



LUMINAIRE TESTING LABORATORY, INC.

SUSTAINING MEMBER
of the
IESNA

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

LTL NUMBER: 08550

DATE: 12-01-2004

PREPARED FOR: RENOVA LIGHTING SYSTEMS, INC.

CATALOG NUMBER: ECS-SPS-S4-M-24-UNV-2-PS

LUMINAIRE: FORMED STEEL HOUSING, FORMED WHITE ENAMEL PERFORATED STEEL REFLECTOR WITH FORMED SPECULAR ALUMINUM SECTION ABOVE LAMPS, NO ENCLOSURE.

LAMPS: TWO HORIZONTAL 32 WATT T8 LINEAR FLUORESCENT LAMPS RATED AT 2850 LUMENS EACH.

LAMP CATALOG NUMBER: PHILIPS F32T8/TL841/ALTO

BALLAST: ONE MAGNETEK B232I120RH-A

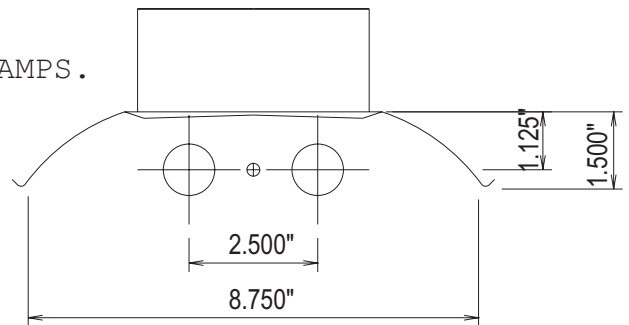
MOUNTING: PENDANT

LUMEN TO CANDELA RATIO USED = 9.18

TOTAL INPUT WATTS = 58.2 AT 120.0 VOLTS

THE 0 DEGREE PLANE IS PARALLEL WITH THE LAMPS.

#08550



CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	1118	1118	1118	1118	1118
5	1108	1130	1154	1163	1169
15	1071	1146	1254	1329	1360
25	998	1156	1359	1475	1519
35	890	1137	1385	1493	1516
45	755	1073	1279	1250	1265
55	597	943	992	1050	1108
65	419	679	803	937	952
75	227	422	566	583	591
85	46	159	172	180	183
90	2	21	23	31	35
95	0	17	24	33	36
105	3	11	20	30	34
115	5	7	17	26	30
125	7	7	12	19	22
135	6	6	5	11	12
145	6	6	7	6	5
155	8	8	8	6	7
165	6	6	6	7	6
175	8	7	7	7	6
180	7	7	7	7	7

FLUX

110
351
606
814
891
861
770
519
174
24
21
17
11
6
4
3
2
1

ZONAL LUMEN SUMMARY

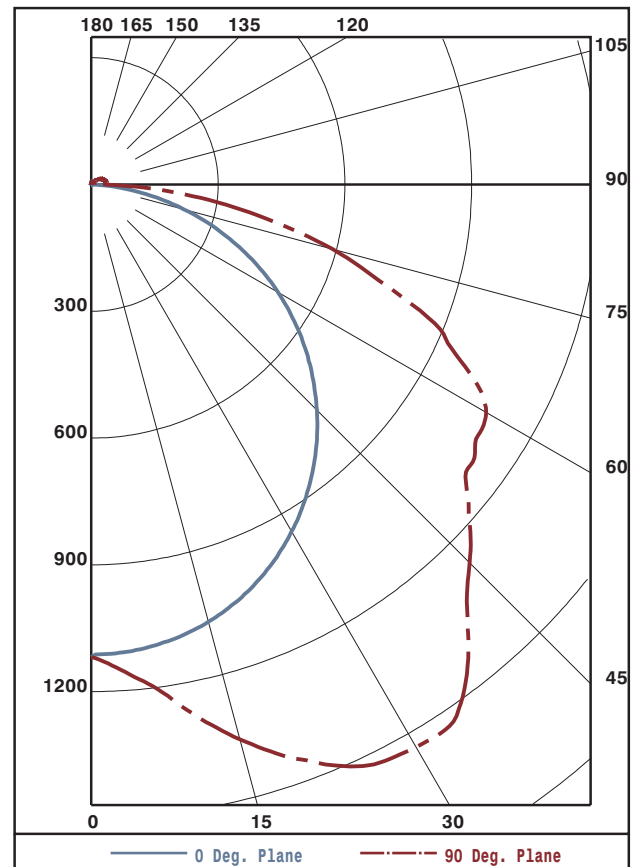
ZONE	LUMENS	%LAMP	%FIXT
0- 30	1067	18.7	20.6
0- 40	1882	33.0	36.3
0- 60	3634	63.8	70.1
0- 90	5097	89.4	98.3
90-120	62	1.1	1.2
90-130	73	1.3	1.4
90-150	84	1.5	1.6
90-180	90	1.6	1.7
0-180	5186	91.0	100.0

TOTAL LUMINAIRE EFFICIENCY: 91.0%

CIE TYPE: DIRECT

PLANE: 0-DEG 90-DEG

SPACING CRITERIA: 1.3 1.8



TESTED BY HERSCHEL SCHRECK
CHECKED BY MIKE GRATHER



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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 0 to 108.

PLANE: 0-DEG 90-DEG
LUMINOUS LENGTH: 48.000 8.750
HEIGHT OF SIDE: 1.500 1.500

LUMINANCE IN CANDELA PER SQUARE METER
Table with columns ANGLE IN DEG, AVERAGE 0-DEG, AVERAGE 45-DEG, AVERAGE 90-DEG. Values range from 2286 to 7220.



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CANDELA DISTRIBUTION

Table with 6 columns of candela values for various angles from 0.0 to 180 degrees.

ZONAL LUMEN SUMMARY

Table with 2 columns: Zonal angle ranges and corresponding lumen values.

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.