Optional anti-microbial white finish available for use in healthcare applications
- Maximize energy savings with efficacies as high as 142 lm/w
- Wireless in-fixture control solutions available
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING – 22-gauge die-formed C.R.S.
- DOOR FRAME & LENS – Transparent acrylic lens, .080″ thick, mounted in .050″ thick extruded aluminum door frame, flat with mitered corners.
- REFLECTOR – Precision die-formed C.R.S. with highly reflective, non-glare matte white polyester powder coated finish.
- SHIELDING – .125″ frosted ribbed acrylic diffuser.
- 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. L70 at 50,000 hours.
- MOUNTING – NEMA Type "G" 15/16″ or 1″ grid standard. For NEMA Type "NFG" and "SG" 9/16″ grid installations, specify EQCLIPS option. Drywall flange type available.
- LISTINGS –
  - cCSAus certified as luminaire suitable for dry or damp locations.
  - City of Chicago Environmental Air approved when specified with CP option.
  - 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: DILG - S24 - L64/835 - FAD - OPTIONS - CONTROL/DIM - UNV

ORDERING INFO

SERIES	CEILING TYPE	FIXTURE STYLE	WIDTH	LENGTH	LUMENS [1]		CRI	CCT
DIL	G 15/16″ or 1″ grid	S Full door frame, no reveal	1 1′ [3]	2 2′	**1x4**		8 80	27 2700K
	F Flange [2]		2 2′	4 4′	L30	3,000lm	9 90 [4]	30 3000K
					L48	4,800lm		35 3500K
					2x2			40 4000K
					L25	2,500lm		50 5000K
					L32	3,200lm		
					L45	4,500lm		
					2x4			
					L51	5,100lm		
					L64	6,400lm		
					L89	8,900lm		

DOOR FRAME	SHIELDING	OPTIONS [5]	
F Flat aluminum	AD Acrylic	EM/10WLP	Low-profile 10-watt emergency battery
	WPR White perforated round [6]	EQCLIPS	Earthquake clips [7]
		DG	Double gasket [8]
		TG	Triple gasket [9]
		(L__)	Additional lower lumen packages available. Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package. **Example**: 7,500 nominal lumens = DILG-S24-L89/835-**(L75)**
		CP	Chicago plenum (CCEA)
		AMW	Anti-microbial white finish

CONTROL [10]		DRIVER		VOLTAGE	
See page 5 for ADDITIONAL CONTROL OPTIONS.		*See page 5 for ADDITIONAL DRIVER OPTIONS.*		**120**	120V
–	None			**277**	277V
AVI-LVFA	Avi-on wireless fixture control [11]	DIM	Driver with external dimming wires	**UNV**	120-277V
AVI-LVFA-CS2-PIR	Avi-on wireless fixture control with PIR motion and daylight sensor [12]	DRV	Driver without external dimming wires	**347**	347V [17]
AWNR	Lutron Athena wireless node integral fixture control, RF only [13]	DA	Driver with 12V auxiliary power, without external dimming wires [15]		
AWNS	Lutron Athena wireless node integral fixture control, RF with daylight and occupancy sensing [14]	DSR	Sensor-ready driver without external dimming wires (D4i DALI-2) [16]		

NOTES

1. Lumen output based on AD Shielding, 80 CRI/3500K CCT. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see Options.
2. See page 3 for F CEILING TYPE INSTALLATION.
3. 4′ length only.
4. Extended lead times may apply. Consult factory for availability.
5. See Technical Info for DRYWALL KIT and POWER ENTRY details.
6. 2x2 and 2x4 only.
7. 4 per fixture. Optional for 1″ grid installations. Required for 9/16″ grid mounting. Not available with F Ceiling Type.
8. See page 3 for GASKETING DETAILS.
9. Field-installed. See page 3 for GASKETING DETAILS.
10. See page 4 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS. See page 3 for SENSOR & NODE PLACEMENT DETAILS.
11. DA Driver only.
12. DA Driver only.
13. DA and DSR Drivers only.
14. DA and DSR Drivers only.
15. Avi-on and Lutron Athena Controls only.
16. Lutron Athena Controls only.
17. Not available with EM batteries, DA, or DSR drivers.

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FIXTURE PERFORMANCE DATA

	LUMEN PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (LM/W)
1x4	L30	3081	27.6	112
1x4	L48	4812	41.1	117
2x2	L25	2614	19.6	133
2x2	L32	3202	23.9	134
2x2	L45	4405	31.2	141
2x4	L51	5228	37.7	139
2x4	L64	6515	48.0	136
2x4	L89	8903	62.8	142

- Photometrics tested in accordance with IESNA LM-79. Results based on AD 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 tables to calculate additional options.

