3 0 0 LINE

PERFORMANCE CYLINDERS





LIGHTING



THE GARDCO CYLINDER.

PERFORMANCE. PURE AND SIMPLE.



CONSTRUCTION

This is the Gardco cylinder. In almost every aspect of lighting performance, construction and versatility, it promises to change where and how you apply this classic architectural form. These are luminaires that are at home indoors and out. Conventional symmetric optics offer high-performance illumination for uplight and downlight applications. And now, a revolutionary new forward throw optical system offers a uniform distribution for illumination out and away from the luminaire — ideal for entry- and building-mounted luminaires.

The luminaire housing and the seamlessly integrated mounting arm are die cast aluminum. Matching brackets and the one-piece luminaire simplify and promote perfectly aligned mounting.



The 301 utilizes a single lamp and ballast to achieve downlighting and uplighting.





The finish is a fade- and abrasion-resistant, electrostatically applied, thermally cured polyester, textured powder coat. This extremely durable paint and the die cast aluminum housing will be a permanent enhancement wherever they are specified.

The optical systems can be specified as a flood or spike distribution for the uplight or downlight, as well as a forward throw downlight.

Gardco cylinders are among the most efficient on the market. Each of the specular Alzak® reflectors is actually a cascading pair, and the entire optical system is recessed into the housing to minimize glare.

A wide choice of baffles and trims, along with the option to enclose the luminaire makes the series a versatile choice for a wide range of architectural settings and operating environments.



Traditional up/down wall cylinders have required two lamps and ballasts. This has necessitated oversized luminaires often out of scale for many mounting heights. The resulting form is a remarkably compact cylinder featuring trademark Gardco twin reveal and design sensitivity. 301 Series Up/Down Wall Cylinders

TRIMS

Practical and durable options for the most demanding commercial applications.



The sealed lens option is suitable for wet locations in either downlight or uplight mounting orientations.



Enclosed downlight luminaire with flat clear glass for forward throw optics.



Enclosed downlight luminaire with regressed trim and flat Solite® glass.



Enclosed downlight with eggcrate louver and Solite® lens.



The unique "Spike" (301 only) downlight and/or uplight distribution provides a narrow stripe of illumination on the wall or column. Specifying blue or green colored lamps (see accessories in ordering information) can further enhance the dramatic effect.



Open downlight may be specified with polished reflectors or black baffle.

OPTICS



Exceptionally low brightness open downlight with architectural black baffle for PAR38 or R40 lamps.



Open baffled E-17 downlight with faceted high-performance reflector.



Open downlight with twin highly specular reflectors for fluorescent lamps.



Open downlight with faceted high-performance reflector for E-17 HID lamps. Sharp cut-off of the lamp arc tube and arc tube images.



Enclosed uplight or downlight with high-performance forward throw optics — a unique asymmetric distribution available in a cylinder.
Supplied with T70MH lamp.

MOUNTINGS

Carefully detailed hardware complements each of the six luminaire forms. Luminaire style and mounting options.



One of three wall mounting options; this for either uplighting or downlighting. (300) $\,$



Universal knuckle for wall, ground or ceiling mount. Permits 358° rotation and 90° tilt. A cast junction box is available for pre-shipment and can be used in poured concrete or for surface mounting.



Standard 300 Line pendant length is a net 18" from the ceiling. Internal swivel accommodates up to 35° slope.

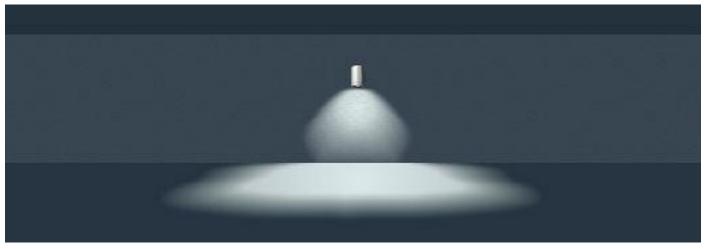


302 wall bracket for simultaneous bi-directional up/downlighting.



Ceiling mount with offset, low-profile canopy.

FORWARD THROW PHOTOMETRICS

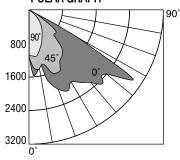


The 300 Line features a unique forward throw optical system, the first of its kind, designed to provide unprecedented forward projection from a cylinder.

CANDELA TABULATION

	0	45	90
0.0	1050	1050	1050
5.0	1461	1384	1114
10.0	1280	1440	1148
15.0	1740	1336	981
20.0	2060	1608	877
25.0	2171	1670	773
30.0	2032	1496	682
35.0	2171	1392	591
40.0	2296	1246	494
42.5	2407	1037	438
45.0	2519	877	306
47.5	2394	849	153
50.0	2422	856	63
52.5	2755	773	49
55.0	3132 2463	529 327	35 28
57.5 60.0	2403 1475	32 <i>1</i> 181	20 21
62.5	738	112	14
65.0	320	69	14
67.5	139	49	14
70.0	84	28	14
72.5	42	14	14
75.0	28	14	14
77.5	14	7	7
80.0	14	7	7
82.5	0	0	0
85.0	0	0	0
87.5	0	0	0
90.0	0	0	0

POLAR GRAPH

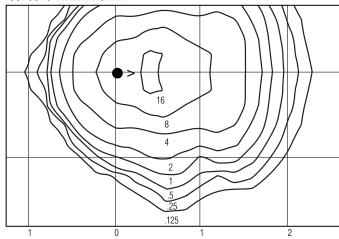


DESCRIPTION

70w T6 G12 Metal Halide 6200 LUMENS Flat Lens Trim Cat. No. 300-D-X-FT/D-T70MH [Test No. 3LF70MT (6362)]

Total Luminaire Efficiency 42.9% Spacing Criterion (90°-270° Lateral) 1.0

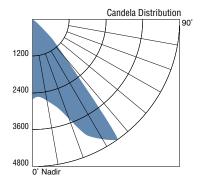
ISOFOOTCANDLE DIAGRAM



Distance in Units of Mounting Height

REFLECTOR TRIM

CLEAR LAMPS



Spacing Criterion Total Luminaire Efficiency 79.7%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.95	.95	.95	.95	.89	.89	.89	.85	.85	.85	.80
	1	.90	.87	.85	.83	.82	.80	.79	.79	.78	.77	.73
	2	.84	.80	.76	.73	.76	.73	.70	.73	.71	.69	.66
		.79	.73	.68	.64	.70	.66	.63	.68	.64	.62	.59
	4	.74	.67	.61	.57	.64	.60	.56	.62	.59	.56	.54
큠	5	.69	.61	.56	.51	.59	.54	.51	.57	.53	.50	.48
٣.	6	.64	.56	.50	.46	.54	.49	.46	.53	.49	.45	.44
⇟	7	.60	.51	.46	.42	.50	.45	.41	.49	.44	.41	.40
ఔ	8	.56	.47	.42	.38	.46	.41	.38	.45	.41	.37	.36
Room Cavity Ratio	9	.53	.44	.38	.34	.43	.38	.34	.42	.37	.34	.33
2	10	.50	.41	.35	.31	.39	.35	.31	.39	.34	.31	.30

RC-Effective Ceiling Cavity Reflectance

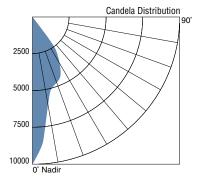
RW-Effective Wall Reflectance

DESCRIPTION

100w E-17 CLEAR METAL HALIDE - 8500 LUMENS REFLECTOR TRIM CAT. NO. 300-0-X-R-100MH TEST NO. 3R1M (6413)

BAFFLE TRIM

CLEAR LAMPS



Spacing Criterion Total Luminaire Efficiency 75.6%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	0 .76
0 .90 .90 .90 .90 .84 .84 .84 .80 .80 .8	
1 .86 .84 .82 .80 .79 .78 .76 .76 .75 .7	4 .71
2 .81 .78 .75 .72 .74 .72 .70 .72 .70 .6 3 .77 .72 .69 .66 .69 .66 .64 .67 .65 .6	8 .66
3 .77 .72 .69 .66 .69 .66 .64 .67 .65 .6	3 .61
4 .73 .67 .63 .60 .65 .62 .59 .63 .61 .5	8 .56
👼 5 .69 .63 .59 .55 .61 .57 .55 .60 .57 .5	4 .52
🗲 6 .66 .59 .55 .51 .57 .53 .51 .56 .53 .5	0 .49
₹ 7 .63 .55 .51 .48 .54 .50 .47 .53 .50 .4	7 .46
🛂 8 .59 .52 .48 .44 .51 .47 .44 .50 .47 .4	4 .43
통 9 .57 .49 .45 .42 .48 .44 .41 .47 .44 .4	1 .40
0 R	9 .38

RC-Effective Ceiling Cavity Reflectance RW-Effective Wall Reflectance

DESCRIPTION

100w E-17 CLEAR METAL HALIDE - 8500 LUMENS REFLECTOR W/BLACK BAFFLE TRIM CAT. NO. 300-0-X-R/B-100MH TEST NO. 3RB1M (6409)

LUMEN FACTOR CHART - CLEAR LAMPS

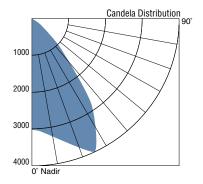
For approximate candela values, the following multipliers may be used for clear lamps:

50MH - .41 70MH - .61 50HPS - .47 70HPS - .74 100MH - 1.00 100HPS - 1.12

For more precise high-pressure sodium values, contact your Gardco Lighting Representative and request the actual HPS tests.

REFLECTOR TRIM

COATED LAMPS



Spacing Criterion Total Luminaire Efficiency 76.9%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

		-										
	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.92	.92	.92	.92	.85	.85	.85	.82	.82	.82	.77
	1	.86	.84	.82	.80	.79	.78	.76	.76	.75	.74	.70
	2	.81	.77	.73	.70	.73	.70	.68	.70	.68	.66	.63
	3	.76	.70	.66	.62	.67	.63	.60	.65	.62	.59	.57
_	4	.71	.64	.59	.55	.61	.57	.54	.60	.56	.53	.51
₩	5	.66	.59	.53	.50	.57	.52	.49	.55	.51	.48	.47
Œ	6	.62	.54	.49	.45	.52	.48	.44	.51	.47	.44	.42
€	7	.58	.50	.44	.41	.48	.44	.40	.47	.43	.40	.38
Š	8	.55	.46	.41	.37	.45	.40	.37	.44	.40	.37	.35
트	9	.52	.43	.37	.34	.42	.37	.34	.41	.37	.34	.32
Room Cavity Ratio	10	.49	.40	.35	.31	.39	.34	.31	.38	.34	.31	.30

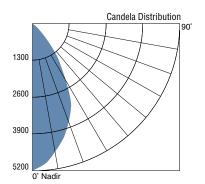
RC-Effective Ceiling Cavity Reflectance RW-Effective Wall Reflectance

DESCRIPTION

100w E-17 COATED METAL HALIDE - 7900 LUMENS REFLECTOR TRIM CAT. NO. 300-0-X-R-100MH/C TEST NO. 3R1X (6414)

BAFFLE TRIM

COATED LAMPS



Spacing Criterion Total Luminaire Efficiency 61.4%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	_11000		1001	ouvit,	,	iootai	100 2	0 /0				
	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.73	.73	.73	.73	.68	.68	.68	.65	.65	.65	.61
	1	.70	.68	.66	.65	.64	.63	.62	.62	.61	.60	.57
	2	.66	.63	.60	.58	.60	.58	.56	.58	.56	.55	.53
	3	.62	.58	.55	.52	.56	.53	.51	.54	.52	.50	.48
_	4	.59	.54	.50	.47	.52	.49	.47	.51	.48	.46	.45
Ħ	5	.56	.50	.46	.43	.48	.45	.43	.47	.45	.42	.41
Ξ	6	.53	.47	.43	.40	.45	.42	.40	.44	.41	.39	.38
₹	7	.50	.44	.40	.37	.42	.39	.37	.42	.39	.36	.35
3	8	.47	.41	.37	.34	.40	.37	.34	.39	.36	.34	.33
튽	9	.45	.38	.35	.32	.38	.34	.32	.37	.34	.32	.31
коот салту капо	10	.43	.36	.32	.30	.35	.32	.30	.35	.32	.30	.29

RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

100w E-17 COATED METAL HALIDE - 7900 LUMENS REFLECTOR W/BLACK BAFFLE TRIM CAT. NO. 300-0-X-R/B-100MH/C TEST NO. 3RB1X (6410)

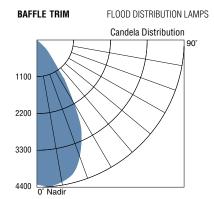
LUMEN FACTOR CHART - COATED LAMPS

For approximate candela values, the following multipliers may be used for clear lamps:

CON ALL	00	FOLIDO 43	,
50MH	38	50HPS47	
70MH	60	70HPS73	3
100MH	_ 1 00	100HPS = 1 11	

For more precise high-pressure sodium values, contact your Gardco Lighting Representative and request the actual HPS tests.

