

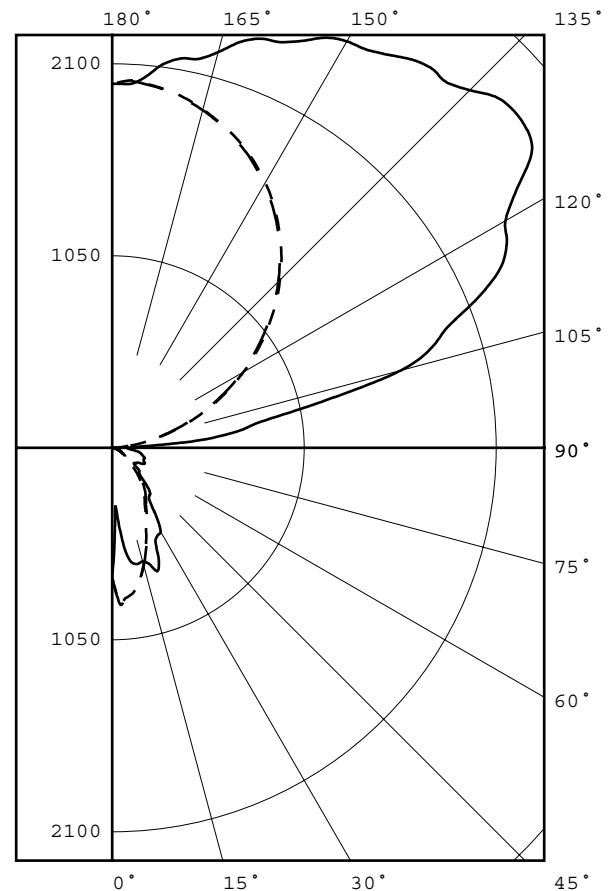
**LEXALITE
INTERNATIONAL
CORPORATION**

10163 U.S. 31 North
Charlevoix, MI 49720
Phone (231) 547-6584 • Fax (231) 547-5833

REPORT NUMBER: 03161
PREPARED FOR: ADAM METALS
CATALOG NUMBER: 851
LUMINAIRE: DIRECT/INDIRECT WITH NEW REFLECTOR AND LOUVERS
LAMP CAT. NO.: 183-185
LAMPS: THREE 54W T5 LINEAR FLUORESCENT FP54/835HO/ECO
BALLAST CAT. NO.: N/A
BALLAST: FULHAM WORKHORSE 7
REFERENCE ONLY
MOUNTING: PENDANT
REPORT IS BASED ON 5000 LUMENS PER LAMP.

DATE: 07/01/09

| CANDELA DISTRIBUTION | | | | | | FLUX |
|----------------------|------|------|------|-------|-------|------|
| | 0.0 | 45.0 | 90.0 | 135.0 | 180.0 | |
| 0 | 711 | 711 | 711 | 711 | 711 | |
| 5 | 826 | 770 | 424 | 776 | 829 | 69 |
| 15 | 663 | 669 | 643 | 680 | 667 | 188 |
| 25 | 436 | 503 | 560 | 508 | 451 | 242 |
| 35 | 303 | 370 | 360 | 370 | 319 | 230 |
| 45 | 184 | 224 | 222 | 228 | 200 | 177 |
| 55 | 86 | 127 | 146 | 130 | 91 | 114 |
| 65 | 52 | 77 | 197 | 80 | 56 | 100 |
| 75 | 24 | 49 | 175 | 51 | 28 | 80 |
| 85 | 6 | 24 | 101 | 26 | 7 | 43 |
| 90 | 1 | 53 | 77 | 26 | 1 | |
| 95 | 58 | 363 | 494 | 379 | 54 | 364 |
| 105 | 332 | 1403 | 1635 | 1404 | 323 | 1242 |
| 115 | 661 | 1946 | 2348 | 1943 | 649 | 1703 |
| 125 | 992 | 2175 | 2799 | 2163 | 978 | 1829 |
| 135 | 1297 | 2216 | 2766 | 2200 | 1285 | 1658 |
| 145 | 1562 | 2237 | 2625 | 2224 | 1552 | 1366 |
| 155 | 1772 | 2197 | 2455 | 2186 | 1763 | 1002 |
| 165 | 1916 | 2121 | 2240 | 2112 | 1912 | 598 |
| 175 | 2001 | 2020 | 2033 | 2016 | 1998 | 194 |
| 180 | 1991 | 1991 | 1991 | 1991 | 1991 | |



