



Incandescent

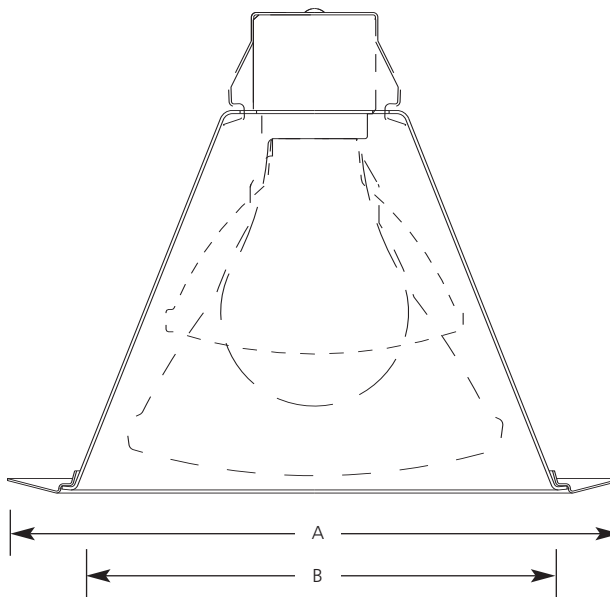
**6" Alzak® Cone
IC & Non-IC**

Recessed

Type _____

-21A -22A -23A -21 -22 -28
P8068

Catalog No.	Finish						Dimensions (Inches)		
	Clear Alzak®	Gold Alzak®	Black Alzak®	Clear	Gold	White	A	B	C
P8068	-21A	-22A	-23A	-21	-22	-28	7-3/4	6-11/32	4-3/4



Lamp Wattage

Housing	IC	Non-IC
P87-AT	75PAR30/65BR30	120BR40/150PAR38/40A19
P87-ATQC	75PAR30/65BR30	120BR40/150PAR38/40A19
P187-TG	75PAR30/65BR30	120BR40/150PAR38/40A19
P821-AT	120BR40/150PAR38/100A19	120BR40/150PAR38/100A19
P821-FB, P821-FBFC	N/A	150R40/150BR40/150PAR38

Specifications:

Flange

- Bright white powdered painted metal flange

Trim

- All aluminum construction
- Built-in bracket to accept Trim-Lok spring
- Trim-Lok action forces trim to fit snugly against the ceiling
- One-piece construction
- No light leaks around trim flange
- Socket mounts to trim for optimum performance and consistent lamp position

Options

- Clear Cone - specify "21" after catalog number
- Gold Cone - specify "22" after catalog number
- White Cone - specify "28" after catalog number
- Clear Alzak® Cone - specify "21A" after catalog number
- Gold Alzak® Cone - specify "22A" after catalog number
- Black Alzak® Cone - specify "23A" after catalog number

Labels

- UL-CUL damp location listed

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

www.progresslighting.com

Patent# 5,758,981, 5,758,982, 5,758,983, 5,758,984, 5,758,985, 5,758,986

P87-AT

P87-AT WITH P8068-21A

Report No. 98086

No. Lamps: 1 Type Lamp: 150BR40 FL Total Lumens: 1545

Fixture Efficiency: 98.4%

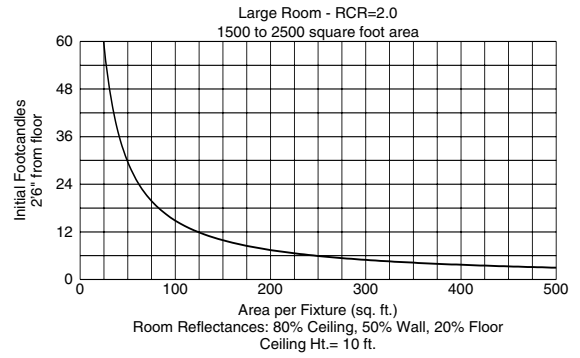
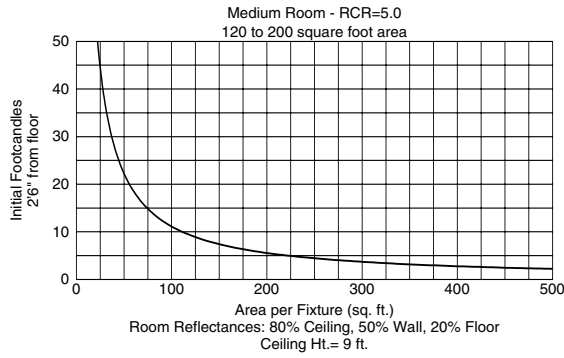
S/MH Ratio: 0.8

Single Fixture Data

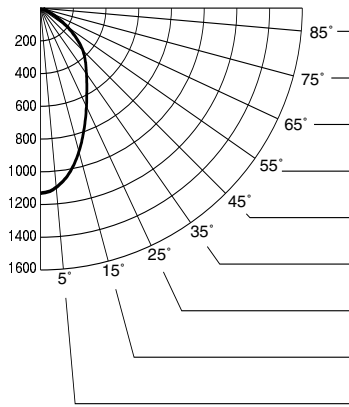
Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 93°			Beam Angle - 45°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	3.7	12	37.4	18.7	5
10	2.0	16	20.1	10.1	6
12	1.3	20	12.5	6.3	8
14	0.9	24	8.6	4.3	10
16	0.6	28	6.2	3.1	11

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

Quick Calculator Charts



DISTRIBUTION CURVE



INTENSITY DATA

DEGREES	CANDELA
90	0
85	7
80	11
75	17
70	30
65	60
60	119
55	202
50	289
45	365
40	427
35	489
30	566
25	664
20	781
15	907
10	1021
5	1099
0	1131

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	117	117	117	117	114	114	114	114	109	109	109	105	105	105	100	100	100	98						
1	110	106	103	100	107	104	101	99	100	98	95	96	94	93	93	91	90	88						
2	102	96	91	86	100	94	89	85	91	87	83	88	84	82	85	82	80	78						
3	95	87	80	75	93	85	79	75	83	77	73	80	76	72	78	74	71	69						
4	88	79	72	66	86	78	71	66	75	70	65	73	68	64	71	67	63	62						
5	82	72	64	59	81	71	64	59	69	63	58	67	62	58	65	61	57	55						
6	77	66	58	53	75	65	58	53	63	57	52	62	56	52	60	55	52	50						
7	72	61	53	48	71	60	53	48	58	52	48	57	52	47	56	51	47	45						
8	68	56	49	44	66	55	48	44	54	48	43	53	47	43	52	47	43	41						
9	64	52	45	40	62	52	45	40	50	44	40	50	44	40	49	43	40	38						
10	60	49	42	37	59	48	41	37	47	41	37	46	41	37	46	40	37	35						

P87-AT

P87-AT WITH P8068-21A

Report No. 98085

No. Lamps: 1 Type Lamp: 150PAR38 - SYLVANIA Total Lumens: 2200

Fixture Efficiency: 98.3%

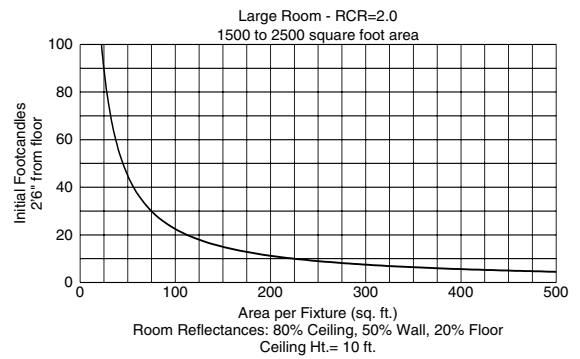
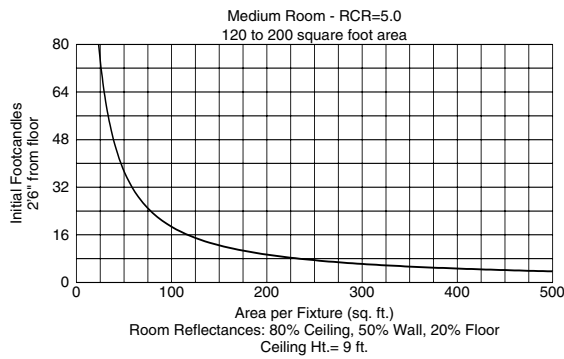
S/MH Ratio: 0.5

Single Fixture Data

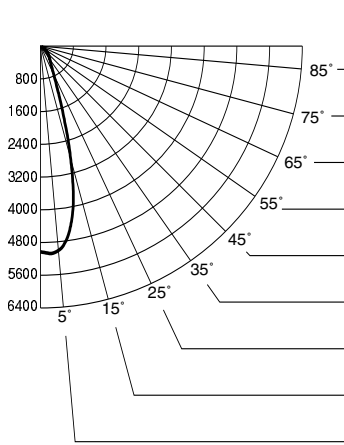
Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 52°			Beam Angle - 30°	
	Ft.-C	Beam Dia.	Ft.-C	Ft.-C	Beam Dia.
8	16.6	5	166.2	83.1	3
10	8.9	7	89.4	44.7	4
12	5.6	9	55.7	27.9	5
14	3.8	11	38.0	19.0	6
16	2.8	13	27.6	13.8	7

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	3
70	7
65	13
60	36
55	99
50	186
45	257
40	323
35	397
30	518
25	763
20	1398
15	2852
10	4357
5	5016
0	5028

