

**PRODUCT SPECIFICATIONS**

**Optics**

Two-piece optical system maximizes lamp output while providing excellent glare control

**Cone:** Self-flanged, specular clear Alzak® (SACSF) satin cone with low iridescent finish is standard • Other Alzak satin finishes are available; see trim options

**Upper Reflector:** Upper reflector finish is specular clear Alzak® standard

**Electrical**

**Ballast:** Class 'P' thermally protected 120/277V universal voltage high power factor electronic ballast with end of life protection

**Lamp Holder:** 4-pin GX24q UV stabilized thermoplastic socket with nonfatiguing stainless steel lamp retention spring

**Mechanical**

**Housing:** Heavy gauge steel with black enamel finish

**Mounting Frame:** Heavy gauge steel lower housing ring with factory installed spring steel friction clips securely holds cones in ceiling

• Accommodates ceilings up to 3/4" thick; Trim collar is available for thicker ceilings; consult factory

**Mounting Bracket:** Mounting brackets have 3" vertical adjustment and accept 1-1/2" C-channel mounting bars • Indy TRU-LOCK bar hangers are supplied standard • For non-accessible ceiling add suffix "825" for 28" 'C' channel mounting bars • One-piece Tru-Lock bar hangers have integral T-bar locking screws and alignment notches for locating and locking fixture in the center or 1/4" tile increments

**Junction Box:** Ballast mounted to j-box cover for optimal heat dissipation and serviceability from below the ceiling Over size 4" x 6" galvanized steel junction box with (6) 1/2" and (1) 3/4" knockouts facilitate quick wiring • Junction box rated for 8 No. 12 AWG 90° C branch circuit conductors (4-in, 4-out)

**Labels and Listings**

UL/C-UL listed for feed through and damp locations • I.B.E.W. Union made

Product specifications subject to change without notice.

**ENGINEERING DATA**

Voltage	120V-HPF		277V-HPF		347V-HPF-Canada	
Lamp Voltage	18W	26W	18W	26W	18W	26W
Total input power	19W	27W	19W	27W	21W	31W
Operating AMPS	0.16	0.23	0.07	0.10	0.11	0.09
Ballast factor	1.00	1.00	1.00	1.00	1.00	1.02

**ORDERING INFORMATION: Accessories ordered separately.**

Example: **FD14-26E-SACSF**

Catalog #	Trim Options	Options	Accessories
<b>FD14-18E</b> 18W Universal	<b>Alzak® Satin Finish Options</b> <b>SACSF</b> <sup>2</sup> Clear <b>CGCSF</b> <sup>2</sup> Champagne Gold <b>BACSF</b> <sup>2</sup> Black <b>PACSF</b> <sup>2</sup> Pewter <b>WTCSF</b> <sup>2</sup> Wheat <b>BRCsf</b> <sup>2</sup> Bronze <b>Painted Finish Options</b> <b>WHCF</b> White Painted Cone	<b>PF</b> Painted Flange Only (White) <b>LD</b> <sup>1</sup> Dimming Ballast, Lutron Compact SE <b>AD</b> <sup>1</sup> Dimming Ballast, Advance Mark 10™ <b>D7</b> Dimming Ballast, Advance Mark 7™ <b>BP-I</b> 120/277V Emergency Battery Pack with Internal Test Switch (For remote test switch specify - BP) <b>HP-I</b> 120/277V High-Lumen Emergency Battery Pack with Internal Test Switch (For remote test switch specify - HP) <b>F</b> Fuse and Fuse Holder <b>†CP</b> Chicago Plenum <b>825</b> 28" 'C' Channel Mounting Bars, Pair <b>†347</b> 347 Volt	<b>SCA4-*</b> Sloped Ceiling adapter *Angle must be specified when ordering; Available in 5°, 10°, 15°, 20°, 25°, 30° Example: SCA4-20