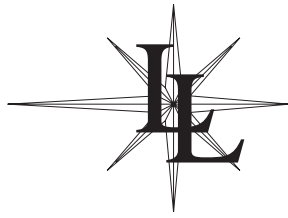
LEGEND:
0-deg: - - - - -
90-deg: _____
180-deg: - - - - -

| ZONAL LUMEN SUMMARY | | | |
|---------------------|--------|-------|-------|
| ZONE | LUMENS | %LAMP | %FIXT |
| 0- 30 | 498 | 3.3 | 4.4 |
| 0- 40 | 728 | 4.9 | 6.5 |
| 0- 60 | 1019 | 6.8 | 9.1 |
| 0- 90 | 1242 | 8.3 | 11.1 |
| 90-120 | 3309 | 22.1 | 29.6 |
| 90-130 | 5138 | 34.3 | 45.9 |
| 90-150 | 8162 | 54.4 | 72.9 |
| 90-180 | 9956 | 66.4 | 88.9 |
| 0-180 | 11198 | 74.7 | 100.0 |

TOTAL LUMINAIRE EFFICIENCY = 74.7 %

CIE TYPE - SEMI-INDIRECT
PLANE : 0-DEG 90-DEG 180-DEG
SPACING CRITERIA : 0.9 1.1 0.9

| | |
|----------|-------|
| Checked | |
| Approved | |



**LEXALITE
INTERNATIONAL
CORPORATION**

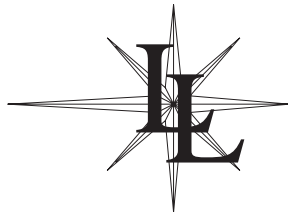
10163 U.S. 31 North
Charlevoix, MI 49720
Phone (231) 547-6584 • Fax (231) 547-5833

REPORT NUMBER: 03161
PREPARED FOR: ADAM METALS

DATE: 07/01/09

CANDELA DISTRIBUTION

| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 | 112.5 | 135.0 | 157.5 | 180.0 |
|-------|------|------|------|------|------|-------|-------|-------|-------|
| 0.0 | 711 | 711 | 711 | 711 | 711 | 711 | 711 | 711 | 711 |
| 5.0 | 826 | 817 | 770 | 604 | 424 | 625 | 776 | 828 | 829 |
| 10.0 | 773 | 775 | 731 | 650 | 640 | 671 | 750 | 784 | 775 |
| 15.0 | 663 | 681 | 669 | 647 | 643 | 630 | 680 | 694 | 667 |
| 20.0 | 543 | 590 | 595 | 624 | 718 | 623 | 604 | 615 | 550 |
| 25.0 | 436 | 504 | 503 | 545 | 560 | 535 | 508 | 515 | 451 |
| 30.0 | 357 | 409 | 447 | 500 | 530 | 497 | 449 | 429 | 369 |
| 35.0 | 303 | 337 | 370 | 384 | 360 | 388 | 370 | 354 | 319 |
| 40.0 | 248 | 283 | 306 | 307 | 323 | 315 | 318 | 304 | 267 |
| 45.0 | 184 | 225 | 224 | 233 | 222 | 235 | 228 | 236 | 200 |
| 50.0 | 114 | 161 | 171 | 180 | 192 | 188 | 183 | 173 | 125 |
| 55.0 | 86 | 104 | 127 | 131 | 146 | 134 | 130 | 112 | 91 |
| 60.0 | 69 | 64 | 96 | 133 | 162 | 132 | 102 | 70 | 74 |
| 65.0 | 52 | 50 | 77 | 152 | 197 | 158 | 80 | 53 | 56 |
| 70.0 | 37 | 40 | 67 | 133 | 183 | 140 | 72 | 43 | 41 |
| 75.0 | 24 | 31 | 49 | 119 | 175 | 121 | 51 | 34 | 28 |
| 80.0 | 12 | 20 | 34 | 87 | 156 | 96 | 38 | 23 | 14 |
| 85.0 | 6 | 13 | 24 | 57 | 101 | 58 | 26 | 14 | 7 |
| 90.0 | 1 | 17 | 53 | 68 | 77 | 42 | 26 | 12 | 1 |
| 95.0 | 58 | 328 | 363 | 370 | 494 | 419 | 379 | 306 | 54 |
| 100.0 | 184 | 721 | 912 | 930 | 831 | 861 | 845 | 701 | 175 |
| 105.0 | 332 | 980 | 1403 | 1514 | 1635 | 1553 | 1404 | 967 | 323 |
| 110.0 | 493 | 1138 | 1674 | 1959 | 1963 | 1924 | 1645 | 1136 | 481 |
| 115.0 | 661 | 1256 | 1946 | 2214 | 2348 | 2218 | 1943 | 1243 | 649 |
| 120.0 | 829 | 1384 | 2145 | 2451 | 2483 | 2415 | 2133 | 1370 | 815 |
| 125.0 | 992 | 1505 | 2175 | 2690 | 2799 | 2669 | 2163 | 1484 | 978 |
| 130.0 | 1148 | 1611 | 2196 | 2692 | 2867 | 2685 | 2184 | 1594 | 1134 |
| 135.0 | 1297 | 1709 | 2216 | 2620 | 2766 | 2613 | 2200 | 1686 | 1285 |
| 140.0 | 1436 | 1790 | 2240 | 2581 | 2712 | 2568 | 2225 | 1776 | 1423 |
| 145.0 | 1562 | 1867 | 2237 | 2524 | 2625 | 2519 | 2224 | 1844 | 1552 |
| 150.0 | 1675 | 1916 | 2231 | 2479 | 2567 | 2462 | 2216 | 1903 | 1663 |
| 155.0 | 1772 | 1964 | 2197 | 2392 | 2455 | 2395 | 2186 | 1944 | 1763 |
| 160.0 | 1851 | 1994 | 2169 | 2318 | 2381 | 2296 | 2154 | 1984 | 1843 |
| 165.0 | 1916 | 2016 | 2121 | 2207 | 2240 | 2219 | 2112 | 1998 | 1912 |
| 170.0 | 1969 | 2020 | 2077 | 2137 | 2162 | 2113 | 2064 | 2010 | 1963 |
| 175.0 | 2001 | 2019 | 2020 | 2027 | 2033 | 2040 | 2016 | 2008 | 1998 |
| 180.0 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 |



