



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 TEST: 13041

DATE: 04-11-2008

PREPARED FOR: PRECISION ARCHITECTURAL STAR LIGHTING

CATALOG NUMBER: MLS-I2/D1-4-X-OP/PBW-X-120-T5HO

LUMINAIRE: EXTRUDED ALUMINUM HOUSING, FORMED SPECULAR ALUMINUM UPPER REFLECTOR, FORMED WHITE ENAMEL ALUMINUM LOWER REFLECTOR, 30 CELL, 3/4" DEEP, FORMED WHITE ENAMEL ALUMINUM LOWER BAFFLE, OPEN TOP.

LAMPS: THREE 54 WATT HIGH OUTPUT T5 LINEAR FLUORESCENT LAMPS RATED AT 4400 LUMENS EACH.

LAMP CATALOG NUMBER: PHILIPS F54T5/835/HO/ALTO AND F54T5/850/HO/ALTO

BALLASTS: TWO UNIVERSAL LIGHTING TECHNOLOGIES B254PUNV-D

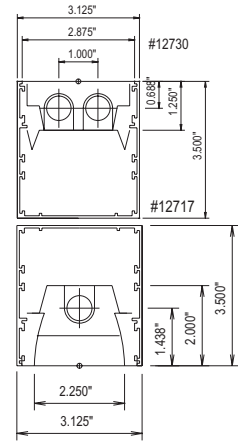
MOUNTING: PENDANT

NOTE: THIS TEST WAS CALCULATED USING MEASURED DATA FROM LTL TEST NUMBERS 12730 AND 12717.

LUMEN TO CANDELA RATIO USED = 9.18

TOTAL INPUT WATTS =164.6 AT 120.0 VOLTS

THE 0 DEGREE PLANE IS PARALLEL WITH THE LAMPS.



CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	1100	1100	1100	1100	1100
5	1089	1090	1101	1098	1099
15	1000	1011	1047	1077	1089
25	870	892	953	1003	1027
35	715	746	797	813	827
45	534	571	573	544	545
55	340	362	338	332	343
65	162	165	183	192	202
75	85	85	89	96	100
85	20	20	22	23	25
90	0	0	0	0	0
95	83	151	132	119	112
105	371	518	603	621	625
115	704	909	967	1020	1052
125	1018	1371	1282	1387	1395
135	1314	1762	1770	1662	1638
145	1559	1884	2117	2099	2096
155	1763	1916	2281	2368	2373
165	1896	2003	2078	2191	2244
175	1966	1981	2027	2038	2034
180	1966	1966	1966	1966	1966

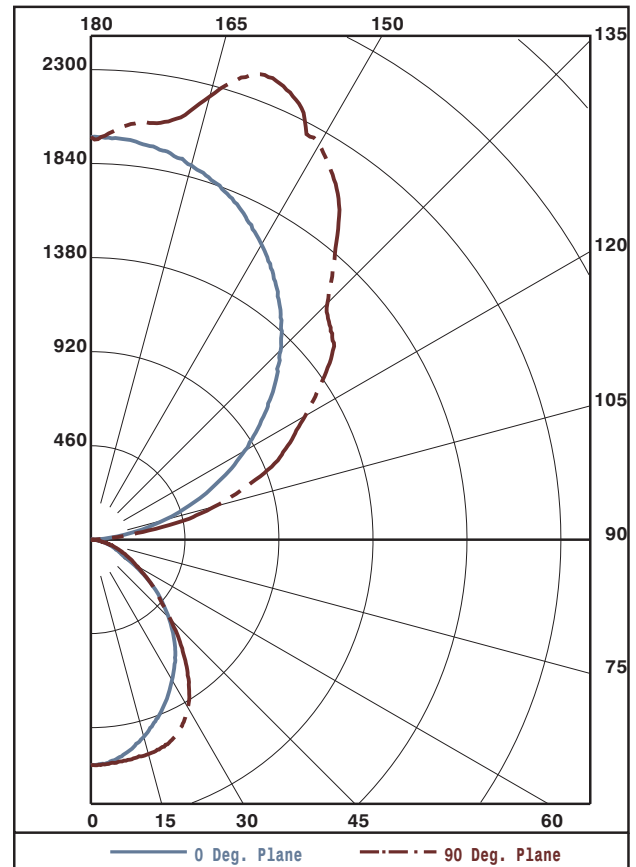
FLUX

104
295
437
488
430
308
182
97
25
135
591
939
1177
1286
1240
993
594
193

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	836	6.3	8.8
0- 40	1324	10.0	13.9
0- 60	2061	15.6	21.7
0- 90	2364	17.9	24.9
90-120	1665	12.6	17.5
90-130	2842	21.5	29.9
90-150	5368	40.7	56.4
90-180	7147	54.1	75.1
0-180	9512	72.1	100.0

TOTAL LUMINAIRE EFFICIENCY: 72.1%
 CIE TYPE: SEMI-INDIRECT
 PLANE: 0-DEG 90-DEG
 SPACING CRITERIA: 1.1 1.3
 SHIELDING ANGLES: 29 41



Approved By: MG



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

Table with columns RC, RW, and rows for cavity heights 80, 70, 50, 30, 10, 0. Each row contains 18 numerical values representing utilization coefficients.

PLANE: 0-DEG 90-DEG
LUMINOUS LENGTH: 44.875 2.250

Table with columns ANGLE IN DEG, AVERAGE 0-DEG, AVERAGE 45-DEG, AVERAGE 90-DEG. Rows show luminance values for angles 0, 45, 55, 65, 75, 85.



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CANDELA DISTRIBUTION

Table with 6 columns of candela values for various angles from 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.