



LED

8" Pro-Optic® LED Retrofit Downlight
120-277V
0-10V Dimming

Recessed

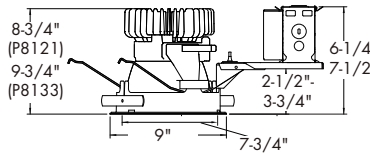
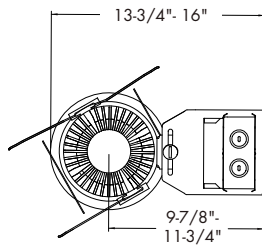


Type _____
-EB -EBSD
P8102

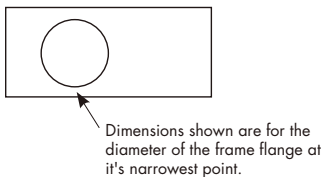
All Items **MTO**

Ceiling Cutout: see guide

Maximum Ceiling Thickness: 1-1/2"



Notes:
To order proper housing:
1. Measure existing plaster frame aperture
2. Use Compatibility Guide for selecting hsg



Housing Compatibility Guide		
Ordering Guidelines	8 inch	
	MIN	MAX
Requires SD Housing Option	7-15/16	8-1/8
All Standard Housings	8-1/8	8-3/4
Requires P8101-01 Ring Accessory and WF trims	8-3/4	9-1/8

LED Housing Catalog No.	Description	Lamping	Suitable Plaster Frame Aperture Range (see Notes)
P8102-EB	8" LED Retrofit Hsg.	See Trim Specifications	8-1/8" min. to 9-1/8" max.
P8102-EBSD	8" LED Retrofit Hsg. Small Diameter	See Trim Specifications	7-15/16" min. to 8-1/8" max.

Housing Accessory

P8101-01 8" Ring Accessory (Use when WF trims are required) 8-3/4" min. to 6-7/8" max.

LED Trim

Catalog No.	Reflector Finish	LED Color Temp	Flange Options
<input type="checkbox"/> P8121 8" LED, 1100lm	<input type="checkbox"/> -21A Clear Alzak®	<input type="checkbox"/> /30K 3000 Kelvin	<input type="checkbox"/> WF Wide Flange
<input type="checkbox"/> P8133 8" LED, 2000lm	<input type="checkbox"/> -22A Gold Alzak®	<input type="checkbox"/> /35K 3500 Kelvin	(White flange standard)
	<input type="checkbox"/> -28 White	<input type="checkbox"/> /40K 4000 Kelvin	

Example: P8121-21A/30KWF (Ordered separately)

Specifications:

General

- Commercial grade LED retrofit downlight combines superior brightness control with energy savings and low maintenance
- Suitable for commercial, retail or other institutional applications with ambient temperatures up to 40°C (104°F)

Housing

- Components made of quality die cast aluminum or galvaneal steel
- Installation can be performed from below the ceiling without removing the existing fixture
- Pre-wired J-box with snap on cover for easy access
- Approved for 8 (4 in/4 out) No. 12 AWG conductors rated for 90°C through wiring
- Snap in connections from driver compartment allow easy installation of LED trim assembly without tools above or below ceiling
- Standard with ballast disconnect
- Can be upgraded to accommodate technology improvements

LED Driver

- Efficient Class 2 driver specifically designed for optimal performance with Fortimo DLM module system
- 120-277VAC input, 50/60Hz
- >0.90 Power Factor

- Compliant to FCC 47CFR Part 15 Class A
- Flicker-free 0-10V Dimming to 10%
- Intergrated thermal feedback loop to ensure driver life of 50,000 hrs

LED Light Engine/Reflector

- Uses Philips Fortimo DLM 1100 lumen or 2000 lumen LED modules
- 50,000 hrs at 70% lumen maintenance
- 80 CRI in 30K, 35K or 40K CCT
- Remote phosphor LED technology utilizes high-brightness royal blue LEDs allowing phosphor lens to be exposed to less heat degradation than traditional LEDs
- Provides more controlled color consistency fixture to fixture and over life
- Energy efficient providing 50 LPW delivered from fixture
- High purity aluminum reflector in white or Alzak. Painted white flange standard.