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	117	117	117	117	114	114	114	114	109	109	109	105	105	105	100	100	100	98	98	98	98		
1	112	109	107	105	110	107	105	103	103	102	100	100	98	97	96	95	94	93	93	93	93		
2	107	102	98	95	105	101	97	94	97	95	92	94	92	90	92	90	88	87	87	87	87		
3	102	96	91	88	100	95	90	87	92	88	86	90	87	84	87	85	83	81	81	81	81		
4	97	90	85	81	95	89	84	81	87	83	80	85	82	79	83	80	78	77	77	77	77		
5	93	85	80	76	91	84	79	76	83	78	75	81	77	74	80	76	74	72	72	72	72		
6	89	81	75	72	88	80	75	71	79	74	71	77	73	70	76	73	70	69	69	69	69		
7	85	77	71	68	84	76	71	67	75	70	67	74	70	67	73	69	66	65	65	65	65		
8	82	73	68	64	81	73	68	64	72	67	64	71	67	64	70	66	63	62	62	62	62		
9	79	70	65	61	78	70	65	61	69	64	61	68	64	61	67	63	61	59	59	59	59		
10	76	67	62	59	75	67	62	59	66	62	58	65	61	58	65	61	58	57	57	57	57		

P87AT

P87AT WITH P8068-21A

Report No. 98127

No. Lamps: 1 Type Lamp: 150PAR38/FL Total Lumens: 2200

Fixture Efficiency: 77.8%

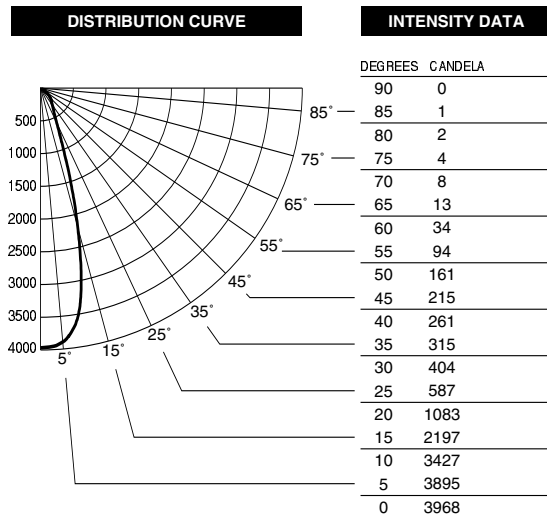
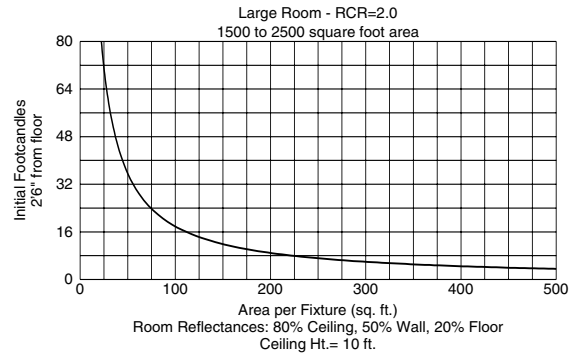
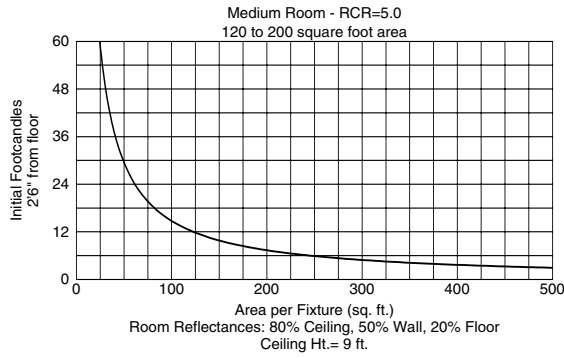
S/MH Ratio: 0.5

Single Fixture Data

Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 52°			Beam Angle - 30°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	13.1	5	131.2	65.6	3
10	7.1	7	70.5	35.3	4
12	4.4	9	44.0	22.0	5
14	3.0	11	30.0	15.0	6
16	2.2	13	21.8	10.9	7

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

Quick Calculator Charts



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	93	93	93	93	91	91	91	91	87	87	87	83	83	83	79	79	79	78	78	77	76	75	74	73	73	73	72	71	70	68	68	68	69	67	65	64	64	64	66	63	61	60	60	60																												
1	89	86	85	83	87	85	83	82	82	80	79	79	78	77	76	75	74	73	73	73	72	71	70	68	68	68	69	67	65	64	64	64	66	63	61	60	60	60																																		
2	84	81	78	75	83	79	77	74	77	75	73	75	73	71	72	71	70	68	68	68	69	67	65	64	64	64	66	63	61	60	60	60	66	63	61	60	60	60																																		
3	80	76	72	69	79	74	71	68	72	70	67	71	68	66	69	67	65	64	64	64	66	63	61	60	60	60	66	63	61	60	60	60	66	63	61	60	60	60																																		
4	77	71	67	64	75	70	66	63	68	65	63	67	64	62	66	63	61	60	60	60	66	63	61	60	60	60	66	63	61	60	60	60	66	63	61	60	60	60																																		
5	73	67	63	60	72	66	62	59	65	61	59	64	61	58	62	60	58	57	57	57	60	57	55	54	54	54	60	57	55	54	54	54	60	57	55	54	54	54																																		
6	70	63	59	56	69	63	59	56	62	58	55	61	57	55	60	57	55	54	54	54	60	57	55	54	54	54	60	57	55	54	54	54	60	57	55	54	54	54																																		
7	67	60	56	53	66	60	56	53	59	55	52	58	55	52	57	54	52	51	51	51	57	54	52	51	51	51	57	54	52	51	51	51	57	54	52	51	51	51																																		
8	64	57	53	50	63	57	53	50	56	53	50	55	52	50	55	52	49	48	48	48	55	52	49	48	48	48	55	52	49	48	48	48	55	52	49	48	48	48																																		
9	62	55	51	48	61	55	50	48	54	50	48	53	50	47	53	49	47	46	46	46	53	49	47	46	46	46	53	49	47	46	46	46	53	49	47	46	46	46																																		
10	59	53	48	46	59	52	48	46	52	48	46	51	48	45	51	47	45	44	44	44	51	47	45	44	44	44	51	47	45	44	44	44	51	47	45	44	44	44																																		

P87-AT

P87-AT WITH P8068-21A

Report No. 98087

No. Lamps: 1 Type Lamp: 40A19 Total Lumens: 505

Fixture Efficiency: 54.0%

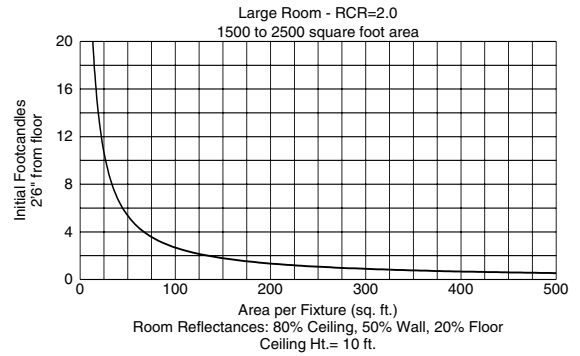
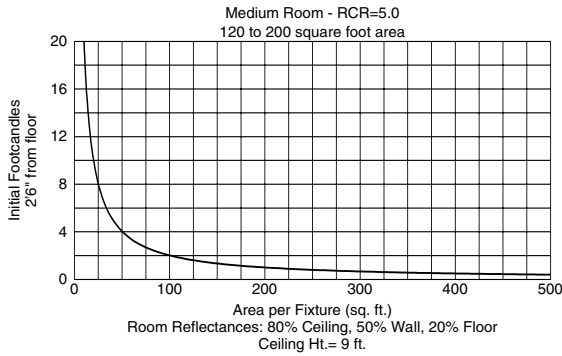
S/MH Ratio: 1.4

Single Fixture Data

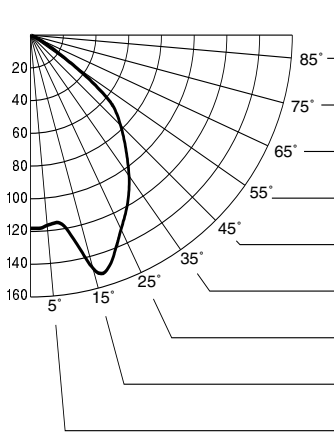
Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 104°			Beam Angle - 69°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	0.4	14	3.9	2.0	8
10	0.2	19	2.1	1.0	10
12	0.1	24	1.3	0.7	13
14	0.1	30	0.9	0.4	16
16	0.1	35	0.6	0.3	19

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	0
70	1
65	4
60	13
55	32
50	64
45	78
40	91
35	105
30	119
25	131
20	146
15	148
10	119
5	117
0	118

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	65	65	65	65	63	63	63	63	60	60	60	58	58	58	55	55	55	54					
1	61	59	57	56	59	58	56	55	56	54	53	53	52	52	52	51	50	49					
2	57	53	51	48	55	52	50	48	51	48	47	49	47	46	47	46	45	44					
3	53	48	45	42	52	47	44	42	46	43	41	45	42	40	43	41	40	39					
4	49	44	40	37	48	43	40	37	42	39	36	41	38	36	40	37	35	34					
5	46	40	36	33	45	39	35	33	38	35	32	37	34	32	36	34	32	31					
6	42	36	32	29	42	36	32	29	35	31	29	34	31	29	33	31	28	27					
7	40	33	29	26	39	33	29	26	32	29	26	31	28	26	31	28	26	25					
8	37	31	26	24	36	30	26	24	30	26	24	29	26	23	28	25	23	22					
9	35	28	24	22	34	28	24	21	27	24	21	27	24	21	26	23	21	20					
10	33	26	22	20	32	26	22	20	25	22	20	25	22	19	24	21	19	19					

