

## SAE Systems

P-I-95PF, P-I-95N

LS-P-I-95PF, LS-P-I-95N

Pendant-Mounted Indirect

### Product Description

Small-scale fixture for indirect lighting in a solid or perforated housing. UL Listed. This fixture is Cradle to Cradle Silver Certified<sup>CM</sup> by MBDC.

### Ordering Guide

Product, Lamping, & Length					Options						
Mounting	Distribution	Series	Lamp Count	Nominal Length (ft)	Lamp Type	Finish	Ballast	Tandem Wiring	Circuiting	Other Options	Volts
P Pendant-mounted LS-P LiteSpeed Pendant-mounted	I Indirect	95PF Perf 95N Non-patterned	1, 2, 3 → 2, 4, 6 → 3, 6, 9 → see notes	4 8 12	T5HO T5	TCWM (textured matte white) is standard  see website for other <b>Product Finishes</b>	LP/ELB is standard  LPD/MK7  see <b>Ballast Options</b>	-- → TW →  see notes	1CWQ 2CWQ	F HPR LP/EF  see <b>Other Options</b>	120 277
<b>Mounting Options - add to end of catalog number</b> <b>Aircraft cables</b> <input type="checkbox"/> FAI/ACC (field adjustable)  standard <b>Stems</b> <input type="checkbox"/> P6S (stem) <input type="checkbox"/> SC/P6 (sloped ceiling)											

**P-I-95PF24T5HO-TCWM-LP/ELB-TW-2CWQ-F-120-FAI/ACC** is a typical catalog number for a 2-lamp (2 lamps in cross-section), 4-foot long, high-output T5 fixture with perforated windows, textured matte white finish, electronic ballast, tandem-wired, pre-wired with two-circuit branch wiring and quick-connects, fuse, 120 volts, mounted with field adjustable aircraft cables.



### LiteSpeed Quick-Ship

Many configurations of this fixture are available in our LiteSpeed 10-day quick-ship program. The "10-day" icon in the descriptions below shows which options are available in LiteSpeed. LiteSpeed orders are shipped within 10 working days of receipt of a released, cleared order. An "LS" prefix is required in front of the ordering number to have the order handled as LiteSpeed. Other configurations not indicated here may be available for 10-day shipment; contact Customer Service for availability. Some restrictions may apply to large orders. All LiteSpeed fixtures are supplied in textured white finish (TCWM).

### Cross-section lamping



### Ballast Options

Specify in place of LP/ELB, contact factory for availability/compatibility with lamping:  
**LPD/MK7** Low-profile electronic Advance Mark VII dimming ballast

### Other Options

- EF** Emergency Fluorescent Ballast. Battery-powered ballast from a UL Listed manufacturer will operate one lamp for 1 1/2 hours.
- F** Fuse. Slow or fast blow, determined by Litecontrol.
- HPR** High Performance Reflector. Die-formed, specular anodized aluminum.

### Tandem Wiring & Circuiting Options

- 1CWQ** Fixture is wired with a single-circuit so that all lamps are switched together.
- TW-2CWQ** Fixtures wired with two circuits. 2-lamp in cross section fixtures, the fixture is wired such that the inline lamps are switched separately. 3-lamp in cross section fixtures, the fixture is wired such that the inline center lamps are switched separately from the inline outer lamps.

### Questions to Ask

1. Row information, including desired fixture lengths? 2. Lamp type?
3. White finish or other? 4. Ballast options? 5. Tandem wiring?
6. Other options? 7. 120 or 277 volt? 8. Cables or stems, what length?



## Specifications

**HOUSING.** Die-formed steel with choice of patterns – Frame-finished perforated sections (**95PF**) with .046" diameter holes .140" OC, 10% open, or no pattern (**95N**). White acrylic diffusing panels retained behind. Perforated areas in 95PF are 0.970" wide and 3" from each fixture end. In the middle of 8' or 12' fixtures, perforation is interrupted for 6" to match perforation patterns of joined 4', 8', and 12' fixtures.

