



Compact Fluorescent
Trims

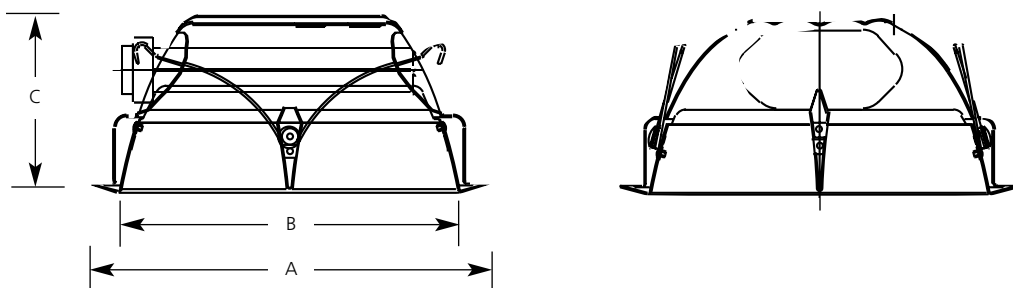
**8" Pro-Optic™
Alzak® Shallow Cross Louver
2-Lamp Horizontal
Non-IC**

Recessed

Type _____
-21A -22A
P8170

Catalog No.	Finish		Dimensions (Inches)		
	Clear Alzak®	Gold Alzak®	A	B	C
P8170	-21A	-22A	9-3/4	8	3-7/8

Maximum Ceiling Thickness: 3/4"



*Lamps shown are 26w quad tube compact fluorescent

Lamp Wattage

Housing	IC	Non-IC
P8213	N/A	2 13w Twin or Quad
P8218	N/A	2 18w Quad
P8226	N/A	2 26w Quad

Specifications:

Flange

- Bright white enamel painted metal flange

Trim

- All aluminum construction
- One piece construction with integral flange
- No light leaks around trim flange
- Socket box mounts to trim for optimum performance, and consistent lamp position
- Trim retention accompanied by 3 spring clips located in aperture of housing
- Anti-iridescent specular Alzak® finish

Louver Assembly

- Provides a broad, even distribution of light
- Locks into reflector by means of 2 torsion springs
- Eliminates high angle brightness
- Removable for lamp replacement without the use of tool

Labeling

- UL-CUL damp location listed
- Rated Non-IC

Progress Lighting
Post Office Box 5704
Spartanburg, South Carolina
29304-5704

www.progresslighting.com
Patent# 6,254,257

P8170-21A / P8213-EB

8 INCH PRO-OPTIC

Report No. 2000078

No. Lamps: 2 Type Lamp: (2) CF13 QUAD - GE Total Lumens: 1800

Fixture Efficiency: 49.5%

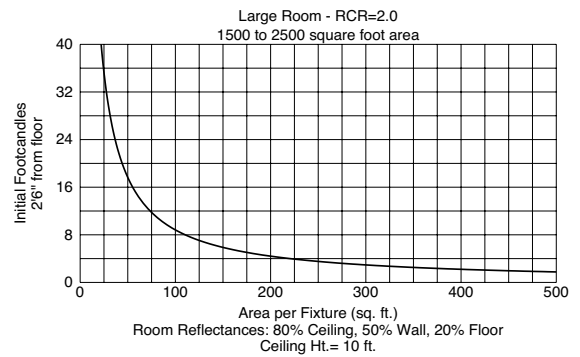
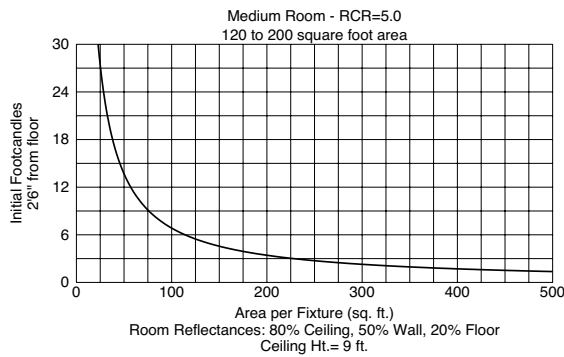
S/MH Ratio: 1.1

