

LUMINAIRE: LLHP2-50-H-W-EDU
 LLHP Led High Bay, Industrial
 11" x 24" led with wide distribution optics
BALLAST: (2) TRC-152Q070DT
BALLAST FACTOR: 1.00
LAMP: Led
FIXTURE LUMENS: 27068
WATTS: 281.00
MOUNTING: Pendant
SHIELDING ANGLE: 0° = 90 90° = 90
SPACING CRITERION: 0° = 1.36 90° = 1.36
LUMINOUS OPENING IN FEET
 LENGTH: 1.58
 WIDTH: 0.67
 HEIGHT: 0.00

TEST #5960

DATE: 10/10/2012

TOTAL LUMINAIRE EFFICIENCY = 100.0

TOTAL LUMENS PER WATT = 96

ANSI/IESNA RP-1-2004 COMPLIANCE: NONCOMPLIANT

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$2.50
BASED ON 3000 HRS. AND \$.08 PER KWH

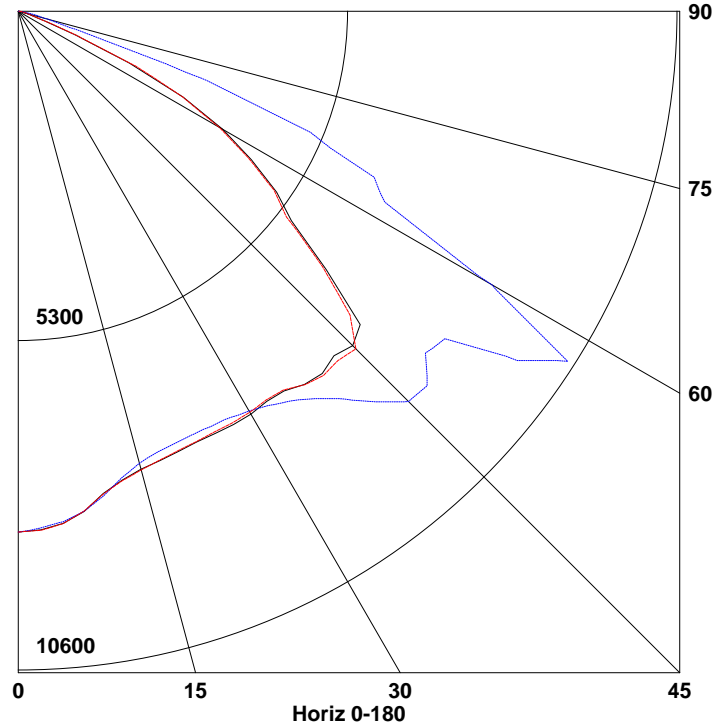
ZONAL LUMENS

| ZONE | LUMENS | % LAMP | % FIXTURE |
|-------|--------|--------|-----------|
| 0-30 | 6376 | 23.6 | 23.6 |
| 0-40 | 11167 | 41.3 | 41.3 |
| 0-60 | 23257 | 85.9 | 85.9 |
| 0-90 | 27068 | 100.0 | 100.0 |
| 0-180 | 27068 | 100.0 | 100.0 |

AVERAGE LUMINANCE

| ANGLE | CANDELA/SQ M | | | | |
|-------|--------------|--------|--------|--------|--------|
| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
| 0 | 85198 | 85198 | 85198 | 85198 | 85198 |
| 30 | 87870 | 87917 | 87177 | 86778 | 87459 |
| 40 | 100985 | 106440 | 108086 | 106188 | 101489 |
| 45 | 109416 | 118519 | 127664 | 119381 | 110452 |
| 50 | 102331 | 110510 | 135282 | 110051 | 101034 |
| 55 | 89985 | 105816 | 173694 | 105284 | 89116 |
| 60 | 77196 | 98793 | 178979 | 98468 | 76098 |
| 65 | 47350 | 74273 | 151986 | 75572 | 49876 |
| 70 | 13200 | 15281 | 84878 | 15578 | 12903 |
| 75 | 5775 | 7229 | 19879 | 7307 | 6247 |
| 80 | 4392 | 4802 | 10072 | 4802 | 4860 |
| 85 | 4550 | 5133 | 4667 | 4900 | 4900 |