**END CAPS.** End caps are 14-gauge steel with no holes or knockouts, finished to match housing. Two fasteners on each end cap allow tight attachment to ends of fixtures without removing reflector. End caps are required at each end of row and on both ends of an individual fixture.

**REFLECTOR.** Die-formed steel with high-reflectance white paint is standard. A high performance die-formed aluminum reflector (**HPR**) is available as an option.

**BALLAST.** Low-profile Electronic Ballast (**LP/ELB**), high power factor, thermally protected Class P, Sound Rated A, less than 10% THD, manufactured by a UL Listed manufacturer, as available, determined by Litecontrol. Ballasts with a voltage range of 120 to 277 will be used when fixture configuration and ballast availability allow. The minimum number of ballasts will be used.

**BALLAST DISCONNECT.** Fixture supplied with a ballast disconnect device to enable compliance with the NEC.


**LAMPING.** Available in one-, two- and three-lamp T5 or T5HO cross-sections .

**TANDEM WIRING.** When selected from Ordering Guide below, fixtures can be wired to switch in-line lamps only, providing two or three (two- and three-lamp cross-section fixtures only) levels of light.

**CIRCUITING.** Fixtures are supplied with #12 AWG type THHN wire for branch circuits. One end will have factory installed push-in quick-connects. The other end will be stripped back 1/2" for quick connection in field. For fixtures to accommodate special circuits such as night light and emergency, etc., in-field wiring will be required. See Pre-Wiring Information for details.

**ROW JOINING.** Litecontrol's at-joint flat strap supporting two fixtures allows one-person, one-hand-free fixture joining and installation. Support points are centered above the midpoint of joint "on seam" for aligned, symmetrical appearance. Fixture end headers are threaded in two locations to allow easy row joining without removing reflectors. Fixture support points are on 4', 8', or 12' modules.

**SUSPENSION.** Aircraft cable or rigid stem pendants attach to fixture using Litecontrol's easy-hang system, with one attachment plate for use at any support point. Standard suspension provided is field adjustable aircraft cable (**FAI/ACC**) with a 51" length cable. See Aircraft Cables and Stems for details.

**CERTIFICATION.** Fixture and electrical components are UL and/or CUL Listed  and bear the I.B.E.W., A.F. of L. label. This fixture is Cradle to Cradle Certified<sup>CM</sup> Silver by MBDC. Note: Litecontrol reserves the right to change specifications without notice for product development and improvement.

## Planning for installation

### Suspension assemblies

Provided with 3/32" diameter field-adjustable aircraft cables (FAI/ACC) in 51" lengths (4' nominal). Lengths of 87" and 219" are available upon request. Fixed length cable assemblies (with 1/4 - 20 stud adjustment for leveling purposes) are also available as an option in nominal lengths of 9", 12", 18", 24" and 36". Refer to Aircraft Cables sheet for further details.

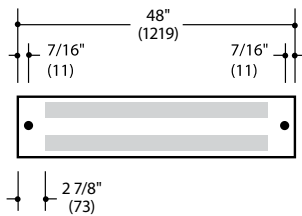
### Stem lengths

P65 stems are available in five fixed lengths: 9", 12", 18", 24", and 36". Stems with 0-45° swivel joints are also available as Sloped Ceiling (SC/P6) and Earthquake (EQ/P6) assemblies. Refer to Stems sheet for further details.

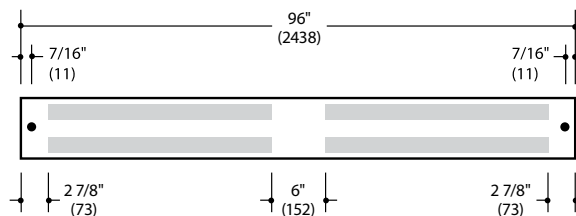
### Suspension mounting locations

Pendant locations at ends of rows or individual fixtures are 7/16" from fixture end. Pendant locations for in-row joints are at the joint. In-row mounting points are "on module" at 48", 96" and 144" spacings.