P87-AT

P87-AT WITH P8068-21A

Report No. 98082

No. Lamps: 1 Type Lamp: 75PAR30 FL Total Lumens: 985

Fixture Efficiency: 97.7%

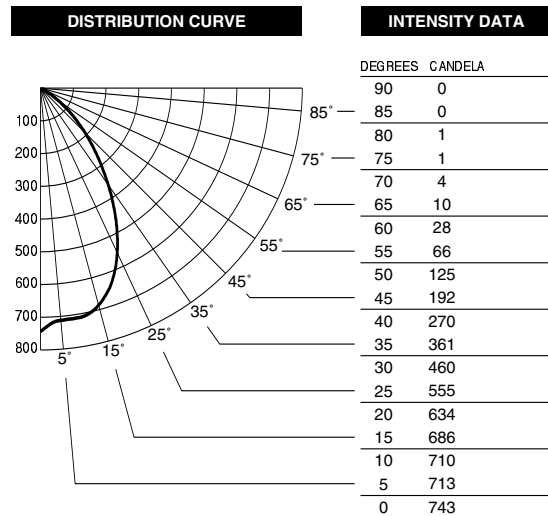
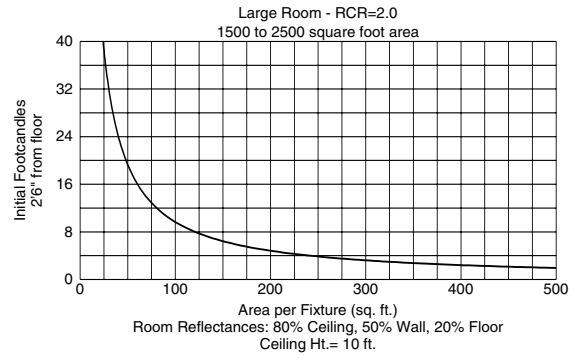
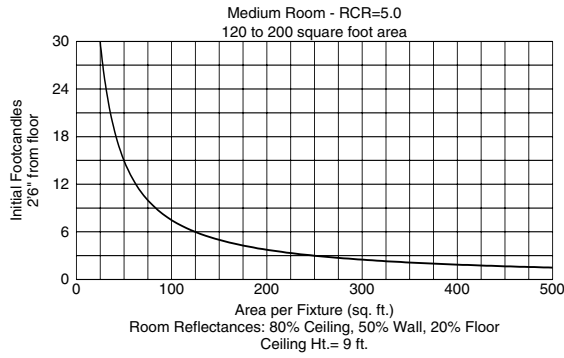
S/MH Ratio: 1.0

Single Fixture Data

Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 89°			Beam Angle - 54°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	2.5	11	24.6	12.3	6
10	1.3	15	13.2	6.6	8
12	0.8	19	8.2	4.1	10
14	0.6	22	5.6	2.8	12
16	0.4	26	4.1	2.0	14

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

Quick Calculator Charts



ZONAL CAVITY COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 0.20

RC	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	116	116	116	116	114	114	114	114	109	109	109	104	104	104	100	100	100	98														
1	110	107	104	102	108	105	102	100	101	99	97	97	96	94	94	93	91	90														
2	103	98	93	90	101	96	92	89	93	90	87	90	87	85	87	85	83	81														
3	97	90	84	80	95	88	83	79	86	81	78	83	80	77	81	78	75	74														
4	91	83	76	72	89	81	76	71	79	74	70	77	73	69	75	72	69	67														
5	86	76	69	65	84	75	69	64	73	68	64	72	67	63	70	66	63	61														
6	80	70	64	59	79	70	63	59	68	62	58	66	61	58	65	61	57	56														
7	76	65	58	54	74	64	58	54	63	57	53	62	57	53	61	56	53	51														
8	71	61	54	49	70	60	54	49	59	53	49	58	53	49	57	52	49	47														
9	67	57	50	46	66	56	50	45	55	49	45	54	49	45	53	48	45	43														
10	64	53	47	42	63	52	46	42	52	46	42	51	46	42	50	45	42	40														

P87-AT

P87-AT WITH P8068-21

Report No. 98089

No. Lamps: 1 Type Lamp: 150PAR38 - SYLVANIA Total Lumens: 2200

Fixture Efficiency: 98.6%

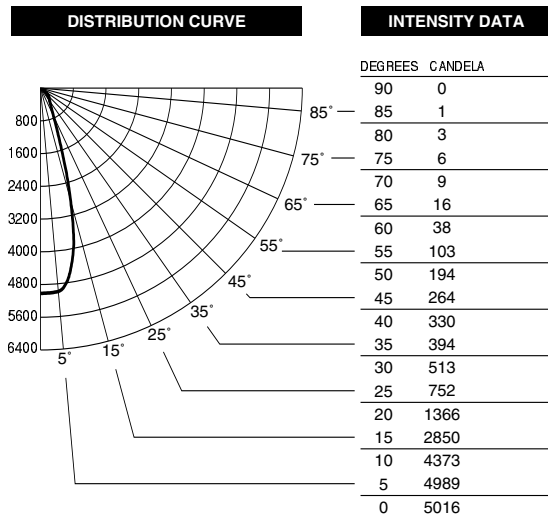
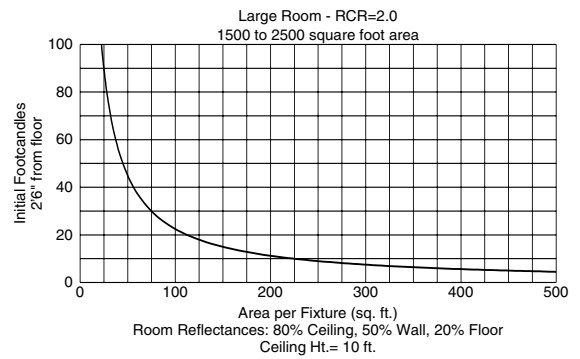
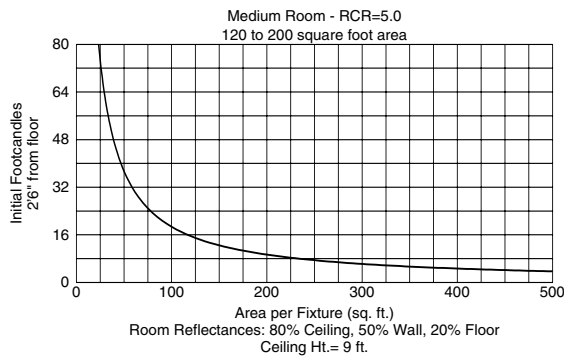
S/MH Ratio: 0.5

Single Fixture Data

Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 52°			Beam Angle - 30°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	16.6	5	165.8	82.9	3
10	8.9	7	89.2	44.6	4
12	5.6	9	55.6	27.8	5
14	3.8	11	37.9	19.0	6
16	2.8	13	27.5	13.8	7

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

Quick Calculator Charts



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	117	117	117	117	115	115	115	115	110	110	110	105	105	105	101	101	101	99					
1	112	110	107	105	110	108	105	103	104	102	100	100	99	97	96	95	95	93					
2	107	102	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87					
3	102	96	91	88	100	95	90	87	92	88	86	90	87	84	88	85	83	81					
4	97	90	85	81	96	89	84	81	87	83	80	85	82	79	83	80	78	77					
5	93	85	80	76	91	84	79	76	83	78	75	81	77	74	80	76	74	72					
6	89	81	75	71	88	80	75	71	79	74	71	77	73	70	76	72	70	68					
7	85	77	71	68	84	76	71	67	75	70	67	74	70	67	73	69	66	65					
8	82	73	68	64	81	73	68	64	72	67	64	71	67	63	70	66	63	62					
9	79	70	65	61	78	70	64	61	69	64	61	68	64	61	67	63	60	59					
10	76	67	62	58	75	67	62	58	66	61	58	65	61	58	65	61	58	57					