Single Fixture Data

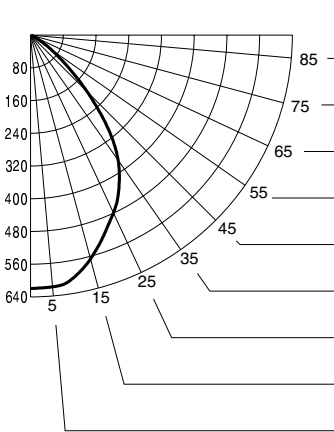
Ceiling Ht.(Ft.)	10% Values		Zero Degrees Ft.-C	50% Values	
	Beam Angle - 92			Beam Angle - 56	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	2.0	11	20.5	10.2	6
10	1.1	15	11.0	5.5	8
12	0.7	20	6.9	3.4	10
14	0.5	24	4.7	2.3	12
16	0.3	28	3.4	1.7	14

Ft.-C (Footcandles) are initial and measured 2'-6" from floor

Quick Calculator Charts



DISTRIBUTION CURVE



INTENSITY DATA

DEGREES	CANDELA
90	0
85	0
80	1
75	1
70	3
65	11
60	28
55	61
50	115
45	196
40	291
35	373
30	432
25	479
20	522
15	567
10	603
5	618
0	620

ZONAL CAVITY COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 0.20

RC	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	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10																																		
0	59	59	59	59	57	57	57	57	55	55	55	53	53	53	50	50	50	49	47	47	46	45	45	45	44	44	43	44	43	42	41	41	39	38	37																																					
1	56	54	53	51	54	53	52	51	51	50	49	49	48	48	47	47	46	45	44	43	42	41	41	40	39	38	38	36	35	34	33	33	31	30	30																																					
2	52	49	47	45	51	49	46	45	47	45	44	45	44	43	44	43	42	41	41	39	38	37	37	36	35	34	33	32	31	30	29	28	27	27																																						
3	49	45	42	40	48	44	42	40	43	41	39	42	40	38	41	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	21																																					
4	46	41	38	36	45	41	38	35	40	37	35	39	36	35	38	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	18																																					
5	43	38	35	32	42	38	34	32	37	34	32	36	33	31	35	33	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	15																																						
6	40	35	32	29	39	35	31	29	34	31	29	33	30	29	32	30	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	12																																						
7	38	32	29	26	37	32	29	26	31	28	26	31	28	26	30	28	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	10																																						
8	36	30	27	24	35	30	26	24	29	26	24	29	26	24	28	26	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	8																																						
9	33	28	25	22	33	28	24	22	27	24	22	27	24	22	26	24	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	7																																							
10	32	26	23	21	31	26	23	21	25	22	20	25	22	20	25	22	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	6	6																																							

P8170-21A / P8213

8 INCH PRO-OPTIC

Report No. 2000116

No. Lamps: 2 Type Lamp: (2) CF13 QUAD - GE Total Lumens: 1720

Fixture Efficiency: 51.8%

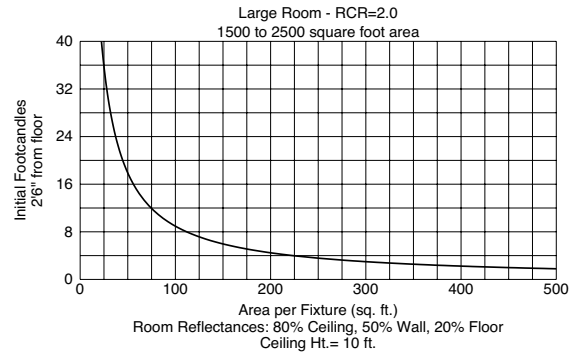
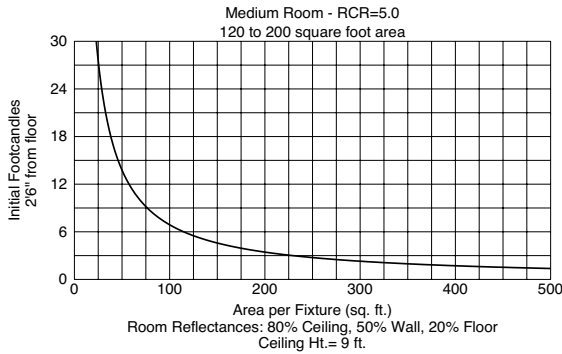
S/MH Ratio: 1.1