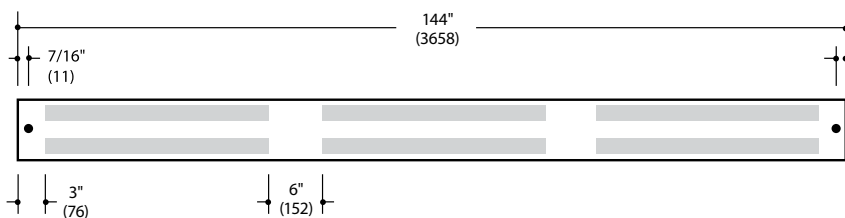
#### Individual fixture (4')



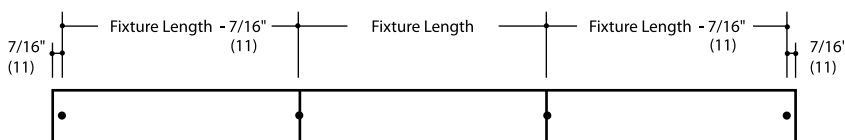
#### Individual fixture (8')



#### Individual fixture (12')



#### Row diagram



Fixture Lengths: 4', 8', 12'  
● Indicates pendant locations

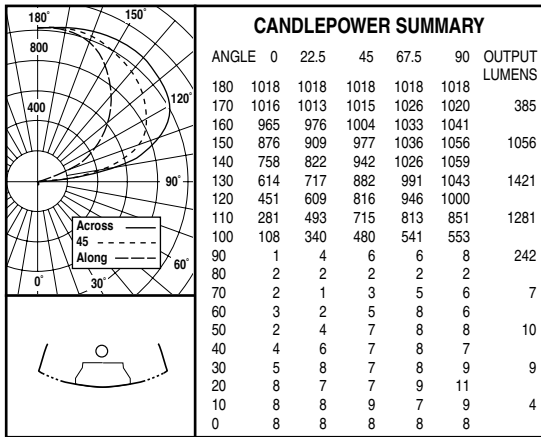
LITECONTROL

100 Hawks Avenue Hanson, MA 02341  
781 294 0100 f: 781 293 2849 litecontrol.com



**Photometric data**

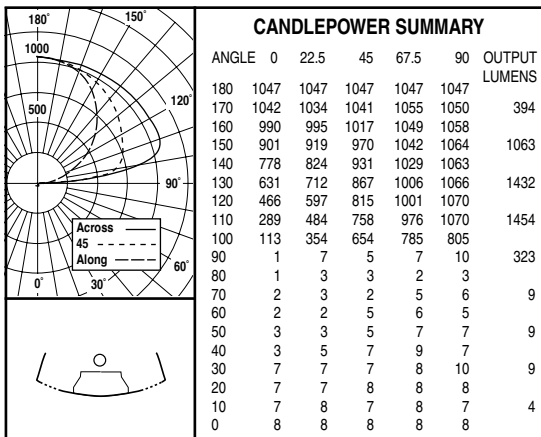
**SAE P-I-95PF, P-I-95N, LS-P-I-95PF, LS-P-I-95N**



RCC	80				70				50				30				10				0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	0	.84	.84	.84	.84	.72	.72	.72	.72	.49	.49	.49	.29	.29	.29	.10	.10	.10	.10	.01	
	1	.76	.73	.70	.67	.65	.62	.60	.57	.43	.41	.40	.25	.24	.23	.08	.08	.08	.08	.01	
	2	.69	.63	.58	.54	.59	.54	.50	.47	.37	.35	.33	.22	.21	.19	.07	.07	.07	.07	.00	
	3	.63	.56	.50	.45	.54	.48	.43	.39	.33	.30	.28	.19	.18	.16	.06	.06	.06	.06	.00	
	4	.58	.49	.43	.38	.49	.42	.37	.33	.29	.26	.23	.17	.15	.14	.06	.05	.05	.04	.00	
	5	.53	.43	.37	.32	.45	.37	.32	.28	.26	.22	.20	.15	.13	.12	.05	.05	.04	.00	.00	
	6	.48	.39	.32	.27	.41	.33	.28	.24	.23	.20	.17	.14	.12	.10	.05	.04	.04	.00	.00	
	7	.45	.35	.28	.24	.38	.30	.24	.21	.21	.17	.15	.12	.10	.09	.04	.03	.03	.00	.00	
	8	.41	.31	.25	.20	.35	.27	.21	.18	.19	.15	.13	.11	.09	.08	.04	.03	.03	.00	.00	
	9	.38	.28	.22	.18	.32	.24	.19	.16	.17	.13	.11	.10	.08	.07	.03	.03	.02	.00	.00	
	10	.35	.25	.20	.16	.30	.22	.17	.14	.15	.12	.10	.09	.07	.06	.03	.02	.02	.00	.00	
Floor Cavity Reflectance .20																					