P87-AT

P87-AT WITH P8068-22A

Report No. 98080

No. Lamps: 1 Type Lamp: 150PAR38 - SYLVANIA Total Lumens: 2200

Fixture Efficiency: 96.8%

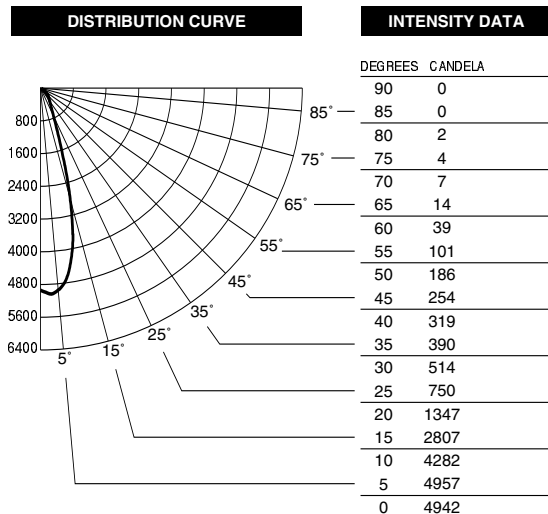
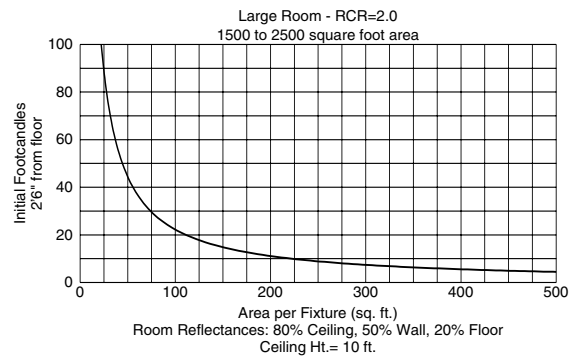
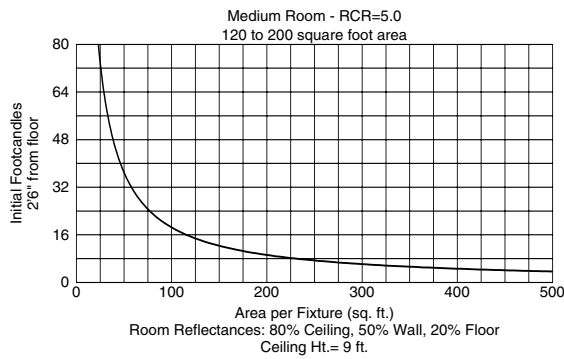
S/MH Ratio: 0.5

Single Fixture Data

Ceiling Ht.(Ft.)	10% Values		Zero Degrees Ft.-C	50% Values	
	Beam Angle - 52°			Beam Angle - 30°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	16.3	5	163.4	81.7	3
10	8.8	7	87.9	43.9	4
12	5.5	9	54.8	27.4	5
14	3.7	11	37.4	18.7	6
16	2.7	13	27.1	13.6	7

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

Quick Calculator Charts



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	115	115	115	115	113	113	113	113	108	108	108	103	103	103	99	99	99	99	99	99	97		
1	110	108	105	103	108	106	103	102	102	100	99	98	97	96	95	94	93	91	91	91	91		
2	105	101	97	94	103	99	96	93	96	93	91	93	91	89	90	89	87	85	85	85	85		
3	100	94	90	86	98	93	89	86	91	87	84	88	85	83	86	84	82	80	80	80	80		
4	96	89	84	80	94	88	83	80	86	82	79	84	80	78	82	79	77	75	75	75	75		
5	91	84	79	75	90	83	78	74	81	77	74	80	76	73	78	75	73	71	71	71	71		
6	87	80	74	70	86	79	74	70	77	73	70	76	72	69	75	71	69	67	67	67	67		
7	84	76	70	67	83	75	70	66	74	69	66	73	69	66	72	68	65	64	64	64	64		
8	81	72	67	63	79	72	67	63	71	66	63	70	66	63	69	65	62	61	61	61	61		
9	77	69	64	60	76	68	64	60	68	63	60	67	63	60	66	62	60	58	58	58	58		
10	75	66	61	58	74	66	61	58	65	60	57	64	60	57	64	60	57	56	56	56	56		

P87AT

P87AT WITH P8068-22A

Report No. 98128

No. Lamps: 1 Type Lamp: 40A19 - GE Total Lumens: 505

Fixture Efficiency: 57.7%

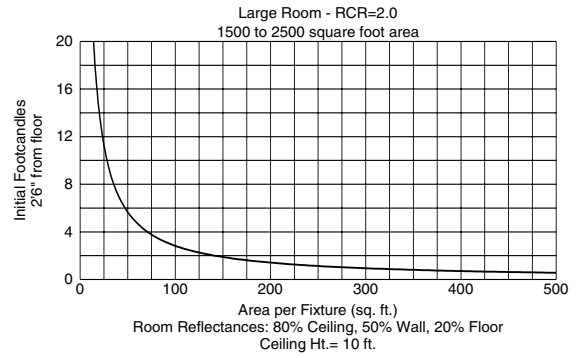
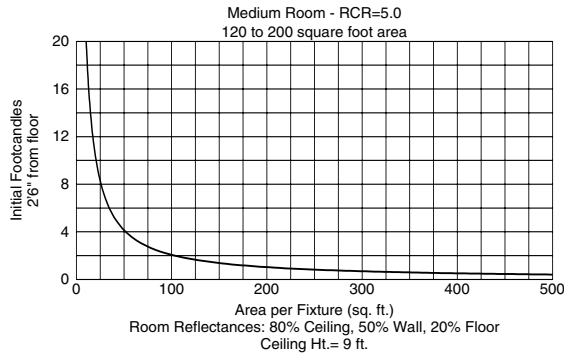
S/MH Ratio: 1.4

Single Fixture Data

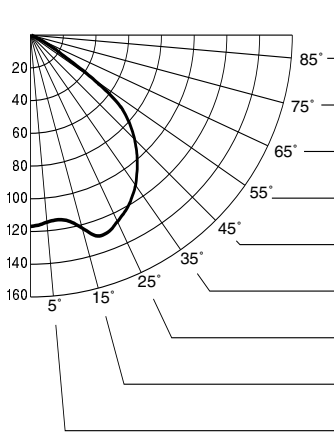
Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 108°			Beam Angle - 72°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	0.4	15	3.9	1.9	8
10	0.2	20	2.1	1.0	11
12	0.1	26	1.3	0.6	14
14	0.1	31	0.9	0.4	17
16	0.1	37	0.6	0.3	20

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	1
65	6
60	18
55	47
50	76
45	90
40	102
35	112
30	120
25	126
20	130
15	122
10	115
5	115
0	117

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	69	69	69	69	67	67	67	67	64	64	64	62	62	62	59	59	59	58					
1	65	62	61	59	63	61	60	58	59	57	56	57	56	55	55	54	53	52					
2	60	56	53	51	59	55	52	50	53	51	49	51	49	48	50	48	47	46					
3	55	51	47	44	54	50	46	43	48	45	42	47	44	42	45	43	41	40					
4	51	45	41	38	50	45	41	38	43	40	37	42	39	37	41	38	36	35					
5	48	41	37	33	46	40	36	33	39	36	33	38	35	32	37	34	32	31					
6	44	37	33	29	43	37	32	29	36	32	29	35	31	29	34	31	29	28					
7	41	34	29	26	40	34	29	26	33	29	26	32	28	26	31	28	26	25					
8	38	31	27	23	37	31	26	23	30	26	23	29	26	23	29	25	23	22					
9	36	29	24	21	35	28	24	21	28	24	21	27	23	21	26	23	21	20					
10	33	26	22	19	33	26	22	19	25	22	19	25	21	19	24	21	19	18					

P87-AT

P87-AT WITH P8068-22A

Report No. 98079

No. Lamps: 1 Type Lamp: 75PAR30 SN - GE Total Lumens: 1100

Fixture Efficiency: 98.5%

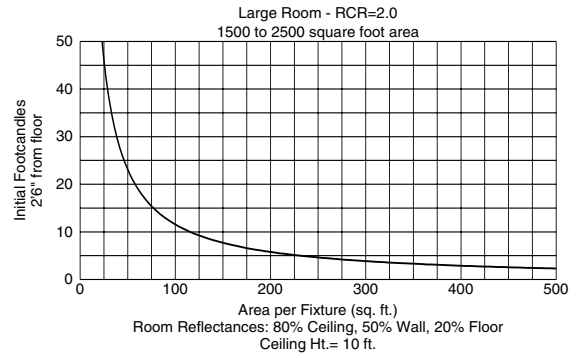
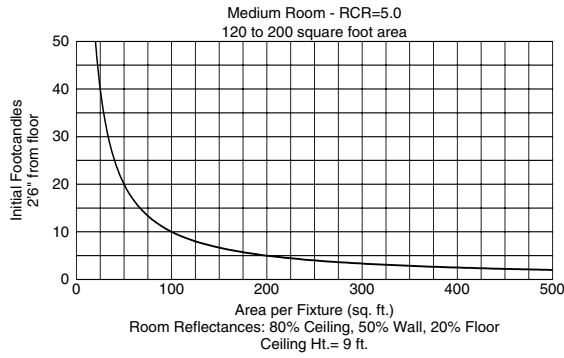
S/MH Ratio: 0.5

Single Fixture Data

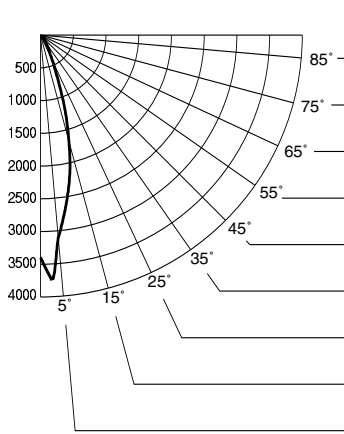
Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 49°			Beam Angle - 28°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	11.2	5	112.3	56.1	3
10	6.0	7	60.4	30.2	4
12	3.8	9	37.6	18.8	5
14	2.6	11	25.7	12.8	6
16	1.9	12	18.6	9.3	7

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	0
70	0
65	1
60	2
55	5
50	12
45	35
40	81
35	146
30	244
25	430
20	914
15	1675
10	2429
5	3112
0	3396

