

LUMINAIRE: LLHP3-40VL-W-EU
 LLHP Led High Bay, Industrial
 11" x 36" led with wide distribution optics
BALLAST: PISE-Z202B
BALLAST FACTOR: 1.00
LAMP: Led
FIXTURE LUMENS: 39561
WATTS: 423.20
MOUNTING: Pendant
SHIELDING ANGLE: 0° = 90 90° = 90
SPACING CRITERION: 0° = 1.09 90° = 1.08
LUMINOUS OPENING IN FEET
 LENGTH: 0.79
 WIDTH: 3.00
 HEIGHT: 0.00

TEST #14.00174
 DATE: 9/2/2014

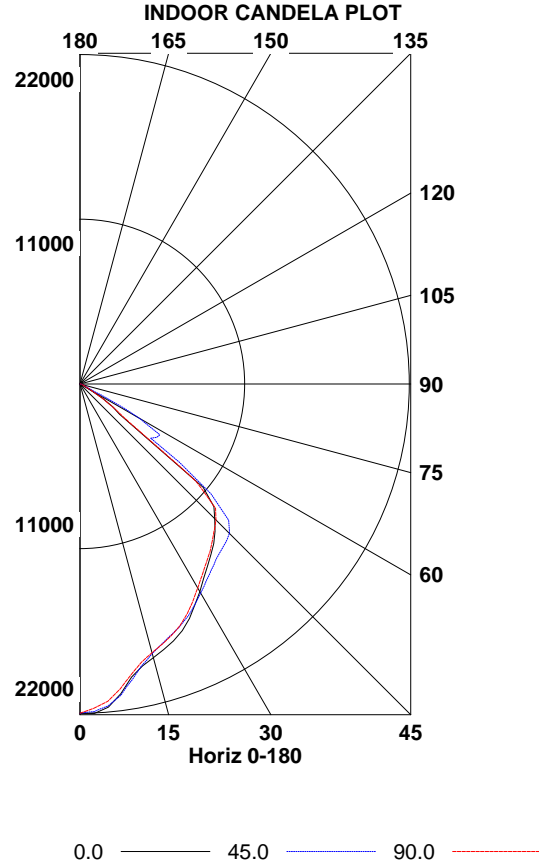
TOTAL LUMINAIRE EFFICIENCY = 100.0
TOTAL LUMENS PER WATT = 93
ANSI/IESNA RP-1-2004 COMPLIANCE: NONCOMPLIANT
COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$2.55
BASED ON 3000 HRS. AND \$.08 PER KWH

ZONAL LUMENS

| ZONE | LUMENS | % LAMP | % FIXTURE |
|--------|--------|--------|-----------|
| 0-30 | 15180 | 38.4 | 38.4 |
| 0-40 | 24594 | 62.2 | 62.2 |
| 0-60 | 38683 | 97.8 | 97.8 |
| 0-90 | 39560 | 100.0 | 100.0 |
| 90-120 | 1 | 0.0 | 0.0 |
| 90-130 | 1 | 0.0 | 0.0 |
| 90-150 | 1 | 0.0 | 0.0 |
| 90-180 | 1 | 0.0 | 0.0 |
| 0-180 | 39561 | 100.0 | 100.0 |

AVERAGE LUMINANCE

| ANGLE | CANDELA/SQ M | | | | |
|-------|--------------|-------|-------|-------|-------|
| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
| 0 | 99845 | 99845 | 99845 | 99845 | 99845 |
| 30 | 83967 | 83936 | 84523 | 83055 | 82494 |
| 40 | 82428 | 84462 | 86567 | 83863 | 81438 |
| 45 | 81700 | 85850 | 90635 | 86126 | 82471 |
| 50 | 75893 | 76288 | 80478 | 73441 | 71498 |
| 55 | 21142 | 24634 | 49323 | 24840 | 20928 |
| 60 | 7785 | 11100 | 41893 | 11373 | 8048 |
| 65 | 3428 | 3084 | 4965 | 3084 | 4148 |
| 70 | 3028 | 2815 | 2988 | 2815 | 3134 |
| 75 | 2615 | 3439 | 3615 | 3527 | 2632 |
| 80 | 2694 | 3949 | 3322 | 4028 | 2877 |
| 85 | 2658 | 4273 | 3231 | 4794 | 2970 |