ZONE	LUMENS	% LAMP	% LUMINAIRE
180-90°	4376	87.53	99.32
90-0°	29	.60	.68
180-0°	4406	88.13	100.00

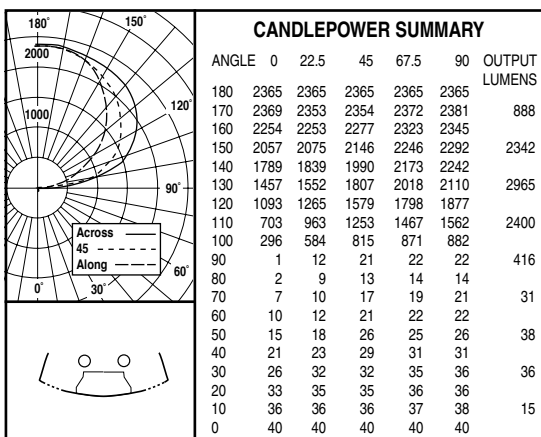
ANGLE	0°	45°	90°
45°	8	17	17
55°	7	15	29
65°	9	12	22
75°	15	12	21
85°	22	12	30



RCC	80				70				50				30				10				0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	0	.89	.89	.89	.89	.77	.77	.77	.77	.52	.52	.52	.30	.30	.30	.10	.10	.10	.10	.01	
	1	.81	.78	.74	.71	.70	.66	.64	.61	.46	.44	.43	.26	.26	.25	.09	.09	.08	.01	.01	
	2	.74	.67	.62	.58	.63	.58	.54	.50	.40	.37	.35	.23	.22	.21	.08	.07	.07	.00	.00	
	3	.67	.59	.53	.48	.57	.51	.46	.42	.35	.32	.29	.20	.19	.18	.07	.06	.06	.00	.00	
	4	.61	.52	.45	.40	.52	.45	.39	.35	.31	.27	.25	.18	.16	.15	.06	.06	.05	.00	.00	
	5	.56	.45	.39	.34	.48	.40	.34	.30	.27	.24	.21	.16	.14	.13	.05	.05	.04	.00	.00	
	6	.51	.41	.34	.29	.44	.35	.30	.25	.25	.21	.18	.14	.12	.11	.05	.04	.04	.00	.00	
	7	.47	.37	.30	.25	.40	.32	.26	.22	.22	.18	.16	.13	.11	.09	.04	.04	.03	.00	.00	
	8	.44	.33	.26	.22	.37	.28	.23	.19	.20	.16	.14	.12	.10	.08	.04	.03	.03	.00	.00	
	9	.40	.30	.23	.19	.34	.26	.20	.17	.18	.14	.12	.10	.09	.07	.04	.03	.02	.00	.00	
	10	.37	.27	.21	.17	.32	.23	.18	.15	.16	.13	.10	.10	.08	.06	.03	.03	.02	.00	.00	
Floor Cavity Reflectance .20																					