Single Fixture Data

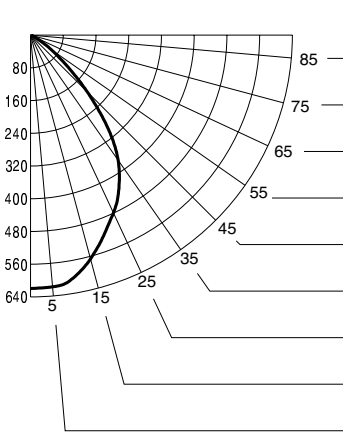
Ceiling Ht.(Ft.)	10% Values		Zero Degrees Ft.-C	50% Values	
	Beam Angle - 92			Beam Angle - 56	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	2.0	11	20.5	10.2	6
10	1.1	15	11.0	5.5	8
12	0.7	20	6.9	3.4	10
14	0.5	24	4.7	2.3	12
16	0.3	28	3.4	1.7	14

Ft.-C (Footcandles) are initial and measured 2'-6" from floor

Quick Calculator Charts



DISTRIBUTION CURVE



INTENSITY DATA

DEGREES	CANDELA
90	0
85	0
80	1
75	1
70	3
65	11
60	28
55	61
50	115
45	196
40	291
35	373
30	432
25	479
20	522
15	567
10	603
5	618
0	620

ZONAL CAVITY COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 0.20

RC	Effective Floor Cavity Reflectance 0.20																							
	80				70				50				30				10				0			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
0	62	62	62	62	60	60	60	60	57	57	57	55	55	55	53	53	53	52						
1	58	57	55	54	57	55	54	53	53	52	51	51	51	50	50	49	48	47						
2	55	52	49	47	53	51	49	47	49	47	46	48	46	45	46	45	44	43						
3	51	47	44	42	50	47	44	41	45	43	41	44	42	40	43	41	40	39						
4	48	43	40	37	47	43	40	37	42	39	37	40	38	36	39	37	36	35						
5	45	40	36	34	44	39	36	33	38	35	33	37	35	33	37	34	32	32						
6	42	37	33	30	41	36	33	30	35	32	30	35	32	30	34	31	30	29						
7	40	34	30	28	39	34	30	28	33	30	27	32	29	27	32	29	27	26						
8	37	31	28	25	36	31	28	25	30	27	25	30	27	25	29	27	25	24						
9	35	29	26	23	34	29	26	23	28	25	23	28	25	23	27	25	23	22						
10	33	27	24	21	32	27	24	21	27	24	21	26	23	21	26	23	21	20						

