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Type _





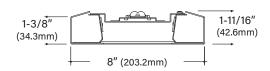


DIRECT CRI, CCT & OUTPUT¹

LINERO L8DI-A-BW

INDIRECT CRI, CCT & OUTPUT¹

Dual Source Linear



Key Features

L8DI-A-BW

HOUSING

- One piece die-formed 18 gauge steel housing
- Highly reflective die-formed white painted steel reflector
- Die-cast aluminum end caps
- LINERO offered with a 5-year limited warranty that covers LED, driver and fixture
- UL and cUL Listed
- Approved for dry/damp location
- Maximum fixture weight is 17 lbs per standard 4' fixture
- Room-Side Maintenance for LED system
- Buy American Act compliant









LENGTH²





Example Part #: L8DI-A-BW-835HO-835-26'-AC48G1-U-OL2-1-0-W

8DI-A-BW				_			-		-		-
DUSING	DIRECT OUTPUT	INDIRECT OUTPUT	LENGTH	MOUNTING	VOLTAGE	DRIVER	CIRCUITING	BATTERY & EMERGENCY	FINISH	FIXTURE OPTIONS	CONTROLS

L8DI-A-BW - LINERO 8 with Direct Satine Lens and Indirect Batwing Shielding pg. 2	_27 2700K _30 3000K _35 3500K _40 4000K CL Custom Lumens CW Custom Watts Lumen Output pg. 2	_27 2700K _30 3000K _35 3500K _40 4000K CL Custom Lumens CW Custom Watts Lumen Output pg. 3	Individual Fixture Continuous Row Length and Pattern pg. 3
MOUNTING ³	VOLTAGE	DRIVER	CIRCUITING
ACG AC to Grid ACJB- AC to J Box ACST- AC to Structure AC5G 5" Non-Power Canopy AC5JB-5" Non-Power Canopy SQG 5" Square Canopy SQJB-5" Square Canopy WA - Wall Mount Mounting pg. 4	U - Universal (120 thru 277V) 1 - 120V 2 - 277V 3 - 347V Voltage pg. 4	FSD - Factory Select Driver (1%, 0-10v) PL2 - Advance Xitanium (1%, 0-10v) OL2 - eldoLED Optotronic (1%, 0-10v) EE1 - eldoLED ECOdrive (1%, 0-10v) ES1 - eldoLED SOLOdrive (0.1%, 0-10v) OL5 - eldoLED Optotronic (1%, 0-10v, AUX) OD1 - eldoLED Optotronic (1%, 0-10v, DEXAL) LH1- Lutron Hi-lume (1%, EcoSystem) PS1 - Advance Xitanium (50%/100%) Driver pg. 4	1 - Single Circuit 2- Dual Circuit M - Multi Circuit E - Emergency (entire fixture) N - Night Light (entire fixture) Circuiting pg. 5

BATTERY & EMERGENCY ⁴	FINISH	CONTROLS ⁵
O - None _FSB - Factory Select Battery _FSG - Factory Select ALCR _GI - lota ETS DR _GB - Bodine GTD _ILL - lota 10w Integral _PLL - Bodine 10w Integral Lithium _E - Emergency circuit section _N - Night Light circuit section _L - Life Safety circuit section _Battery and Emergency pg. 5	W - White S - Metallic Silver BL - Textured Black BR - Bronze GR - Graphite CC - Custom Color Finish pg. 5	DLMFC - Wattstopper DLM (wired) EASYS - Philips EasySense (wireless) SNSLM - Encelium Sensilum (wireless) WVLX - Eaton WaveLinx (wireless) VDO - Lutron Vive Sensor (wireless) VFF - Lutron Vive Connected (wireless) ENL Enlighted (wireless) Controls pg. 6

"When specifying SOURCE the first _ is for specifying either 8 - 80CRI, 9 - 90CRI. The ending _ are for specifying output, example HO - High Output, please contact factory for more information. Individual fixtures come in 4', 6' & 8' lengths. Continuous row come in 4' or 6' increments. Specify AC Cable length, standard AC is 48"; Specify grid: G1=15/16", G9=9/16", GS=Screw Slot. Example AC48G1. Enter quantity for Battery and Emergency, Example 2PL. Controls can only be used with Single Circuit (1) or Emergency Circuit (E). See Controls chart on page 5 for driver options and more information.