ZONE	LUMENS	% LAMP	% LUMINAIRE
180-90°	4658	93.16	99.35
90-0°	30	.61	.65
180-0°	4688	93.77	100.00

ANGLE	0°	45°	90°
45°	8	17	19
55°	7	15	14
65°	9	12	18
75°	15	17	27
85°	43	12	30



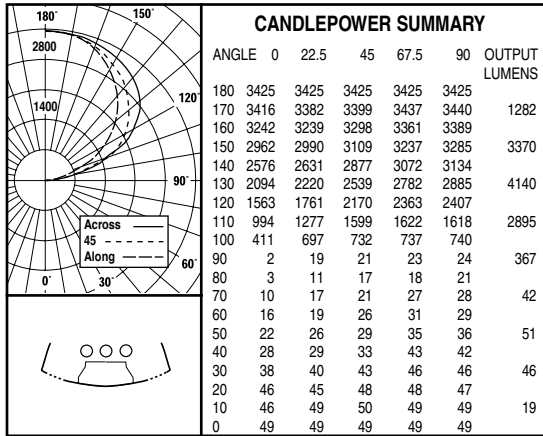
RCC	80				70				50				30				10				0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	0	.87	.87	.87	.87	.75	.75	.75	.75	.51	.51	.51	.30	.30	.30	.10	.10	.10	.10	.01	
	1	.79	.76	.72	.69	.68	.65	.62	.59	.45	.43	.42	.26	.25	.25	.09	.09	.09	.01	.01	
	2	.72	.66	.61	.56	.61	.56	.52	.49	.39	.36	.34	.23	.22	.20	.08	.08	.07	.01	.01	
	3	.66	.58	.52	.47	.56	.50	.45	.41	.34	.31	.29	.20	.19	.17	.07	.07	.06	.01	.01	
	4	.60	.51	.44	.39	.51	.44	.38	.34	.30	.27	.24	.18	.16	.15	.06	.06	.05	.01	.01	
	5	.55	.44	.38	.33	.47	.39	.33	.29	.27	.23	.21	.16	.14	.13	.06	.05	.04	.01	.01	
	6	.50	.40	.33	.28	.43	.34	.29	.25	.24	.20	.18	.14	.12	.11	.05	.04	.04	.00	.00	
	7	.46	.36	.29	.24	.39	.31	.25	.21	.21	.18	.15	.13	.11	.09	.05	.04	.03	.00	.00	
	8	.42	.32	.26	.21	.36	.28	.22	.19	.19	.16	.13	.12	.10	.08	.04	.03	.03	.00	.00	
	9	.39	.29	.23	.18	.33	.25	.20	.16	.17	.14	.12	.10	.08	.07	.04	.03	.03	.00	.00	
	10	.37	.26	.20	.16	.31	.23	.18	.14	.16	.13	.10	.10	.08	.06	.03	.03	.02	.00	.00	
Floor Cavity Reflectance .20																					

ZONE	LUMENS	% LAMP	% LUMINAIRE
180-90°	8992	89.93	98.60
90-0°	127	1.27	1.40
180-0°	9120	91.20	100.00

ANGLE	0°	45°	90°
45°	48	65	71
55°	43	66	69
65°	31	62	81
75°	44	98	91
85°	43	120	122

**Photometric data**

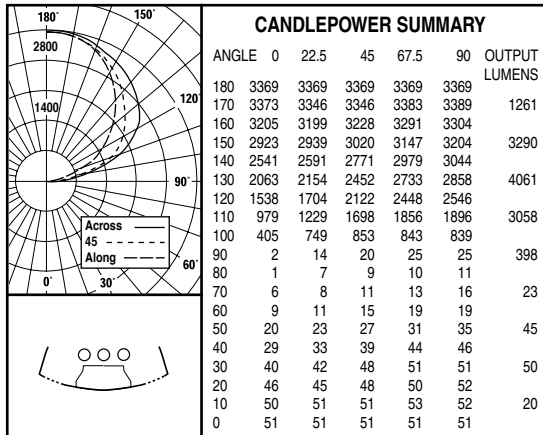
**SAE P-I-95PF, P-I-95N, LS-P-I-95PF, LS-P-I-95N**



