



LTL NUMBER: 07355

DATE: 04-14-2003

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

CATALOG NUMBER: TRP01-X-4-X-OP/PB-X-120-T5HO

LUMINAIRE: EXTRUDED ALUMINUM HOUSING, FORMED SPECULAR ALUMINUM REFLECTORS BESIDE LAMP, 12 CELL, 1 1/2" DEEP FORMED SEMI-SPECULAR ALUMINUM LOUVER WITH TRANSLUCENT WHITE ACRYLIC OVERLAY, OPEN TOP.

LAMP: ONE 54 WATT HIGH OUTPUT T5 LINEAR FLUORESCENT LAMP RATED AT 4400 LUMENS.

LAMP CATALOG NUMBER: SYLVANIA FP54/841/HO

BALLAST: ONE UNIVERSAL LIGHTING TECHNOLOGIES B254PUNV-D

MOUNTING: WALL

LUMEN TO CANDELA RATIO USED = 9.18

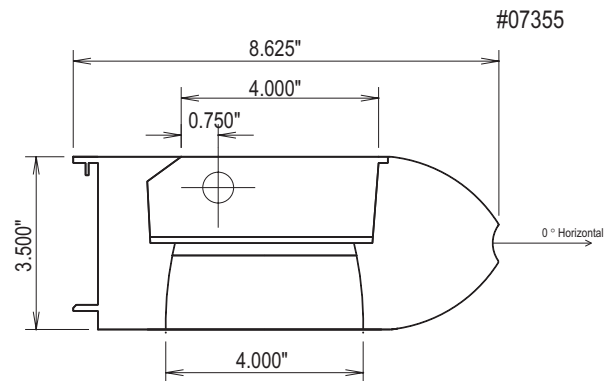
TOTAL INPUT WATTS = 62.9 AT 120.0 VOLTS

THE 0 DEGREE PLANE IS PERPENDICULAR TO THE LAMPS.

| CANDELA DISTRIBUTION | | | | | | | | | | FLUX |
|----------------------|-----|------|------|------|------|-------|-------|-------|-------|------|
| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 | 112.5 | 135.0 | 157.5 | 180.0 | |
| 0 | 424 | 424 | 424 | 424 | 424 | 424 | 424 | 424 | 424 | |
| 5 | 443 | 438 | 437 | 429 | 422 | 412 | 407 | 401 | 400 | 40 |
| 15 | 465 | 459 | 445 | 422 | 399 | 378 | 355 | 339 | 332 | 113 |
| 25 | 473 | 461 | 433 | 397 | 364 | 324 | 286 | 263 | 255 | 166 |
| 35 | 439 | 427 | 403 | 356 | 316 | 261 | 214 | 186 | 181 | 193 |
| 45 | 348 | 343 | 338 | 303 | 257 | 191 | 145 | 130 | 135 | 188 |
| 55 | 191 | 199 | 227 | 227 | 188 | 118 | 93 | 117 | 138 | 149 |
| 65 | 33 | 45 | 75 | 98 | 72 | 43 | 58 | 80 | 84 | 65 |
| 75 | 2 | 3 | 6 | 6 | 5 | 6 | 6 | 5 | 5 | 7 |
| 85 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 95 | 25 | 28 | 38 | 109 | 24 | 83 | 99 | 46 | 47 | 84 |
| 105 | 508 | 519 | 410 | 260 | 123 | 126 | 189 | 315 | 349 | 306 |
| 115 | 666 | 624 | 504 | 401 | 240 | 245 | 224 | 239 | 248 | 365 |
| 125 | 704 | 681 | 619 | 495 | 354 | 359 | 349 | 321 | 318 | 413 |
| 135 | 784 | 761 | 683 | 576 | 459 | 456 | 492 | 462 | 453 | 434 |
| 145 | 811 | 785 | 731 | 622 | 543 | 539 | 556 | 587 | 592 | 396 |
| 155 | 811 | 788 | 738 | 660 | 612 | 605 | 612 | 618 | 621 | 309 |
| 165 | 758 | 739 | 713 | 680 | 653 | 650 | 652 | 650 | 656 | 193 |
| 175 | 703 | 697 | 692 | 681 | 677 | 671 | 672 | 670 | 670 | 65 |
| 180 | 677 | 677 | 677 | 677 | 677 | 677 | 677 | 677 | 677 | |

