



LTL NUMBER: 07104

DATE: 11-25-2002

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

CATALOG NUMBER: AR9300 3LP-D/I-4-C-OP/PB-X-120-T8

LUMINAIRE: EXTRUDED ALUMINUM HOUSING, FORMED SPECULAR ALUMINUM REFLECTORS  
 BESIDE LAMPS, 12 CELL, 1 1/2" DEEP, FORMED SEMI-SPECULAR  
 ALUMINUM LOUVER BELOW LAMPS, OPEN TOP.

LAMPS: THREE PHILIPS F32T8/TL841 RATED AT 2850 LUMENS EACH.

BALLAST: ONE SYLVANIA QT3X32T8/120 ISN-SC

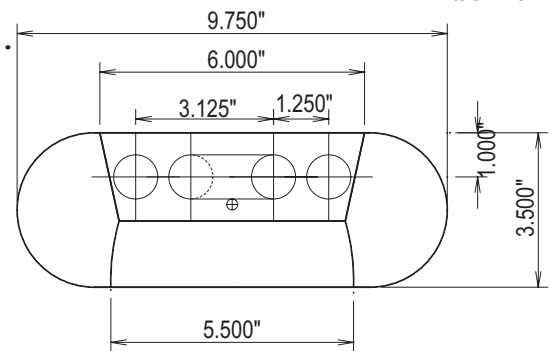
MOUNTING: PENDENT

LUMEN TO CANDELA RATIO USED = 9.18

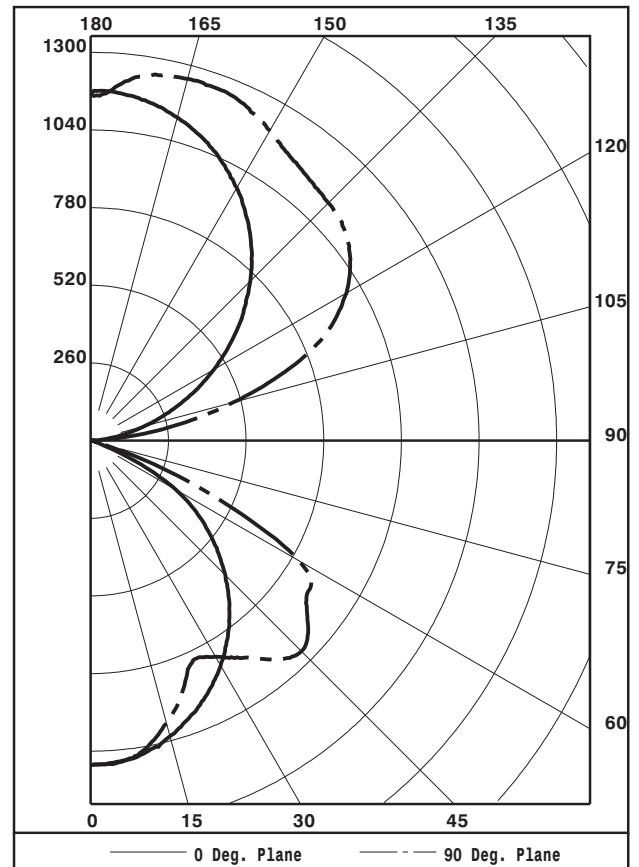
TOTAL INPUT WATTS = 89.1 AT 120.0 VOLTS

THE 0 DEGREE PLANE IS PARALLEL WITH THE LAMPS.

#07104



CANDELA DISTRIBUTION						FLUX
0.0	22.5	45.0	67.5	90.0		
0	1088	1088	1088	1088	1088	103
5	1082	1085	1084	1077	1079	284
15	1025	1030	1012	987	981	401
25	931	919	857	811	811	496
35	801	757	719	830	888	587
45	637	581	732	914	997	588
55	444	472	693	799	886	353
65	172	248	395	467	495	43
75	18	25	36	37	37	6
85	6	8	7	8	8	
90	0	0	0	0	0	
95	37	102	98	87	83	106
105	186	383	497	497	493	451
115	379	546	752	854	879	685
125	574	716	882	1018	1061	768
135	755	891	987	1082	1126	753
145	911	1030	1106	1143	1162	677
155	1034	1132	1192	1226	1234	540
165	1120	1174	1231	1246	1254	342
175	1167	1164	1185	1197	1201	114
180	1163	1163	1163	1163	1163	



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0- 30	788	9.2	10.8
0- 40	1284	15.0	17.6
0- 60	2458	28.8	33.7
0- 90	2861	33.5	39.2
90-120	1242	14.5	17.0
90-130	2010	23.5	27.5
90-150	3440	40.2	47.1
90-180	4436	51.9	60.8
0-180	7297	85.3	100.0

TOTAL LUMINAIRE EFFICIENCY: 85.3%

CIE TYPE: SEMI-INDIRECT

PLANE: 0-DEG 90-DEG

SPACING CRITERIA: 1.2 1.2

SHIELDING ANGLES: 21 21

TESTED BY HERSCHEL SCHRECK  
 CHECKED BY MIKE GRATHER



LUMINAIRE TESTING LABORATORY, INC.