		P-I-95PF34T5HO-LP/ELB 81.3% Efficiency																				
		Litecontrol Certified Test Report #30336000																				
RCC	RW	80				70				50				30				10				0
		70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0			
RCC	RW																					
0		.78	.78	.78	.78	.67	.67	.67	.67	.46	.46	.46	.27	.27	.27	.09	.09	.09	.01			
1		.71	.67	.64	.62	.60	.58	.55	.53	.40	.38	.37	.23	.23	.22	.08	.08	.08	.01			
2		.64	.59	.54	.50	.55	.50	.47	.43	.35	.32	.30	.20	.19	.18	.07	.07	.06	.01			
3		.59	.52	.46	.42	.50	.44	.40	.36	.31	.28	.26	.18	.17	.15	.06	.06	.05	.01			
4		.53	.45	.39	.35	.45	.39	.34	.30	.27	.24	.22	.16	.14	.13	.06	.05	.05	.01			
5		.49	.39	.34	.30	.42	.35	.30	.26	.24	.21	.18	.14	.12	.11	.05	.04	.04	.00			
6		.45	.36	.30	.25	.38	.31	.26	.22	.21	.18	.16	.13	.11	.10	.04	.04	.03	.00			
7		.41	.32	.26	.22	.35	.27	.23	.19	.19	.16	.14	.11	.10	.08	.04	.03	.03	.00			
8		.38	.29	.23	.19	.32	.25	.20	.17	.17	.14	.12	.10	.08	.07	.04	.03	.03	.00			
9		.35	.26	.20	.16	.30	.22	.18	.14	.16	.13	.10	.09	.08	.06	.03	.03	.02	.00			
10		.33	.24	.18	.15	.28	.20	.16	.13	.14	.11	.09	.08	.07	.06	.03	.02	.02	.00			
Floor Cavity Reflectance .20																						

ZONE	LUMENS	% LAMP	% LUMINAIRE
180-90°	12033	80.22	98.62
90-0°	168	1.13	1.38
180-0°	12202	81.35	100.00

ANGLE	0°	45°	90°
45°	69	90	92
55°	53	87	95
65°	49	86	111
75°	51	127	122
85°	43	144	172



		P-I-95PF34T5HO-HPR-LP/ELB 81.3% Efficiency																				
		Litecontrol Certified Test Report #30436000																				
RCC	RW	80				70				50				30				10				0
		70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0			
RCC	RW																					
0		.78	.78	.78	.78	.67	.67	.67	.67	.46	.46	.46	.27	.27	.27	.09	.09	.09	.01			
1		.71	.67	.64	.62	.60	.58	.55	.53	.40	.38	.37	.23	.23	.22	.08	.08	.08	.01			
2		.64	.59	.54	.50	.55	.50	.47	.43	.35	.32	.30	.20	.19	.18	.07	.07	.06	.01			
3		.59	.52	.46	.42	.50	.44	.40	.36	.31	.28	.26	.18	.17	.15	.06	.06	.05	.01			
4		.53	.45	.40	.35	.45	.39	.34	.31	.27	.24	.22	.16	.14	.13	.06	.05	.05	.01			
5		.49	.39	.34	.30	.42	.35	.30	.26	.24	.21	.18	.14	.12	.11	.05	.04	.04	.00			
6		.45	.36	.30	.25	.38	.31	.26	.22	.21	.18	.16	.13	.11	.10	.04	.04	.03	.00			
7		.41	.32	.26	.22	.35	.28	.23	.19	.19	.16	.14	.11	.10	.08	.04	.03	.03	.00			
8		.38	.29	.23	.19	.32	.25	.20	.17	.17	.14	.12	.10	.08	.07	.04	.03	.03	.00			
9		.35	.26	.20	.17	.30	.22	.18	.14	.16	.13	.10	.09	.08	.06	.03	.03	.02	.00			
10		.33	.24	.18	.15	.28	.20	.16	.13	.14	.11	.09	.08	.07	.06	.03	.02	.02	.00			
Floor Cavity Reflectance .20																						

ZONE	LUMENS	% LAMP	% LUMINAIRE
180-90°	12053	80.36	98.82
90-0°	144	.96	1.18
180-0°	12198	81.32	100.00

ANGLE	0°	45°	90°
45°	69	82	105
55°	46	66	72
65°	31	47	59
75°	36	69	69
85°	65	84	41