Housing

DUAL OUTPUT

L8DI-A-BW



Direct Source: Static White1

- Specify either 80 or 90 CRI
- Longer lead-time may apply for 90 CRI. Consult factory

• 90 CRI = R9≥50

Custom Output- Lumens OR Wattage

CL	Specify CRI, CCT and desired lumens (i.e. CL835950)	Specify lumens between standard offering listed below. Lumens are specified per color temp
CW	Specify CRI, CCT and desired wattage (i.e. CW9409.5)	Specify watts between standard offering listed below

Direct 80 CRI

	Color	Lumens per foot	Shielding A	
			Satine	
			Watts/ft	LPW
830LO	3000K	400	3.9	103.0
830	3000K	600	5.9	102.1
830HO	3000K	850	8.4	101.0
830VHO	3000K	1250	12.7	98.7
835LO	3500K	400	3.6	110.1
835	3500K	600	5.5	109.0
835HO	3500K	850	7.8	108.6
835VHO	3500K	1250	11.8	106.3
840LO	4000K	400	3.6	111.0
840	4000K	600	5.5	110.0
840HO	4000K	850	7.8	109.6
840VHO	4000K	1250	11.7	107.2

Direct 90 CRI

927LO	2700K	400	5.7	70.6
927LU	2700K	400	5.7	70.0
927	2700K	600	8.6	70.1
927HO	2700K	850	12.4	68.6
930LO	3000K	400	5.3	75.7
930	3000K	600	8.0	75.2
930HO	3000K	850	11.5	73.7
930VHO	3000K	1250	17.5	71.6
935LO	3500K	400	5.1	79.0
935	3500K	600	7.6	78.7
935HO	3500K	850	11.0	77.1
935VHO	3500K	1250	16.7	75.0
940LO	4000K	400	5.1	77.9
940	4000K	600	7.7	77.4
940HO	4000K	850	11.2	75.9
940VHO	4000K	1250	16.9	73.8

'LPW and watts/ft based off 48" fixture size.



Indirect Source: Static White1

Indirect 80 CRI				
	Color	Lumens per foot	Shielding BW	
			Batwing	1
			Watts/ft	LPW
830LO	3000K	400	3.3	122
830SO	3000K	600	4.5	135
830HO	3000K	850	6.3	135
830VHO	3000K	1250	9.1	138
835LO	3500K	400	3.2	126
835SO	3500K	600	4.3	139
835HO	3500K	850	6.1	139
835VHO	3500K	1250	8.8	142
840LO	4000K	400	3.2	126
840SO	4000K	600	4.3	139
840HO	4000K	850	6.1	139
840VHO	4000K	1250	8.8	142

Indirect 90 CRI 927LO 2700K 400 3.7 107 **927SO** 2700K 600 5.4 111 927HO 2700K 850 7.6 111 **927VHO** 2700K 1250 11.1 112 930LO 3000K 117 400 3.4 930SO 3000K 600 4.9 122 930HO 3000K 850 7.0 122 **930VHO** 3000K 1250 10.2 123 935LO 3500K 400 3.4 116 **935SO** 3500K 600 5.0 121 935HO 3500K 850 7.0 121 935VHO 3500K 1250 10.2 122 940LO 4000K 400 3.4 116

600

850

1250

5.0

7.0

10.2

121

121

122

LPW and watts/ft based off 48" fixture size.