OPEN TRIMS - PAR HID LAMPS



Spacing Criterion Total Luminaire Efficiency

75.7%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.90	.90	.90	.90	.84	.84	.84	.81	.81	.81	.76
	1	.86	.84	.82	.80	.79	.78	.77	.76	.75	.74	.71
	2	.82	.78	.75	.72	.74	.72	.70	.72	.70	.68	.66
	3	.77	.73	.69	.66	.70	.67	.64	.68	.65	.63	.61
_	4	.73	.68	.63	.60	.65	.62	.59	.64	.61	.58	.57
퓵	5	.70	.63	.59	.55	.61	.58	.55	.60	.57	.54	.53
æ	6	.66	.59	.55	.51	.57	.54	.51	.56	.53	.50	.49
€	7	.63	.56	.51	.48	.54	.50	.47	.53	.50	.47	.46
S	8	.60	.52	.48	.44	.51	.47	.44	.50	.47	.44	.43
트	9	.57	.49	.45	.42	.48	.44	.41	.47	.44	.41	.40
Room Cavity Ratio	10	.54	.46	.42	.39	.45	.42	.39	.45	.41	.39	.38

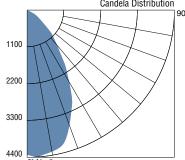
RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

100w PAR-38 FLOOD METAL HALIDE - 5600 LUMENS BLACK BAFFLE TRIM CAT. NO. 300-0-X-B-100MH/PAR38/WFL TEST NO. 3B1MP3F (6407)





Spacing Criterion Total Luminaire Efficiency

90.3%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

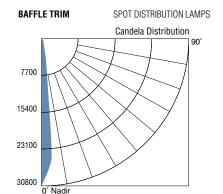
Effective Floor Cavity Reflectance 20%

RC		80)%			50%			30%		0%
RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.96	.96	.96	.90
1	1.00	.99	.97	.95	.94	.92	.90	.90	.89	.88	.83
2	.96	.91	.87	.84	.87	.84	.81	.84	.82	.79	.76
	.91	.84	.79	.75	.80	.77	.73	.78	.75	.72	.70
	.85	.78	.72	.68	.75	.70		.73	.69	.66	.64
	.80	.72	.66		.69	.65		.68		.60	.58
	.76	.67	.61		.65	.60		.63			.54
	.71	.62	.56	.52	.60						.49
	.67	.58	.52	.48	.56	.51	.47	.55	.51	.47	.46
	.64	.54	.48		.53	.48	.44	.52	.47	.44	.42
10	.60	.51	.45	.41	.50	.45	.41	.49	.44	.41	.39
	RW	RW 70% 0 1.00 1 1.00 2 .96 3 .91 4 .85 5 .80 6 .76 7 .71 8 .67 9 .64	RW 70% 50% 0 1.00 1.00 1 1.00 .99 2 .96 .91 3 .91 .84 4 .85 .78 5 .80 .72 6 .76 .67 7 .71 .62 8 .67 .58 9 .64 .54	RW 70% 50% 30% 0 100 100 100 100 1 100 99 97 2 96 91 87 3 91 84 79 4 85 78 72 66 6 76 67 61 7 71 62 56 8 67 58 54	RW 70% 50% 30% 10% 0 100 100 100 100 1 100 99 97 95 2 96 91 87 .84 3 91 .84 .79 .75 4 .85 78 .72 .66 .62 6 .76 .71 .62 .56 .52 8 .67 .58 .52 .48 9 .64 .48 .44 .48	RW 70% 50% 30% 10% 50% 0 100 100 100 100 100 1 100 9 9.7 9.8 10 10 2 .96 .91 .87 .84 .87 .84 .87 .85 .75 .86 .75 .5 .80 .72 .66 .62 .69 .65 .67 .61 .56 .62 .69 .67 .71 .62 .56 .52 .60 .67 .67 .58 .52 .48 .56 .99 .64 .48 .44 .43 .53 .44 .53 .44 .53 .44 .53 .44 .53 .44 .53 .44 .53 .54 .48 .44 .53 .54 .52 .60 .60 .60 .60 .60 .60 .60 .60 .60 .60 .60 .60 .60 .60 .60 .60<	RW 70% 50% 30% 10% 50% 30% 0 100 120 120 100 120 100 120 100 120	RW 70% 50% 30% 10% 50% 30% 10% 0 100	RW 70% 50% 30% 10% 50% 30% 10% 50% 0 100 100 100 100 100 100 100 50% 1 100 99 97 95 94 92 90 90 2 96 91 87 84 87 84 81 84 3 91 84 79 75 80 77 73 78 4 85 78 72 66 67 76 76 77 3 78 5 80 72 66 62 69 65 61 68 6 76 67 61 56 65 60 56 63 7 71 62 56 52 60 55 51 51 59 8 67 58 248 36 51 47 52 <t< th=""><th>RW 70% 50% 30% 10% 50% 30% 10% 50% 30% 10% 50% 30%</th><th>RW 70% 50% 30% 10% 50% 30% 10% 50% 30% 10% 50% 30% 10% 0 100 100 100 100 100 100 96</th></t<>	RW 70% 50% 30% 10% 50% 30% 10% 50% 30% 10% 50% 30%	RW 70% 50% 30% 10% 50% 30% 10% 50% 30% 10% 50% 30% 10% 0 100 100 100 100 100 100 96

RC-Effective Ceiling Cavity Reflectance RW-Effective Wall Reflectance

DESCRIPTION

100w PAR-38 FLOOD METAL HALIDE - 5600 LUMENS REFLECTOR TRIM CAT. NO. 300-0-X-R-100MH/PAR38/WFL TEST NO. 3R1MP3F (6465)



Spacing Criterion

0.3 Total Luminaire Efficiency 87.8%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

RC 80% 50% 30% 30% 30% 30% 30% 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% 50% 50% 50% 50% 50% 50% 50% 50% 50% 5	0% 0% .88 .85 .83
0 1.00 1.00 1.00 1.00 98 98 98 99 93 93 93 1 1.00 99 98 96 96 94 93 92 91 90 89	.88 .85
1 1.00 .99 .98 .96 .94 .93 .92 .91 .90 .89	.85
	00
2 .98 .95 .93 .91 .91 .89 .88 .89 .87 .86	.00
2 .98 .95 .93 .91 .91 .89 .88 .89 .87 .86 3 .95 .91 .88 .86 .88 .86 .84 .86 .84 .83	.81
4 93 .88 .85 .82 .86 .83 .81 .84 .82 .80	.78
ቘ 5 .90 .85 .82 .79 .83 .81 .78 .82 .80 .78	.76
= 6 .88 .83 .79 .77 .81 .78 .76 .80 .78 .76	.74
7 .86 .80 .77 .75 .79 .76 .74 .78 .76 .74	.73
5 8 8 84 .78 .75 .73 .77 .74 .72 .76 .74 .72 3	.71
喜 9 .82 .76 .73 .71 .75 .72 .71 .75 .72 .70	.69
5 90 85 82 79 83 81 78 82 80 78 76 74 72 76 74 72 76 74 72 70 70 70 70 70 70 70 70 70 70 70 70 70	.68

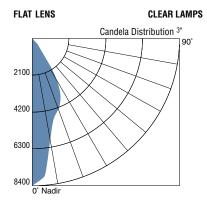
RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

100w PAR-38 SPOT METAL HALIDE - 5200 LUMENS BLACK BAFFLE TRIM CAT. NO. 300-0-X-B-100MH/PAR38/SP TEST NO. 3B1MP3S (6408)

ENCLOSED TRIMS - E-17 HID LAMPS



Spacing Criterion 0.6 Total Luminaire Efficiency 68.3%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

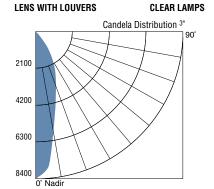
Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.81	.81	.81	.81	.76	.76	.76	.73	.73	.73	.68
	1	.77	.76	.74	.72	.71	.70	.69	.69	.68	.67	.64
	2	.74	.70	.67	.65	.67	.65	.63	.65	.63	.62	.59
		.70	.65	.62	.59	.63	.60	.58	.61	.59	.57	.55
	4	.66	.61	.57	.54	.59	.56	.53	.57	.55	.53	.51
a	5	.63	.57	.53	.50	.55	.52	.49	.54	.51	.49	.47
ž	6	.59	.53	.49	.46	.52	.48	.46	.51	.48	.45	.44
Саупу Капо	7	.56	.50	.46	.43	.49	.45	.43	.48	.45	.42	.41
25	8	.54	.47	.43	.40	.46	.42	.40	.45	.42	.40	.39
H00H	9	.51	.44	.40	.38	.43	.40	.37	.43	.40	.37	.36
욷	10	.49	.42	.38	.35	.41	.38	.35	.41	.37	.35	.34

RC-Effective Ceiling Cavity Reflectance RW-Effective Wall Reflectance

DESCRIPTION

100w E-17 CLEAR METAL HALIDE - 8500 LUMENS FLAT LENS TRIM CAT. NO. 300-D-X-L-100MH TEST NO. 3L1M (6439)



Spacing Criterion 0.5 Total Luminaire Efficiency 43.8%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

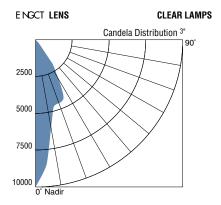
	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.52	.52	.52	.52	.49	.49	.49	.47	.47	.47	.44
	1	.50	.49	.48	.47	.46	.45	.45	.44	.44	.43	.41
	2	.48	.46	.44	.42	.43	.42	.41	.42	.41	.40	.39
	3	.45	.43	.41	.39	.41	.39	.38	.40	.39	.37	.36
	4	.43	.40	.38	.36	.39	.37	.35	.38	.36	.35	.34
Room Cavity Ratio	5	.41	.38	.35	.34	.37	.35	.33	.36	.34	.33	.32
Z.	6	.39	.36	.33	.31	.35	.33	.31	.34	.32	.31	.30
≨	7	.38	.34	.31	.29	.33	.31	.29	.32	.30	.29	.28
బ	8	.36	.32	.29	.28	.31	.29	.28	.31	.29	.28	.27
틍	9	.34	.30	.28	.26	.30	.28	.26	.29	.27	.26	.25
é	10	.33	.29	.27	.25	.28	.26	.25	.28	.26	.25	.24

RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

100w E-17 CLEAR METAL HALIDE - 8500 LUMENS LOUVERED LENS TRIM CAT. NO. 300-D-X-LL-100MH TEST NO. 3LV1M (6436)



Spacing Criterion Total Luminaire Efficiency

0.5 67.7%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

					_							
	RC		80)%			50%			30%		0%
Γ	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
Γ	0	.81	.81	.81	.81	.75	.75	.75	.72	.72	.72	.68
	1	.77	.75	.73	.72	.71	.70	.69	.68	.67	.67	.63
	2	.73	.70	.67	.65	.67	.65	.63	.65	.63	.61	.59
	3	.69	.65	.62	.59	.62	.60	.58	.61	.59	.57	.55
	4	.66	.61	.57	.54	.59	.56	.53	.57	.55	.53	.51
憲	5	.63	.57	.53	.50	.55	.52	.50	.54	.51	.49	.48
۳	6	.60	.54	.50	.47	.52	.49	.46	.51	.48	.46	.45
€.	7	.57	.50	.46	.44	.49	.46	.43	.48	.45	.43	.42
కె	8	.54	.48	.44	.41	.46	.43	.41	.46	.43	.40	.39
Room Cavity Ratio	9	.51	.45	.41	.38	.44	.41	.38	.43	.40	.38	.37
윤	10	.49	.43	.39	.36	.42	.38	.36	.41	.38	.36	.35

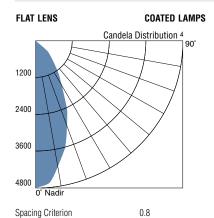
RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

100w E-17 CLEAR METAL HALIDE - 8500 LUMENS CLEAR LENS TRIM CAT. NO. 300-D/U/E-X-C-100MH TEST NO. 3CL1M (6445)

^{3&}quot;For approximate candela values, the following multipliers may be used: 50MH - .41, 70MH - .61, 100MH - 1.00, 50HPS - .47, 70HPS - .74, 100HPS - 1.12. For more precise high-pressure sodium values, contact your Gardco Lighting Representative and request the actual HPS tests.



52.2% Total Luminaire Efficiency

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD Effective Floor Cavity Reflectance 20%

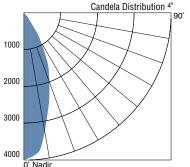
	RC		80)%			50%			30%		0%	ı
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
	0	.62	.62	.62	.62	.58	.58	.58	.56	.56	.56	.52	
	1	.59	.58	.56	.55	.54	.53	.52	.52	.52	.51	.48	ı
	2	.56	.53	.51	.49	.51	.49	.47	.49	.48	.46	.44	ı
	3	.53	.49	.46	.44	.47	.45	.43	.46	.44	.42	.41	ı
	4	.50	.46	.43	.40	.44	.41	.39	.43	.41	.39	.38	ı
æ	5	.47	.42	.39	.37	.41	.38	.36	.40	.38	.36	.35	ı
Ψ.	6	.45	.40	.36	.34	.38	.36	.34	.38	.35	.33	.32	ı
₹.	7	.42	.37	.34	.31	.36	.33	.31	.35	.33	.31	.30	ı
ొ	8	.40	.35	.32	.29	.34	.31	.29	.33	.31	.29	.28	ı
틍	9	.38	.33	.30	.27	.32	.29	.27	.32	.29	.27	.26	ı
Room Cavity Ratio	10	.36	.31	.28	.26	.30	.27	.26	.30	.27	.25	.25	ı

RC-Effective Ceiling Cavity Reflectance RW-Effective Wall Reflectance

DESCRIPTION

100w E-17 COATED METAL HALIDE - 7900 LUMENS FLAT LENS TRIM CAT. NO. 300-D-X-L-100MH/C TEST NO. 3L1X (6440)

LENS WITH LOUVERS COATED LAMPS Candela Distribution 4"



Spacing Criterion 0.7 32.7% Total Luminaire Efficiency

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

					,							
	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.39	.39	.39	.39	.36	.36	.36	.35	.35	.35	.33
	1	.37	.36	.35	.35	.34	.34	.33	.33	.33	.32	.31
	2	.35	.34	.33	.31	.32	.31	.30	.31	.30	.30	.29
	3	.34	.32	.30	.29	.30	.29	.28	.30	.28	.28	.27
_	4	.32	.30	.28	.26	.29	.27	.26	.28	.27	.26	.25
Ratio	5	.30	.28	.26	.25	.27	.25	.24	.26	.25	.24	.23
Æ,	6	.29	.26	.24	.23	.25	.24	.23	.25	.24	.23	.22
Cavity	7	.28	.25	.23	.21	.24	.22	.21	.24	.22	.21	.21
Ca	8	.26	.23	.21	.20	.23	.21	.20	.22	.21	.20	.19
E	9	.25	.22	.20	.19	.22	.20	.19	.21	.20	.19	.18
Room	10	.24	.21	.19	.18	.21	.19	.18	.20	.19	.18	.17

RC-Effective Ceiling Cavity Reflectance RW-Effective Wall Reflectance

DESCRIPTION

100w E-17 COATED METAL HALIDE - 7900 LUMENS LOUVERED LENS TRIM CAT. NO. 300-D-X-LL-100MH/C TEST NO. 3LV1X (6443)

ENGCT LENS **COATED LAMPS** Candela Distribution 4' 1300 2600 3900

Spacing Criterion 0.7 50.9% Total Luminaire Efficiency

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.61	.61	.61	.61	.57	.57	.57	.54	.54	.54	.51
	1	.58	.56	.55	.54	.53	.52	.51	.51	.51	.50	.48
	1 2 3	.55	.52	.50	.48	.50	.48	.47	.48	.47	.46	.44
	3	.52	.49	.46	.44	.47	.45	.43	.45	.44	.42	.41
_	4	.49	.45	.43	.40	.44	.41	.40	.43	.41	.39	.38
뜵	5	.47	.42	.39	.37	.41	.39	.37	.40	.38	.36	.35
æ	6	.44	.40	.37	.34	.39	.36	.34	.38	36	.34	.33
€	7	.42	.37	.34	.32	.36	.34	.32	.36	.33	.32 .30	.31
Ga	8	.40	.35	.32	.30	.34	.32	.30	.34	.31	.30	.29
Ε	9	.38	.33	.30	.28	.32	.30	.28	.32	.30	.28	.27
Room Cavity Ratio	10	.36	.31	.28	.26	.31	.28	.26	.30	.28	.26	.25

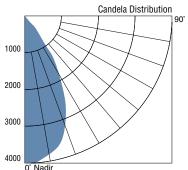
RC-Effective Ceiling Cavity Reflectance RW-Effective Wall Reflectance

DESCRIPTION

5200

100w E-17 COATED METAL HALIDE - 7900 LUMENS CLEAR LENS TRIM CAT. NO. 300-D/U/E-X-C-100MH/C TEST NO. 3CL1X (6444)

