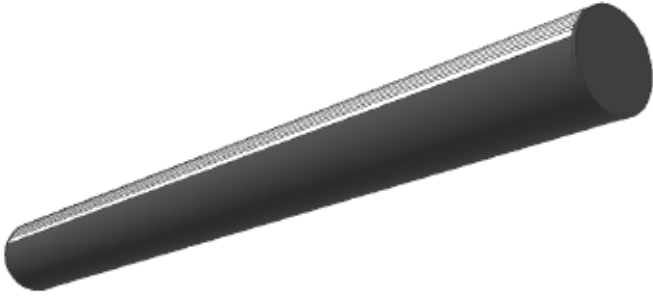


Catalog Number	Type
Project Name	



AR402 • AR404

**4 1/2" Round Indirect
110° Aperture
(T8 Lamps)**

S P E C I F I C A T I O N S

Housing

Constructed of one-piece .100" thick extruded aluminum. Standard lengths are available up to 12' long in one section. Provisions may be made for continuous rows of any length. Cast aluminum end plates are secured with no visible fasteners.

Optical Control Options

■ Clear extruded DR[®] acrylic linear prismatic lens optically designed to provide maximum efficiency and optimum visual comfort. ■ One piece aluminum radial baffle finished white.

Ballast

Standard ballasts for T8 lamps are UL/CUL Listed, Class P, HPF, Electronic, Universal 120/277volt, Instant Start with <10% THD.

Reflectors

Die-formed from .032" aluminum and finished with a high reflectance baked white enamel.

Finish

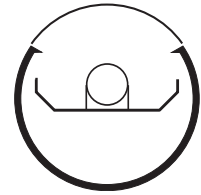
Standard and premium finishes are baked powder coat electrostatically applied (2.0 mil minimum thickness) to assure aesthetics and durability.

Circuitry

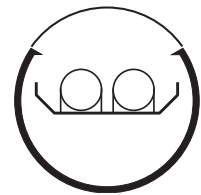
All fixtures are factory pre-wired for a single circuit. Provision for multiple switching/circuiting is optional.

Certification

All fixtures are UL/CUL listed for use in "Dry Applications". "Damp Location" is optional.



AR402



AR404

Standard Lengths:
4', 8', 12'

Mounting

CN = Cable (Non-Tbar) Fully Adjustable (36" Standard)
P = Rigid Stem (Up to 48" Standard)
K = Swivel Stem (Up to 48" Standard)
W = Wall
T = Telescoping End

Series
AR402
AR404

AR402-12-CN-LP-F01G-V-T8-[]

Optical Control

LP
Linear Prismatic Lens
BW
White Radial Baffle
OP
Open

Standard Finish

F01M Matte White
F01G Gloss White
Premium Finishes
F02 Ivory **F13** Merlot
F03 Stonewash **F14** Red Skies
F04 Camel **F15** Lemon
F05 Gray Day **F16** Forest Hunter
F06 Pebble Beach **F17** Olive
F07 Steel **F18** Khaki
F08 Gray Seal **F19** Heather Green
F09 Mocha **F20** Blue Print
F10 Bronzed **F21** Reflex Blue
F11 Black **F22** Navy
F12 Ultrasonic Clear **FCC** Custom Color

Voltage

120
277
347

Lamp Type

T8
T5*

Options

EM
Emergency Battery Pack
2Ckt
Two Circuit Wiring
SS
Separate Switching
(Common Neutral Utilized)
Dim
Dimming
FS
Fused Ballasts
ROT
Rotatable

*For T5/T5HO lamping options contact factory

To view Wood Grain, Marble and Granite Finishes on our Website see "Products"--"Specialty Finishes".