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	117	117	117	117	114	114	114	114	109	109	109	105	105	105	100	100	100	98	98	98	98		
1	113	110	108	107	110	108	107	105	104	103	102	101	100	99	98	97	96	94	94	94	94		
2	109	105	101	99	106	103	100	98	100	98	95	97	95	93	94	93	92	90	91	91	90		
3	104	99	96	92	103	98	95	92	96	93	90	93	91	89	91	89	88	86	88	88	86		
4	101	95	90	87	99	94	90	87	92	88	86	90	87	85	88	86	84	83	85	85	83		
5	97	91	86	83	96	90	86	82	88	85	82	87	83	81	85	83	80	79	82	82	80		
6	94	87	82	79	92	86	82	79	85	81	78	84	80	78	82	79	77	76	80	80	77		
7	91	83	79	76	89	83	78	75	82	78	75	81	77	75	80	77	74	73	78	78	74		
8	88	80	76	72	87	80	75	72	79	75	72	78	74	72	77	74	72	70	76	76	72		
9	85	77	73	70	84	77	73	70	76	72	69	75	72	69	75	71	69	68	74	74	70		
10	82	75	70	67	81	74	70	67	74	70	67	73	69	67	72	69	67	66	72	72	67		

P87-AT

P87-AT WITH P8068-22

Report No. 98107

No. Lamps: 1 Type Lamp: 150PAR38 SYLVANIA Total Lumens: 2200

Fixture Efficiency: 76.5%

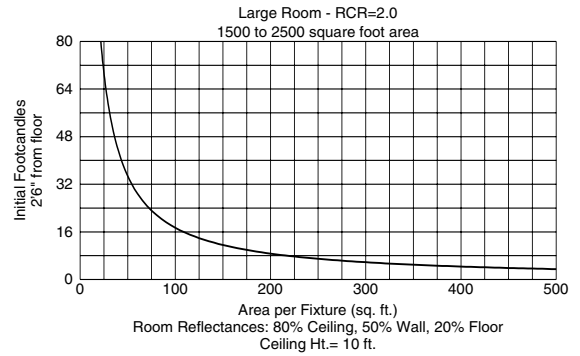
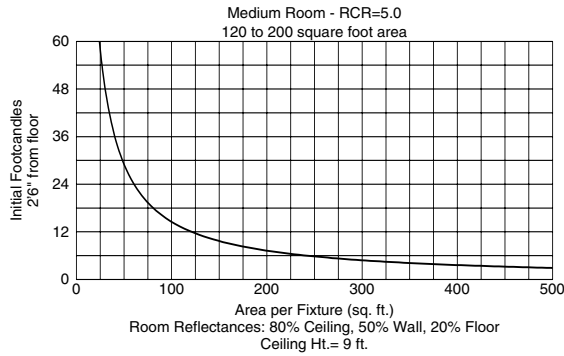
S/MH Ratio: 0.5

Single Fixture Data

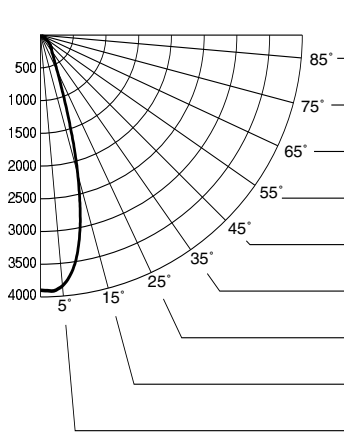
Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 53°			Beam Angle - 30°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	12.9	5	128.8	64.4	3
10	6.9	7	69.3	34.6	4
12	4.3	9	43.2	21.6	5
14	2.9	11	29.5	14.7	6
16	2.1	13	21.4	10.7	7

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	3
70	6
65	13
60	36
55	89
50	150
45	205
40	254
35	303
30	399
25	603
20	1103
15	2195
10	3310
5	3842
0	3897

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	91	91	91	91	89	89	89	89	85	85	85	81	81	81	78	78	78	77						
1	87	85	83	82	85	83	82	80	80	79	78	77	76	76	75	74	73	72						
2	83	79	76	74	81	78	75	73	76	73	72	73	72	70	71	70	69	67						
3	79	74	71	68	78	73	70	67	71	69	66	70	67	65	68	66	64	63						
4	75	70	66	63	74	69	65	63	68	64	62	66	63	61	65	62	60	59						
5	72	66	62	59	71	65	61	58	64	61	58	63	60	57	62	59	57	56						
6	69	63	58	55	68	62	58	55	61	57	55	60	57	54	59	56	54	53						
7	66	59	55	52	65	59	55	52	58	54	52	57	54	52	56	53	51	50						
8	63	57	52	50	62	56	52	49	55	52	49	55	51	49	54	51	49	48						
9	61	54	50	47	60	54	50	47	53	49	47	52	49	47	52	49	47	46						
10	59	52	48	45	58	52	48	45	51	47	45	50	47	45	50	47	45	44						

P87-AT

P87-AT WITH P8068-22

Report No. 98106

No. Lamps: 1 Type Lamp: 75PAR30 (SN) GE Total Lumens: 1100

Fixture Efficiency: 99.8%

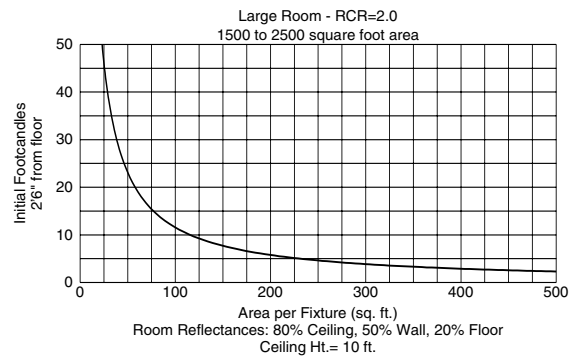
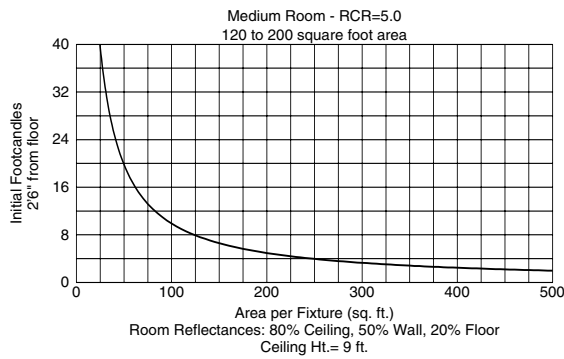
S/MH Ratio: 0.5

Single Fixture Data

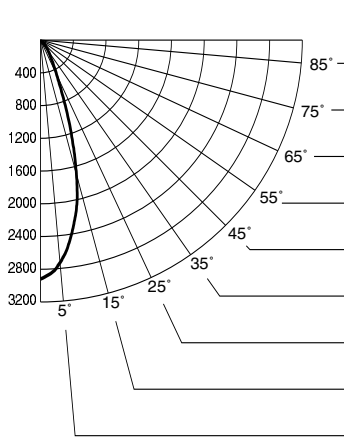
Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 53°			Beam Angle - 31°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	9.7	5	96.5	48.3	3
10	5.2	7	51.9	26.0	4
12	3.2	9	32.4	16.2	5
14	2.2	11	22.1	11.0	6
16	1.6	13	16.0	8.0	7

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	1
65	3
60	7
55	12
50	21
45	47
40	101
35	168
30	268
25	470
20	955
15	1694
10	2312
5	2730
0	2920

ZONAL CAVITY COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 0.20

RC	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	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10																																																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	99	98	97	95	95	95	92	90	88	86	84	82	80	78	76	74	72	70	68	66	64	62	60	58	56	54	52	50	48	46	44	42	40	38	36	34	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0																																	
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	94	93	92	90	88	86	84	82	80	78	76	74	72	70	68	66	64	62	60	58	56	54	52	50	48	46	44	42	40	38	36	34	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0																																					
2	110	105	102	99	107	104	101	98	101	98	96	98	96	94	95	93	92	90	89	88	87	86	84	82	80	78	76	74	72	70	68	66	64	62	60	58	56	54	52	50	48	46	44	42	40	38	36	34	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0																																							
3	105	100	96	92	103	98	95	92	96	93	90	94	91	89	91	89	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
4	101	95	90	87	99	94	89	86	92	88	85	90	87	84	88	85	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0				
5	97	90	85	82	96	89	85	82	88	84	81	86	83	80	85	82	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0								
6	94	86	81	78	92	85	81	77	84	80	77	83	79	76	82	78	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0											
7	90	83	78	74	89	82	77	74	81	77	74	80	76	73	79	75	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0														
8	87	79	74	71	86	79	74	71	78	73	70	77	73	70	76	72	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																	
9	84	76	71	68	83	76	71	68	75	71	68	74	70	67	73	70	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																				
10	81	73	68	65	80	73	68	65	72	68	65	71	68	65	71	68	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																						

P87-AT

P87-AT WITH P8068-28

Report No. 98104

No. Lamps: 1 Type Lamp: 150BR40 FL Total Lumens: 1545

Fixture Efficiency: 98.5%

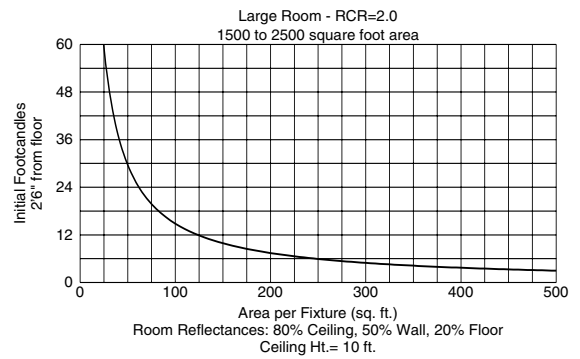
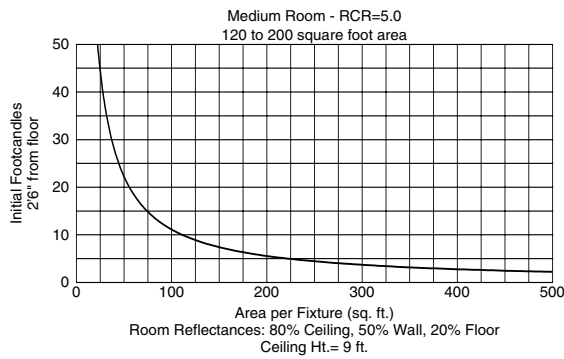
S/MH Ratio: 0.8