FLAT LENS FLOOD DISTRIBUTION LAMPS



Spacing Criterion Total Luminaire Efficiency

0.9 67.2%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%	l
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
	0	.80	.80	.80	.80	.75	.75	.75	.71	.71	.71	.67	ı
	1	.76	.74	.73	.71	.70	.69	.68	.68	.67	.66	.63	ı
	2	.72	.69	.66	.64	.66	.63	.62	.63	.62	.60	.58	l
	3	.68	.64	.60	.58	.61	.59	.56	.60	.57	.55	.54	l
_	4	.65	.60	.56	.53	.57	.54	.52	.56	.53	.51	.50	ı
ı≝	5	.61	.56	.51	.48	.54	.50	.48	.53	.50	.47	.46	ı
2	6	.58	.52	.48	.45	.50	.47	.44	.49	.46	.44	.43	ı
€	7	.55	.49	.44	.42	.47	.44	.41	.46	.43	.41	.40	l
Ča	8	.52	.46	.42	.39	.45	.41	.38	.44	.41	.38	.37	l
Ε	9	.50	.43	.39	.36	.42	.38	.36	.41	.38	.36	.35	l
Room Cavity Ratio	10	.47	.41	.37	.34	.40	.36	.34	.39	.36	.34	.33	l

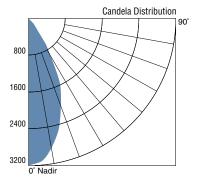
RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

100w PAR-38 FLOOD METAL HALIDE - 5600 LUMENS FLAT LENS TRIM CAT. NO. 300-D-X-L-100MH/PAR38/WFL TEST NO. 3L1MP3F (6427)

LENS WITH LOUVERS FLOOD DISTRIBUTION LAMPS



Spacing Criterion Total Luminaire Efficiency

0.8 43.1%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.51	.51	.51	.51	.48	.48	.48	.46	.46	.46	.43
	1	.49	.48	.47	.46	.45	.44	.44	.44	.43	.42	.40
	2	.47	.45	.43	.42	.42	.41	.40	.41	.40	.39	.38
	3	.44	.42	.40	.38	.40	.38	.37	.39	.38	.36	.35
_	4	.42	.39	.37	.35	.38	.36	.34	.37	.35	.34	.33
薑	5	.40	.37	.34	.32	.36	.34	.32	.35	.33	.32	.31
Æ	6	.38	.35	.32	.30	.34	.31	.30	.33	.31	.30	.29
€	7	.36	.33	.30	.38	.32	.30	.28	.31	.29	.28	.27
బ	8	.35	.31	.28	.27	.30	.28	.26	.30	.28	.26	.26
듵	9	.33	.29	.27	.25	.29	.26	.25	.28	.26	.25	.24
Room Cavity Ratio	10	.32	.28	.25	.24	.27	.25	.23	.27	.25	.23	.23

RC-Effective Ceiling Cavity Reflectance

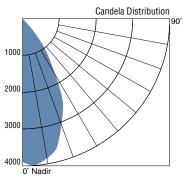
RW-Effective Wall Reflectance

DESCRIPTION

100w PAR-38 FLOOD METAL HALIDE - 5600 LUMENS LOUVERED LENS TRIM CAT. NO. 300-D-X-LL-100MH/PAR38/WFL TEST NO. 3LV1MP3F (6431)

ENGCT LENS

FLOOD DISTRIBUTION LAMPS



Spacing Criterion Total Luminaire Efficiency

0.9 65.7%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.78	.78	.78	.78	.73	.73	.73	.70	.70	.70	.66
	1	.75	.73	.71	.70	.69	.67	.66	.66	.65	.64	.61
	2	.71	.68	.65	.63	.64	.62	.61	.62	.61	.59	.57
	3	.67	.63	.60	.57	.60	.58	.56	.59	.57	.55	.53
	4	.64	.59	.55	.53	.57	.54	.52	.55	.53	.51	.49
æ	5	.61	.55	.51	.49	.53	.50	.48	.52	.50	.47	.46
- E	6	.58	.52	.48	.45	.50	.47	.45	.49	.46	.44	.43
₹	7	.55	.49	.45	.42	.47	.44	.42	.47	.44	.41	.40
బ	8	.52	.46	.42	.39	.45	.41	.39	.44	.41	.39	.38
틍	9	.50	.43	.39	.37	.42	.39	.37	.42	.39	.36	.35
æ	10	.47	.41	.37	.35	.40	.37	.34	.40	.37	.34	.33
Room Cavity Ratio	10	.47	.41	.37	.35	.40	.37	.34	.40	.37	.34	

RC-Effective Ceiling Cavity Reflectance

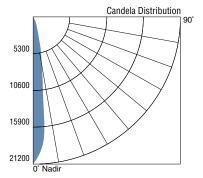
RW-Effective Wall Reflectance

DESCRIPTION

100w PAR-38 FLOOD METAL HALIDE - 5600 LUMENS CLEAR LENS TRIM CAT. NO. 300-D/U/E-X-C-100MH/PAR38/WFL

TEST NO. 3CL1MP3F (6429)

SPOT DISTRIBUTION LAMPS FLAT LENS



Spacing Criterion Total Luminaire Efficiency

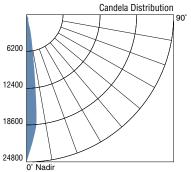
Effective Floor Cavity Reflectance 20%

RW 70% 50% 30% 10% 50%

0.472.5%

30% 10% 50% 30% 10% 0%

LENS WITH LOUVERS SPOT DISTRIBUTION LAMPS



Spacing Criterion Total Luminaire Efficiency

0.3 60.7%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	LIIUU	LIVUI	1001	Ouvit	yrici	ioota	1100 2	.0 /0				
	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.72	.72	.72	.72	.67	.67	.67	.65	.65	.65	.61
	1	.70	.69	.68	.67	.65	.64	.64	.63	.62	.62	.59
	2	.68	.66	.64	.63	.63	.62	.61	.61	.61	.60	.58
		.66	.64	.62	.60	.61	.60	.59	.60	.59	.58	.56
_	4	.64	.62	.59	.58	.60	.58	.57	.59	.57	.56	.55
薑	5	.63	.60	.57	.56	.58	.56	.55	.57	.56	.55	.54
Æ	6	.61	.58	.56	.54	.57	.55	.54	.56	.55	.53	.52
€	7	.60	.56	.54	.53	.56	.54	.52	.55	.53	.52	.51
S	8	.59	.55	.53	.51	.54	.52	.51	.54	.52	.51	.50
E	9	.57	.54	.52	.50	.53	.51	.50	.53	.51	.50	.49
Room Cavity Ratio	10	.56	.53	.51	.49	.52	.50	.49	.52	.50	.49	.48

RC-Effective Ceiling Cavity Reflectance

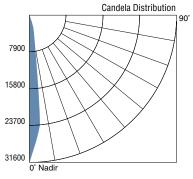
RW-Effective Wall Reflectance

DESCRIPTION

100w PAR-38 SPOT METAL HALIDE - 5200 LUMENS LOUVERED LENS TRIM CAT. NO. 300-D-X-LL-100MH/PAR38/SP TEST NO. 3LV1MP3S (6433)

ENGCT LENS

SPOT DISTRIBUTION LAMPS



Spacing Criterion

0.3 79.1%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.94	.94	.94	.94	.88	.88	.88	.84	.84	.84	.79
	1	.91	.90	.88	.87	.85	.84	.83	.82	.81	.81	.77
	2	.89	.86	.84	.82	.82	.81	.79	.80	.79	.78	.75
	3	.86	.83	.80	.78	.80	.78	.76	.78	.76	.75	.73
_	4	.84	.80	.77	.75	.78	.75	.74	.76	.74	.73	.71
₩	5	.82	.77	.75	.72	.76	.73	.71	.74	.72	.71	.70
~	6	.80	.75	.72	.70	.74	.71	.70	.73	.71	.69	.68
₹.	7	.78	.73	.70	.68	.72	.70	.68	.71	.69	.67	.66
ఔ	8	.76	.71	.69	.67	.70	.68	.66	.70	.68	.66	.65
톧	9	.74	.70	.67	.65	.69	.66	.65	.68	.66	.65	.64
Room Cavity Ratio	10	.73	.68	.65	.64	.67	.65	.63	.67	.65	.63	.62

RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

100w PAR-38 SPOT METAL HALIDE - 5200 LUMENS CLEAR LENS TRIM CAT. NO. 300-D/U/E-X-C-100MH/PAR38/SP TEST NO. 3CL1MP3S (6446)

.81 .78 .75 .72 .70 .68 .66 .64 .62 .61 .86 .82 .78 .75 .72 .70 .67 .65 .63 .62 .86 .81 .76 .72 .69 .67 .64 .62 .61 .59 .86 .79 .74 .70 .67 .65 .62 .60 .59 .81 .77 .73 .70 .68 .64 .62 .60 .58 .81 .76 .72 .69 .64 .62 .60 .58 .77 .75 .73 .71 .69 .67 .65 .63 .62 .77 .74 .72 .69 .67 .65 .63 .61 .60 .58 .77 .74 .70 .68 .65 .63 .61 .60 .58 .86 .83 .78 .76 .74 .72 .70 .68 .72 .70 .68 .66 .64 .62 .60 .59 .57 Room Cavity 8 9 10

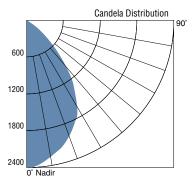
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

RC-Effective Ceiling Cavity Reflectance

DESCRIPTION

100w PAR-38 SPOT METAL HALIDE - 5200 LUMENS FLAT LENS TRIM CAT. NO. 300-D-X-L-100MH/PAR38/SP TEST NO. 3L1MP3S (6432)

FLAT LENS FLOOD DISTRIBUTION LAMPS



Spacing Criterion Total Luminaire Efficiency

51.9%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.62	.62	.62	.62	.58	.58	.58	.55	.55	.55	.52
	1	.58	.57	.55	.54	.53	.52	.51	.51	.51	.50	.47
	2	.55	.52	.49	.47	.49	.47	.45	.47	.46	.44	.43
	3	.51	.47	.44	.42	.45	.43	.41	.44	.42	.40	.38
_	4	.48	.43	.40	.37	.41	.39	.36	.40	.38	.36	.35
薑	5	.45	.40	.36	.33	.38	.35	.33	.37	.35	.33	.31
æ	6	.42	.37	.33	.30	.35	.32	.30	.35	.32	.30	.29
€	7	.40	.34	.30	.28	.33	.30	.27	.32	.29	.27	.26
Ça	8	.37	.31	.28	.25	.30	.27	.25	.30	.27	.25	.24
loom Cavity Ratio	9	.35	.29	.26	.23	.28	.25	.23	.28	.25	.23	.22
ĕ	10	.33	.27	.24	.22	.27	.24	.21	.26	.23	.21	.20

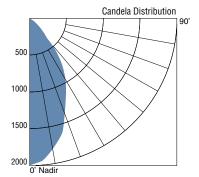
RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

100w R-40 FLOOD METAL HALIDE - 6700 LUMENS FLAT LENS TRIM CAT. NO. 300-D-L-100MH/R40/FL TEST NO. 3L1MR4F (6417)

LENS WITH LOUVERS FLOOD DISTRIBUTION LAMPS



Spacing Criterion Total Luminaire Efficiency

8.0 29.7%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC RW	70%	80 50%	30%	10%	50%	50% 30%	10%	50%	30% 30%	10%	0% 0%
	0	.35	.35	.35	.35	.33	.33	.33	.32	.32	.32	.30
	1	.34	.33	.32	.31	.31	.30	.30	.30	.29	.29	.28
	2	.32	.30	.29	.28	.29	.28	.27	.28	.27	.26	.25
	3	.30	.28	.26	.25	.27	.26	.25	.26	.25	.24	.23
_	4	.28	.26	.24	.23	.25	.24	.22	.24	.23	.22	.21
Cavity Ratio	5	.27	.24	.22	.21	.23	.22	.21	.23	.21	.20	.20
æ	6	.25	.22	.21	.19	.22	.20	.19	.21	.20	.19	.18
€	7	.24	.21	.19	.18	.20	.19	.18	.20	.19	.17	.17
S	8	.23	.20	.18	.16	.19	.17	.16	.19	.17	.16	.16
Ε	9	.21	.18	.17	.15	.18	.16	.15	.18	.16	.15	.15
Room	10	.20	.17	.16	.14	.17	.15	.14	.17	.15	.14	.14

RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

6600

13200

19800

26400

Spacing Criterion

Total Luminaire Efficiency

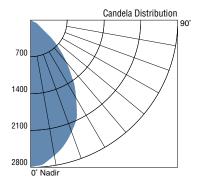
100w R-40 FLOOD METAL HALIDE - 6700 LUMENS LOUVERED LENS TRIM CAT. NO. 300-D-X-LL-100MH TEST NO. 3LV1MR4F (6421)

LENS WITH LOUVERS SPOT DISTRIBUTION LAMOS

Candela Distribution

0.3

ENGCT LENS FLOOD DISTRIBUTION LAMPS



Spacing Criterion Total Luminaire Efficiency

49.9%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.59	.59	.59	.59	.55	.55	.55	.53	.53	.53	.50
	1	.56	.55	.53	.52	.51	.50	.50	.50	.49	.48	.46
	2	.53	.50	.48	.46	.47	.46	.44	.46	.45	.43	.41
	3	.50	.46	.43	.41	.44	.42	.40	.43	.41	.39	.38
	4	.47	.42	.39	.37	.40	.38	.36	.39	.37	.35	.34
Room Cavity Ratio	5	.44	.39	.36	.33	.37	.35	.33	.37	.34	.32	.31
<u>ج</u>	6	.41	.36	.33	.30	.35	.32	.30	.34	.31	.30	.28
₹	7	.39	.33	.30	.28	.32	.29	.27	.32	.29	.27	.26
ឌ	8	.36	.31	.28	.25	.30	.27	.25	.30	.27	.25	.24
틍	9	.34	.29	.26	.23	.28	.25	.23	.28	.25	.23	.22
æ	10	.33	.27	.24	.22	.26	.24	.22	.26	.23	.22	.21

RC-Effective Ceiling Cavity Reflectance

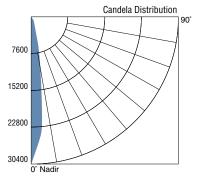
RW-Effective Wall Reflectance

DESCRIPTION

100w R-40 FLOOD METAL HALIDE - 6700 LUMENS CLEAR LENS TRIM CAT. NO. 300-D/U/E-X-C-100MH/R40/FL TEST NO. 3CL1MR4F (6419)

FLAT LENS

SPOT DISTRIBUTION LAMPS



COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Spacing Criterion Total Luminaire Efficiency