Precision Architectural Lighting

4830 Timber Creek Drive Houston, Texas 77017

Tel (713) 946-4343 Fax (713) 946-4441 www.pal-lighting.com

AR402

4 1/2" Round Indirect

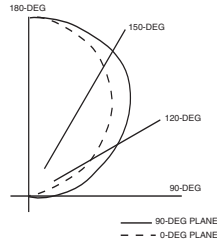
Linear Prismatic Lens

Catalog Number: AR402-4-X-LP-F01-120-T12

Report Number: LTL #00588.ies

Luminaire Description: Extruded Aluminum Housing, White Enamel Reflector

Lamps: One F40T12/CW rated at 3150 lumens



CANDELA DISTRIBUTION LUMENS

	0.0	22.5	45.0	67.5	90.0
0	0	0	0	0	0
5	0	0	0	0	0
15	0	0	0	0	0
25	0	0	0	0	0
35	0	0	0	0	0
45	0	0	1	2	2
55	0	1	3	5	5
65	0	2	6	9	10
75	0	3	14	19	20
85	0	11	37	44	45
90	1	21	54	65	67
95	6	35	76	88	91
105	46	79	132	150	154
115	137	156	207	230	236
125	241	256	291	318	324
135	331	344	373	396	403
145	402	414	436	456	462
155	457	466	478	490	496
165	494	500	505	511	514
175	514	516	517	519	520
180	518	518	518	518	518

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	0
0	51	51	51	51	44	44	44	44	30	30	30	18	18	18	7	7	7	2
1	46	43	41	39	39	37	36	34	26	25	24	15	15	14	5	5	5	1
2	41	38	35	32	35	32	30	28	22	21	19	13	12	12	5	4	4	0
3	38	33	29	26	32	28	25	23	20	18	16	12	10	10	4	4	3	0
4	34	29	25	22	29	25	22	19	17	15	14	10	9	8	4	3	3	0
5	31	26	22	19	27	22	19	16	15	13	12	9	8	7	3	3	2	0
6	29	23	19	16	25	20	16	14	14	12	10	8	7	6	3	2	2	0
7	27	20	17	14	23	18	14	12	12	10	9	7	6	5	3	2	2	0
8	24	18	15	12	21	16	13	10	11	9	7	5	4	3	2	2	1	0
9	23	17	13	11	19	14	11	9	10	8	7	5	4	3	2	1	1	0
10	21	15	12	9	18	13	10	8	9	7	6	5	4	3	2	1	1	0

QUICK SELECTION TABLE

Number of 4' luminaires required for initial illumination of 50 footcandles

Luminaire suspension length = 18" Working Plane Height = 30" Floor Reflectance = .20

Room HT	8				9				10				12				
Ceil RF	80		70		80		70		80		70		80		70		
Wall RF	70	50	50	30	70	50	50	30	70	50	50	30	70	50	50	30	
Width	Length																
10.	10.	5	6	7	8	6	7	8	9	6	7	9	10	7	9	10	13
10.	15.	7	8	9	10	8	9	10	12	8	10	11	13	9	12	13	16
15.	20.	12	14	16	17	13	15	17	19	14	16	18	21	15	18	21	25
15.	30.	18	19	23	24	19	21	24	26	19	22	26	29	21	25	29	33
20.	20.	16	17	20	22	17	18	21	24	17	20	23	26	19	22	26	30
20.	30.	23	25	29	31	24	26	30	33	25	27	32	35	27	31	35	40
20.	40.	30	32	37	39	31	34	39	42	32	35	41	45	34	39	45	51
20.	60.	43	46	54	57	45	49	57	61	46	51	59	64	49	56	65	72
30.	30.	33	35	41	43	34	37	43	46	35	38	45	48	37	42	49	54
30.	40.	43	45	53	55	44	47	55	58	45	49	57	61	48	53	62	68
30.	50.	53	56	65	68	54	58	67	71	56	60	70	75	59	65	75	82
30.	60.	63	66	77	81	64	69	80	84	66	71	83	88	69	76	89	96
60.	60.	121	125	146	150	123	129	150	155	125	132	154	161	129	138	161	170
60.	80.	160	164	191	196	162	168	196	202	165	172	201	209	170	180	209	220
60.	100.	199	204	237	243	201	208	242	249	204	213	248	256	210	222	258	271
100.	100.	326	333	387	393	330	338	393	401	333	343	399	410	340	354	412	427

AR404

4 1/2" Round Indirect (T8 Lamps)