Single Fixture Data

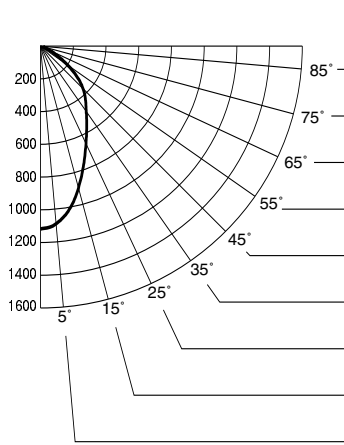
Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 93°			Beam Angle - 45°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	3.7	12	36.9	18.5	5
10	2.0	16	19.9	9.9	6
12	1.2	20	12.4	6.2	8
14	0.8	24	8.4	4.2	10
16	0.6	29	6.1	3.1	11

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

Quick Calculator Charts



DISTRIBUTION CURVE



INTENSITY DATA

DEGREES	CANDELA
90	0
85	8
80	11
75	18
70	33
65	65
60	122
55	204
50	292
45	368
40	428
35	488
30	564
25	658
20	771
15	897
10	1013
5	1089
0	1117

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	117	117	117	117	114	114	114	114	109	109	109	105	105	105	100	100	100	98						
1	110	106	103	100	107	104	101	99	100	98	95	96	94	93	93	91	90	88						
2	102	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	80	78						
3	95	87	80	75	93	85	79	74	82	77	73	80	76	72	77	74	71	69						
4	88	79	71	66	86	77	71	66	75	69	65	73	68	64	71	67	63	61						
5	82	72	64	59	80	71	64	58	69	63	58	67	62	57	65	61	57	55						
6	77	66	58	53	75	65	58	53	63	57	52	62	56	52	60	55	51	50						
7	72	60	53	48	70	60	53	48	58	52	47	57	51	47	56	51	47	45						
8	67	56	49	44	66	55	48	43	54	48	43	53	47	43	52	47	43	41						
9	64	52	45	40	62	51	44	40	50	44	40	49	44	39	48	43	39	38						
10	60	48	41	37	59	48	41	37	47	41	37	46	40	36	45	40	36	35						

P87-AT

P87-AT WITH P8068-28

Report No. 98103

No. Lamps: 1 Type Lamp: 150PAR38 Total Lumens: 2200

Fixture Efficiency: 71.3%

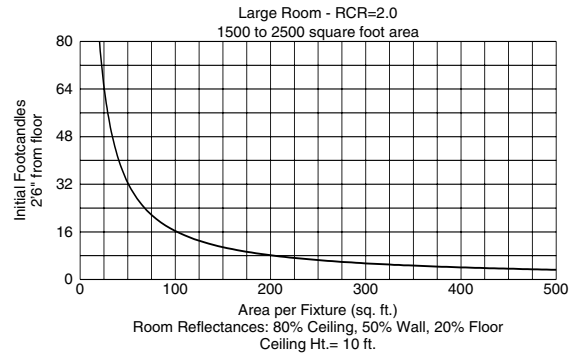
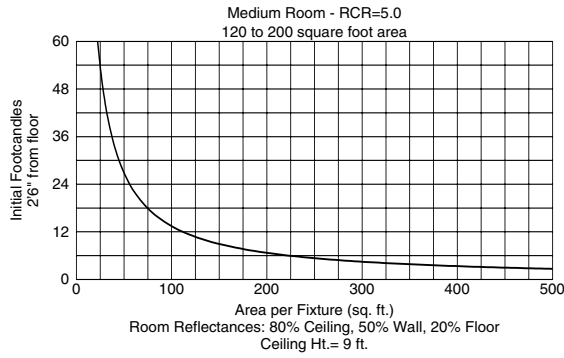
S/MH Ratio: 0.5

Single Fixture Data

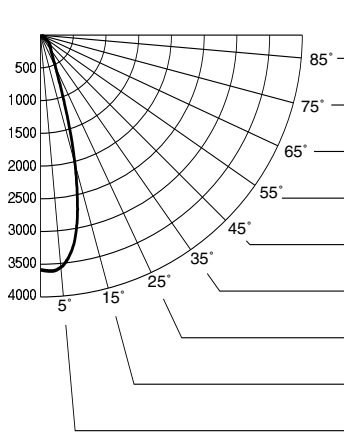
Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 52°			Beam Angle - 30°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	11.9	5	118.6	59.3	3
10	6.4	7	63.8	31.9	4
12	4.0	9	39.8	19.9	5
14	2.7	11	27.1	13.6	6
16	2.0	13	19.7	9.8	7

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

Quick Calculator Charts



DISTRIBUTION CURVE



INTENSITY DATA

DEGREES	CANDELA
90	0
85	2
80	4
75	7
70	10
65	16
60	37
55	83
50	142
45	192
40	235
35	277
30	363
25	545
20	1002
15	2033
10	3096
5	3561
0	3588

ZONAL CAVITY COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 0.20

RC	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	0				
0	85	85	85	85	83	83	83	83	79	79	79	76	76	76	73	73	73	71	71	71	71	71	71	71				
1	81	79	77	76	79	77	76	75	75	73	72	72	71	70	70	69	68	67	67	67	67	67	67	67				
2	77	74	71	69	76	72	70	68	70	68	66	68	66	65	66	65	64	62	62	62	62	62	62	62				
3	73	69	66	63	72	68	65	62	66	64	61	64	62	60	63	61	59	58	58	58	58	58	58	58				
4	70	65	61	58	69	64	61	58	63	60	57	61	59	56	60	58	56	55	55	55	55	55	55	55				
5	67	61	57	54	66	61	57	54	59	56	54	58	55	53	57	55	53	52	52	52	52	52	52	52				
6	64	58	54	51	63	57	54	51	56	53	51	55	52	50	54	52	50	49	49	49	49	49	49	49				
7	61	55	51	48	60	55	51	48	54	50	48	53	50	48	52	49	47	46	46	46	46	46	46	46				
8	59	52	48	46	58	52	48	46	51	48	45	51	48	45	50	47	45	44	44	44	44	44	44	44				
9	56	50	46	44	56	50	46	44	49	46	43	49	45	43	48	45	43	42	42	42	42	42	42	42				
10	54	48	44	42	54	48	44	42	47	44	42	47	44	41	46	43	41	40	40	40	40	40	40	40				

P87-AT

P87-AT WITH P8068-28

Report No. 98102

No. Lamps: 1 Type Lamp: 65BR30 FL Total Lumens: 770

Fixture Efficiency: 91.0%

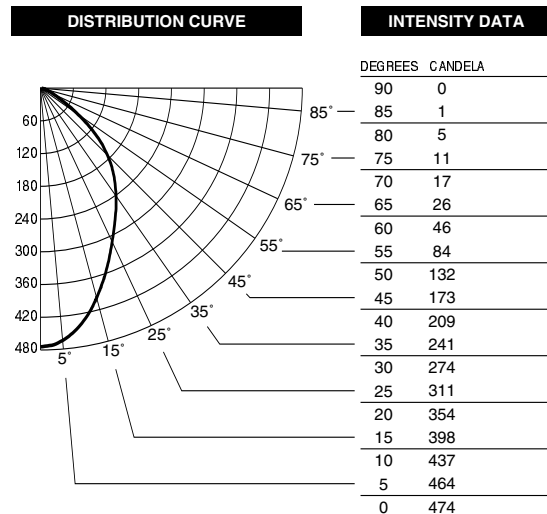
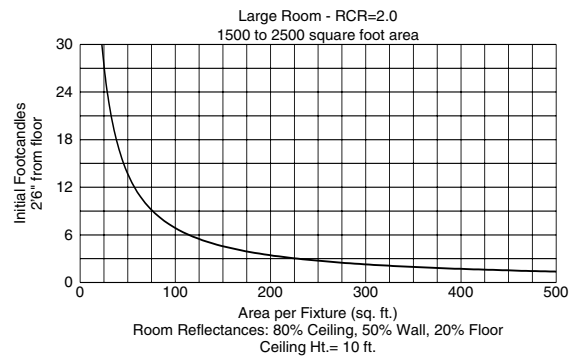
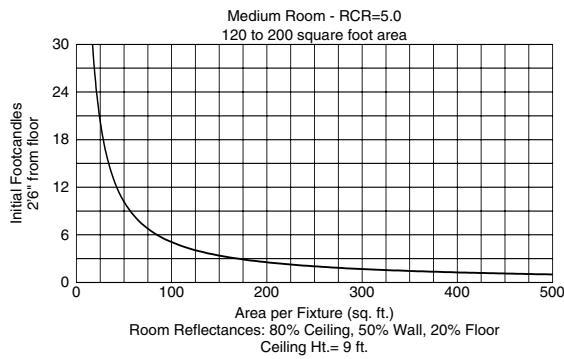
S/MH Ratio: 0.9