Effective Floor Cavity Reflectance 20%

70% 50% 30% 10% 50%

RC-Effective Ceiling Cavity Reflectance

0.3 76.4%

30% 10% 50% 30% 10% 0%

.81 .77 .74 .71 .69 .66 .64 .62 .60 .59 .76 .74 .71 .69 .67 .65 .63 .61 .59

RW-Effective Wall Reflectance

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	LIIGG	LIVGI	1001	Oavit	y i ioi	ισσια	1166 2	.0 /0				
	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.67	.67	.67	.67	.63	.63	.63	.60	.60	.60	.56
	1	.65	.64	.63	.62	.60	.60	.59	.58	.58	.57	.55
	2	.63	.61	.60	.58	.58	.57	.56	.57	.56	.55	.53
	3	.61	.59	.57	.55	.57	.55	.54	.55	.54	.53	.52
_	4	.60	.57	.55	.53	.55	.54	.52	.54	.53	.52	.50
薑	5	.58	.55	.53	.51	.54	.52	.51	.53	.51	.50	.49
Æ	6	.57	.53	.51	.50	.52	.50	.49	.52	.50	.49	.48
€	7	.55	.52	.50	.48	.51	.49	.48	.50	.49	.48	.47
Š	8	.54	.51	.48	.47	.50	.48	.47	.49	.48	.47	.46
듵	9	.53	.49	.47	.46	.49	.47	.46	.48	.47	.45	.45
Room Cavity Ratio	10	.52	.48	.46	.45	.48	.46	.45	.47	.46	.44	.44

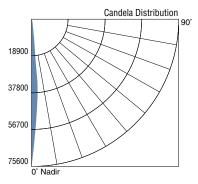
RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

100w R-40 SPOT METAL HALIDE - 6700 LUMENS LOUVERED LENS TRIM CAT. NO. 300-D-X-LL-100MH/R40/SP TEST NO. 3LV1MR4S (6422)

ENGCT LENS SPOT DISTRIBUTION LAMPS



Spacing Criterion Total Luminaire Efficiency

0.2 87%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	1.00	1.00	1.00	1.00	.97	.97	.97	.93	.93	.93	.87
	1	1.00	.99	.97	.96	.94	.92	.92	.90	.90	.89	.85
	2	.98	.95	.92	.90	.91	.89	.88	.88	.87	.86	.83
	3	.95	.91	.89	.86	.88	.86	.84	.86	.84	.83	.81
_	4	.93	.88	.85	.83	.86	.83	.82	.84	.82	.81	.79
₩	5	.90	.86	.83	.80	.84	.81	.79	.82	.80	.79	.77
~	6	.88	.83	.80	.78	.82	.79	.77	.81	.78	.77	.75
€	7	.86	.81	.78	.76	.80	.77	.75	.79	.77	.75	.74
బ	8	.84	.79	.76	.74	.78	.76	.74	.77	.75	.73	.72
듣	9	.83	.78	.74	.72	.77	.74	.72	.76	.74	.72	.71
Room Cavity Ratio	10	.81	.76	.73	.71	.75	.72	.71	.75	.72	.71	.70

RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

100w R-40 SPOT METAL HALIDE - 6700 LUMENS CLEAR LENS TRIM CAT. NO. 300-D/U/E-X-C-100MH/R40/SP TEST NO. 3CL1MR4S (6424)

DESCRIPTION

300m Cavity Ratio

100w R-40 SPOT METAL HALIDE - 6700 LUMENS FLAT LENS TRIM CAT. NO. 300-D-X-L-100MH/R40/SP TEST NO. 3L1MR4S (6426)

OPEN TRIMS - COMPACT FLUORESCENT LAMPS

REFLECTOR 42W - TRIPLE TUBE Candela Distribution 90° 400 1200

Spacing Criterion Total Luminaire Efficiency 0.9 55%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

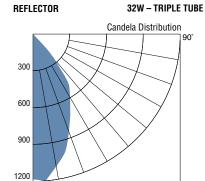
	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.65	.65	.65	.65	.61	.61	.61	.59	.59	.59	.55
	1	.62	.60	.59	.57	.57	.56	.55	.55	.54	.53	.50
	2	.58	.55	.53	.50	.52	.50	.49	.51	.49	.48	.46
	3	.55	.50	.47	.45	.48	.46	.44	.47	.45	.43	.41
	4	.51	.46	.43	.40	.44	.42	.39	.43	41	.39	.37
	5	.48	.43	.39	.36	.41	.38	.36	.40	.37	.35	.34
٤	6	.45	.39	.36	.33	.38	.35	.32	.37	.34	.32	.31
Savit,	7	.42	.36	.33	.30	.35	.32	.30	.35	.32	.30	.28
	8	.40	.34	.30	.28	.33	.30	.27	.32	.29	.27	.26
	9	.38	.32	.28	.25	.31	.28	.25	.30	.27	.25	.24
2	10	.36	.30	.26	.24	.29	.26	.23	.28	.25	.23	.22

RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

42w TRIPLE TUBE – 3200 LUMENS REFLECTOR TRIM CAT. NO. 300-0-X-R-42F TEST NO. 3R42F (6485)



Spacing Criterion Total Luminaire Efficiency 0.9 46.8%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80	1%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.56	.56	.56	.56	.52	.52	.52	.50	.50	.50	.47
	1	.53	.52	.50	.49	.49	.48	.47	.47	.46	.46	.43
	2	.50	.48	.46	.44	.45	.44	.42	.44	.43	.42	.40
	3	.47	.44	.42	.40	.42	.40	.39	.41	.39	.38	.37
	4	.45	.41	.38	.36	.39	.37	.35	.38	.36	.35	.34
æ	5	.42	.38	.35	.33	.37	.34	.32	.36	.34	.32	.31
Z.	6	.40	.35	.32	.30	.34	.32	.30	.33	.31	.29	.29
₹	7	.38	.33	.30	.28	.32	.29	.27	.31	.29	.27	.26
బ	8	.35	.31	.28	.26	.30	.27	.25	.29	.27	.25	.25
Room Cavity Ratio	9	.34	.29	.26	.24	.28	.25	.24	.28	.25	.24	.23
æ	10	.32	.27	.24	.22	.26	.24	.22	.26	.24	.22	.21

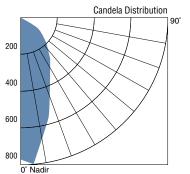
RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

32w TRIPLE TUBE – 2400 LUMENS REFLECTOR TRIM CAT. NO. 300-0-X-R-32F TEST NO. 3R32F (6488)

REFLECTOR 26W – QUAD TUBE



Spacing Criterion Total Luminaire Efficiency 0.7 45.5%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%	l
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
	0	.54	.54	.54	.54	.51	.51	.51	.48	.48	.48	.46	l
	1	.51	.50	.48	.47	.47	.46	.45	.45	.44	.44	.41	l
	2	.48	.45	.43	.41	.43	.41	.40	.41	.40	.39	.37	l
		.45	.41	.38	.36	.39	.37	.35	.38	.36	.35	.33	l
	4	.42	.38	.35	.32	.36	.34	.32	.35	.33	.31	.30	l
ᄪ	5	.39	.34	.31	.29	.33	.30	.28	.32	.30	.28	.27	l
Ξ	6	.37	.32	.28	.26	.31	.28	.26	.30	.27	.26	.25	l
ቜ፟፟፟፟፟፟	7	.34	.29	.26	.24	.28	.26	.24	.28	.25	.23	.23	l
۳	8	.32	.27	.24	.22	.26	.24	.22	.26	.23	.22	.21	l
Koom Cavity Katio	9	.31	.25	.22	.20	.25	.22	.20	.24	.22	.20	.19	l
모	10	.29	.24	.21	.19	.23	.20	.19	.23	.20	.18	.18	l

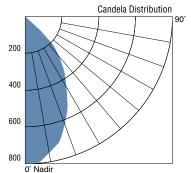
RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

26w QUAD TUBE – 1800 LUMENS REFLECTOR TRIM CAT. NO. 300-0-X-R-26F TEST NO. 3R26F (6482)

FLAT LENS **42W TRIPLE TUBE**



Spacing Criterion Total Luminaire Efficiency

0.9 38.7%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.46	.46	.46	.46	.43	.43	.43	.41	.41	.41	.39
	1	.43	.42	.41	.40	.40	.39	.38	.38	.38	.37	.35
	2	.41	.39	.37	.35	.37	.35	.34	.35	.34	.33	.32
	3	.38	.35	.33	.31	.34	.32	.30	.33	.31	.30	.29
_	4	.36	.32	.30	.28	.31	.29	.27	.30	.28	.27	.26
퓵	5	.34	.30	.27	.25	.29	.26	.25	.28	.26	.24	.24
ĕ	6	.31	.27	.25	.23	.26	.24	.23	.26	.24	.22	.22
€	7	.30	.25	.23	.21	.25	.22	.21	.24	.22	.20	.20
S	8	.28	.24	.21	.19	.23	.21	.19	.23	.20	.19	.18
Ē	9	.26	.22	.19	.18	.21	.19	.18	.21	.19	.17	.17
Room Cavity Ratio	10	.25	.21	.18	.16	.20	.18	.16	.20	.18	.16	.16

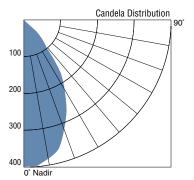
RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

42w TRIPLE TUBE - 3200 LUMENS FLAT LENS TRIM CAT. NO. 300-D-X-L-42F TEST NO. 3L42F (6480)

FLAT LENS 32W TRIPLE TUBE



Spacing Criterion Total Luminaire Efficiency

0.9 25.3%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

RC		80)%			50%			30%		0%
RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	.30	.30	.30	.30	.28	.28	.28	.27	.27	.27	.25
	.29		.27		.26	.26		.25	.25		.23
2	.27	.25	.24	.23	.24	.23	.23	.23	.23	.22	.21
	.25	.23	.22	.21	.22	.21	.20	.22	.21	.20	.19
	.24	.22	.20	.19	.21	.20	.19	.20	.19	.18	.18
	.22	.20	.18	.17	.19	.18	.17	.19	.18	.17	.16
6	.21	.19	.17	.16	.18	.17	.16	.18	.16	.15	.15
7	.20	.17	.16	.14	.17	.15	.14	.17	.15	.14	.14
8	.19	.16	.15			.14			.14	.13	.13
9	.18	.15	.14	.12	.15	.13	.12	.15	.13	.12	.12
10	.17	.14	.13	.12	.14	.12	.12	.14	.12	.11	.11
	0 1 2 3 4 5 6 7 8 9	RW 70% 0 .30 1 .29 2 .27 3 .25 4 .24 5 .22 6 .21 7 .20 8 .19 9 .18	RW 70% 50% 0 .30 .30 1 .29 .28 2 .27 .25 3 .25 .23 4 .24 .22 5 .22 .20 6 .21 .19 7 .20 .17 8 .19 .16 9 .18 .15	RW 70% 50% 30% 0 .30 .30 .30 .30 1 .29 .28 .27 2 .27 .25 .24 3 .25 .23 .22 4 .24 .22 .20 .18 6 .21 .19 .17 7 .20 .17 .16 8 .19 .16 .15 .14	RW 70% 50% 30% 10% 0 30 30 30 30 30 1 29 28 27 26 2 27 25 24 23 3 25 23 22 21 4 24 22 20 19 5 22 20 18 17 6 21 19 17 16 14 8 19 16 15 13 9 18 15 14 12	RW 70% 50% 30% 10% 50% 0 30 30 30 30 30 28 1 29 28 27 26 26 2 27 25 24 23 24 3 25 23 22 21 22 4 24 22 20 19 21 5 22 20 18 17 19 6 21 19 17 16 14 17 8 19 16 15 13 16 9 18 15 14 12 15	RW 70% 50% 30% 10% 50% 30% 0 30 30 30 30 28 28 1 29 28 27 26 26 26 2 27 25 24 23 24 23 3 25 23 22 21 22 21 4 24 22 20 19 21 20 5 22 20 18 17 19 18 16 6 21 19 17 16 14 17 15 8 19 16 15 13 16 14 17 15 9 18 15 14 12 15 13 16	RW 70% 50% 30% 10% 50% 30% 10% 0 30 30 30 28 28 28 1 29 28 27 26 26 26 26 25 22 22 22 23 22 23 23 23 23 23 23 22 21 20 19 21 20 19 18 17 19 18 17 6 21 19 18 17 19 18 17 6 21 20 19 18 17 19 18 17 30 18 17 19 18 17 19 18 17 19 18 17 19 18 17 19 18 17 19 18 17 19 18 17 19 18 17 19 18 17 19 18 17 15 14 17	RW 70% 50% 30% 10% 50% 30% 10% 50% 0 3.0 3.0 3.0 28 28 28 2.2 2.6 25 25 2.2 2.1 2.0 1.9 2.0 1.9 2.0 1.9 2.0 1.8 1.7 1.9 2.0 1.9 2.0 1.8 1.7 1.9 1.8 1.7 1.9 2.0 1.9 2.0 1.8 1.7 1.9 1.0 1.0 1.4 1.7 1.5 1.4 1.7 1.9 1.8 1.7 1.9 1.8 1.7 1.9 1.8 1.7 1.9 1.8	RW 70% 50% 30% 10% 50% 30% 10% 50% 30%	RW 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% 50% 30% 10% 50% 30% 10% 50% 30% 10% 50% 30% 10% 50% 30% 10% 50% 30% 10% 50% 30% 10% 20 20 27 27 27 27 27 27 22 22 22 22 22 22 22 21 20 22 21 20 22 21 20 22 21 20 22 21 20 29 28 17 19 18 17 19 18 17 19 18

RC-Effective Ceiling Cavity Reflectance RW-Effective Wall Reflectance

DESCRIPTION

32w TRIPLE TUBE -2400 LUMENS FLAT LENS TRIM CAT. NO. 300-D-X-L-32F TEST NO. 3L32F (6486)

Candela Distribution 100 200 300 400

Spacing Criterion Total Luminaire Efficiency

FLAT LENS

0.8 32.5%

26W QUAD TUBE

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%	
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
	0	.39	.39	.39	.39	.36	.36	.36	.35	.35	.35	.32	
	1	.36	.35	.33	.33	.33	.32	.32	.32	.31	.31	.29	
	2	.34	.32	.29	.29	.30	.29	.28	.29	.28	.27	.26	
	3	.32	.29	.26	.26	.28	.26	.25	.27	.26	.24	.23	
_	4	.30	.27	.23	.23	.25	.24	.22	.25	.23	.22	.21	
¥	5	.28	.24	.20	.20	.23	.22	.20	.23	.21	.20	.19	
Æ	6	.26	.22	.18	.18	.22	.20	.18	.21	.19	.18	.17	
₹.	7	.24	.21	.17	.17	.20	.18	.17	.20	.18	.17	.16	
ខ	8	.23	.19	.15	.15	.19	.17	.15	.18	.17	.15	.15	
Room Cavity Ratio	9	.22	.18	.14	.14	.18	.16	.14	.17	.15	.14	.14	
æ	10	.21	.17	.13	.13	.16	.14	.13	.16	.14	.13	.13	