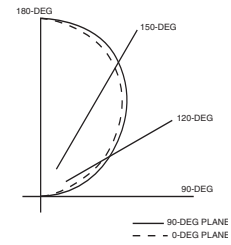
Linear Prismatic Lens

Catalog Number: AR404-4-X-LP-F01-120-T8

Report Number: LTL #00594.ies

Luminaire Description: Extruded Aluminum Housing, White Enamel Reflector

Lamps: Two F032T8/CW rated at 2900 lumens each



CANDELA DISTRIBUTION LUMENS

	0.0	22.5	45.0	67.5	90.0
0	0	0	0	0	0
5	0	0	0	0	0
15	0	0	0	0	0
25	0	0	0	0	0
35	0	0	0	1	1
45	0	0	2	3	3
55	0	1	4	5	6
65	0	3	6	11	12
75	0	3	17	23	24
85	0	18	47	48	47
90	1	34	74	72	70
95	10	58	108	109	105
105	82	137	200	202	200
115	251	274	334	339	336
125	449	456	486	504	503
135	621	631	651	662	665
145	761	775	786	798	800
155	867	879	888	896	898
165	939	949	954	964	966
175	978	983	986	989	990
180	987	987	987	987	987

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	0
0	47	47	47	47	40	40	40	40	28	28	28	16	16	16	6	6	6	1
1	42	40	38	37	36	35	33	32	24	23	22	14	13	13	5	5	5	0
2	38	35	32	30	33	30	28	26	21	19	18	12	11	11	4	4	4	0
3	35	31	27	25	30	26	24	21	18	16	15	11	10	9	4	3	3	0
4	32	27	23	21	27	23	20	18	16	14	13	9	8	8	3	3	3	0
5	29	24	20	17	25	21	18	15	14	12	11	8	7	6	3	2	2	0
6	27	21	18	15	23	18	15	13	13	11	9	7	6	6	3	2	2	0
7	25	19	15	13	21	16	13	11	11	9	8	7	6	5	2	2	2	0
8	23	17	14	11	19	15	12	10	10	8	7	6	5	4	2	2	1	0
9	21	16	12	10	18	13	11	9	9	7	6	6	4	4	2	2	1	0
10	20	14	11	9	17	12	9	8	9	7	5	5	4	3	2	1	1	0

QUICK SELECTION TABLE

Number of 4' luminaires required for initial illumination of 50 footcandles

Luminaire suspension length = 18" Working Plane Height = 30" Floor Reflectance = .20

Room HT	8				9				10				12				
Ceil RF	80		70		80		70		80		70		80		70		
Wall RF	70	50	50	30	70	50	50	30	70	50	50	30	70	50	50	30	
Width	Length																
10.	10.	3	4	4	5	3	4	5	5	4	5	5	6	4	6	6	8
10.	15.	4	5	6	6	5	5	6	7	5	6	7	8	6	7	8	10
15.	20.	7	8	9	10	8	9	10	11	8	9	11	12	8	9	11	13
15.	30.	11	12	13	14	11	12	14	16	12	13	15	17	13	15	17	20
20.	20.	9	10	12	13	10	11	13	14	10	12	14	15	11	13	15	18
20.	30.	14	15	17	18	14	15	18	19	15	16	19	21	16	18	21	24
20.	40.	18	19	22	23	18	20	23	25	19	21	24	26	20	23	27	30
20.	60.	26	27	32	34	27	29	33	36	27	30	35	38	29	33	38	42
30.	30.	19	21	24	25	20	22	25	27	21	23	26	28	22	25	29	32
30.	40.	25	27	31	33	26	28	32	34	27	29	34	36	28	31	36	40
30.	50.	31	33	38	40	32	34	40	42	33	35	41	44	35	38	44	48
30.	60.	37	39	45	47	38	40	47	49	39	42	49	52	41	45	52	56
60.	60.	71	74	86	88	72	75	88	91	74	78	90	94	76	81	94	100
60.	80.	94	97	113	115	95	99	115	119	97	101	118	122	100	105	123	129
60.	100.	117	120	140	143	118	122	142	146	120	125	145	150	123	130	151	159
100.	100.	192	195	228	231	194	198	231	236	196	201	235	240	200	208	242	250