† Consult Factory for Availability

<sup>1</sup>Add a -1 for 120V, a -2 for 277V

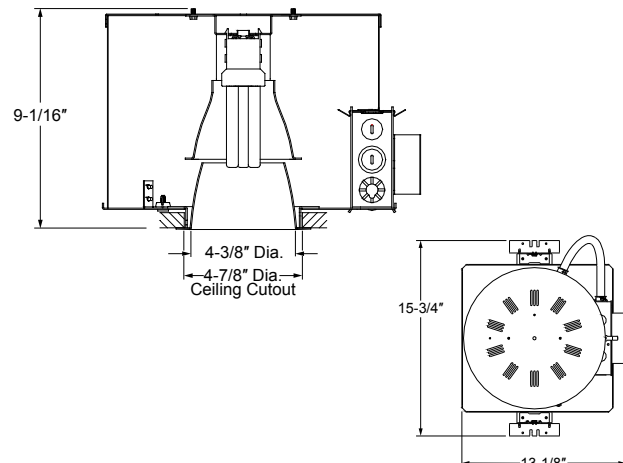
<sup>2</sup>For Specular Cone, remove "S"  
Example: SACF

**DESIGNER SERIES**  
**4" TRIPLE TUBE VERTICAL LAMP**  
**DOWNLIGHT**

18W, 26W  
COMPACT FLUORESCENT  
**FD14**

Type	Cat. No.
_____	_____
_____	_____
Project: _____	
Notes: _____	

**DIMENSIONS**



**OPEN REFLECTOR  
(4" 18W TRIPLE TUBE)**

Catalog Number: FD14-18E-SACF  
 PHOTOMETRIC REPORT  
 Test Number: PR09091102  
 Total Luminaire Efficiency: 42.9%  
 Luminaire Spacing Criteria: 1.26  
 Luminaire: Two-Piece Reflector, Specular Clear, Open bottom.  
 Lamps: One (1) OSi CF18DT/E/IN/840, rated @ 1200 lumens.  
 CIE-type: Direct

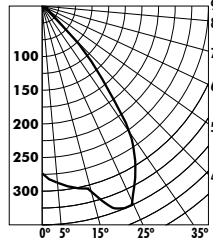
**Initial Footcandles**

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	7.6	2.2	10.7'
7'	5.6	1.6	12.5'
8'	4.3	1.2	14.2'
9'	3.4	1.0	16.0'
10'	2.7	0.8	17.8'
11'	2.3	0.6	19.6'
12'	1.9	0.5	21.4'
13'	1.6	0.5	23.1'
14'	1.4	0.4	24.9'
15'	1.2	0.3	26.7'

**AVERAGE INITIAL FOOTCANDLES**

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR4	RCR8
5' x 5'	23	18	13
6' x 6'	16	12	9
7' x 7'	12	9	7
8' x 8'	9	7	5
9' x 9'	7	5	4
10' x 10'	6	4	3
11' x 11'	5	4	3
12' x 12'	4	3	2



**Candlepower Distribution**  
(Candelas)

Angle	Candela	Lumens
0°	275	
5°	294	28
15°	307	87
25°	360	167
35°	264	166
45°	87	68
55°	0	0
65°	0	0
75°	0	0
85°	0	0

**Luminaire Data**

Ang in Deg	Footlamberts	Candela/M <sup>2</sup>
45	4453	15257
55	0	0
65	0	0
75	0	0
85	0	0

**Zonal Lumen Summary**

Zone	Lumens	%Lamp	%Fixture
0-30°	282	23.5	54.7
0-40°	447	37.3	86.9
0-60°	515	42.9	100.0
0-90°	515	42.9	100.0
90-180°	0	0.0	0.0
0-180°	515	42.9	100.0

**COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)**

Effective Floor Reflectance 20%

PCC	80		70		50		30		10		0							
	PW	70	50	30	10	70	50	30	10	50	30	10	0					
0	51	51	51	51	50	50	50	48	48	48	46	46	46	44	44	44	43	
1	49	47	46	45	47	46	45	44	45	44	43	43	42	42	41	41	40	40
2	46	44	42	40	45	43	41	40	41	40	39	40	39	38	39	38	37	36
3	43	40	38	36	42	39	37	36	38	36	35	37	36	34	36	35	34	33
4	41	37	34	32	40	36	34	32	36	33	32	35	33	31	34	32	31	30
5	38	34	31	29	37	34	31	29	33	31	29	32	30	29	31	30	28	28
6	36	32	29	27	35	31	29	27	31	28	26	30	28	26	29	27	26	25
7	34	29	26	24	33	29	26	24	28	26	24	28	26	24	27	25	24	23
8	32	27	24	22	31	27	24	22	26	24	22	26	24	22	25	23	22	21
9	30	25	22	20	29	25	22	20	25	22	20	24	22	20	24	22	20	20
10	28	24	21	19	28	23	21	19	23	21	19	23	20	19	22	20	19	18