P8170-21A / P8218

8 INCH PRO-OPTIC

Report No. 2000117

No. Lamps: 2 Type Lamp: CF18 QUAD - GE Total Lumens: 2500

Fixture Efficiency: 46.2%

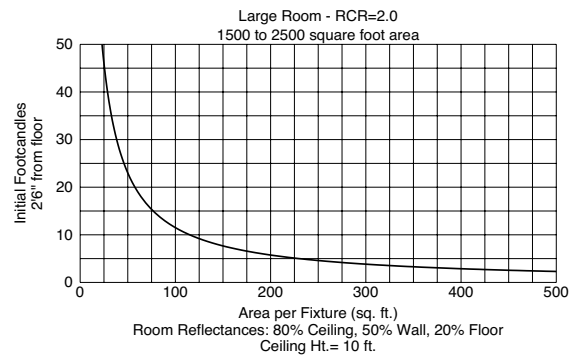
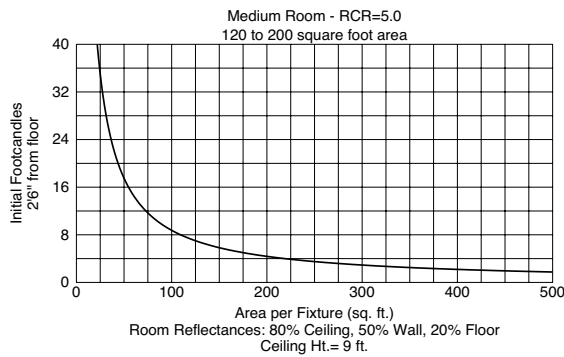
S/MH Ratio: 1.1

Single Fixture Data

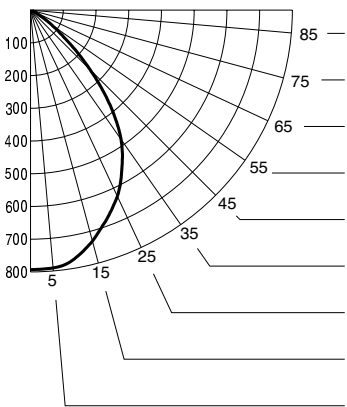
Ceiling Ht.(Ft.)	10% Values		Zero Degrees Ft.-C	50% Values	
	Beam Angle - 92			Beam Angle - 57	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	2.6	11	26.2	13.1	6
10	1.4	16	14.1	7.0	8
12	0.9	20	8.8	4.4	10
14	0.6	24	6.0	3.0	12
16	0.4	28	4.4	2.2	15

Ft.-C (Footcandles) are initial and measured 2'-6" from floor

Quick Calculator Charts



DISTRIBUTION CURVE



INTENSITY DATA

DEGREES	CANDELA
90	0
85	1
80	1
75	2
70	4
65	14
60	36
55	80
50	149
45	258
40	377
35	482
30	559
25	628
20	680
15	731
10	772
5	791
0	793

ZONAL CAVITY COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 0.20

RC	Effective Floor Cavity Reflectance 0.20																						
	80				70				50				30				10				0		
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
0	55	55	55	55	54	54	54	54	51	51	51	49	49	49	47	47	47	46	46	46	46		
1	52	51	49	48	51	50	48	47	48	47	46	46	45	44	44	44	43	42	42	42	42		
2	49	46	44	42	48	45	43	42	44	42	41	42	41	40	41	40	39	38	38	38	38		
3	46	42	39	37	45	42	39	37	40	38	36	39	37	36	38	37	35	34	34	34	34		
4	43	39	36	33	42	38	35	33	37	35	33	36	34	32	35	33	32	31	31	31	31		
5	40	35	32	30	39	35	32	30	34	32	30	33	31	29	33	31	29	28	28	28	28		
6	38	33	29	27	37	32	29	27	32	29	27	31	28	27	30	28	26	26	26	26	26		
7	35	30	27	25	35	30	27	25	29	26	24	29	26	24	28	26	24	23	23	23	23		
8	33	28	25	23	33	28	25	22	27	24	22	27	24	22	26	24	22	21	21	21	21		
9	31	26	23	21	31	26	23	21	25	23	21	25	22	21	24	22	20	20	20	20	20		
10	29	24	21	19	29	24	21	19	24	21	19	23	21	19	23	21	19	18	18	18	18		