Single Fixture Data

Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 95°			Beam Angle - 49°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	1.6	12	15.7	7.8	5
10	0.8	16	8.4	4.2	7
12	0.5	21	5.3	2.6	9
14	0.4	25	3.6	1.8	10
16	0.3	29	2.6	1.3	12

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

Quick Calculator Charts



ZONAL CAVITY COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 0.20

RC	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	108	108	108	108	106	106	106	106	101	101	101	97	97	97	93	93	93	91														
1	101	98	95	93	99	96	93	91	92	90	88	89	87	86	86	84	83	81														
2	94	89	84	80	92	87	82	79	84	80	77	81	78	75	78	76	74	72														
3	88	80	74	69	86	79	73	69	76	72	68	74	70	67	72	68	66	64														
4	82	73	66	61	80	72	65	61	69	64	60	67	63	59	66	62	59	57														
5	76	66	59	54	74	65	59	54	64	58	54	62	57	53	60	56	53	51														
6	71	61	54	49	69	60	53	49	58	53	48	57	52	48	56	51	48	46														
7	66	56	49	44	65	55	49	44	54	48	44	53	47	43	51	47	43	42														
8	62	52	45	40	61	51	45	40	50	44	40	49	44	40	48	43	39	38														
9	59	48	41	37	57	47	41	37	46	41	37	45	40	36	45	40	36	35														
10	55	45	38	34	54	44	38	34	43	38	34	42	37	34	42	37	33	32														

P87AT

P87AT WITH P8068-28

Report No. 98101

No. Lamps: 1 Type Lamp: 75PAR30 SN - GE Total Lumens: 1100

Fixture Efficiency: 99.3%

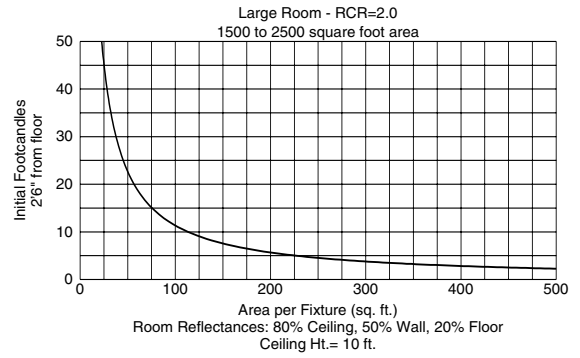
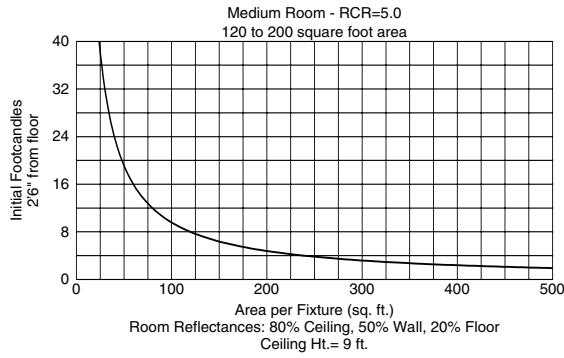
S/MH Ratio: 0.5

Single Fixture Data

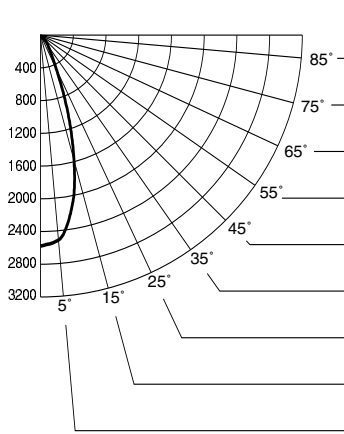
Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 54°			Beam Angle - 32°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	8.5	6	85.3	42.6	3
10	4.6	8	45.8	22.9	4
12	2.9	10	28.6	14.3	5
14	2.0	12	19.5	9.8	7
16	1.4	14	14.2	7.1	8

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

Quick Calculator Charts



DISTRIBUTION CURVE



INTENSITY DATA

DEGREES	CANDELA
90	0
85	2
80	5
75	9
70	14
65	18
60	23
55	26
50	34
45	39
40	45
35	59
30	109
25	167
20	257
15	453
10	936
5	1580
0	2167
0	2515
0	2579

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	118	118	118	118	115	115	115	115	110	110	110	106	106	106	101	101	101	99					
1	113	110	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93					
2	108	103	100	97	106	102	98	96	99	96	93	96	93	91	93	91	90	88					
3	103	97	93	89	101	96	92	89	94	90	87	91	88	86	89	87	85	83					
4	99	92	87	83	97	91	86	83	89	85	82	87	84	81	85	82	80	79					
5	95	87	82	78	93	87	82	78	85	81	77	83	80	77	82	79	76	75					
6	91	83	78	74	90	82	78	74	81	77	73	80	76	73	78	75	73	71					
7	88	79	74	71	86	79	74	70	78	73	70	76	73	70	75	72	69	68					
8	84	76	71	67	83	75	71	67	74	70	67	73	69	67	73	69	66	65					
9	81	73	68	64	80	72	68	64	72	67	64	71	67	64	70	66	64	62					
10	78	70	65	62	77	70	65	62	69	64	61	68	64	61	67	64	61	60					



Compact Fluorescent

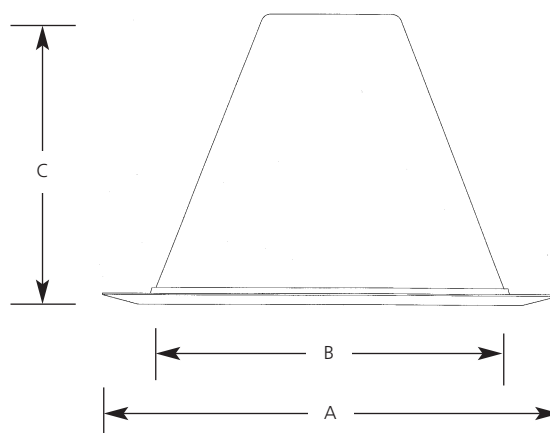
**6" Alzak® Cone
Single Lamp Vertical
IC & Non-IC**

Recessed

Type _____

-21A -22A -23A -28 -21 -22
P8068

Catalog No.	Finish						Dimensions (Inches)		
	Clear Alzak®	Gold Alzak®	Black Alzak®	Clear	Gold	White	A	B	C
P8068	-21A	-22A	-23A	-21	-22	-28	7-3/4	6-11/32	4-3/4



Lamp Wattage

Housing	IC	Non-IC
P83-AT	13w 4-pin Quad/Triple-tube CF	13w 4-pin Quad/Triple-tube CF
P83-ICAT	13w 4-pin Quad/Triple-tube CF	13w 4-pin Quad/Triple-tube CF
P88-ICAT	18w 4-pin Quad/Triple-tube CF	18w 4-pin Quad/Triple-tube CF
P183-EB	13w 4-pin Quad/Triple-tube CF	13w 4-pin Quad/Triple-tube CF

Specifications:

Flange

- Bright white powdered painted metal flange

Trim

- All aluminum construction
- Trim-Lok action forces trim to fit snugly against the ceiling
- One-piece construction
- No light leaks around trim flange
- Socket mounts to trim for optimum performance and consistent lamp position

Options

- Clear Alzak® Cone - specify "21A" after catalog number
- Gold Alzak® Cone - specify "22A" after catalog number
- Black Alzak® Cone - specify "23A" after catalog number

Labels

- UL-CUL damp location listed

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

www.progresslighting.com

Patent# 5,758,981, 5,758,982, 5,758,983, 5,758,984, 5,758,985, 5,758,986

Rev. 4/06

P83

P83 WITH P8068-21A

Report No. 98035

No. Lamps: 1 Type Lamp: 13W QUAD CF-GE Total Lumens: 860

Fixture Efficiency: 63.2%

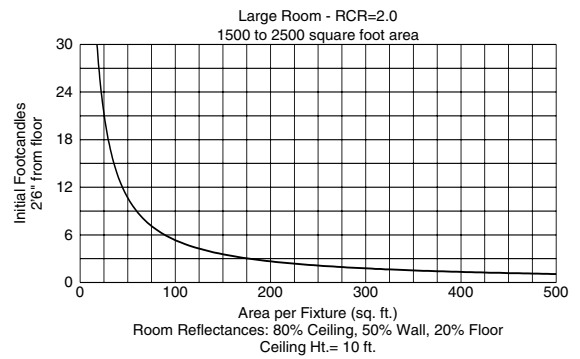
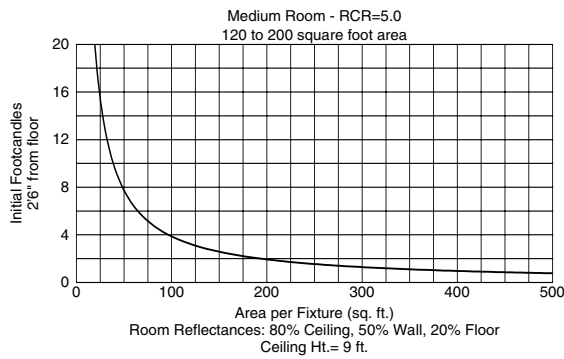
S/MH Ratio: 1.1