Labeling

- cCSAus certified to US and Canadian standards
- Non-IC rated.
- Suitable for wet locations
- 5 year warranty

Progress Lighting
701 Millennium Blvd.
Greenville, South Carolina
29607



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8" Pro-Optic® LED Retrofit Downlight
P8102/P8121/P8133

Recessed

P8102 Housing with DRIVER DATA	P8121 (1100 lumen)			P8133 (2000 lumen)		
	30K	35K	40K	30K	35K	40K
Input Voltage	120-277V	120-277V	120-277V	120-277V	120-277V	120-277V
Input Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Input Current	0.146A (120v) 0.063 (277v)	0.156A (120v) 0.067 (277v)	0.137A (120v) 0.059 (277v)	0.146A (120v) 0.063 (277v)	0.156A (120v) 0.067 (277v)	0.137A(120v) 0.059 (277v)
Input Power	17.3W	18.5W	16.3W	36W	34W	33W
Constant Current Output	200-700mA	200-700mA	200-700mA	200-700mA	200-700mA	200-700mA
Power Factor	≥0.90	≥0.90	≥0.90	≥0.90	≥0.90	≥0.90
THD	<20%	<20%	<20%	<20%	<20%	<20%
EMI Filtering	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A
Operating Temperature	-20°C to 55°C	-20°C to 55°C	-20°C to 55°C	-20°C to 55°C	-20°C to 55°C	-20°C to 55°C
Dimming	0-10V	0-10V	0-10V	0-10V	0-10V	0-10V
Over-voltage, over-current, short-circuit protected						

Dimming 0-10V 100% to 10%

Pro-Optic LED driver is compatible with 0-10V type dimming controls. Recommended dimming controls are listed below.

Control Manufacturer	Wallbox Dimmer	Power Booster Available
Douglas Lighting controls	WPC 5721	
Entertainment Technology	Tap Glide TG600FAM120 (120V) Tap Glide Heatsink TGH1500FAM120 (120V) Oasis OA2000FAMU (120/277V)	
Honeywell, Inc.	EL 7315A1019 and EL7315A1009	EL7305A1010
HUNT Dimming	Preset Slide: PS-010-IV-120V and PS-010-WH-120V Preset Slide: PS-010-3W-IV-120V and PS-010-3W-WH-120V Preset Slide: PS-010-IV-277V and PS-010-WH-277V Preset Slide: PS-010-3W-IV-277V and PS-010-3W-WH-277V Preset Slide, controls FD-010: PS-IFC-010-IV- and PS-IFC-010-WH-120/277V Preset Slide, controls FD-010: PS-IFC-010-3W-IV- and PS-IFC-010-3W-WH-120/277V Remoted mounted unit: FD-010-120V and FD-010-277V	
Lehigh Electric Products Co.	Solitaire	PBX
Leviton Lighting Controls Div.	Leviton Centura Fluorescent Control System IllumaTech™ IP7 Series	CN100 PE300
Lightolier Controls	Sunrise Preset slider ZP600FAM120 (120V) Momentum Preset slider MP1500FAM120 (120V) Vega Slider V2000FAMU (120/277)	
Lithonia Controls	ISD BC SLD LPCS Digital Equinox (DEQ BC)	RDM FC
Lutron Electronics Co., Inc.	Visit www.lutron.com/advance for the latest control information and selection	
PDM Electrical products	WPC-5721	
Starfield Controls	TR61 with DALI interface port	RT03 DAL Inet router
The Watt Stopper, Inc.	LS4 used with LCD-101 and LCD-103	





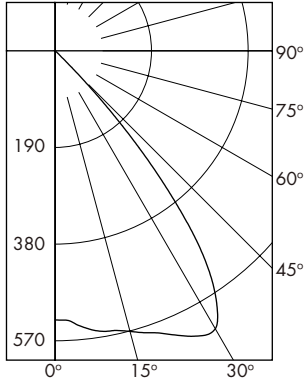
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P8102/P8121/P8133