4000K

4000K

4000K

Length

940SO

940HO

940VHO

- All individual units cannot be joined, end caps are factory installed and cannot be removed
- Add 3/8" for each end cap or 3/4" to the overall length of the row

Aperture sizes vary, 4' fixtures have a single 45-7/16" long aperture, 6' fixtures have two
33-11/16" long apertures, and 8' fixtures have two 45-7/16" long apertures

4	6	8	_
Individual Fixture	Individual Fixture	Individual Fixture	Continuous Run
48" (1,219mm)			Continuous rows available in 2' increments, starting at 4.'
	72" (1,829mm)		
		96" (2,438mm)	

Specify to the 2', starting at 4'





Dual Source Linear

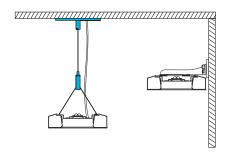


Mounting

- Specify cable length in ordering code (AC48G1)
- Standard adjustable cable. Specify 48", 120", 240" or 350"
- Adjustable aircraft cable mounts on 4'-0" (1,219mm), 6'-0" (1,829mm) and 8'-0" (3,438mm) centers
- End caps and standard white power cord attached at factory Aircraft Cable supplied with 5" (127mm) power and 2" (51mm) non-power canopies

ACG1	Adjustable AC to 1" (15/16") T-Bar
ACG9	Adjustable AC to 9/16" T-Bar
ACGS	Adjustable AC to Screw Slot T-Bar
ACJB	Adjustable AC to Junction Box
ACST	Adjustable AC to Structure
AC5G_	5" (127mm) Non-Power Canopy
AC5JB	5" (127mm) Non-Power Canopy
SQG_	5" (127mm) Square Canopy
SQJB	5" (127mm) Square Canopy
WA	Wall Mount

- Canopies match fixture finish, power cords are white or black depending on fixture finish. See Finish section for additional details
- Approved for dry/damp location unless otherwise noted
- Refer to installation instructions during installation at the job site
- Maximum fixture weight is 17 lbs. per 4' fixture



Voltage

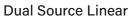
 Some LINERO configurations will not accommodate all voltage options; consult with factory

U	Universal
1	120 volt
2	277 volt
3	347 volt

Driver

- Standard Driver Option = FSD
- Driver Lifetime: 50,000 hours at 25°C ambient operating conditions
- For more driver options see Pinnacle Resource Guide
- Some LINERO configurations will not accommodate all driver options; consult with factory

0-10V Drivers					
FSD	Factory Select Driver (1%, 0-10v)				
PL2	Signify Advance Xitanium 1%, 0-10v				
PL4	Advance Xitanium 347v 1%, 0-10v, requires 347v				
OL2	eldoLED Optotronic, 1%, 0-10v				
OL4	eldoLED Optotronic 347v, 1% 0-10v, requires 347v option				
EE1	eldoLED ECOdrive 1%, 0-10v Logarithmic				
EE2	eldoLED ECOdrive 1%, 0-10v Linear				
ES1	eldoLED SOLOdrive 0-10v, 0.1% Logarithmic				
ES2	eldoLED SOLOdrive 0-10v, 0% Linear				
OL5	eldoLED Optotronic 1%, 0-10v, AUX				
DALI Drivers					
EE3	eldoLED ECOdrive .1%, DALI (logarithmic)				
ES3	eldoLED SOLOdrive .1%, DALI (logarithmic)				
OD1	eldoLED Optotronic 1%, DEXAL				
OD2	eldoLED Optotronic 1%, DALI 2 Channel				
Lutron Drivers					
LH1	Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1				
Alternate Drivers					
PS1	Signify Advance Xitanium Step Dimming 50%/100%				
PR1	Philips Advance Xitanium SR, requires EASYS, VDO or VRF				
OD1	eldoLED Optotronic 1%, DEXAL				
EH1	ELV 120v only, 0-10v universal				





How to specify Circuiting, Battery and Emergency



- Select fixture circuiting from options below
- Some LINERO configurations will not accommodate all circuiting options, consult with factory

Circuiting

1	Single Circuit	
2	Dual Circuit	
M	Multi Circuit	
E	Emergency Circuit only	
N	Night Light Circuit only	



- Battery and emergency section options are available in addition to fixture circuit
- Select battery and emergency section options below; factory shop drawing required
- Some LINERO configurations will not accommodate all circuiting options, consult with factory