INDOOR CANDELA PLOT



0.0 ——— 45.0 ——— 90.0 ——— 180.0 ———

COEFFICIENTS OF UTILIZATION (%)

| RC | EFFECTIVE FLOOR CAVITY REFLECTANCE = 20% | | | | | | | | | | | | | | | | | | |
|----|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 80% | | | | 70% | | | | 50% | | | | 30% | | | | | | |
| | 70% | 50% | 30% | 10% | 70% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0% | |
| RW | 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| | 1 | 110 | 106 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 94 | 95 | 93 | 91 | 92 | 90 | 88 | 86 |
| | 2 | 100 | 93 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 78 | 75 | 72 |
| | 3 | 91 | 81 | 73 | 67 | 89 | 79 | 72 | 66 | 77 | 70 | 65 | 74 | 68 | 64 | 71 | 67 | 63 | 61 |
| R | 4 | 83 | 71 | 63 | 56 | 81 | 70 | 62 | 56 | 68 | 61 | 55 | 65 | 59 | 54 | 63 | 58 | 53 | 51 |
| C | 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 47 | 60 | 53 | 47 | 58 | 51 | 46 | 56 | 50 | 46 | 44 |
| R | 6 | 70 | 56 | 47 | 41 | 68 | 56 | 47 | 41 | 54 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 40 | 38 |
| | 7 | 64 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 33 |
| | 8 | 60 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 29 |
| | 9 | 56 | 42 | 34 | 28 | 54 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 27 | 25 |
| | 10 | 52 | 38 | 30 | 25 | 51 | 38 | 30 | 25 | 37 | 30 | 25 | 36 | 29 | 25 | 35 | 29 | 25 | 23 |

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: LLHP2-50-H-W-EDU
LLHP Led High Bay, Industrial
11" x 24" led with wide distribution optics

TEST #5960
DATE: 10/10/2012

CANDELA VALUES

| ANGLE | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|-------|------|------|---------------|------|------|
| 0.0 | 8379 | 8379 | 8379 | 8379 | 8379 |
| 2.5 | 8351 | 8422 | 8320 | 8316 | 8357 |
| 5.0 | 8272 | 8343 | 8246 | 8234 | 8274 |
| 7.5 | 8117 | 8201 | 8112 | 8088 | 8111 |
| 10.0 | 7878 | 7973 | 7915 | 7867 | 7886 |
| 12.5 | 7726 | 7771 | 7687 | 7687 | 7736 |
| 15.0 | 7628 | 7646 | 7528 | 7574 | 7640 |
| 17.5 | 7580 | 7559 | 7439 | 7489 | 7570 |
| 20.0 | 7535 | 7515 | 7394 | 7429 | 7522 |
| 22.5 | 7500 | 7481 | 7367 | 7387 | 7491 |
| 25.0 | 7494 | 7460 | 7364 | 7363 | 7468 |
| 27.5 | 7496 | 7455 | 7371 | 7362 | 7463 |
| 30.0 | 7484 | 7488 | 7425 | 7391 | 7449 |
| 32.5 | 7442 | 7526 | 7516 | 7438 | 7415 |
| 35.0 | 7456 | 7614 | 7653 | 7539 | 7437 |
| 37.5 | 7565 | 7795 | 7855 | 7737 | 7572 |
| 40.0 | 7608 | 8019 | 8143 | 8000 | 7646 |
| 42.5 | 7516 | 8176 | 8523 | 8234 | 7618 |
| 45.0 | 7609 | 8242 | 8878 | 8302 | 7681 |
| 47.5 | 7460 | 7990 | 8920 | 7863 | 7241 |
| 50.0 | 6469 | 6986 | 8552 | 6957 | 6387 |
| 52.5 | 5537 | 6216 | 8650 | 6192 | 5440 |
| 55.0 | 5076 | 5969 | 9798 | 5939 | 5027 |
| 57.5 | 4448 | 5726 | 10481* | 5725 | 4392 |
| 60.0 | 3796 | 4858 | 8801 | 4842 | 3742 |
| 62.5 | 2992 | 4017 | 6646 | 4021 | 2981 |
| 65.0 | 1968 | 3087 | 6317 | 3141 | 2073 |
| 67.5 | 990 | 1557 | 5091 | 1607 | 1019 |
| 70.0 | 444 | 514 | 2855 | 524 | 434 |
| 72.5 | 235 | 268 | 980 | 271 | 238 |
| 75.0 | 147 | 184 | 506 | 186 | 159 |
| 77.5 | 96 | 125 | 309 | 124 | 112 |
| 80.0 | 75 | 82 | 172 | 82 | 83 |
| 82.5 | 56 | 60 | 79 | 63 | 63 |
| 85.0 | 39 | 44 | 40 | 42 | 42 |
| 87.5 | 21 | 32 | 24 | 28 | 21 |
| 90.0 | 0 | 0 | 0 | 0 | 0 |

*MAXIMUM CANDELA VALUE