COEFFICIENTS OF UTILIZATION (%)

| RC | EFFECTIVE FLOOR CAVITY REFLECTANCE = 20% | | | | | | | | | | | | | | | | | | |
|----|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| | 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 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98 | 98 | 96 | 95 | 95 | 93 | 92 | 90 | |
| 2 | 104 | 98 | 93 | 88 | 102 | 96 | 91 | 87 | 93 | 89 | 85 | 90 | 86 | 84 | 87 | 84 | 82 | 80 | |
| 3 | 97 | 89 | 82 | 77 | 95 | 87 | 81 | 76 | 84 | 79 | 75 | 82 | 77 | 74 | 79 | 76 | 73 | 71 | |
| R | 4 | 90 | 80 | 73 | 68 | 88 | 79 | 72 | 67 | 77 | 71 | 66 | 74 | 69 | 65 | 72 | 68 | 65 | 63 |
| C | 5 | 84 | 73 | 65 | 60 | 82 | 72 | 65 | 59 | 70 | 64 | 59 | 68 | 63 | 58 | 66 | 61 | 58 | 56 |
| R | 6 | 78 | 66 | 59 | 53 | 76 | 65 | 58 | 53 | 64 | 57 | 53 | 62 | 56 | 52 | 61 | 56 | 52 | 50 |
| | 7 | 72 | 61 | 53 | 48 | 71 | 60 | 53 | 47 | 58 | 52 | 47 | 57 | 51 | 47 | 56 | 51 | 47 | 45 |
| | 8 | 68 | 56 | 48 | 43 | 66 | 55 | 48 | 43 | 54 | 47 | 43 | 53 | 47 | 42 | 52 | 46 | 42 | 40 |
| | 9 | 63 | 51 | 44 | 39 | 62 | 51 | 44 | 39 | 50 | 43 | 39 | 49 | 43 | 39 | 48 | 42 | 38 | 37 |
| | 10 | 60 | 48 | 40 | 36 | 58 | 47 | 40 | 36 | 46 | 40 | 35 | 45 | 39 | 35 | 44 | 39 | 35 | 34 |

RCR = ROOM CAVITY RATIO RC = EFFECTIVE CEILING CAVITY REFLECTANCE RW = WALL REFLECTANCE

THE DATA IN THIS REPORT ARE BASED ON ABSOLUTE MEASUREMENTS.
 ANSI/IESNA RP-1 COMPLIANCE IS BASED ON ABSOLUTE MEASUREMENTS.
 THIS TEST RUN IN ACCORDANCE WITH CURRENT I.E.S.N.A. PUBLISHED PROCEDURES.

APPROVED BY: _____

LUMINAIRE: LLHP3-40VL-W-EU
LLHP Led High Bay, Industrial
11" x 36" led with wide distribution optics