| ZONAL ZONE | LUMEN LUMENS | %LAMP | %FIXT |
|------------|--------------|-------|-------|
| 0- 30 | 319 | 7.3 | 9.2 |
| 0- 40 | 512 | 11.6 | 14.7 |
| 0- 60 | 849 | 19.3 | 24.4 |
| 0- 90 | 921 | 20.9 | 26.4 |
| 90-120 | 755 | 17.2 | 21.6 |
| 90-130 | 1168 | 26.6 | 33.5 |
| 90-150 | 1999 | 45.4 | 57.3 |
| 90-180 | 2566 | 58.3 | 73.6 |
| 0-180 | 3487 | 79.3 | 100.0 |

TOTAL LUMINAIRE EFFICIENCY: 79.3%
 CIE TYPE: SEMI-INDIRECT
 PLANE: 0-DEG 90-DEG 180-DEG
 SPACING CRITERIA: 1.5 1.2 0.8



TESTED BY HERSCHEL SCHRECK
 CHECKED BY MIKE GRATHER



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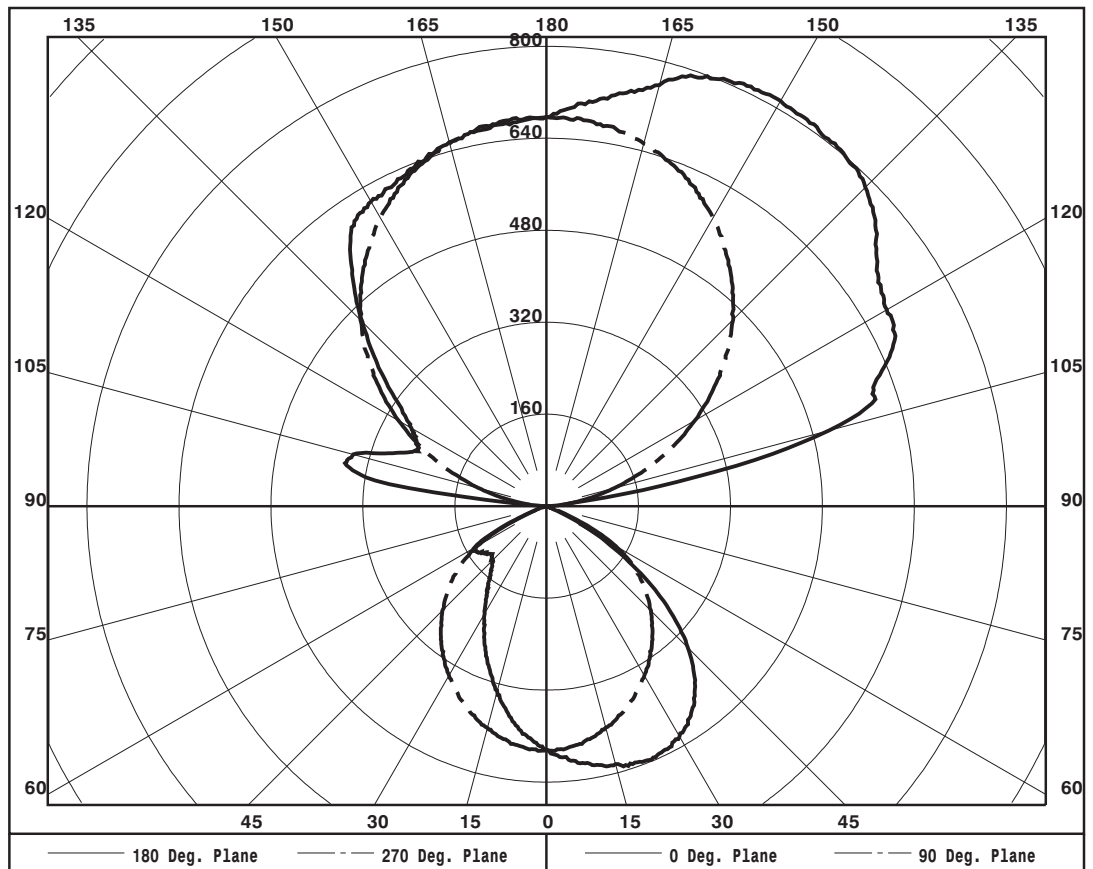
ZONAL LUMEN SUMMARY