Battery and/or Emergency If Required

No battery or specific emergency section required

Battery

- Select battery section type if required, indicate total QTY. Example 2PL
- 90 minute battery runtime; test button is integral to fixture
- For more battery options available, see Pinnacle Resource Guide

0	No Battery			
_FSB	Factory Select Battery (10w option)			
_FSBST Factory Select Battery (10w, Self Testing)				
_ILL lota 10w Integral Lithium, Self Testing				
_IRC Iota 10w Remote				
_PRH Bodine 20w Remote				
_PLL Bodine 10w Integral Lithium, Self Testing				

For Approximate Battery Lumen Output

- Multiply battery wattage X fixture LPW shown on Lumen Table
- 92.3 (LPW) x 10 (watts) = 923 battery lumen output

Emergency

- Select emergency section type if required, indicate total QTY. Example 1E
- Combine battery and emergency section ordering codes if both options are selected

_FSG	Factory Select Automatic Load Control Relay (ALCR), UNV
_GI	Emergency Transfer Switch (ETS) DR Emergency Control Device, UNV
_GB	Bodine GTD, Generator Transfer Device, 120v or 277v
_E	Emergency circuit section
_N	Night Light circuit section
_L	Life Safety circuit section NO THROUGH WIRE

Combination Section Ordering Examples

- Single circuit, (1) 10w battery, (1) emergency section Ordering Code: 1-1PL1E
- Multi circuit, (2) 10w battery, (2) emergency sections

Single circuit, (1) night light section

Ordering Code: M-2PL2E

Ordering Code: 1-1N

Battery OR Emergency Ordering Examples

- Single circuit, 10w Integral Battery
- Emergency only, 10w Integral Battery

Single circuit, GTD required

Ordering Code: 1-1PLL Ordering Code: E-1PLL

Ordering Code: 1-1GB

Finish

- Standard powder-coat textured white, metallic silver, textured black, graphite or bronze painted finish; consult factory for chip of standard paint finishes
- Selecting a fixture finish other than white may impact lumen output; consult factory for more information

W	White (white cord/white canopy)			
S	Metallic Silver (white cord/silver canopy)			
BL	Textured Black (black cord/black canopy)			
BR	Bronze (white cord/bronze canopy)			
GR	Graphite (white cord/graphite canopy)			
CC	Custom Color (white cord/color match canopy)			



Dual Source Linear

$\frac{1}{1}$

Controls

- Pinnacle Lighting offers easy to specify network control solutions that connect to an intelligent centralized system to maximize lighting energy efficiencies or integral sensors for individual fixture control
- Pinnacle Lighting fixtures ship technology ready; commissioning by others
- Controls can only be used with Single Circuit (1) or Emergency Circuit (E)
- Contact factory for any non-standard configurations for layout, placement, or EM options
- One drop pers sensor typical, consult factory for more information

	Solution	Components	Network/Sensor	Connection	Required Drivers	Limitations
DLMFC	Legrand Wattstopper DLM	LMFC-011	Digital Lighting Management (DLM)	Wired, one RJ45 ports	OL2, OL4	Not available with Battery
EASYS	Philips EasySense	SNS-210	Daylight/PIR Occupancy	Wireless to switches	PR1	Not available with 347 volt
SNSLM	Encelium Sensilum	EN-CLM-PIR-DD-ZB	Encelium, Daylight/PIR Occupancy	Wireless	OD1, OL5	Not available with 347 volt
WLVX	Eaton WaveLinx	SWPD1, MSP3IVMVDC1	WaveLinx WCL, Daylight	Wireless	Any 0-10v	Not available with 347 volt
VDO	Lutron Vive Sensor	DFCSJ-OEM-OCC	Vive, Daylight/PIR Occupancy	Wireless	OD1, PR1	Not available with 347 volt
VRF	Lutron Vive Connected	DFCSJ-OEM-RF	Vive	Wireless	OD1, PR1	Not available with 347 volt
ENLI	Enlighted IOT	SU-5E-IOT, CU-4E	Enlighted, Daylight/PIR Occupancy	Wireless	Any 0-10v	Not available with 347 volt
ENLC	Enlighted Connected Lighting	SU-5E-CL, CU-4E	Enlighted, Daylight/PIR Occupancy	Wireless	Any 0-10v	Not available with 347 volt