TEST #14.00174
DATE: 9/2/2014

CANDELA VALUES

| ANGLE | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|-------|---------------|-------|-------|-------|-------|
| 0.0 | 21984 | 21984 | 21984 | 21984 | 21984 |
| 2.5 | 22026* | 21982 | 21908 | 21814 | 21668 |
| 5.0 | 21667 | 21639 | 21582 | 21441 | 21271 |
| 7.5 | 20863 | 20922 | 20957 | 20749 | 20542 |
| 10.0 | 19862 | 19955 | 20060 | 19920 | 19698 |
| 12.5 | 19284 | 19250 | 19226 | 19190 | 19026 |
| 15.0 | 18925 | 18826 | 18634 | 18696 | 18585 |
| 17.5 | 18600 | 18460 | 18200 | 18297 | 18223 |
| 20.0 | 18258 | 18101 | 17826 | 17898 | 17866 |
| 22.5 | 17833 | 17668 | 17484 | 17441 | 17460 |
| 25.0 | 17282 | 17167 | 17092 | 16964 | 16930 |
| 27.5 | 16623 | 16592 | 16615 | 16391 | 16337 |
| 30.0 | 16011 | 16005 | 16117 | 15837 | 15730 |
| 32.5 | 15378 | 15479 | 15650 | 15347 | 15181 |
| 35.0 | 14838 | 15003 | 15237 | 14897 | 14662 |
| 37.5 | 14365 | 14598 | 14872 | 14495 | 14219 |
| 40.0 | 13903 | 14246 | 14601 | 14145 | 13736 |
| 42.5 | 13341 | 13860 | 14384 | 13820 | 13277 |
| 45.0 | 12720 | 13366 | 14111 | 13409 | 12840 |
| 47.5 | 12126 | 12543 | 13466 | 12668 | 12280 |
| 50.0 | 10741 | 10797 | 11390 | 10394 | 10119 |
| 52.5 | 3324 | 3996 | 5952 | 4200 | 3724 |
| 55.0 | 2670 | 3111 | 6229 | 3137 | 2643 |
| 57.5 | 1817 | 2419 | 6319 | 2432 | 1754 |
| 60.0 | 857 | 1222 | 4612 | 1252 | 886 |
| 62.5 | 440 | 436 | 1602 | 458 | 469 |
| 65.0 | 319 | 287 | 462 | 287 | 386 |
| 67.5 | 294 | 236 | 310 | 237 | 302 |
| 70.0 | 228 | 212 | 225 | 212 | 236 |
| 72.5 | 192 | 207 | 209 | 206 | 194 |
| 75.0 | 149 | 196 | 206 | 201 | 150 |
| 77.5 | 121 | 173 | 185 | 179 | 123 |
| 80.0 | 103 | 151 | 127 | 154 | 110 |
| 82.5 | 82 | 125 | 84 | 128 | 83 |
| 85.0 | 51 | 82 | 62 | 92 | 57 |
| 87.5 | 26 | 45 | 39 | 54 | 32 |
| 90.0 | 3 | 9 | 7 | 10 | 3 |
| 92.5 | 0 | 0 | 0 | 0 | 0 |
| 95.0 | 0 | 0 | 0 | 0 | 0 |
| 97.5 | 0 | 0 | 0 | 0 | 0 |
| 100.0 | 0 | 0 | 0 | 0 | 0 |
| 102.5 | 0 | 0 | 0 | 0 | 0 |
| 105.0 | 0 | 0 | 0 | 0 | 0 |
| 107.5 | 0 | 0 | 0 | 0 | 0 |
| 110.0 | 0 | 0 | 0 | 0 | 0 |
| 112.5 | 0 | 0 | 0 | 0 | 0 |
| 115.0 | 0 | 0 | 0 | 0 | 0 |
| 117.5 | 0 | 0 | 0 | 0 | 0 |
| 120.0 | 0 | 0 | 0 | 0 | 0 |
| 122.5 | 0 | 0 | 0 | 0 | 0 |
| 125.0 | 0 | 0 | 0 | 0 | 0 |
| 127.5 | 0 | 0 | 0 | 0 | 0 |
| 130.0 | 0 | 0 | 0 | 0 | 0 |
| 132.5 | 0 | 0 | 0 | 0 | 0 |
| 135.0 | 0 | 0 | 0 | 0 | 0 |
| 137.5 | 0 | 0 | 0 | 0 | 0 |
| 140.0 | 0 | 0 | 0 | 0 | 0 |
| 142.5 | 0 | 0 | 0 | 0 | 0 |
| 145.0 | 0 | 0 | 0 | 0 | 0 |
| 147.5 | 0 | 0 | 0 | 0 | 0 |
| 150.0 | 0 | 0 | 0 | 0 | 0 |
| 152.5 | 0 | 0 | 0 | 0 | 0 |
| 155.0 | 0 | 0 | 0 | 0 | 0 |
| 157.5 | 0 | 0 | 0 | 0 | 0 |
| 160.0 | 0 | 0 | 0 | 0 | 0 |
| 162.5 | 0 | 0 | 0 | 0 | 0 |
| 165.0 | 0 | 0 | 0 | 0 | 0 |
| 167.5 | 0 | 0 | 0 | 0 | 0 |
| 170.0 | 0 | 0 | 0 | 0 | 0 |
| 172.5 | 0 | 0 | 0 | 0 | 0 |
| 175.0 | 0 | 0 | 0 | 0 | 0 |
| 177.5 | 0 | 0 | 0 | 0 | 0 |
| 180.0 | 0 | 0 | 0 | 0 | 0 |

*MAXIMUM CANDELA VALUE