MULTIPLIER TABLES

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

| LENS		CONVERSION FACTOR
2x2	AD	1.00
2x2	WPR	0.75
2x4	AD	1.00
2x4	WPR	0.79

PHOTOMETRY

DILG-S14-L48/835 Total Luminaire Output: 4812 lumens; 41.1 Watts | Efficacy: 117.1 lm/W | 80 CRI; 3500K CCT
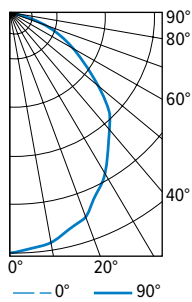
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0º	45º	90º	
0	2092	2092	2092	
5	2057	2056	2056	196
15	1950	1957	1970	556
25	1750	1766	1775	820
35	1488	1519	1538	952
45	1215	1270	1286	954
55	808	860	761	731
65	468	455	321	421
75	173	135	98	157
85	22	19	19	27
90	0	0	0	

| ZONE	LUMENS	% FIXTURE
0 - 30	1571	33
0 - 40	2523	52
0 - 60	4207	87
0 - 90	4812	100
0 - 180	4812	100

DILG-S22-L45/835-FAD Total Luminaire Output: 4405 lumens; 31.2 Watts | Efficacy: 141 lm/W | 80 CRI; 3500K CCT
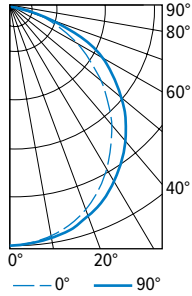
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0º	45º	90º	
0	1729	1729	1729	
5	1720	1716	1719	163
15	1635	1648	1665	465
25	1473	1507	1545	694
35	1245	1304	1369	816
45	980	1058	1150	818
55	698	781	903	706
65	422	500	595	495
75	176	211	214	217
85	20	25	19	33
90	2	3	2	

ZONE	LUMENS	% FIXTURE
0 - 40	2137	49
0 - 60	3660	83
0 - 90	4405	100
0 - 180	4405	100

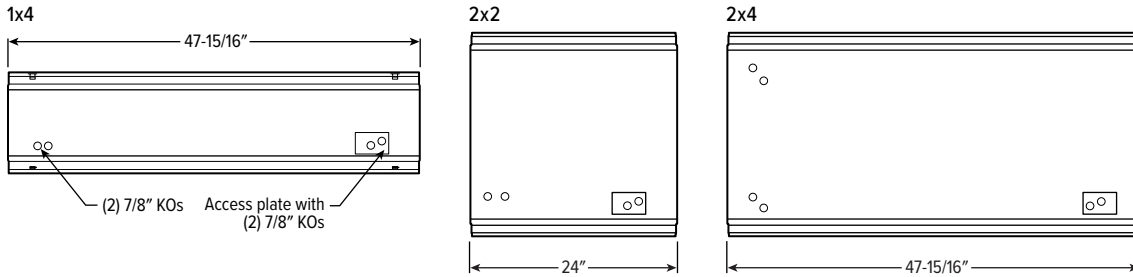**DILG-S24-L89/835-FAD** Total Luminaire Output: 8903 lumens; 62.8 Watts | Efficacy: 142 lm/W | 80 CRI; 3500K CCT
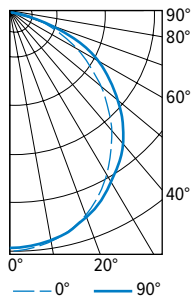
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0º	45º	90º	
0	3439	3439	3439	
5	3470	3407	3405	325
15	3289	3258	3280	922
25	2960	2970	3030	1373
35	2531	2598	2703	1629
45	2013	2133	2257	1644
55	1450	1590	1765	1433
65	897	1049	1179	1028
75	389	442	449	471
85	51	56	56	77
90	3	3	3	

ZONE	LUMENS	% FIXTURE
0 - 40	4249	48
0 - 60	7326	82
0 - 90	8903	100
0 - 180	8903	100

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FIXTURE DETAILS

1x4

47-15/16"

(2) 7/8" KOs   Access plate with (2) 7/8" KOs

2x2

24"

2x4

47-15/16"

CROSS SECTIONS

AD

1x4

2x2 | 2x4

WPR

2x2 | 2x4

F CEILING TYPE INSTALLATION

1x4

1" Min.
3-3/8" Max.

4-3/8"

13-5/16"
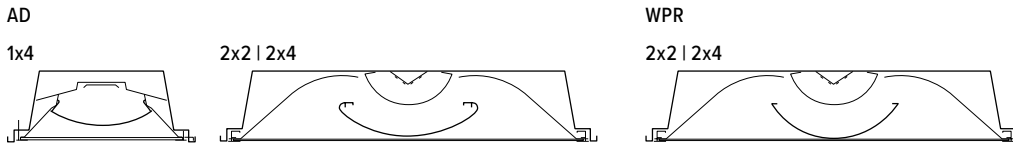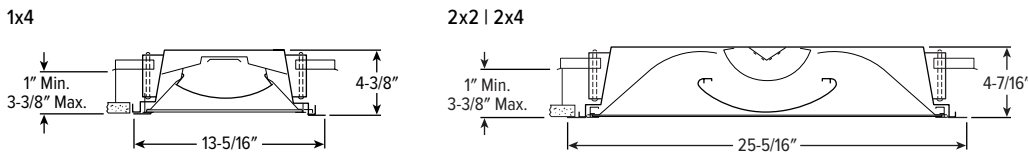
Note: Maximum recommended ceiling opening is 12-3/8"x 48-3/8". For continuous row mounting, add 49-5/16" for each additional fixture to obtain ceiling opening. 1-5/16" between end plates.