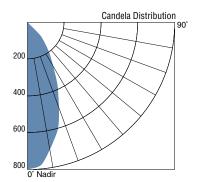
RC-Effective Ceiling Cavity Reflectance

DESCRIPTION

26w QUAD TUBE - 1800 LUMENS FLAT LENS TRIM CAT. NO. 300-D-X-L-26F TEST NO. 3L26F (6481)

LENS WITH LOUVER

42W TRIPLE TUBE



Spacing Criterion Total Luminaire Efficiency 0.8

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.28	.28	.28	.28	.26	.26	.26	.25	.25	.25	.23
	1	.26	.26	.25	.24	.24	.24	.23	.23	.23	.23	.22
	2	.25	.24	.23	.22	.23	.22	.21	.22	.21	.21	.20
	3	.24	.22	.21	.20	.21	.20	.19	.20	.20	.19	.18
_	4	.22	.20	.19	.18	.20	.18	.18	.19	.18	.17	.17
薑	5	.21	.19	.17	.16	.18	.17	.16	.18	.17	.16	.16
Æ	6	.20	.18	.16	.15	.17	.16	.15	.17	.16	.15	.14
€	7	.19	.17	.15	.14	.16	.15	.14	.16	.15	.14	.13
Š	8	.18	.16	.14	.13	.15	.14	.13	.15	.14	.13	.12
톤	9	.17	.15	.13	.12	.14	.13	.12	.14	.13	.12	.12
Room Cavity Ratio	10	.16	.14	.12	.11	.13	.12	.11	.13	.12	.11	.11

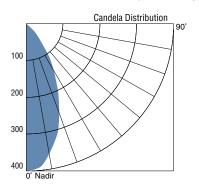
RC-Effective Ceiling Cavity Reflectance RW-Effective Wall Reflectance

DESCRIPTION

42w TRIPLE TUBE - 3200 LUMENS LOUVERED LENS TRIM CAT. NO. 300-D-X-LL-42F TEST NO. 3LV42F (6484)

LENS WITH LOUVER

32W TRIPLE TUBE



Spacing Criterion Total Luminaire Efficiency 8.0

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

			1001	ouvit	, 1101	ioota	100 2	0 /0				
	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.22	.22	.22	.22	.21	.21	.21	.20	.20	.20	.19
	1	.21	.21	.20	.20	.19	.19	.19	.19	.19	.18	.17
	2	.20	.19	.18	.18	.18	.18	.17	.18	.17	.17	.16
	3	.19	.18	.17	.16	.17	.16	.16	.17	.16	.15	.15
_	4	.18	.17	.16	.15	.16	.15	.14	.16	.15	.14	.14
첉	5	.17	.15	.14	.14	.15	.14	.13	.15	.14	.13	.13
æ	6	.16	.14	.13	.13	.14	.13	.12	.14	.13	.12	.12
€	7	.15	.14	.12	.12	.13	.12	.12	.13	.12	.11	.11
ē	8	.15	.13	.12	.11	.12	.12	.11	.12	.11	.11	.10
Ε	9	.14	.12	.11	.10	.12	.11	.10	.12	.11	.10	.10
Room Cavity Ratio	10	.13	.11	.10	.10	.11	.10	.10	.11	.10	.10	.9

RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

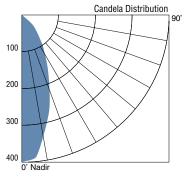
DESCRIPTION

32w TRIPLE TUBE - 2400 LUMENS LOUVERED LENS TRIM CAT. NO. 300-D-X-LL-32F TEST NO. 3LV32F (6487)

LENS WITH LOUVER

26W TRIPLE TUBE

RW-Effective Wall Reflectance



Spacing Criterion Total Luminaire Efficiency

0.7 19.4%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.23	.23	.23	.23	.22	.22	.22	.21	.21	.21	.19
	1	.22	.21	.21	.20	.20	.20	.19	.19	.19	.19	.18
	2	.21	.20	.19	.18	.19	.18	.17	.18	.18	.17	.16
	3	.19	.18	.17	.16	.17	.16	.16	.17	.16	.16	.15
_	4	.18	.17	.16	.15	.16	.15	.14	.16	.15	.14	.14
퓵	5	.17	.16	.14	.13	.15	.14	.13	.15	.14	.13	.13
ĕ	6	.16	.15	.13	.12	.14	.13	.12	.14	.13	.12	.12
€	7	.16	.14	.12	.11	.13	.12	.11	.13	.12	.11	.11
Ē	8	.15	.13	.12	.11	.12	.11	.11	.12	.11	.11	.10
Ē	9	.14	.12	.11	.10	.12	.11	.10	.12	.11	.10	.10
Room Cavity Ratio	10	.13	.11	.10	.9	.11	.10	.9	.11	.10	.9	.9

RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

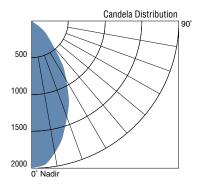
DESCRIPTION

26w QUAD TUBE - 1800 LUMENS LOUVERED LENS TRIM CAT. NO. 300-D-X-LL-26F TEST NO. 3LV26F (6483)

OPEN TRIMS - INCANDESCENT LAMPS

BAFFLE TRIM

R- LAMP, FLOOD



Spacing Criterion Total Luminaire Efficiency

69.8%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%	
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
	0	.83	.83	.83	.83	.78	.78	.78	.74	.74	.74	.70	
	1	.79	.77	.75	.73	.73	.71	.70	.70	.69	.68	.65	
	2	.75	.71	.68	.65	.68	.65	.63	.65	.64	.62	.59	
	3	.70	.66	.62	.59	.63	.60	.58	.61	.59	.57	.55	
_	4	.67	.61	.57	.54	.59	.55	.53	.57	.54	.52	.50	
뜵	5	.63	.57	.52	.49	.55	.51	.48	.53	.50	.48	.46	
æ	6	.59	.53	.48	.45	.51	.47	.44	.50	.47	.44	.43	
€	7	.56	.49	.45	.42	.48	.44	.41	.47	.43	.41	.40	
g	8	.53	.46	.42	.39	.45	.41	.38	.44	.41	.38	.37	
Ē	9	.50	.43	.39	.36	.42	.38	.36	.42	.38	.36	.34	
Room Cavity Ratio	10	.48	.41	.36	.34	.40	.36	.33	.39	.36	.33	.32	

RC-Effective Ceiling Cavity Reflectance

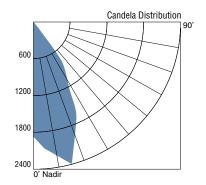
RW-Effective Wall Reflectance

DESCRIPTION

300w R-40 FLOOD – 3030 LUMENS BLACK BAFFLE TRIM CAT. NO. 300-O-X-B-300/R40/FL TEST NO. 3B30R4F (6497)

BAFFLE TRIM

R- LAMP. SPOT



Spacing Criterion Total Luminaire Efficiency

1.1 73.5%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.87	.87	.87	.87	.82	.82	.82	.78	.78	.78	.73
	1	.83	.81	.80	.78	.77	.76	.74	.74	.73	.72	.69
	2	.79	.76	.73	.70	.72	.70	.68	.70	.68	.67	.64
		.75	.71	.67	.64	.68	.65	.63	.66	.64	.62	.60
_	4	.72	.66	.62	.59	.64	.60	.58	.62	.59	.57	.55
¥	5	.68	.62	.58	.54	.60	.56	.54	.59	.56	.53	.52
ĕ	6	.65	.58	.54	.50	.56	.53	.50	.55	.52	.50	.48
€	7	.61	.54	.50	.47	.53	.49	.47	.52	.49	.46	.45
Sa.	8	.58	.51	.47	.44	.50	.46	.44	.49	.46	.43	.42
트	9	.55	.48	.44	.41	.47	.43	.41	.47	.43	.41	.40
Room Cavity Ratio	10	.53	.46	.41	.38	.45	.41	.38	.44	.41	.38	.37

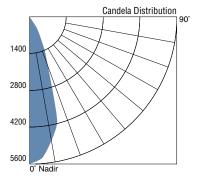
RC-Effective Ceiling Cavity Reflectance RW-Effective Wall Reflectance

DESCRIPTION

300w R-40 SPOT – 3030 LUMENS BLACK BAFFLE TRIM CAT. NO. 300-0-X-B-300/R40/SP TEST NO. 3B30R4S (6496)

BAFFLE TRIM

PAR- LAMP, FLOOD



Spacing Criterion Total Luminaire Efficiency

75.5%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.90	.90	.90	.90	.84	.84	.84	.80	.80	.80	.76
	1	.86	.84	.83	.81	.80	.79	.78	.77	.76	.75	.72
	2	.83	.80	.77	.75	.76	.74	.72	.74	.72	.71	.68
	3	.79	.75	.72	.69	.72	.70	.68	.71	.69	.67	.65
_	4	.76	.71	.68	.65	.69	.66	.64	.68	.65	.63	.61
뜵	5	.73	.68	.64	.61	.66	.63	.60	.65	.62	.60	.58
25	6	.70	.65	.61	.58	.63	.60	.57	.62	.59	.57	.56
€	7	.67	.62	.58	.55	.60	.57	.55	.59	.56	.54	.53
ē	8	.65	.59	.55	.52	.58	.54	.52	.57	.54	.52	.51
oom Cavity Ratio	9	.62	.56	.52	.50	.55	.52	.50	.55	.52	.50	.49
8	10	.60	.54	.50	.48	.53	.50	.48	.53	.50	.47	.46

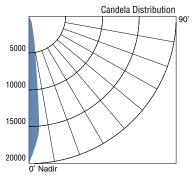
RC-Effective Ceiling Cavity Reflectance RW-Effective Wall Reflectance

DESCRIPTION

250w PAR-38 FLOOD - 3600 LUMENS BLACK BAFFLE TRIM CAT. NO. 300-0-X-B-250/PAR38/FL TEST NO. 3B25P3F (6499)

BAFFLE TRIM

PAR-LAMP, SPOT



Spacing Criterion Total Luminaire Efficiency

0.3 89.2%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

					,							
	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	1.00	1.00	1.00	1.00	.99	.99	.99	.95	.95	.95	.89
	1	1.00	1.00	.99	.98	.96	.94	.93	.92	.91	.91	.87
	2	1.00	.97	.94	.92	.92	.90	.89	.90	.88	.87	.84
	3	.97	.93	.90	.87	.89	.87	.85	.87	.85	.84	.81
_	4	.94	.89	.86	.83	.87	.84	.82	.85	.83	.81	.79
퓵	5	.91	.86	.83	.80	.84	.81	.79	.83	.80	.79	.77
æ	6	.89	.83	.80	.77	.82	.79	.77	.81	.78	.76	.75
€	7	.86	.81	.77	.75	.80	.77	.74	.79	.76	.74	.73
ŝ	8	.84	.79	.75	.73	.77	.75	.72	.77	.74	.72	.71
Ē	9	.82	.77	.73	.71	.76	.73	.71	.75	.72	.70	.69
Room Cavity Ratio	10	.80	.75	.71	.69	.74	.71	.69	.73	.71	.69	.68

RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

250w PAR-38 SPOT - 3600 LUMENS BLACK BAFFLE TRIM CAT. NO. 300-0-X-B-250/PAR38/SP TEST NO. 3B25P3S (6498)

ENCLOSED TRIMS - INCANDESCENT LAMPS

FLAT LENS PAR- LAMP, FLOOD Candela Distribution 1200 2400 3600 4800 Nadii Spacing Criterion 0.7

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

67.1%

Effective Floor Cavity Reflectance 20%

Total Luminaire Efficiency

					,							
	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.80	.80	.80	.80	.75	.75	.75	.71	.71	.71	.67
	1	.77	.75	.73	.72	.71	.70	.69	.68	.68	.67	.64
	2	.73	.71	.68	.66	.67	.65	.64	.65	.64	.63	.60
	3	.70	.67	.64	.61	.64	.62	.60	.62	.60	.59	.57
_	4	.67	.63	.60	.57	.61	.58	.56	.60	.57	.56	.54
差	5	.65	.60	.56	.54	.58	.55	.53	.57	.54	.53	.51
æ	6	.62	.57	.53	.51	.55	.52	.50	.54	.52	.50	.49
€	7	.59	.54	.51	.48	.53	.50	.48	.52	.49	.47	.46
Ĉ	8	.57	.52	.48	.46	.51	.48	.45	.50	.47	.45	.44
Ε	9	.55	.49	.46	.44	.48	.45	.43	.48	.45	.43	.42
Room Cavity Ratio	10	.53	.47	.44	.42	.46	.43	.41	.46	.43	.41	.40

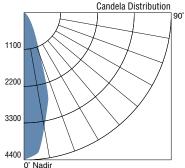
RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

250w PAR-38 FLOOD - 3600 LUMENS FLAT LENS TRIM CAT. NO. 300-D-X-L-250/PAR38/FL TEST NO. 3L25P3F (6506)

LENS WITH LOUVER PAR- LAMP, FLOOD



Spacing Criterion Total Luminaire Efficiency

0.6 47.1%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.56	.56	.56	.56	.52	.52	.52	.50	.50	.50	.47
	1	.54	.53	.52	.51	.50	.49	.49	.48	.48	.47	.45
	2	.52	.50	.48	.47	.48	.46	.45	.46	.45	.45	.43
		.50	.47	.45	.44	.46	.44	.43	.44	.43	.42	.41
	4	.48	.45	.43	.41	.44	.42	.41	.43	.41	.40	.39
	5	.46	.43	.41	.39	.42	.40	.38	.41	.39	.38	.37
ž	6	.44	.41	.39	.37	.40	.38	.37	.39	.38	.36	.36
E	7	.43	.39	.37	.35	.38	.36	.35	.38	.36	.35	.34
2	8	.41	.38	.35	.34	.37	.35	.33	.36	.35	.33	.33
Ē	9	.40	.36	.34	.32	.35	.33	.32	.35	.33	.32	.31
коот Саупу капо	10	.38	.35	.32	.31	.34	.32	.31	.34	.32	.31	.30

RC-Effective Ceiling Cavity Reflectance RW-Effective Wall Reflectance

DESCRIPTION

250w PAR-38 FLOOD - 3600 LUMENS LOUVERED LENS TRIM CAT. NO. 300-D-X-LL-250/PAR38/FL TEST NO. 3LV25P3F (6505)

FLAT LENS PAR- LAMP, FLOOD Candela Distribution 1400 2800 4200 5600 0° Nadir

Spacing Criterion Total Luminaire Efficiency

0.7 68.6%

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.82	.82	.82	.82	.76	.76	.76	.73	.73	.73	.69
	1	.78	.77	.75	.74	.73	.72	.71	.70	.69	.68	.65
	2	.75	.72	.70	.68	.69	.67	.66	.67	.66	.64	.62
	3	.72	.69	.66	.63	.66	.64	.62	.64	.62	.61	.59
_	4	.69	.65	.62	.59	.63	.60	.58	.62	.59	.58	.56
薰	5	.67	.62	.59	.56	.60	.57	.55	.59	.57	.55	.54
Æ	6	.64	.59	.56	.53	.58	.55	.53	.57	.54	.52	.51
€	7	.62	.56	.53	.51	.55	.52	.50	.54	.52	.50	.49
బ	8	.59	.54	.51	.48	.53	.50	.48	.52	.50	.48	.47
트	9	.57	.52	.48	.46	.51	.48	.46	.50	.48	.46	.45
Room Cavity Ratio	10	.55	.50	.46	.44	.49	.46	.44	.48	.46	.44	.43

RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

PAR- LAMP, SPOT

Candela Distribution

DESCRIPTION

CLEAR LENS

4900

9800

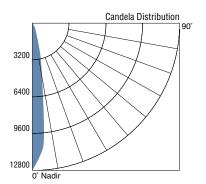
14700

19600

250w PAR-38 FLOOD - 3600 LUMENS CONVEX LENS TRIM CAT. NO. 300-D/U/E-X-C-250/PAR38/FL TEST NO. 3CL25P3F (6512)

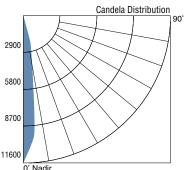
FLAT LENS

PAR- LAMP, SPOT



Spacing Criterion Total Luminaire Efficiency 0.4

PAR- LAMP, SPOT



Spacing Criterion

Spacing Criterion

0.3

Total Luminaire Efficiency **COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 20%

80% 50% 30% 30% 0% 70% 50% 30% 10% 50% 30% 10% 50% 30% 10% 0% .76 .76 .76 .74 .73 .72 .71 .69 .68 .68 .66 .64 .65 .63 .64 .62 .62 .61 .59 .79 .77 .74 .72 .70 .69 .67 .66 .64 .63 0 1 2 3 4 5 6 7 8 9 10 .85 .82 .80 .78 .76 .74 .72 .71 .69 .68 .79 .76 .73 .71 .69 .67 .65 .63 .62 .79 .75 .72 .69 .67 .65 .63 .62 .61 .59 .76 .73 .70 .68 .66 .65 .62 .60 .59 .71 .70 .68 .66 .65 .63 .62 .61 .60

RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

250w PAR-38 SPOT - 3600 LUMENS CLEAR LENS TRIM CAT. NO. 300-D/U/E-X-C-250/PAR38/SP TEST NO. 3CL25P3S (6513)

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80	1%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.77	.77	.77	.77	.72	.72	.72	.69	.69	.69	.65
	1	.74	.73	.72	.71	.69	.68	.68	.67	.66	.66	.63
	2	.72	.70	.68	.67	.67	.66	.65	.65	.64	.63	.61
	3	.70	.67	.65	.63	.65	.63	.62	.63	.62	.61	.59
	4	.68	.65	.63	.61	.63	.61	.60	.62	.60	.59	.58
ا≝	5	.66	.63	.60	.59	.61	.59	.58	.60	.59	.57	.56
۳	6	.65	.61	.59	.57	.60	.58	.56	.59	.57	.56	.55
€	7	.63	.59	.57	.55	.58	.56	.55	.58	.56	.54	.54
ខ	8	.62	.58	.55	.54	.57	.55	.53	.56	.54	.53	.52
틸	9	.60	.56	.54	.52	.55	.53	.52	.55	.53	.52	.51
Room Cavity Ratio	10	.59	.55	.53	.51	.54	.52	.51	.54	.52	.51	.50

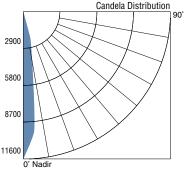
RC-Effective Ceiling Cavity Reflectance

RW-Effective Wall Reflectance

DESCRIPTION

250w PAR-38 SPOT - 3600 LUMENS FLAT LENS TRIM CAT. NO. 300-D-X-L-250/PAR38/SP TEST NO. 3L25P3S (6508)

LENS WITH LOUVER



Total Luminaire Efficiency

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 20%

	RC		80)%			50%			30%		0%
	RW	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
	0	.55	.55	.55	.55	.52	.52	.52	.50	.50	.50	.47
	1	.54	.53	.52	.51	.50	.50	.49	.48	.48	.48	.46
	2	.52	.51	.50	.49	.49	.48	.47	.47	.47	.46	.45
	3	.51	.49	.48	.47	.47	.46	.45	.46	.46	.45	.44
	4	.50	.48	.46	.45	.46	.45	.44	.45	.44	.44	.43
ŧ	5	.49	.46	.45	.44	.45	.44	.43	.45	.43	.43	.42
~	6	.48	.45	.44	.42	.44	.43	.42	.44	.43	.42	.41
₹.	7	.47	.44	.42	.41	.43	.42	.41	.43	.42	.41	.40
ខ	8	.46	.43	.41	.40	.42	.41	.40	.42	.41	.40	.40
Room Cavity Ratio	9	.45	.42	.41	.40	.42	.40	.39	.41	.40	.39	.39
Š	10	.44	.41	.40	.39	.41	.40	.39	.41	.39	.39	.38

RC-Effective Ceiling Cavity Reflectance

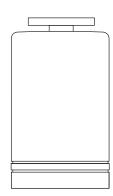
RW-Effective Wall Reflectance

DESCRIPTION

250w PAR-38 SPOT - 3600 LUMENS LOUVERED LENS TRIM CAT. NO. 300-D-X-LL-250/PAR38/SP TEST NO. 3LV25P3S (6507)

300 LINE OPEN DOWNLIGHT

GENERAL DESCRIPTION: The Gardco 300 Line is a series of compact, high-performance cylinder luminaires in a variety of styles and mounting configurations. The Open Downlight style uses high-intensity discharge, incandescent or fluorescent lamps. Housings are die cast aluminum with twin architectural reveals located near the luminaire apertures. A choice of two (2) light control styles and three (3) mounting options is available. Luminaires are finished with a fade- and abrasion-resistant polyester powdercoat offered in six (6) standard colors.



ORDERING

_	PREFIX	MODEL	MOUNTING	TRIMS	LA	MP	VOLTAGE	FINISH	OPTIONS
example	300	0	C	R	50	MH	120	BRP	F
8	300	O Open Downlight	C Ceiling P2 Pendant W Wall Mount A1 Arm Mount to Pole 2" x 5" arm	R Reflector B Black Baffle N/A with Fluorescent	E17 50MH ⁵ 70MH ⁵ 100MH ⁵ 50HPS 70HPS 100HPS Eluorescent 26QF ⁶ 32TRF ⁸ 42TRF ⁸	PAR38 P70MH ⁴ P100MH ⁴ P70HPS ⁴ Incandescent 250PAR38 ⁴ 300R40 ⁴	120 208 240 277 347 480 UNIV	BRP BLP WP NP BGP VP OC SC	F PCB WS

LAMP/VOLTAGE CHART

Voltage	120	208	240	277	347	480
<u>E17</u>						
50MH⁵	•			•	•	
70MH⁵	•	•	•	•	•	
100MH⁵	•	•	•	•	•	•
50HPS	•			•	•	
70HPS	•	•	•	•	•	•
100HPS	•	•	•	•		
PAR38						
P70MH⁴	•	•	•	•	•	
P100MH ⁴	•	•	•	•	•	•
P70HPS ⁴	•	•	•	•	•	
Fluorescent (Type "R" Trim only)						
26QF ⁶		UN	١١٧		•	
32TRF ⁶		UN	١١٧		•	
42TRF ⁶		UI	NV.		•	
<u>Incandescent</u>						
250PAR384	•					
300R40 ⁴	•					

MH – Metal Halide • HPS – High Pressure Sodium • QF – Quad Fluorescent TRF – Triple Tube Fluorescent

HKP KUJ

DT R Bronze Paint
DNR Black Paint
Y R White Paint
P R Natural Aluminum Paint
DI R Beige Paint
XR Verde Green Paint
QE Optional Color Paint
Specify RAL designation.
Ex. OC-RAL7024.

Special Color Paint Must supply color chip.

QR VIQP U

H Fusing
RED Button Type Photocontrol
Contact factory for availability.
Y I Wall-Mounted Boy for

Y U Wall-Mounted Box for Surface Conduit

Notes

- 1. For "A" mounting, standard arm length is 6". If a longer arm is desired, indicate arm length, ex. "A12" is for a 12" arm length. Arms available in 6" increments of length up to 48". Maximum arm length is 48". If not mounted to top of pole, an additional handhole on pole is required to permit installation. Provide information as to size and type of pole.
- For "P" mounting, standard pendant length is 18". For other lengths, indicate desired length in inches, ex. "P30" is for a 30" pendant. Pendants available in 6" increments of length from 6" up to 144". Maximum pendant length is 144". Stated length is the distance from the ceiling to the top of the luminaire and takes into account the mounting hardware. For other stem lengths, add desired length in inches after "P." ex. 300-D-P24-L-50HPS-120-BRP (for 24").
- 3. Luminaires cannot be field-modified to change optics or lamp types.
- 4. Not available with reflector (R) trim.
- 5. Must use open fixture rated É-17 Metal Halide lamps.
- Fluorescent units feature an electronic fluorescent ballast that accepts 120V through 277V or 347V only. Starting temperature is 0°F.

SPECIFICATIONS

HOUSING: Housings are die cast aluminum in a single-piece cylindrical form of corrosion-resistant alloy, 1/8" (.32cm) minimum wall thickness. Units are 7.5" (19cm) in diameter and 12" (30.5cm) in height, nominal measurements.

MOUNTING

CEILING (C): Provides for direct ceiling mount as shown.

PENDANT ASSEMBLY (P): Swivel pendant assembly with locking set screws. Stated length is the distance from the ceiling to the top of the luminaire and takes into account the mounting hardware. Available pendant lengths are 6" (15.24cm) through 144" (365.76cm) in 6" increments. Standard pendant length is 18" (46cm). Maximum pendant length is 144". Swivel pendant can accommodate 35° sloped ceiling maximum.

WALL BRACKET (W): Cast aluminum canopy with integrated aluminum arm secured to housing with two (2) 5/16" (.8cm) bolts. Requires mounting to a structural member of the building.

ARM MOUNT TO POLE (A): Luminaire mounts to pole with an extruded aluminum 2" x 5" arm. Available arm lengths are 6" (15.24cm) through 48" (121.92cm) in 6" (15.24cm) increments. Standard arm length is 6". Maximum arm length is 48". If not mounted to top of pole, an additional handhole on pole is required to permit installation. Provide information as to size and type of pole.

LIGHT CONTROL (TRIM)

REFLECTOR (R): Reflectors are composed of spun Alzak® components, electro-polished, anodized and sealed. Reflectors for compact fluorescent lamps feature a dual stage construction.

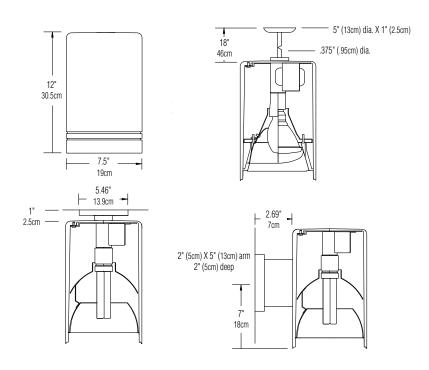
BAFFLE (B): Step black baffles are die cast aluminum and finished with black TGIC powdercoat.

ELECTRICAL: Internal ballast will be provided based on the specified lamp configuration. Standard fluorescent ballasts are solid state.

LAMPHOLDER: Pulse-rated medium base lampholders are glazed porcelain with nickel-plated screw shell. Fluorescent lampholders are high-temperature thermoplastic (PBT) with brass alloy contacts.

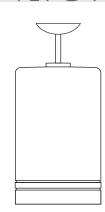
FINISH: Each luminaire receives a fade- and abrasion-resistant, electrostatically applied, thermally cured, textured TGIC polyester powdercoat finish.

LABELS: All fixtures bear UL or CUL (where applicable) Wet Location labels.



300 LINE ENCLOSED DOWNLIGHT

GENERAL DESCRIPTION: The Gardco 300 Line is a series of compact, high-performance cylinder luminaires in a variety of styles and mounting configurations. The Enclosed Downlight style uses high-intensity discharge, incandescent or fluorescent lamps. Housings are die cast aluminum with twin architectural reveals located near the luminaire apertures. A choice of two (2) light control styles and three (3) mounting options is available. Luminaires are finished with a fade- and abrasion-resistant polyester powdercoat offered in six (6) standard colors.



ORDERING

example	PREFIX 300 —	MODEL D	MOUNTING C	TRIMS — L –		AMP DMH	VOLTAGE — 120 —	FINISH BRP	OPTIONS F
8	300	D Enclosed Downlight	C Ceiling P2 Pendant W Wall A1 Arm Mount to Pol 2*x 5* arm	L Solite Lens LL Solite Lens w/Louver	E17 50MH 70MH 100MH 50HPS 70HPS 100HPS Fluorescent 26QF ⁴ 32TRF ⁴ 42TRF ⁴	PAR38 P70MH P100MH P70HPS R40 R70MH R100MH Incandescent 250PAR38 300R40	120 208 240 277 347 480 UNIV	BRP BLP WP NP BGP VP OC SC	F PCB WS

LAMP/VOLTAGE CHART

Voltage	120	208	240	277	347	480
<u>E17</u>						
50MH	•			•	•	
70MH	•	•	•	•	•	
100MH	•	•	•	•	•	•
50HPS	•			•	•	
70HPS	•	•	•	•	•	
100HPS	•	•	•	•		
PAR38						
P70MH	•	•	•	•	•	
P100MH	•	•	•	•	•	•
P70HPS	•	•	•	•	•	
Fluorescent						
26QF3		UN	١١٧		•	
32TRF ³		UN	١١٧		•	
42TRF ³		UN	1IV		•	
<u>Incandescent</u>						
250PAR38	•					
300R40	•					

MH – Metal Halide • HPS – High Pressure Sodium • QF – Quad Fluorescent TRF – Triple Tube Fluorescent

FINISH BRP

BLP Black Paint
WP White Paint
NP Natural Aluminum Paint
BGP Beige Paint
VP Verde Green Paint
OC Optional Color Paint
Specify RAL designation.
EX. OC-RAL7024.
SC Special Color Paint
Must supply color chip.

Bronze Paint

OPTIONS

F Fusing
PCB Button Type Photocontrol
Contact factory for availability.
WS Wall-Mounted Box for Surface Conduit

Notes:

- 1. For "A" mounting, standard arm length is 6". If a longer arm is desired, indicate arm length, ex. "A12" is for a 12" arm length. Arms available in 6" increments of length up to 48". Maximum arm length is 48". If not mounted to top of pole, an additional handhole on pole is required to permit installation. Provide information as to size and type of pole.
- For "P" mounting, standard pendant length is 18". For other lengths, indicate desired length in inches, ex. "P30" is for a 30" pendant.
 Pendants available in 6" increments of length from 6" up to 144". Maximum pendant length is 144". Stated length is the distance from the ceiling to the top of the luminaire and takes into account the mounting hardware.
 - For other stem lengths, add desired length in inches after "P." ex. 300-D-P24-L-50HPS-120-BRP (for 24").
- 3. Luminaires cannot be field-modified to change optics or lamp types.
- 4. Fluorescent units feature an electronic fluorescent ballast that accepts 120V through 277V or 347V only. Starting temperature is 0°F.

