



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: 08686

DATE: 02-10-2005

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

CATALOG NUMBER: LMSI/D04-PH-OP/PB-T8

LUMINAIRE: EXTRUDED ALUMINUM HOUSING WITH PERFORATED SECTIONS AND TRANSLUCENT WHITE ACRYLIC INSERTS, FORMED SPECULAR ALUMINUM REFLECTORS, 15 CELL, 1-3/8" DEEP, FORMED SEMI-SPECULAR ALUMINUM LOUVER, OPEN TOP.

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

LAMP CATALOG NUMBER: PHILIPS F32T8/TL841/ALTO

BALLAST: ONE ADVANCE REL-4P32-SC

MOUNTING: PENDANT

LUMEN TO CANDELA RATIO USED = 9.18

TOTAL INPUT WATTS = 113.2 AT 120.0 VOLTS

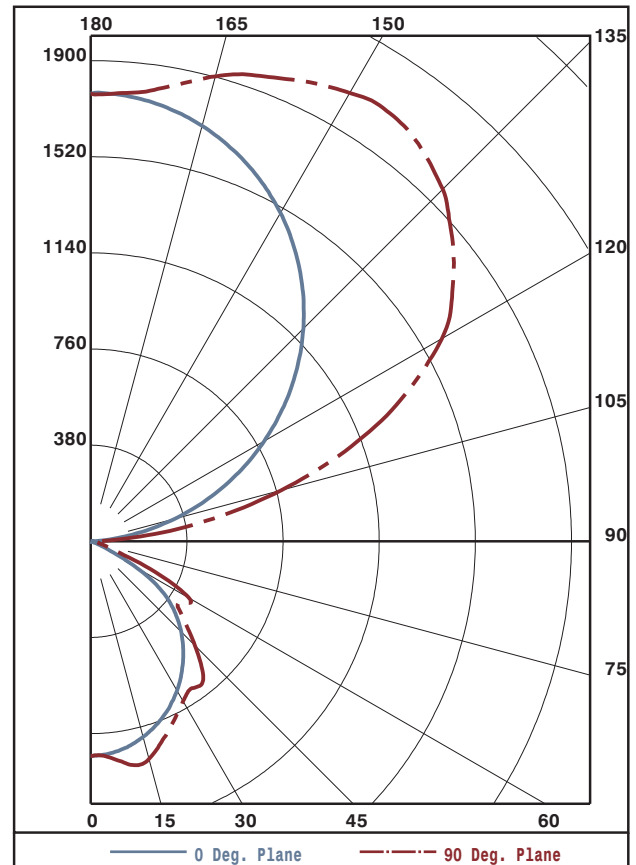
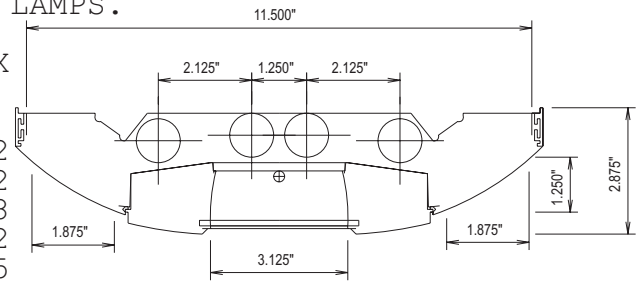
THE 0 DEGREE PLANE IS PARALLEL WITH THE LAMPS.

#08686

CANDELA DISTRIBUTION

| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 | FLUX |
|-----|------|------|------|------|------|------|
| 0 | 848 | 848 | 848 | 848 | 848 | 848 |
| 5 | 842 | 845 | 852 | 854 | 858 | 82 |
| 15 | 800 | 827 | 881 | 891 | 890 | 242 |
| 25 | 729 | 794 | 788 | 777 | 780 | 358 |
| 35 | 628 | 683 | 659 | 675 | 708 | 422 |
| 45 | 504 | 530 | 557 | 575 | 581 | 425 |
| 55 | 343 | 371 | 386 | 391 | 424 | 346 |
| 65 | 64 | 96 | 157 | 230 | 260 | 165 |
| 75 | 11 | 17 | 28 | 41 | 46 | 31 |
| 85 | 2 | 6 | 11 | 18 | 20 | 13 |
| 90 | 1 | 4 | 9 | 13 | 16 | 190 |
| 95 | 63 | 183 | 182 | 173 | 168 | 729 |
| 105 | 342 | 656 | 774 | 779 | 780 | 1134 |
| 115 | 646 | 991 | 1245 | 1348 | 1369 | 1302 |
| 125 | 932 | 1243 | 1546 | 1693 | 1746 | 1289 |
| 135 | 1189 | 1436 | 1755 | 1910 | 1968 | 1121 |
| 145 | 1406 | 1583 | 1832 | 2010 | 2064 | 840 |
| 155 | 1579 | 1670 | 1849 | 1959 | 2005 | 511 |
| 165 | 1700 | 1727 | 1809 | 1875 | 1903 | 169 |
| 175 | 1765 | 1764 | 1776 | 1777 | 1780 | |
| 180 | 1769 | 1769 | 1769 | 1769 | 1769 | |

FLUX



ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %LAMP | %FIXT |
|--------|--------|-------|-------|
| 0- 30 | 682 | 6.0 | 7.3 |
| 0- 40 | 1105 | 9.7 | 11.8 |
| 0- 60 | 1876 | 16.5 | 20.0 |
| 0- 90 | 2085 | 18.3 | 22.2 |
| 90-120 | 2054 | 18.0 | 21.9 |
| 90-130 | 3355 | 29.4 | 35.8 |
| 90-150 | 5766 | 50.6 | 61.5 |
| 90-180 | 7287 | 63.9 | 77.8 |
| 0-180 | 9372 | 82.2 | 100.0 |

TOTAL LUMINAIRE EFFICIENCY: 82.2%

CIE TYPE: SEMI-INDIRECT

PLANE: 0-DEG 90-DEG

SPACING CRITERIA: 1.2 1.3

SHIELDING ANGLES: 24 30

TESTED BY HERSCHEL SCHRECK
CHECKED BY MIKE GRATHER

THIS REPORT BASED ON LM-41 AND OTHER PERTINENT IESNA PROCEDURES.



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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: 46.750 11.625
HEIGHT OF SIDE: 0.000 1.250

LUMINANCE IN CANDELA PER SQUARE METER
Table with columns ANGLE IN DEG, AVERAGE 0-DEG, AVERAGE 45-DEG, AVERAGE 90-DEG and rows 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 showing lumen values for various angular zones 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.