2x2 | 2x4

1" Min.
3-3/8" Max.

4-7/16"

25-5/16"

Note: Maximum recommended ceiling opening is 24-3/8" x 24-3/8" for 2'x2' and 24-3/8"x 48-3/8" for 2'x4'. For continuous row mounting, add 49-5/16" for each additional fixture to obtain ceiling opening. 1-5/16" between end plates.

GASKETING DETAILS

DOUBLE GASKETING (DG OPTION)

First gasketing factory-installed between door frame and luminaire housing prevents light leak and reduces dust ingress.
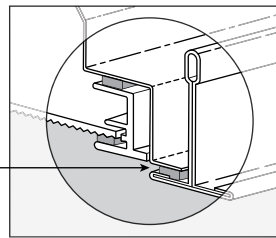
Second gasketing factory-installed between door frame and lens reduces dust and bug contaminants.
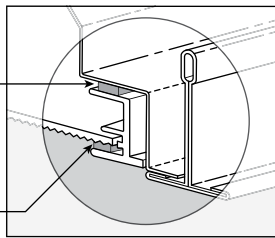
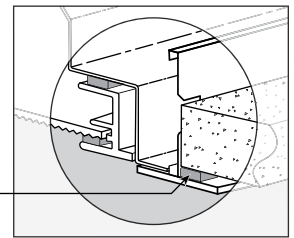**TRIPLE GASKETING (TG OPTION)**

T-bar

Third gasketing field installed between bottom perimeter of fixture and T-bar ceiling seals plenum dust from the room.
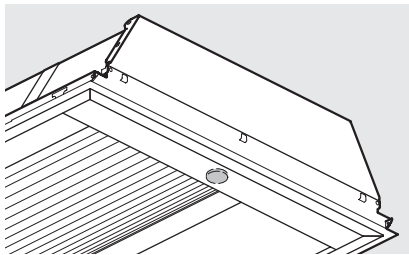
Drywall

Between bottom perimeter of fixture and hardpan ceiling.

SENSOR & NODE PLACEMENT 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
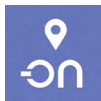- Flexible control strategies

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.
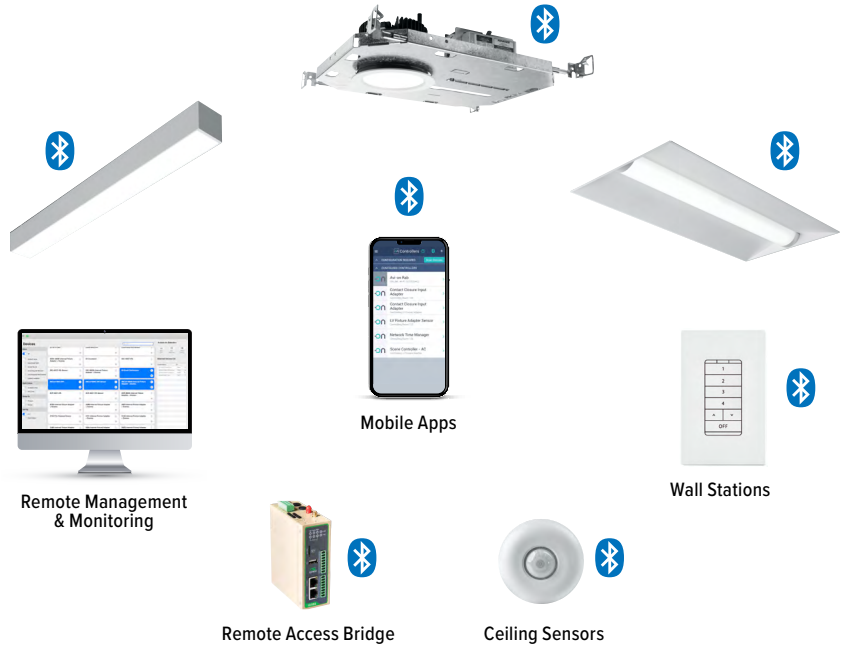
Commissioning Mobile App

Zone Scanner Web App

Commissioning Pro App

SYSTEM COMPONENTS

Mobile Apps

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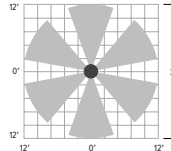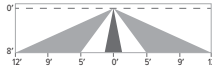
AVI-LVFA-CS2-PIR Avi-on wireless fixture control with PIR motion and daylight sensor. DA Driver only.

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

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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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
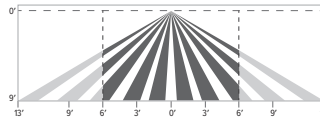
Motion Sensor Coverage

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
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

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

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