

itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

NVLAP
NVLAP LAB CODE: 200925-0

INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

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REPORT NUMBER: ITL85146

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ISSUE DATE: 08/20/15

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: HPR-LED-EP-F-2X4-DCO-V-8-35

LUMINAIRE: FABRICATED METAL HOUSING WITH WHITE PAINTED INTERIOR FINISH,
FORMED WHITE PAINTED METAL REFLECTOR/LED DRIVER COVER, TWO FORMED
WHITE PAINTED METAL CIRCUIT BOARD MOUNTS, EIGHT WHITE CIRCUIT BOARDS
EACH WITH 40 LEDS, 3-PIECE FROSTED HOLOGRAPHIC FLAT PLASTIC LENS IN
FABRICATED WHITE PAINTED METAL FRAME. LENS FROSTED SIDE OUT.

LAMPS: THREE HUNDRED TWENTY WHITE LIGHT EMITTING DIODES (LEDs), 160
VERTICAL BASE-UP POSITION, 160 TILTED 54-DEGREES FROM VERTICAL BASE-
UP POSITION.

INPUT ELECTRICAL: 120.0 VOLTS, 55.1 WATTS, 0.461 AMPS

TOTAL REFLECTANCE OF PAINT = 94.5 %

MOUNTING: RECESSED

LED DRIVER: OSRAM OT50W/PRG1400C/UNV/DIM/L,
DRIVER HAS MULTIPLE LEADS, ONLY LINE
INPUT AND LED OUTPUT LEADS CONNECTED
FOR THIS TEST, CLIENT STATES DRIVER
PROGRAMMED FOR 1050mA OUTPUT.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE
PROVIDED AT RATED INPUT VOLTAGE
(120VAC, 60Hz) TO THE DRIVER.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET

CANDELA DISTRIBUTION

| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|----|------|------|------|------|------|
| 0 | 2373 | 2373 | 2373 | 2373 | 2373 |
| 5 | 2362 | 2362 | 2361 | 2361 | 2361 |
| 15 | 2261 | 2261 | 2263 | 2263 | 2262 |
| 25 | 2073 | 2073 | 2073 | 2074 | 2073 |
| 35 | 1814 | 1814 | 1816 | 1815 | 1815 |
| 45 | 1507 | 1506 | 1504 | 1504 | 1506 |
| 55 | 1160 | 1158 | 1155 | 1150 | 1146 |
| 65 | 792 | 788 | 777 | 770 | 771 |
| 75 | 413 | 408 | 397 | 391 | 390 |
| 85 | 92 | 90 | 87 | 85 | 84 |
| 90 | 0 | 0 | 0 | 0 | 0 |

FLUX

224
638
955
1135
1160
1031
770
424
105

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %FIXT |
|--------|--------|-------|
| 0- 30 | 1817 | 28.2 |
| 0- 40 | 2952 | 45.8 |
| 0- 60 | 5144 | 79.8 |
| 0- 90 | 6444 | 100.0 |
| 90-180 | 0 | 0.0 |
| 0-180 | 6444 | 100.0 |

EFFICACY (120V) = 117.0 lm/W

EFFICACY (277V) = 118.2 lm/W **

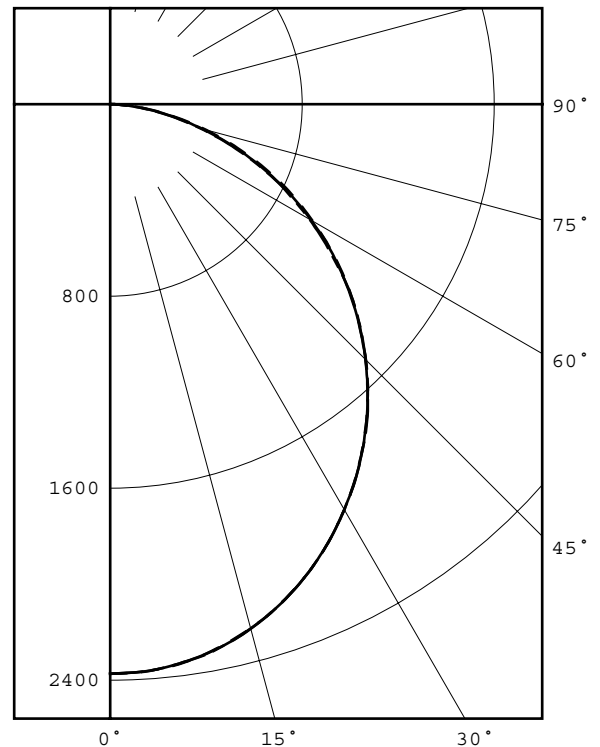
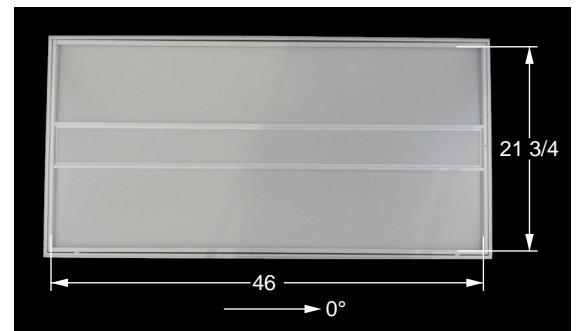
** THE EFFICACY AT 277 VOLTS IS BASED ON THE
LUMENS FROM THIS REPORT AND THE WATTAGE
MEASURED AT 277 VOLTS FROM ITL REPORT
NUMBER ITL85146-THD.

CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG
SPACING CRITERIA : 1.22 1.22
LUMINOUS LENGTH : 46.000 21.750

LUMINANCE DATA IN CANDELA/SQ M

| ANGLE IN DEG | AVERAGE 0-DEG | AVERAGE 45-DEG | AVERAGE 90-DEG |
|--------------|---------------|----------------|----------------|
| 45 | 3302. | 3295. | 3300. |
| 55 | 3133. | 3120. | 3095. |
| 65 | 2903. | 2848. | 2826. |
| 75 | 2472. | 2376. | 2334. |
| 85 | 1635. | 1546. | 1493. |



LEGEND:

0-deg - - - - -
45-deg - - - - -
90-deg - - - - -

Checked M KLOPF
Approved R BEATTIE
Lighting Engineer



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CANDELA DISTRIBUTION LATERAL ANGLE

| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|------|------|------|------|------|------|
| 0.0 | 2373 | 2373 | 2373 | 2373 | 2373 |
| 2.5 | 2371 | 2371 | 2370 | 2370 | 2370 |
| 5.0 | 2362 | 2362 | 2361 | 2361 | 2361 |
| 7.5 | 2347 | 2346 | 2345 | 2345 | 2345 |
| 10.0 | 2323 | 2325 | 2324 | 2324 | 2326 |
| 12.5 | 2294 | 2295 | 2297 | 2297 | 2296 |
| 15.0 | 2261 | 2261 | 2263 | 2263 | 2262 |
| 17.5 | 2222 | 2223 | 2223 | 2223 | 2223 |
| 20.0 | 2177 | 2178 | 2178 | 2178 | 2178 |
| 22.5 | 2128 | 2128 | 2128 | 2129 | 2128 |
| 25.0 | 2073 | 2073 | 2073 | 2074 | 2073 |
| 27.5 | 2014 | 2014 | 2014 | 2015 | 2014 |
| 30.0 | 1951 | 1950 | 1950 | 1952 | 1950 |
| 32.5 | 1884 | 1885 | 1885 | 1886 | 1886 |
| 35.0 | 1814 | 1814 | 1816 | 1815 | 1815 |
| 37.5 | 1741 | 1741 | 1742 | 1742 | 1745 |
| 40.0 | 1666 | 1667 | 1666 | 1666 | 1669 |
| 42.5 | 1588 | 1587 | 1586 | 1586 | 1588 |
| 45.0 | 1507 | 1506 | 1504 | 1504 | 1506 |
| 47.5 | 1420 | 1422 | 1418 | 1417 | 1422 |
| 50.0 | 1336 | 1335 | 1333 | 1332 | 1337 |
| 52.5 | 1249 | 1245 | 1244 | 1243 | 1247 |
| 55.0 | 1160 | 1158 | 1155 | 1150 | 1146 |
| 57.5 | 1068 | 1066 | 1064 | 1058 | 1053 |
| 60.0 | 975 | 972 | 968 | 962 | 958 |
| 62.5 | 885 | 879 | 873 | 866 | 862 |
| 65.0 | 792 | 788 | 777 | 770 | 771 |
| 67.5 | 696 | 692 | 680 | 673 | 673 |
| 70.0 | 600 | 596 | 585 | 577 | 575 |
| 72.5 | 506 | 502 | 490 | 483 | 481 |
| 75.0 | 413 | 408 | 397 | 391 | 390 |
| 77.5 | 323 | 318 | 309 | 304 | 302 |
| 80.0 | 239 | 234 | 227 | 223 | 222 |
| 82.5 | 161 | 157 | 153 | 150 | 149 |
| 85.0 | 92 | 90 | 87 | 85 | 84 |
| 87.5 | 34 | 35 | 32 | 30 | 30 |
| 90.0 | 0 | 0 | 0 | 0 | 0 |



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5-DEGREE
ZONAL LUMEN SUMMARY

| | |
|--------|-----|
| 0- 5 | 57 |
| 5- 10 | 168 |
| 10- 15 | 272 |
| 15- 20 | 366 |
| 20- 25 | 446 |
| 25- 30 | 509 |
| 30- 35 | 555 |
| 35- 40 | 581 |
| 40- 45 | 587 |
| 45- 50 | 573 |
| 50- 55 | 541 |
| 55- 60 | 490 |
| 60- 65 | 424 |
| 65- 70 | 345 |
| 70- 75 | 257 |
| 75- 80 | 167 |
| 80- 85 | 85 |
| 85- 90 | 21 |

10-DEGREE
ZONAL LUMEN SUMMARY

| | |
|-------|------|
| 0- 10 | 224 |
| 0- 20 | 862 |
| 0- 30 | 1817 |
| 0- 40 | 2952 |
| 0- 50 | 4113 |
| 0- 60 | 5144 |
| 0- 70 | 5914 |
| 0- 80 | 6338 |
| 0- 90 | 6444 |



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 84 | 79 | 97 | 89 | 83 | 78 | 86 | 80 | 76 | 82 | 78 | 74 | 79 | 76 | 72 | 70 |
| 3 | 90 | 80 | 72 | 65 | 88 | 78 | 71 | 65 | 75 | 69 | 64 | 73 | 67 | 63 | 70 | 65 | 61 | 59 |
| 4 | 83 | 71 | 62 | 55 | 81 | 70 | 61 | 55 | 67 | 60 | 54 | 65 | 59 | 54 | 63 | 57 | 53 | 51 |
| 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 56 | 51 | 46 | 44 |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 40 | 38 |
| 7 | 65 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 49 | 42 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 38 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 30 |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 27 | 25 |

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.



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