



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: ITL85136

PAGE: 1 OF 5

ISSUE DATE: 08/14/15

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: HP-2-D-4ft-V-8-35

LUMINAIRE: FABRICATED METAL HOUSING WITH WHITE PAINTED GENERAL INTERIOR FINISH, CAST WHITE PAINTED METAL END CAPS, FORMED WHITE PAINTED METAL CIRCUIT BOARD MOUNT/REFLECTOR, 2 WHITE CIRCUIT BOARDS EACH WITH 80 LEDS, TRANSLUCENT WHITE FROSTED PLASTIC DIFFUSER. DIFFUSER FROSTED BOTH SIDES.

LAMPS: ONE HUNDRED SIXTY WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.

INPUT ELECTRICAL: 277.0 VOLTS, 37.7 WATTS, 0.144 AMPS

MOUNTING: SUSPENDED

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 700mA OUTPUT.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (277VAC, 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 | FLUX |
|----|------|------|------|------|------|------|
| 0 | 1334 | 1334 | 1334 | 1334 | 1334 | |
| 5 | 1327 | 1326 | 1326 | 1325 | 1324 | 126 |
| 15 | 1263 | 1252 | 1251 | 1244 | 1236 | 352 |
| 25 | 1133 | 1117 | 1109 | 1088 | 1075 | 508 |
| 35 | 958 | 942 | 923 | 896 | 887 | 576 |
| 45 | 762 | 747 | 725 | 697 | 686 | 558 |
| 55 | 563 | 551 | 532 | 509 | 500 | 475 |
| 65 | 374 | 365 | 351 | 337 | 331 | 349 |
| 75 | 206 | 201 | 195 | 188 | 184 | 207 |
| 85 | 62 | 61 | 59 | 57 | 57 | 66 |
| 90 | 0 | 0 | 0 | 0 | 0 | |

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %FIXT |
|--------|--------|-------|
| 0- 30 | 985 | 30.6 |
| 0- 40 | 1561 | 48.6 |
| 0- 60 | 2594 | 80.7 |
| 0- 90 | 3215 | 100.0 |
| 90-180 | 0 | 0.0 |
| 0-180 | 3215 | 100.0 |

EFFICACY (277V) = 85.3 lm/W

EFFICACY (120V) = 87.4 lm/W **

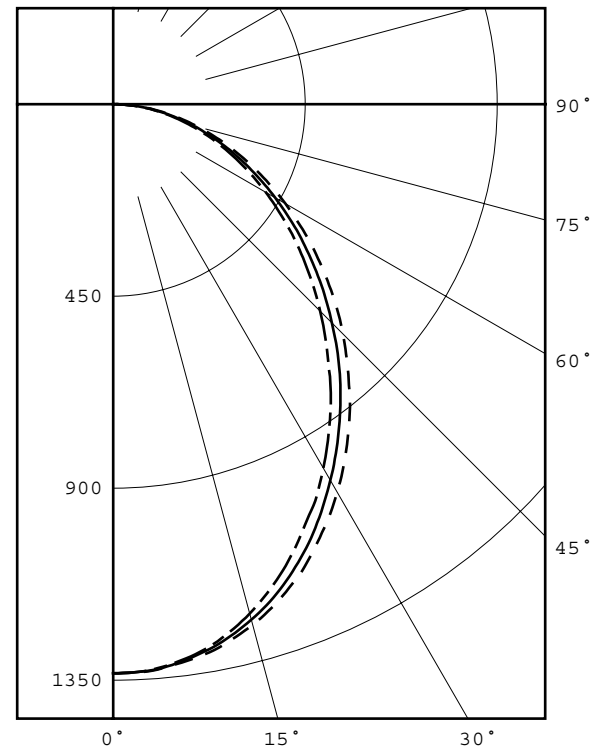
** THE EFFICACY AT 120 VOLTS IS BASED ON THE LUMENS FROM THIS REPORT AND THE WATTAGE MEASURED AT 120 VOLTS FROM ITL REPORT NUMBER ITL85136-THD.

CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG
SPACING CRITERIA : 1.18 1.12
LUMINOUS LENGTH : 48.000 2.125

LUMINANCE DATA IN CANDELA/SQ M

| ANGLE IN DEG | AVERAGE 0-DEG | AVERAGE 45-DEG | AVERAGE 90-DEG |
|--------------|---------------|----------------|----------------|
| 45 | 16376. | 15581. | 14743. |
| 55 | 14916. | 14095. | 13247. |
| 65 | 13448. | 12621. | 11902. |
| 75 | 12095. | 11449. | 10803. |
| 85 | 10810. | 10287. | 9938. |



LEGEND:

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

Checked M KLOPF
Approved R BEATTIE
Lighting Engineer



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PAGE: 2 OF 5

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CANDELA DISTRIBUTION LATERAL ANGLE

| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|------|------|------|------|------|------|
| 0.0 | 1334 | 1334 | 1334 | 1334 | 1334 |
| 2.5 | 1333 | 1332 | 1332 | 1332 | 1332 |
| 5.0 | 1327 | 1326 | 1326 | 1325 | 1324 |
| 7.5 | 1316 | 1316 | 1313 | 1312 | 1310 |
| 10.0 | 1304 | 1298 | 1297 | 1295 | 1292 |
| 12.5 | 1285 | 1277 | 1276 | 1272 | 1266 |
| 15.0 | 1263 | 1252 | 1251 | 1244 | 1236 |
| 17.5 | 1237 | 1223 | 1222 | 1212 | 1201 |
| 20.0 | 1206 | 1191 | 1188 | 1174 | 1163 |
| 22.5 | 1173 | 1156 | 1150 | 1133 | 1120 |
| 25.0 | 1133 | 1117 | 1109 | 1088 | 1075 |
| 27.5 | 1093 | 1075 | 1064 | 1042 | 1034 |
| 30.0 | 1050 | 1032 | 1018 | 994 | 985 |
| 32.5 | 1005 | 989 | 971 | 946 | 936 |
| 35.0 | 958 | 942 | 923 | 896 | 887 |
| 37.5 | 911 | 895 | 875 | 847 | 837 |
| 40.0 | 860 | 844 | 826 | 796 | 784 |
| 42.5 | 810 | 797 | 776 | 745 | 735 |
| 45.0 | 762 | 747 | 725 | 697 | 686 |
| 47.5 | 712 | 698 | 676 | 649 | 638 |
| 50.0 | 661 | 649 | 627 | 601 | 591 |
| 52.5 | 611 | 599 | 578 | 554 | 545 |
| 55.0 | 563 | 551 | 532 | 509 | 500 |
| 57.5 | 513 | 503 | 484 | 463 | 455 |
| 60.0 | 466 | 456 | 438 | 420 | 413 |
| 62.5 | 419 | 410 | 394 | 378 | 371 |
| 65.0 | 374 | 365 | 351 | 337 | 331 |
| 67.5 | 330 | 322 | 310 | 299 | 292 |
| 70.0 | 288 | 281 | 270 | 261 | 255 |
| 72.5 | 246 | 240 | 231 | 224 | 219 |
| 75.0 | 206 | 201 | 195 | 188 | 184 |
| 77.5 | 168 | 164 | 159 | 153 | 150 |
| 80.0 | 131 | 129 | 124 | 120 | 119 |
| 82.5 | 96 | 95 | 91 | 89 | 88 |
| 85.0 | 62 | 61 | 59 | 57 | 57 |
| 87.5 | 28 | 28 | 28 | 27 | 27 |
| 90.0 | 0 | 0 | 0 | 0 | 0 |



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PAGE: 3 OF 5

5-DEGREE
ZONAL LUMEN SUMMARY

| | |
|--------|-----|
| 0- 5 | 32 |
| 5- 10 | 94 |
| 10- 15 | 151 |
| 15- 20 | 201 |
| 20- 25 | 240 |
| 25- 30 | 268 |
| 30- 35 | 285 |
| 35- 40 | 291 |
| 40- 45 | 286 |
| 45- 50 | 272 |
| 50- 55 | 251 |
| 55- 60 | 224 |
| 60- 65 | 192 |
| 65- 70 | 157 |
| 70- 75 | 121 |
| 75- 80 | 85 |
| 80- 85 | 50 |
| 85- 90 | 16 |

10-DEGREE
ZONAL LUMEN SUMMARY

| | |
|-------|------|
| 0- 10 | 126 |
| 0- 20 | 477 |
| 0- 30 | 985 |
| 0- 40 | 1561 |
| 0- 50 | 2120 |
| 0- 60 | 2594 |
| 0- 70 | 2943 |
| 0- 80 | 3150 |
| 0- 90 | 3215 |



REPORT NUMBER: ITL85136

PAGE: 4 OF 5

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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 | 85 | 79 | 97 | 90 | 83 | 78 | 86 | 81 | 76 | 83 | 78 | 75 | 80 | 76 | 73 | 71 |
| 3 | 91 | 81 | 73 | 66 | 89 | 79 | 72 | 66 | 76 | 70 | 65 | 73 | 68 | 64 | 71 | 66 | 62 | 60 |
| 4 | 84 | 72 | 63 | 57 | 81 | 71 | 63 | 56 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 58 | 54 | 52 |
| 5 | 77 | 65 | 56 | 49 | 75 | 63 | 55 | 49 | 61 | 54 | 48 | 59 | 53 | 48 | 57 | 52 | 47 | 45 |
| 6 | 71 | 58 | 50 | 43 | 69 | 57 | 49 | 43 | 56 | 48 | 43 | 54 | 47 | 42 | 52 | 47 | 42 | 40 |
| 7 | 66 | 53 | 44 | 38 | 65 | 52 | 44 | 38 | 51 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 37 | 36 |
| 8 | 62 | 49 | 40 | 35 | 60 | 48 | 40 | 34 | 47 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 32 |
| 9 | 58 | 45 | 37 | 31 | 56 | 44 | 36 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 31 | 29 |
| 10 | 54 | 41 | 34 | 28 | 53 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 |

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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PAGE: 5 OF 5

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