Recessed

P8102-EB WITH P8121-21A/35K

LED Light Engine: 3500K, 80 CRI
System Wattage: 18.5W
Fixture Delivered Lumens: 916
Fixture Efficacy: 50
Spacing Criteria: 1.2



CANDELA DISTRIBUTION

DEG	CANDELA	LUMENS
0	529	
5	542	52
15	571	163
25	619	286
35	529	319
45	62	71
55	4	4
65	1	0
75	0	0
85	0	0
90	0	0

Test No. 3815

Tested at 25°C Ambient in accordance to IESNA LM-79-2008

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	501	56.0
0-40	820	91.7
0-60	894	99.9
0-90	895	100.0
90-180	0	0.0
0-180	865	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

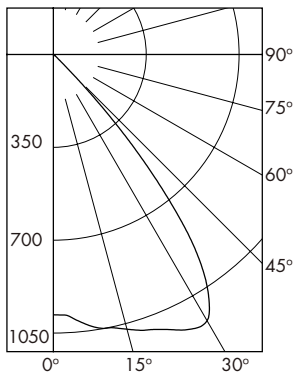
Angle in Vertical	Average - 0°
45°	15105
55°	312
65°	141
75°	0
85°	0

COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Floor Cavity Reflectance																
	80%		70%		50%		30%		10%								
	70	50	30	10	70	50	30	10	50	30	10						
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94
2	107	102	97	94	105	100	96	91	97	93	91	94	91	89	91	89	87
3	101	94	89	84	99	92	88	82	90	86	82	87	84	81	85	82	80
4	95	87	81	76	93	86	80	75	83	79	75	81	77	74	79	76	73
5	89	80	74	69	88	79	73	68	77	72	68	76	71	68	74	70	67
6	84	74	68	63	83	74	67	62	72	67	62	71	66	62	69	65	62
7	79	69	62	58	78	68	62	57	67	61	57	66	61	57	65	60	57
8	75	64	58	53	73	64	57	53	63	57	53	61	56	53	60	56	52
9	71	60	53	49	69	59	53	49	58	53	49	57	52	49	57	52	48
10	67	56	50	45	66	55	49	45	55	49	45	54	49	45	53	48	45

P8102-EB WITH P8133-21A/35K

LED Light Engine: 3500K, 80 CRI
System Wattage: 32.9W
Fixture Delivered Lumens: 1650
Fixture Efficacy: 50 lm/watt
Spacing Criteria: 1.2



CANDELA DISTRIBUTION

DEG	CANDELA	LUMENS
0	981	
5	1005	97
15	1072	305
25	1146	530
35	975	586
45	95	124
55	7	7
65	1	1
75	0	0
85	0	0
90	0	0

Test No. 3971

Tested at 25°C Ambient in accordance to IESNA LM-79-2008

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	932	56.5
0-40	1518	92.0
0-60	1649	99.9
0-90	1650	100.0
90-180	0	0.0
0-180	1650	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average - 0°
45°	4413
55°	401
65°	78
75°	0
85°	0

COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Floor Cavity Reflectance																
	80%		70%		50%		30%		10%								
	70	50	30	10	70	50	30	10	50	30	10						
1	113	110	108	105	111	108	106	103	104	102	100	100	99	97	97	96	94
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80
4	95	87	81	76	93	86	80	76	84	79	75	81	77	74	80	76	73
5	90	80	74	69	88	79	74	69	78	72	68	76	71	68	74	70	67
6	84	75	68	63	83	74	68	63	72	67	63	71	66	62	69	65	62
7	79	69	63	58	78	69	62	58	67	62	58	66	61	57	65	60	57
8	75	64	58	53	74	64	58	53	63	57	53	62	57	53	61	56	53
9	71	60	54	49	70	60	53	49	59	53	49	58	52	49	57	52	49
10	67	56	50	46	66	55	50	45	55	49	45	54	49	45	53	48	45