SPECIFICATIONS

HOUSING: Housings are die cast aluminum in a single-piece cylindrical form of corrosion-resistant alloy, 1/8" (.32cm) minimum wall thickness. Units are 7.5" (19cm) in diameter and 12" (30.5cm) in height, nominal measurements.

MOUNTING

CEILING (C): Provides for direct ceiling mount as shown.

PENDANT ASSEMBLY (P): Swivel pendant assembly with locking set screws. Stated length is the distance from the ceiling to the top of the luminaire and takes into account the mounting hardware. Available pendant lengths are 6" (15.24cm) through 144" (365.76cm) in 6" increments. Standard pendant length is 18" (46cm). Maximum pendant length is 144". Swivel pendant can accommodate 35° sloped ceiling maximum.

WALL BRACKET (W): Cast aluminum canopy with integrated aluminum arm secured to housing with two (2) 5/16" (.8cm) bolts. Requires mounting to a structural member of the building.

ARM MOUNT TO POLE (A): Luminaire mounts to pole with an extruded aluminum 2" x 5" arm. Available arm lengths are 6" (15.24cm) through 48" (121.92cm) in 6" (15.24cm) increments. Standard arm length is 6". Maximum arm length is 48". If not mounted to top of pole, an additional handhole on pole is required to permit installation. Provide information as to size and type of pole.

LIGHT CONTROL (TRIM)

LENS (L): Lens units consist of a Solite® glass lens mounted to a die cast aluminum trim support assembly.

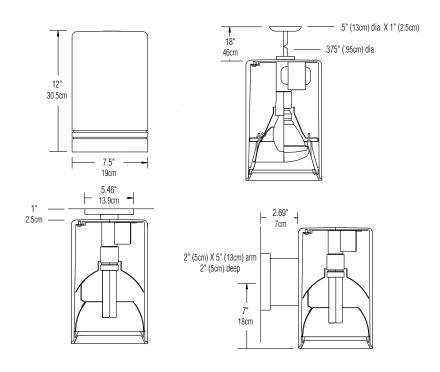
LENS WITH LOUVER (LL): Lens with louver units consists of a Solite® glass lens mounted to a die cast aluminum trim support assembly, including 1 5/8" (4.1cm) x 1 5/8" (4.1cm) square louvers with a nominal depth of 1" (2.5cm).

ELECTRICAL: Internal ballast will be provided based on the specified lamp configuration. Standard fluorescent ballasts are solid state.

LAMPHOLDER: Pulse-rated medium base lampholders are glazed porcelain with nickel-plated screw shell. Fluorescent lampholders are high-temperature thermoplastic (PBT) with brass alloy contacts.

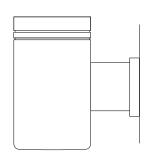
FINISH: Each luminaire receives a fade- and abrasion-resistant, electrostatically applied, thermally cured, textured TGIC polyester powdercoat finish.

LABELS: All fixtures bear UL or CUL (where applicable) Wet I ocation labels.



300 LINE ENCLOSED UPLIGHT

GENERAL DESCRIPTION: The Gardco 300 Line is a series of compact, high-performance cylinder luminaires in a variety of styles and mounting configurations. The Enclosed Uplight style uses high-intensity discharge, or incandescent lamps. Housings are die cast aluminum with twin architectural reveals located near the luminaire apertures. Wall mounting with dual clear lens assembly is standard.



ORDERING

example	PREFIX 300	MODEL U	MOUNTING — W ———	TRIMS - CL -		AMP OHPS	VOLTAGE 120 —	FINISH — BRP ——	OPTIONS F
0	300	U Enclosed Uplight	W Wall A¹ Arm Mount to Pole 2" x 5" arm	CL Clear Lens	E17 50MH 70MH 100MH 50HPS 70HPS 100HPS	PAR38 P70MH P100MH P70HPS Incandescent 250PAR38 300R40	120 208 240 277 347 480	BRP BLP WP NP BGP VP OC SC	F PCB WS

LAMP/VOLTAGE CHART

Voltage	120	208	240	277	347	480
<u>E17</u>						
50MH	•			•	•	
70MH	•	•	•	•	•	
100MH	•	•	•	•	•	•
50HPS	•			•	•	
70HPS	•	•	•	•	•	
100HPS	•	•	•	•		
PAR38						
P70MH	•	•	•	•	•	
P100MH	•	•	•	•	•	•
P70HPS	•	•	•	•	•	
Incandescent						
250PAR38	•					
300R40	•					

MH – Metal Halide • HPS – High Pressure Sodium

FINISH BRP

BLP Black Paint
WP White Paint
NP Natural Aluminum Paint
BGP Beige Paint
VP Verde Green Paint
OC Optional Color Paint
Specify RAL designation.

Bronze Paint

Ex. OC-RAL7024.

SC Special Color Paint

Must supply color chip.

OPTIONS

F Fusing

PCB Button Type Photocontrol

WS Wall-Mounted Box for Surface Conduit

Notes:

- 1. For "A" mounting, standard arm length is 6". If a longer arm is desired, indicate arm length, ex. "A12" is for a 12" arm length. Arms available in 6" increments of length up to 48". Maximum arm length is 48". If not mounted to top of pole, an additional handhole on pole is required to permit installation. Provide information as to size and type of pole.
- 2. Luminaires cannot be field-modified to change optics or lamp types.

SPECIFICATIONS

HOUSING: Housings are die cast aluminum in a single-piece cylindrical form of corrosion-resistant alloy, 1/8" (.32cm) minimum wall thickness. Units are 7.5" (19cm) in diameter and 12" (30.5cm) in height, nominal measurements.

MOUNTING

WALL BRACKET (W): Cast aluminum canopy with integrated aluminum arm secured to housing with two (2) 5/16" (.8cm) bolts. Requires mounting to a structural member of the building.

ARM MOUNT TO POLE (A): Luminaire mounts to pole with an extruded aluminum 2" x 5" arm. Available arm lengths are 6" (15.24cm) through 48" (121.92cm) in 6" (15.24cm) increments. Standard arm length is 6". Maximum arm length is 48". If not mounted to top of pole, an additional handhole on pole is required to permit installation. Provide information as to size and type of pole.

LIGHT CONTROL (TRIM)

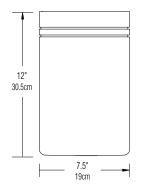
CLEAR DUAL LENS ASSEMBLY (CL): Clear lens trims include a dual lens assembly mounted within a die cast aluminum frame.

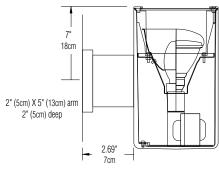
ELECTRICAL: Internal ballast will be provided based on the specified lamp configuration.

LAMPHOLDER: Pulse-rated medium base lampholders are glazed porcelain with nickel-plated screw shell.

FINISH: Each luminaire receives a fade- and abrasion-resistant, electrostatically applied, thermally cured, textured TGIC polyester powdercoat finish.

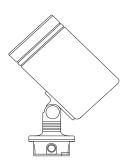
LABELS: All fixtures bear UL or CUL (where applicable) Wet Location labels.





300 LINE ENCLOSED UNIVERSAL

GENERAL DESCRIPTION: The Gardco 300 Line is a series of compact, high-performance cylinder luminaires in a variety of styles and mounting configurations. The Enclosed Universal style uses high-intensity discharge, or incandescent lamps and is suitable for areas with direct rainfall. Housings are die cast aluminum with twin architectural reveals located near the luminaire apertures. A clear lens assembly is offered with a knuckle mounted configuration. Luminaires are finished with a fade- and abrasion-resistant polyester powdercoat offered in six (6) standard colors.



ORDERING

example	PREFIX 300	MODEL E	MOUNTING K -	TRIMS CL		LAMP 50HPS	VOLTAGE 120	FINISH BRP	OPTIONS F
	300	E Enclosed Universal	K Knuckle	CL Clear Lens	E17 50MH 70MH 100MH 50HPS 70HPS 100HPS	PAR38 P70MH P100MH P70HPS Incandescent 250PAR38 300R40	120 208 240 277 347 480	BRP BLP WP NP SGP VP OC SC	F Fusing

LAMP/VOLTAGE CHART

Voltage	120	208	240	277	347	480
<u>E17</u>						
50MH	•			•	•	
70MH	•	•	•	•	•	
100MH	•	•	•	•	•	•
50HPS	•			•	•	
70HPS	•	•	•	•	•	
100HPS	•	•	•	•		
<u>PAR38</u>						
P70MH	•	•	•	•	•	
P100MH	•	•	•	•	•	•
P70HPS	•	•	•	•	•	
Incandescent						
250PAR38	•					
300R40	•					

MH - Metal Halide • HPS - High Pressure Sodium

Notes:

1. Luminaires cannot be field-modified to change optics or lamp types.

FINISH

BRP Bronze Paint BLP Black Paint NPNatural Aluminum Paint WP White Paint **BGP** Beige Paint VPVerde Green Paint 00 **Optional Color Paint** Specify RAL designation. Ex. OC-RAL7024. Special Color Paint Must supply color chip.

Specifications

HOUSING: Housings are die cast aluminum in a single-piece cylindrical form of corrosion-resistant alloy, 1/8" (.32cm) minimum wall thickness. Units are 7.5" (19cm) in diameter and 12" (30.5cm) in height, nominal measurements.

MOUNTING

KNUCKLE: Three (3) piece cast assembly permits 360° rotation of the unit around the axis normal to the mounting plane. An integral cast knuckle with aiming teeth, graduated for 5° increments, permits 180° rotation around the access parallel to the mounting plane. The unit is firmly secured in position by a center lock screw within the axis of the knuckle.

CAST J-BOX: Cast box is provided for knuckle mounting, which is suitable for surface mounting on walls, ceilings or floors. The J-box may also be recessed and used in concrete pour applications.

LIGHT CONTROL (TRIM)

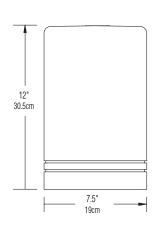
CLEAR DUAL LENS (CL): Clear lens trims include a dual lens assembly mounted within a die cast aluminum frame.

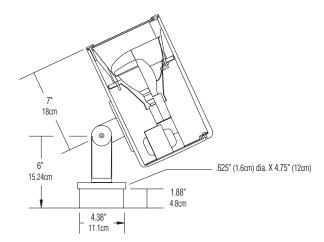
ELECTRICAL: Internal ballast will be provided based on the specified lenses configuration.

LAMPHOLDER: Pulse-rated medium base lampholders are glazed porcelain with nickel-plated screw shell.

FINISH: Each luminaire receives a fade- and abrasion-resistant, electrostatically applied, thermally cured, textured TGIC polyester powdercoat finish.

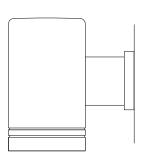
LABELS: All fixtures bear UL or CUL (where applicable) Wet Location labels.





300 LINE FORWARD THROW

GENERAL DESCRIPTION: The Gardco 300 Line is a series of compact, high-performance cylinder luminaires in a variety of styles and mounting configurations. Forward Throw units are suitable for direct rainfall and are rain-tight, dust-tight and corrosion-resistant. Housings are die cast aluminum with twin architectural reveals located near the luminaire apertures. A choice of two (2) models, two (2) light control styles and three (3) mounting options is available. Luminaires are finished with a fade- and abrasion-resistant polyester powdercoat offered in six (6) standard colors.



ORDERING

example	PREFIX	MODEL U	MOUNTING W ——	TRIMS — FT/C —	LAMP T70MH	VOLTAGE — 120 ——	FINISH BRP ——	OPTIONS — F
	300	U Enclosed Upright D Enclosed Downlight	W Wall A¹ Arm Mount to Pole 2"x5"arm C Ceiling P² Pendant W Wall A¹ Arm Mount to Pole 2"x5"arm	FT/C Lens, Clear dual assembly with forward throw reflector FT/D Lens, Clear flat with forward throw reflector	T6 Lamp T70MH Supplied with the Lamp	120 277	BRP BLP WP NP COC SC	F PCB WS

LAMP/VOLTAGE CHART

Voltage	120	208	240	277	347	480
T6 LAMP						
T70MH	•			•		

Supplied with the lamp. MH - Metal Halide

FINISH

BRP Bronze Paint
BLP Black Paint
WP White Paint
NP Natural Aluminum Paint
BGP Beige Paint
VP Verde Green Paint
OC Optional Color Paint

Ex. OC-RAL7024.

SC Special Color Paint

Must supply color chip.

Specify RAL designation.

OPTIONS

Fusing

PCB Button Type Photocontrol

WS Wall-Mounted Box for Surface Conduit

Notes

- For "A" mounting, standard arm length is 6". If a longer arm is desired, indicate arm length, ex. "A12" is for a 12" arm length. Arms available in 6" increments of length up to 48". Maximum arm length is 48". If not mounted to top of pole, an additional handhole on pole is required to permit installation. Provide information as to size and type of pole.
- For "P" mounting, standard pendant length is 18". For other lengths, indicate desired length in inches, ex. "P30" is for a 30" pendant. Pendants available in 6" increments of length from 6" up to 144". Maximum pendant length is 144". Stated length is the distance from the ceiling to the top of the luminaire and takes into account the mounting hardware. For other stem lengths, add desired length in inches after "P." ex. 300-D-P24-L-50HPS-120-BRP (for 24").
- 3. Luminaires cannot be field-modified to change optics or lamp types.

SPECIFICATIONS

HOUSING: Housings are die cast aluminum in a single-piece cylindrical form of corrosion-resistant alloy, 1/8" (.32cm) minimum wall thickness. Units are 7.5" (19cm) in diameter and 12" (30.5cm) in height, nominal measurements.

MOUNTING

CEILING (C): Provides for direct ceiling mount as shown.

PENDANT ASSEMBLY (P): Swivel pendant assembly with locking set screws. Stated length is the distance from the ceiling to the top of the luminaire and takes into account the mounting hardware. Available pendant lengths are 6" (15.24cm) through 144" (365.76cm) in 6" increments. Standard pendant length is 18" (46cm). Maximum pendant length is 144". Swivel pendant can accommodate 35° sloped ceiling maximum.

WALL BRACKET (W): Cast aluminum canopy with integrated aluminum arm secured to housing with two (2) 5/16" (.8cm) bolts. Requires mounting to a structural member of the building.

ARM MOUNT TO POLE (A): Luminaire mounts to pole with an extruded aluminum 2" x 5" arm. Available arm lengths are 6" (15.24cm) through 48" (121.92cm) in 6" (15.24cm) increments. Standard arm length is 6". Maximum arm length is 48". If not mounted to top of pole, an additional handhole on pole is required to permit installation. Provide information as to size and type of pole.