Photometrics

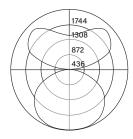
Satine Lens

Test # SCALED FROM ITL90512 & ITL94661 Catalog # L8DI-A-BW-840VHO-840VHO-4

 Lumens
 9938 lm

 Watts
 84 W

 Efficacy
 122.5 LPW



Candela Distribution

Vert Horizontal Angle Angle

0	22.5	45	67.5	90
1744	1744	1744	1744	1744
1738	1738	1739	1741	1742
1681	1675	1698	1711	1709
1558	1558	1601	1631	1639
1377	1386	1443	1485	1498
1152	1165	1222	1267	1282
893	905	952	985	1000
610	618	645	667	677
319	322	334	344	346
74	79	79	77	78
9	108	303	153	155
87	171	267	247	232
173	267	445	436	402
263	356	588	668	641
439	521	772	1038	1100
578	677	933	1202	1294
680	792	1077	1320	1409
778	862	1110	1344	1435
866	913	1060	1194	1250
932	950	1008	1060	1081
964	967	973	978	982
967	967	967	967	967
	1744 1738 1681 1558 1377 1152 893 610 319 74 9 87 173 263 439 578 680 778 866 932 964	1744 1744 1738 1738 1738 1738 1738 1558 1558 1558 1558 1377 1386 1937 905 610 618 319 322 74 79 9 108 87 171 173 267 356 439 521 578 677 680 792 778 862 866 913 932 950 964 967	1744 1744 1744 1738 1738 1738 1558 1558 1601 1377 1386 1443 1152 1165 1222 893 905 952 610 618 634 319 322 334 7 79 79 9 108 303 87 171 267 445 263 356 588 439 521 772 578 677 933 680 792 1077 866 913 1060 932 950 1008 964 967 973	1744 1744 1744 1744 1744 1744 1739 1739 1741 1738 1739 1741 1558 1651 1698 1711 1558 1558 1601 1631 1431 1485 1431 1485 <td< td=""></td<>

Luminance Data (cd/sq.m)

Angle In	Average Average		Average	
Degrees	0-Deg	45-Deg	90-Deg	
45	29615	28678	29117	
55	28237	26499	26619	
65	26079	22914	22593	
75	22084	17113	16129	
85	14623	7676	6348	

Photometry based on ITL report ITL93486. For all available IES files, please visit our website at pinnacle-ltg.com. Photometry testing in accordance to IESNA-LM-79-08 at an NVLAP accredited testing laboratory. Testing conducted at 25°C ambient conditions





Approvals & Certifications

Construction: One piece die-formed 18 gauge steel housing in a 6-7/8" (174mm) by 1-11/16" (42mm) profile with a 1-3/8" (34mm) side profile. Standard 4'-0" (1,219mm), 6'-0" (1,828mm) and 8'-0" (3,438mm) fixtures can be joined to create continuous runs. Standard high reflectance die-formed white painted aluminum.

Shielding: Direct: white satine lens with matte finish. Indirect: 40/60 distubution uses a batwing diffuser, 70/30 distubution uses a perforated reflector and clear dust guard, 100 direct distubution uses a steel top cover. 4' fixtures have a single 45-7/16" long aperture, 6' fixtures have two 33-11/16" long apertures, and 8' fixtures have two 45-7/16" long apertures.

Mounting: Adjustable aircraft cable, or wall mounts available. Air Craft Cable mounts on 4'-0" (1,219mm), 6'-0" (1,828mm) and 8'-0" (3,438mm) centers. Refer to installation instructions for appropriate ceiling detail. Maximum fixture weight is 17 lbs. per 4' fixture.