| | |
|---------|------|
| 0- 5 | 10. |
| 5- 10 | 30. |
| 10- 15 | 48. |
| 15- 20 | 65. |
| 20- 25 | 78. |
| 25- 30 | 88. |
| 30- 35 | 95. |
| 35- 40 | 98. |
| 40- 45 | 97. |
| 45- 50 | 91. |
| 50- 55 | 82. |
| 55- 60 | 68. |
| 60- 65 | 47. |
| 65- 70 | 18. |
| 70- 75 | 4. |
| 75- 80 | 2. |
| 80- 85 | 0. |
| 85- 90 | 0. |
| 90- 95 | 5. |
| 95-100 | 79. |
| 100-105 | 143. |
| 105-110 | 164. |
| 110-115 | 175. |
| 115-120 | 190. |
| 120-125 | 202. |
| 125-130 | 212. |
| 130-135 | 218. |
| 135-140 | 216. |
| 140-145 | 206. |
| 145-150 | 190. |
| 150-155 | 168. |
| 155-160 | 142. |
| 160-165 | 112. |
| 165-170 | 81. |
| 170-175 | 49. |
| 175-180 | 16. |

PLANE: 0-DEG 90-DEG
 LUMINOUS LENGTH: 4.000 48.000

LUMINANCE IN CANDELA PER SQUARE METER

| ANGLE IN DEG | AVERAGE 0-DEG | AVERAGE 45-DEG | AVERAGE 90-DEG |
|-----------------|------------------|-------------------|-------------------|
| 0 | 3423. | 3423. | 3423. |
| 45 | 3973. | 3859. | 2934. |
| 55 | 2688. | 3195. | 2646. |
| 65 | 630. | 1433. | 1375. |
| 75 | 62. | 187. | 156. |
| 85 | 0. | 0. | 0. |





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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

Table with columns RC, RW, and rows for ceiling reflectance (0-10) and room wall reflectance (0-10). Values represent utilization coefficients.

NOTE: THE ZONAL CAVITY CALCULATION TECHNIQUE IS ACCURATE WHEN LUMINAIRES WITH SYMMETRIC CANDELA DISTRIBUTIONS ARE EMPLOYED AND WHEN THE LUMINAIRES ARE LOCATED SYMMETRICALLY THROUGHOUT THE ROOM. THIS UNIT HAS SPECIAL CHARACTERISTICS AND THEREFORE THESE COEFFICIENTS SHOULD BE USED WITH CAUTION.

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.



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INITIAL ILLUMINATION OF 50 FOOTCANDLES USING LTL TEST NUMBER 07355
LUMINAIRE SUSPENSION LENGTH = 1.5
WORKING PLANE HEIGHT = 2.50
FLOOR REFLECTANCE = 20

Table with columns for ROOM HT, CEIL RF, WALL RF, WIDTH, and LENGTH, and rows for various room dimensions (10, 15, 20, 30, 60, 100 feet) and reflectance values (80, 70).

QUANTITY OF LUMINAIRES