P8226-EB / P8170-21A

8 INCH PRO-OPTIC

Report No. 2000080

No. Lamps: 2 Type Lamp: CF26 QUAD - GE Total Lumens: 3400

Fixture Efficiency: 47.5%

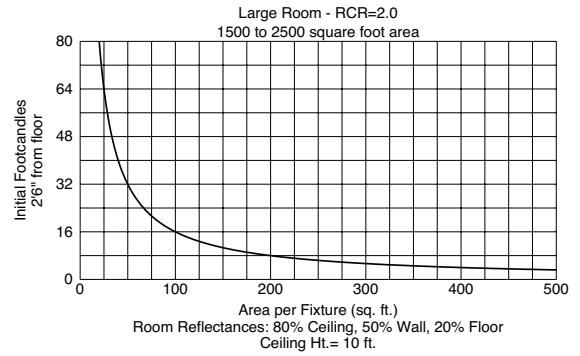
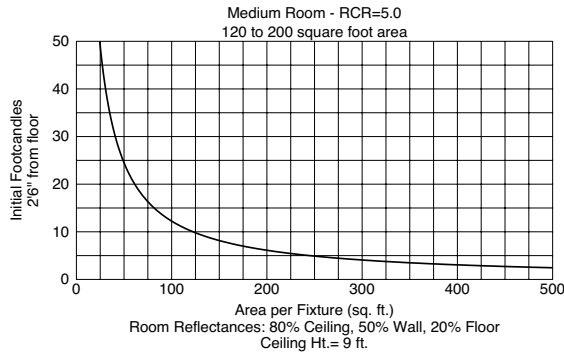
S/MH Ratio: 1.1

Single Fixture Data

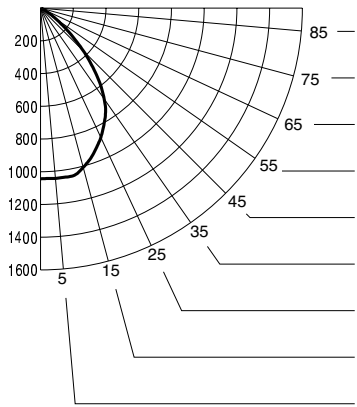
Ceiling Ht.(Ft.)	10% Values		Zero Degrees Ft.-C	50% Values	
	Beam Angle - 93			Beam Angle - 59	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	3.4	12	34.5	17.2	6
10	1.9	16	18.5	9.3	9
12	1.2	20	11.6	5.8	11
14	0.8	24	7.9	3.9	13
16	0.6	29	5.7	2.9	15

Ft.-C (Footcandles) are initial and measured 2'-6" from floor

Quick Calculator Charts



DISTRIBUTION CURVE



INTENSITY DATA

DEGREES	CANDELA
90	0
85	0
80	0
75	1
70	4
65	17
60	49
55	114
50	221
45	370
40	533
35	678
30	786
25	872
20	946
15	1008
10	1045
5	1045
0	1043

ZONAL CAVITY COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 0.20

RC	Effective Floor Cavity Reflectance 0.20																						
	80				70				50				30				10				0		
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
0	57	57	57	57	55	55	55	55	53	53	53	51	51	51	48	48	48	48	48	48	48		
1	53	52	51	49	52	51	50	49	49	48	47	47	46	46	46	45	44	44	43	43	43		
2	50	47	45	43	49	47	45	43	45	43	42	44	42	41	42	41	40	39	39	37	36		
3	47	43	41	38	46	43	40	38	41	39	37	40	38	37	39	37	36	35	35	34	33		
4	44	40	37	34	43	39	36	34	38	36	34	37	35	33	36	34	33	32	32	31	30		
5	41	36	33	31	40	36	33	31	35	32	30	34	32	30	33	31	30	29	29	28	27		
6	39	34	30	28	38	33	30	28	32	30	27	32	29	27	31	29	27	26	26	25	24		
7	36	31	28	25	35	31	27	25	30	27	25	29	27	25	29	26	25	24	24	23	22		
8	34	29	25	23	33	28	25	23	28	25	23	27	25	23	27	24	23	22	22	21	20		
9	32	27	23	21	31	26	23	21	26	23	21	25	23	21	25	23	21	20	20	19	18		
10	30	25	22	19	30	25	22	19	24	21	19	24	21	19	23	21	19	18	18	17	16		