LIGHT CONTROL (TRIM)

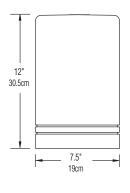
FORWARD THROW REFLECTOR (FT/C AND FT/D): Reflectors are composed of specular extruded and faceted Alzak® components, electro-polished, anodized and sealed. FT/D downlights feature a clear flat glass lens mounted within a die cast aluminum frame. FT/C uplight units feature a clear glass lens mounted within a die cast aluminum frame. Reflector provides asymmetric forward throw distribution of light.

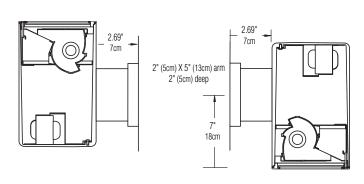
ELECTRICAL: An internal core and coil ballast designed for the 70w Metal Halide M139 lamp is provided.

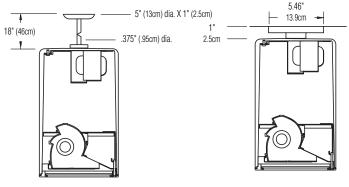
LAMPHOLDER: Pulse-rated G12 lampholder provided.

FINISH: Each luminaire receives a fade- and abrasion-resistant, electrostatically applied, thermally cured, textured TGIC polyester powdercoat finish.

LABELS: All fixtures bear UL or CUL (where applicable) Wet Location labels.

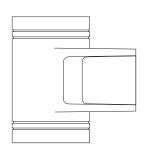






301 LINE UP/DOWN

GENERAL DESCRIPTION: The Gardco 301 Line is a series of high-performance up/downwall mounted cylinders. Each luminaire utilizes a single high-intensity discharge lamp and provides illumination above and below. Housings are die cast aluminum with twin architectural reveals at both the lower and upper apertures. Six (6) downlight and two (2) uplight optical systems are available. The unique optional "Spike" downlight and/or uplight distribution creates a dramatic narrow stripe of illumination on the wall or column. Luminaires are finished with a fade- and abrasion-resistant polyester powdercoat offered in six (6) standard colors.



ORDERING

example	PREFIX 301	MODEL E	MOUNTING W _	TRIMS	WATTAGE 50HPS	VOLTAGE 277	FINISH BRP	OPTIONS F
×ə	301	E Fully Enclosed O Open Downlight	W Wall	Fully Enclosed "E" Units L LL SD SU SB FT Open Downlight "O" Units Only R B	Fully Enclosed "E" Units N/A with FT Trims 50MH¹ 70MH 100MH 150HPS 50HPS 70HPS 100HPS 150HPS² FT Trims T70MH³	120 208 240 277 347	BRP BLP WP NP BGP VP OC SC	F WS RCA
1. 2.		r availability of 150HPS w/SD, SU o Camps. Lamps are supplied with th			T150MH³ Open Downlight "0" Units 50MH¹ 70MH 100MH 150MH 50HPS 70HPS 100HPS 150HPS	MH Metal Halide HPS High Pressure Sodium		

Fully Enclosed "E" Units Only

N Obscuring lenses on uplight and downlight. Soft symmetrical distributions. N Egg crate louvers on downlight. Obscuring lenses on uplight and downlight.

UF Spike downlight distribution. Obscuring lens on uplight. UW Spike uplight distribution. Obscuring lens on downlight.

UD Spike uplight and downlight distributions.

HV Forward throw downlight distributions. Soft uplight glow.
FT Trims utilize T6 lamps. Lamps are supplied with the luminaire.

Open Downlight "O" Units Only

Reflector produces medium downlight distribution with sharp cutoff to lamp and images. Obscuring lens on uplight.

D Black baffled downlight. Obscuring lens on uplight.

FINISH

BRP Bronze Paint
BLP Black Paint
WP White Paint
NP Natural Aluminum Paint
BGP Beige Paint
VP Verde Green Paint
OC Optional Color Paint

Specify RAL designation.

SC Special Color Paint

Must supply color chip.

OPTIONS

F Fusing

WS Wall-Mounted J-Box for Surface Conduit RCA Round Column Mounting Adapter

SPECIFICATIONS

HOUSING:

Housings are single-piece die cast aluminum cylindrical forms with integral side wall mounting canopy / ballast chambers. Provided mounting brackets are galvanized steel.

OPTICAL SYSTEMS

LENS (L): The uplight and downlight components both utilize twin (four total per luminaire) spun specular Alzak® reflectors which provide the symmetrical distributions. The uplight-obscuring lens is flush-mounted and the downlight-obscuring lens is regressed. The lenses soften the distribution and conceal the optical system and internal hardware.

LOUVERS (LL): Die cast aluminum egg crate louvers are installed over the downlight-obscuring lens. All other optical elements are as described in the Lens (L) option.

SPIKE DOWNLIGHT (SD): Inner and outer spun specular Alzak® reflectors provide a very narrow spot beam at nadir. Uplight optical system is as described in the Lens (L) option.

SPIKE UPLIGHT (SU): Inner and outer spun specular Alzak® reflectors provide a very narrow spot at zenith. Downlight optical system is as described in the Lens (L) option.

SPIKE BOTH UPLIGHT AND DOWNLIGHT (SB): Two sets of inner and outer spun specular Alzak® reflectors provide very narrow spot beams at nadir and zenith.

REFLECTOR (R): Spun specular Alzak® reflector produces a medium symmetrical downlight distribution with sharp cutoff to lamp and lamp images. Uplight optical system is as described in the Lens (L) option.

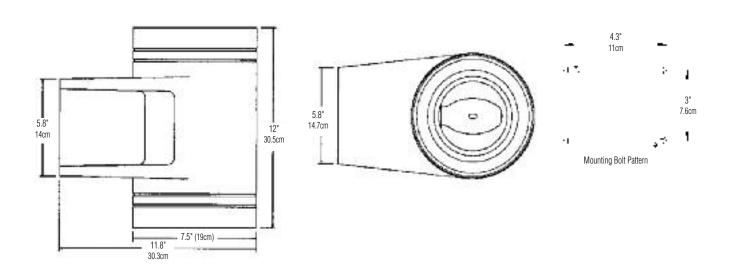
BAFFLE (B): Upper spun specular Alzak® reflector and lower black baffle produce a medium symmetrical downlight distribution with exceptional control of high angle brightness. Uplight optical system is as described in the Lens (L) option.

FORWARD THROW (FT): Faceted specular Alzak® reflector system produces an asymmetric forward projecting distribution. Secondary optical system with obscuring lens produces a soft uplight glow.

ELECTRICAL: All luminaires utilize magnetic HID ballasts that are high power factor and designed for reliable lamp starting to -20°F/-28.8°C. Pulse-rated sockets are glazed porcelain with nickel-plated screw shells.

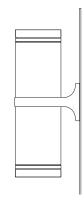
FINISH: Each luminaire receives a fade- and abrasion-resistant electrostatically applied, thermally cured, (TGIC) polyester powdercoat finish. Standard finishes are textured.

LABELS: All fixtures bear UL or CUL (where applicable) Wet Location labels.



302 LINE UP/DOWN

GENERAL DESCRIPTION: The Gardco 302 Line is a series of die cast cylinders for up and down lighting in a single, integrated form. The 302 incorporates two Gardco 300 Line cylinders using a cast bracket to create a single assembly. The 302 offers choices with optics and sources to allow for a variety of aesthetic elements on building surfaces.



FINISH

BRP

BRP

BLP

WP NP BGP VP OC SC OPTIONS

F

PCB

ORDERING

a)	PREFIX	MODEL	MOUNTING	LAN	MP UP ¹	LAM	IP DOWN	TR	IM DOWN	VOLTAGE
example	302	0	_ W _	50	HPS	5	OHPS	_	R	120 _
Φ	302	O Open Downlight	W Wall	50MH T70MH ²	70MH 100MH	50MH 100MH	70MH	R B	Reflector Baffle (Black)	Refer to wattage/Voltage chart below.
				50HPS 100HPS	70HPS	50HPS 100HPS	70HPS	R B	Reflector Baffle (Black)	
				P70MH	P100MH	P70MH⁴	P100MH⁴	В	Baffle (Black)	
				P70HPS		P70HPS		В	Baffle (Black)	
				P/R INC		P/R INC		В	Baffle (Black)	
				26QF⁵ 32T	RF⁵ 42TRF⁵	26QF ⁵ 32	TRF⁵ 42TRF⁵	R	Reflector	
		GEnclosed Downlight	Y Wall	50MH T70MH ²	70MH 100MH	50MH 100MH	70MH			(
		Genelosea Downingin	I Wall	50HPS 100HPS	70HPS	50HPS 100HPS	70HPS	L	Obscuring Fla Solite® Lens	t F
				R70MH	R100MH	R70MH	R100MH	LL	Obscuring Fla	t
				R70HPS		R70HPS			Solite® Lens with Louver	F
				P/R INC		P/R INC				E
				26QF⁵ 32T	RF⁵ 42TRF⁵	26QF⁵ 32	TRF ⁵ 42TRF ⁵			\
				50MH T70MH ²	70MH 100MH	T70MH ²		FT/D	Flat Clear Len with Forward Throw Reflec	Ē

ENCLOSED DOWNLIGHT LAMP/VOLTAGE CHART

ENGLOSED DOWNLIGHT LAWN / VOLINGE OFFICE								
Voltage	120	208	240	277	347	480		
<u>E17</u>								
50MH	•			•	•			
70MH	•	•	•	•	•			
100MH	•	•	•	•	•	•		
50HPS	•			•	•			
70HPS	•	•	•	•	•			
100HPS	•	•	•	•				
PAR38								
P70MH	•	•	•	•	•			
P100MH	•	•	•	•	•	•		
P70HPS	•	•	•	•	•			
Fluorescent								
26QF ³		UN	ĺΙV		•			
32TRF ³		UN	١١٧		•			
42TRF ³		UN	1IV		•			
Incandescent								
250PAR38	•							
300R40	•							

MH – Metal Halide • HPS – High Pressure Sodium • QF – Quad Fluorescent TRF – Triple Tube Fluorescent

QROP "F QY P NK J V"NCOR IX QNVCI G"E J CT V"

Voltage	120	208	240	277	347	480
<u>E17</u>						
50MH⁴	•			•	•	
70MH⁴	•	•	•	•	•	
100MH ⁴	•	•	•	•	•	•
50HPS	•			•	•	
70HPS	•	•	•	•	•	•
100HPS	•	•	•	•		
<u>PAR38</u>						
P70MH ³	•	•	•	•	•	
P100MH ³	•	•	•	•	•	•
P70HPS ³	•	•	•	•	•	
Fluorescent (Type "R" Trim only)						
26QF ⁵		U	١١٧		•	
32TRF⁵		UN	١IV		•	
42TRF ⁵		UN	۱IV		•	
<u>Incandescent</u>						
250PAR38 ³	•					
300R40 ³	•					

OPTIONS

F Fusing

PCB Button Type Photocontrol

FINISH

BRP Bronze Paint BLP Black Paint WP White Paint NPNatural Aluminum Paint Beige Paint **BGP** ۷P Verde Green Paint 00 **Optional Color Paint** Specify RAL designation. Ex. OC-RAL7024. SC Special Color Paint Must supply color chip.

LAMPS:

R PAR38 Reflector Lamp
P/R INC 100W max PAR38 or
R40 Incandescent Lamp
F QF - Quad Tube; TRF - Triple
Tube. 4-pin
Compact Fluorescent Lamp
T70MH Tubular T-6 70MH Lamp
Supplied with luminaire.
All others E-17 Clear Lamp

Notes:

- 1. Lamp Up Trim is always a Diffusing Lens.
- 2. T70MH Lamp utilizes an FT Forward Throw reflector. Lamp is supplied.
- 3. Consult factory for other voltages.
- 4. Suitable for PAR38 only.
- 5. 26QF, 32TRF and 42TRF types feature an electronic fluorescent ballast that accepts 120V through 277V, 50hz or 60hz input. Starting temperature is 0°F. Specify UNIV.

SPECIFICATIONS

CLEAR LENS (CL): Clear lens trims include a clear tempered glass lens mounted to a die cast aluminum frame. Supplied standard on all models ("Trim Up").

HOUSINGS: Housings are cast in a single-piece cylindrical form of corrosion-resistant alloy, 1/8" (.32cm) wall thickness. Units measure 7.5" (19cm) in outside diameter and 12" (30.5cm) in height. Housings are secured to the wall and luminaire assembly using a cast mounting canopy/bracket. The canopy includes a hanger bracket and a mounting bracket (secured over splice box).

LIGHT CONTROL

REFLECTOR (R): Reflectors are composed of spun Alzak® components, electro-polished, anodized and sealed. Reflectors for compact fluorescent lamps feature a dual stage construction.

BAFFLE (B): Step black baffles are die cast aluminum and finished with black TGIC powdercoat.

LENS (L): Lens units consist of a Solite® obscuring glass lens mounted to a die cast aluminum trim support assembly.

LENS WITH LOUVER (LL): Lens with louver units consist of a Solite® obscuring glass lens mounted to a die cast aluminum trim support assembly, including 1.625" (4cm) x 1.625" (4cm) square louvers with a nominal depth of 1" (2.5cm).

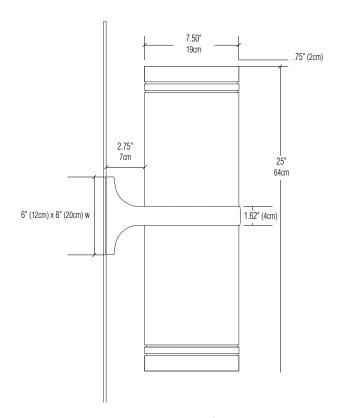
FORWARD THROW REFLECTOR (FT/C AND FT/D): Reflectors are composed of specular extruded and faceted Alzak® components, electro-polished, anodized and sealed. FT/D downlights feature a clear flat glass lens mounted within a die cast aluminum frame. FT/C uplight units feature a clear molded glass lens mounted within a die cast aluminum frame. Reflector provides asymmetric forward throw distribution of light.

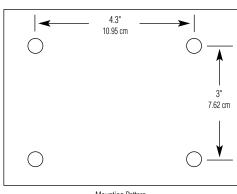
ELECTRICAL: Internal ballast will be provided based on the specified lamp configuration.

LAMPHOLDER: Pulse-rated medium base lampholders are glazed porcelain with a nickel-plated screw shell. Fluorescent sockets are high-temperature plastic (PBT) with brass alloy contacts.

FINISH: Each standard luminaire receives a fade- and abrasion-resistant, electrostatically applied, thermally cured, textured TGIC polyester powdercoat finish. Consult factory for special colors. The cast bracket is painted to match the housings.

LABELS: All fixtures bear UL or CUL (where applicable) Wet Location labels.





Mounting Pattern

Fascia Plates



140 Line Super Sconce



100 Line Sconces



Step & Aisle Lights





LIGHTING

1611 Clovis Barker Road San Marcos, TX 78666 512/753-1000 800/227-0758 Fax: 512/753-7855 www.sitelighting.com