LED: 25°C test environment. Lumen output/wattage has a margin of +/- 5%. Luminaire configurations tested in accordance with IES LM-79. Diodes tested in accordance with IES LM-80. Lifetime calculated using IES TM-21. Minimum lifetime greater than 60,000 hours. Lifetime Projection: L70 lifetime – 114,000 hours L90 lifetime – 34,000 hours. MacAdam 3-Step Ellipses. For all available IES files, please visit our website at pinnacle-ltg.com.

CRI, CCT & Lumen Output: Two lumen packages available. Standard and High (HO). Custom outputs are available. Specify custom lumens or watts between standard offering listed on CRI, CCT & Output page. 80 CRI is available for 3000K, 3500K, and 4000K. 90 CRI is available for 2700K, 3000K, 3500K, and 4000K. 90 CRI = R9≥50. Fixture performance and photometric data based on 8' configuration for worst case input voltage. Published lumen or wattage data based on OL1 configuration.

Voltage: Universal (U), 120 volt (1), 277 volt (2) and 347 volt (3) options available. Must specify OL4 in Driver section when 347 volt (3) is selected. Some LINERO configurations will not accommodate all voltage options; consult with factory.

Driver: Standard Driver Option is Osram 0-10V, 1% = PL2. Electronic driver, Power factor is >0.9 with a THD <20%. Driver Lifetime: 50,000 hours at 25°C ambient operating conditions. Ambient operating range for 40%, 70% and 100%: -23F/-30C to 125F/52C For more driver options, see Pinnacle Resource Guide. Some LINERO configurations will not accommodate all driver options.

Circuiting: Select from single circuit (1), Multi circuit (M), Emergency circuit (E), Night Light circuit (N) or Life Safety (L). For emergency circuiting situations that require no through wire or circuit separation, Life Safety Circuit should be selected. This will provide a separate power feed and only the Life Safety Circuit in that section. Some LINERO configu-

rations will not accommodate all circuiting options; consult with factory.

Battery & Emergency: Select battery or emergency options if required. If battery or emergency option is not required, enter 0. Battery duration is 90 minutes as standard. Test button is integral to fixture. For more Battery options, see Pinnacle Resource Guide.

Finish: Standard powder-coat textured white, metallic silver, textured black, graphite or bronze painted finish, consult factory for chip of standard paint finishes. Canopies painted white unless specified differently in the options section of the part number. Contact factory for additional custom color and finish options.

Controls: DLM utilizes wired network connections for digital control through switching and dimming with 0-10v LED drivers. nLight Air rIO module provides wireless control using eldoLED LED drivers. nLight Air rES7 sensor provides wireless control, daylight harvesting and occupancy detection with PIR or PDT using eldoLED LED drivers. EasySense sensor provides daylight harvesting and PIR occupancy detection using the SR driver; the Philips app provides advanced configurations. ENCELIUM SensiLUM sensor provides wireless control, daylight harvesting and PIR occupancy; driver data is available when using the DEXAL LED driver. WaveLinx Connected Lighting sensor provides wireless control and adylight harvesting using 0-10V LED drivers. Lutron Vive sensor provides wireless control, daylight harvesting and PIR occupancy detection using DEXAL or SR LED drivers. Lutron Vive module provides wireless control using DEXAL or SR LED drivers. Enlighted Smart Sensor provides multi-functionality including daylight harvesting and PIR occupancy; for IOT platform using 0-10v LED drivers. Enlighted Smart Sensor provides multi-functionality including daylight harvesting and PIR occupancy; for Connected platform using 0-10v LED drivers.

Labels: UL and cUL 1598 listed. Approved for dry/damp location unless otherwise noted.

Fixture Weight: Maximum fixture weight is 17 lbs (per 4' fixture).

Buy American Act Compliant

Warranty: LINERO LED offered with a 5-year limited warranty. Covers LED, driver and fixture.