905 Harrison Street · Allentown, PA 18103 · (610) 770-1044 · Fax (610) 770-8912 · www.LuminaireTesting.com

LTL NUMBER: 07104

DATE: 11-25-2002

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD
EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

Table with columns RC, RW, and rows for angles 80, 70, 50, 30, 10, 0. Values range from 38 to 89.

PLANE: 0-DEG 90-DEG
LUMINOUS LENGTH: 48.000 5.500

Table with columns ANGLE IN DEG, AVERAGE 0-DEG, AVERAGE 45-DEG, AVERAGE 90-DEG. Values range from 404 to 6387.



LTL NUMBER: 07104

DATE: 11-25-2002

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

CANDELA DISTRIBUTION

ZONAL LUMEN SUMMARY

Table with 6 columns: Candela values at 0.0, 22.5, 45.0, 67.5, 90.0 degrees and Zonal Lumen Summary for various beam angles from 0-5 to 175-180 degrees.

THIS TEST WAS CONDUCTED USING RELATIVE PHOTOMETRY TECHNIQUES ACCORDING TO STANDARD IESNA PROCEDURES. THE USER MUST THEREFORE USE CAUTION IN THE FOLLOWING SITUATIONS: 1) THIS TEST WAS PERFORMED USING A SPECIFIC BALLAST/LAMP COMBINATION. EXTRAPOLATION OF THESE DATA FOR OTHER BALLAST/LAMP COMBINATIONS MAY PRODUCE ERRONEOUS RESULTS. 2) ACCORDING TO IESNA PROCEDURES, THE BALLAST(S) AND LAMP(S) ARE PRESUMED TO PRODUCE 100% OF RATED OUTPUT. AN APPROPRIATE BALLAST FACTOR MUST BE APPLIED TO THE LUMEN OUTPUT RATINGS AND LUMINOUS INTENSITY VALUES GIVEN. 3) THIS TEST WAS CONDUCTED IN A CONTROLLED LABORATORY ENVIRONMENT WHERE THE AMBIENT TEMPERATURE WAS HELD AT 25 C 1 C. FIELD PERFORMANCE MAY DIFFER PARTICULARLY IN REGARDS TO CHANGE IN LUMINOUS OUTPUT AS A RESULT OF DIFFERENCE IN AMBIENT TEMPERATURE AND METHOD OF MOUNTING THE LUMINAIRE.



LUMINAIRE TESTING LABORATORY, INC.



905 Harrison Street · Allentown, PA 18103 · (610) 770-1044 · Fax (610) 770-8912 · www.LuminaireTesting.com

INITIAL ILLUMINATION OF 50 FOOTCANDLES USING LTL TEST NUMBER 07104  
 LUMINAIRE SUSPENSION LENGTH = 1.5  
 WORKING PLANE HEIGHT = 2.50  
 FLOOR REFLECTANCE = 20

ROOM HT		8				9				10				12				
CEIL RF		80		70		80		70		80		70		80		70		
WALL RF		70	50	50	30	70	50	50	30	70	50	50	30	70	50	50	30	
WIDTH	LENGTH																	
10.	10.		1	2	2	2	2	2	2	2	2	2	2	2	2	2	3	
10.	15.		2	2	2	2	2	2	3	2	2	3	3	2	3	3	3	
15.	20.		3	3	3	4	3	3	4	4	3	4	4	4	3	4	4	5
15.	30.		4	4	5	5	4	5	5	5	4	5	5	6	5	5	6	6
20.	20.		4	4	4	4	4	4	5	4	4	5	5	4	5	5	6	
20.	30.		5	5	6	6	5	6	6	7	5	6	6	7	6	6	7	8
20.	40.		6	7	7	8	7	7	8	8	7	7	8	9	7	8	9	10
20.	60.		9	10	11	11	10	10	11	12	10	11	12	12	10	11	13	14
30.	30.		7	7	8	9	7	8	8	9	8	8	9	9	8	9	10	10
30.	40.		9	10	10	11	9	10	11	11	10	10	11	12	10	11	12	13
30.	50.		11	12	13	13	12	12	13	14	12	13	14	14	12	13	15	16
30.	60.		13	14	15	16	14	14	16	16	14	15	16	17	15	16	17	18
60.	60.		25	26	29	29	26	27	29	30	26	27	30	31	27	28	31	33
60.	80.		34	34	38	38	34	35	38	39	34	36	39	40	35	37	40	42
60.	100.		42	42	47	47	42	43	47	48	43	44	48	50	44	46	50	52
100.	100.		68	69	76	77	69	70	77	78	69	71	78	80	71	73	80	82

QUANTITY OF LUMINAIRES