**OPEN REFLECTOR  
(4" 26W TRIPLE TUBE)**

Catalog Number: FD14-26E-SACF  
 PHOTOMETRIC REPORT  
 Test Number: PR09090301  
 Total Luminaire Efficiency: 49.7%  
 Luminaire Spacing Criteria: 1.38  
 Luminaire: Two-Piece Reflector, Specular Clear, Open bottom.  
 Lamps: One (1) OSi CF26DT/E/IN/835, rated @ 1800 lumens.  
 CIE-type: Direct

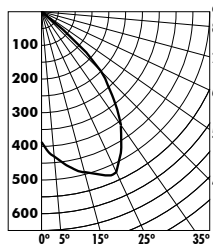
**Initial Footcandles**

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	11.0	2.7	11.8'
7'	8.1	2.0	13.7'
8'	6.2	1.5	15.7'
9'	4.9	1.2	17.6'
10'	4.0	1.0	19.6'
11'	3.3	0.8	21.6'
12'	2.7	0.7	23.5'
13'	2.3	0.6	25.5'
14'	2.0	0.5	27.4'
15'	1.8	0.4	29.4'

**AVERAGE INITIAL FOOTCANDLES**

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR4	RCR8
5' x 5'	39	30	22
6' x 6'	27	21	15
7' x 7'	20	15	11
8' x 8'	15	12	8
9' x 9'	12	9	7
10' x 10'	10	8	5
11' x 11'	8	6	4
12' x 12'	7	5	4



**Candlepower Distribution**  
(Candelas)

Angle	Candela	Lumens
0°	396	
5°	429	41
15°	491	139
25°	528	244
35°	419	263
45°	251	194
55°	12	10
65°	2	2
75°	0	0
85°	0	0

**Luminaire Data**

Ang in Deg	Footlamberts	Candela/M <sup>2</sup>
45	12775	43770
55	722	2474
65	210	720
75	0	0
85	0	0

**Zonal Lumen Summary**

Zone	Lumens	%Lamp	%Fixture
0-30°	424	23.6	47.4
0-40°	688	38.2	76.9
0-60°	892	49.6	99.7
0-90°	895	49.7	100.0
90-180°	0	0.0	0.0
0-180°	895	49.7	100.0

**COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)**

Effective Floor Reflectance 20%

PCC	80		70		50		30		10		0							
	PW	70	50	30	10	70	50	30	10	50	30	10	0					
0	59	59	59	58	58	58	55	55	55	53	53	53	51	51	51	51	50	
1	56	54	53	52	55	53	52	51	51	50	49	49	49	48	48	47	46	46
2	53	50	48	46	51	49	47	45	47	46	44	46	44	43	44	43	42	41
3	49	46	43	40	48	45	42	40	44	41	39	42	40	39	41	40	38	37
4	46	42	39	36	45	41	38	36	40	37	35	39	37	35	38	36	35	34
5	43	38	35	32	42	38	35	32	37	34	32	36	34	32	35	33	31	31
6	40	35	32	29	40	35	32	29	34	31	29	33	31	29	33	30	28	28
7	38	32	29	26	37	32	29	26	31	28	26	31	28	26	30	28	26	25
8	36	30	26	24	35	30	26	24	29	26	24	29	26	24	28	26	24	23
9	33	28	24	22	33	27	24	22	27	24	22	26	24	22	26	24	22	21
10	31	26	22	20	31	26	22	20	25	22	20	25	22	20	24	22	20	19



**indy**

1300 S. Wolf Road • Des Plaines, IL 60018 • Phone (800) 367-5866 • Fax (888) 708-6578  
 Visit us at [www.junolightinggroup.com](http://www.junolightinggroup.com)