Single Fixture Data

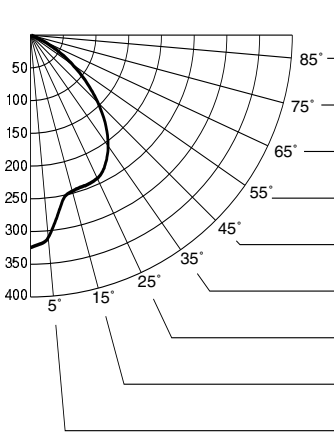
Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 99°			Beam Angle - 56°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	1.1	13	10.7	5.4	6
10	0.6	17	5.8	2.9	8
12	0.4	22	3.6	1.8	10
14	0.2	27	2.5	1.2	12
16	0.2	31	1.8	0.9	14

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	0
75	1
70	4
65	22
60	48
55	78
50	111
45	145
40	178
35	207
30	228
25	241
20	245
15	247
10	265
5	311
0	325

ZONAL CAVITY COEFFICIENTS OF UTILIZATION

Effective Floor Cavity Reflectance 0.20

RC	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	0	0	0				
0	75	75	75	75	73	73	73	73	70	70	70	67	67	67	64	64	64	63										
1	71	68	66	65	69	67	65	63	64	63	61	62	61	60	60	59	58	57										
2	66	62	58	55	64	60	57	55	58	56	54	56	54	52	54	53	51	50										
3	61	55	51	48	59	54	51	48	53	49	47	51	48	46	50	47	45	44										
4	56	50	45	42	55	49	45	42	48	44	41	46	43	41	45	42	40	39										
5	52	45	41	37	51	45	40	37	43	39	36	42	39	36	41	38	36	35										
6	49	41	36	33	48	41	36	33	40	36	33	39	35	32	38	35	32	31										
7	45	38	33	29	44	37	33	29	36	32	29	36	32	29	35	31	29	28										
8	42	35	30	27	41	34	30	27	34	29	26	33	29	26	32	29	26	25										
9	40	32	27	24	39	32	27	24	31	27	24	30	27	24	30	26	24	23										
10	37	30	25	22	37	29	25	22	29	25	22	28	24	22	28	24	22	21										

P83

P83 WITH 8068-21

Report No. 98061

No. Lamps: 1 Type Lamp: 13W QUAD CF - GE Total Lumens: 860

Fixture Efficiency: 68.3%

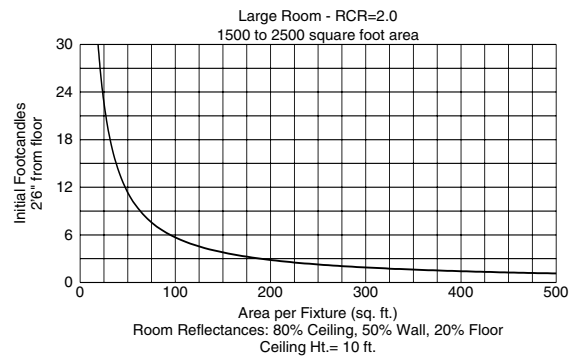
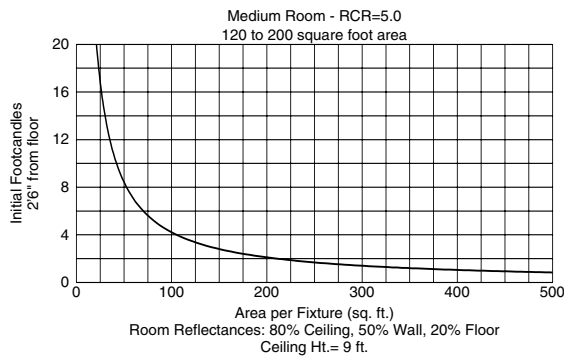
S/MH Ratio: 1.3

Single Fixture Data

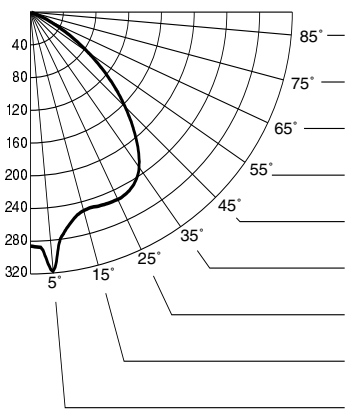
Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 102°			Beam Angle - 65°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	0.9	14	9.5	4.7	7
10	0.5	19	5.1	2.5	10
12	0.3	24	3.2	1.6	12
14	0.2	29	2.2	1.1	15
16	0.2	34	1.6	0.8	17

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	6
65	24
60	52
55	87
50	125
45	163
40	200
35	231
30	247
25	253
20	251
15	251
10	266
5	318
0	286

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	81	81	81	81	79	79	79	79	76	76	76	73	73	73	70	70	70	68					
1	76	74	72	70	74	72	70	68	69	68	66	67	66	64	64	63	62	61					
2	71	66	63	60	69	65	62	59	63	60	58	61	58	56	59	57	55	54					
3	66	60	55	51	64	59	54	51	57	53	50	55	52	49	53	51	49	47					
4	61	54	49	45	59	53	48	45	51	47	44	50	46	43	48	45	43	42					
5	56	49	43	39	55	48	43	39	47	42	39	45	41	38	44	41	38	37					
6	52	44	39	35	51	44	39	35	42	38	35	41	37	34	40	37	34	33					
7	49	40	35	31	48	40	35	31	39	34	31	38	34	31	37	33	31	29					
8	45	37	32	28	44	37	32	28	36	31	28	35	31	28	34	30	28	26					
9	42	34	29	25	42	34	29	25	33	28	25	32	28	25	32	28	25	24					
10	40	32	27	23	39	31	26	23	31	26	23	30	26	23	29	26	23	22					

P83

P83 WITH P8068-22

Report No. 98036

No. Lamps: 1 Type Lamp: 13W QUAD CF - GE Total Lumens: 860

Fixture Efficiency: 58.8%

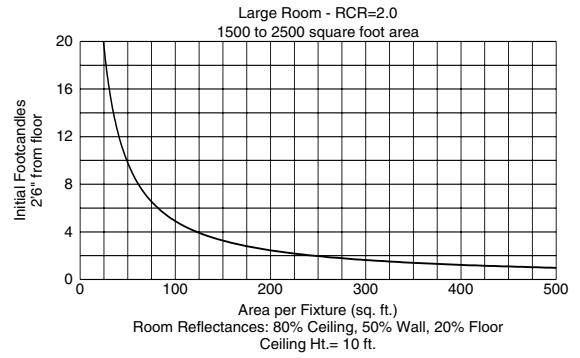
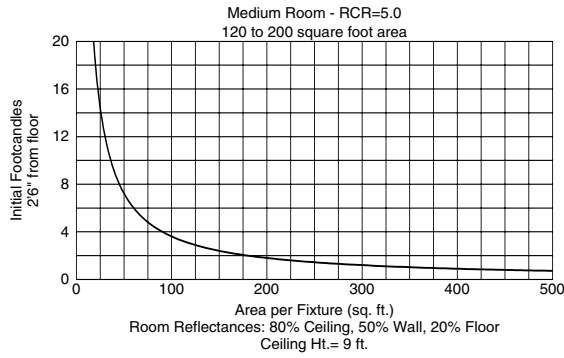
S/MH Ratio: 1.1

Single Fixture Data

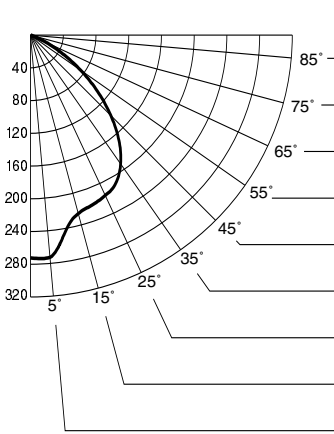
Ceiling Ht.(Ft.)	10% Values		Zero Degrees	50% Values	
	Beam Angle - 101°			Beam Angle - 60°	
	Ft.-C	Beam Dia.		Ft.-C	Beam Dia.
8	0.9	13	9.0	4.5	6
10	0.5	18	4.8	2.4	9
12	0.3	23	3.0	1.5	11
14	0.2	28	2.1	1.0	13
16	0.1	33	1.5	0.7	16

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	5
65	21
60	46
55	75
50	107
45	139
40	168
35	192
30	209
25	216
20	221
15	226
10	244
5	272
0	272

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	70	70	70	70	68	68	68	68	65	65	65	63	63	63	60	60	60	59					
1	66	64	62	60	64	62	61	59	60	58	57	58	57	55	56	55	54	53					
2	61	57	54	51	60	56	53	51	54	52	50	52	50	49	51	49	48	46					
3	57	51	48	44	55	51	47	44	49	46	43	47	45	43	46	44	42	41					
4	52	46	42	39	51	46	42	39	44	41	38	43	40	38	42	39	37	36					
5	49	42	37	34	47	41	37	34	40	36	34	39	36	33	38	35	33	32					
6	45	38	34	30	44	38	33	30	37	33	30	36	32	30	35	32	29	28					
7	42	35	30	27	41	34	30	27	34	30	27	33	29	27	32	29	27	25					
8	39	32	28	24	38	32	27	24	31	27	24	30	27	24	30	26	24	23					
9	37	30	25	22	36	29	25	22	29	25	22	28	24	22	27	24	22	21					
10	35	27	23	20	34	27	23	20	27	23	20	26	22	20	25	22	20	19					