**LEXALITE
INTERNATIONAL
CORPORATION**

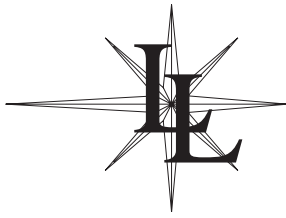
10163 U.S. 31 North
Charlevoix, MI 49720
Phone (231) 547-6584 • Fax (231) 547-5833

REPORT NUMBER: 03161
PREPARED FOR: ADAM METALS

DATE: 07/01/09

ZONAL LUMEN SUMMARY

| | |
|---------|------|
| 0- 5 | 17. |
| 5- 10 | 52. |
| 10- 15 | 84. |
| 15- 20 | 104. |
| 20- 25 | 120. |
| 25- 30 | 121. |
| 30- 35 | 121. |
| 35- 40 | 109. |
| 40- 45 | 99. |
| 45- 50 | 78. |
| 50- 55 | 63. |
| 55- 60 | 51. |
| 60- 65 | 50. |
| 65- 70 | 50. |
| 70- 75 | 44. |
| 75- 80 | 36. |
| 80- 85 | 26. |
| 85- 90 | 17. |
| 90- 95 | 60. |
| 95-100 | 304. |
| 100-105 | 521. |
| 105-110 | 721. |
| 110-115 | 815. |
| 115-120 | 888. |
| 120-125 | 917. |
| 125-130 | 911. |
| 130-135 | 863. |
| 135-140 | 795. |
| 140-145 | 726. |
| 145-150 | 640. |
| 150-155 | 551. |
| 155-160 | 451. |
| 160-165 | 351. |
| 165-170 | 247. |
| 170-175 | 147. |
| 175-180 | 48. |



**LEXALITE
INTERNATIONAL
CORPORATION**

10163 U.S. 31 North
Charlevoix, MI 49720
Phone (231) 547-6584 • Fax (231) 547-5833

REPORT NUMBER: 03161

DATE: 07/01/09

PREPARED FOR: ADAM METALS

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 | 73 | 73 | 73 | 73 | 64 | 64 | 64 | 64 | 46 | 46 | 46 | 30 | 30 | 30 | 15 | 15 | 15 | 8 |
| 1 | 67 | 63 | 61 | 58 | 58 | 55 | 53 | 51 | 40 | 39 | 38 | 26 | 26 | 25 | 13 | 13 | 13 | 7 |
| 2 | 61 | 55 | 51 | 48 | 53 | 48 | 45 | 42 | 35 | 33 | 31 | 23 | 22 | 21 | 12 | 11 | 11 | 6 |
| 3 | 55 | 49 | 44 | 40 | 48 | 43 | 39 | 35 | 31 | 29 | 26 | 21 | 19 | 18 | 11 | 10 | 9 | 5 |
| 4 | 51 | 43 | 38 | 34 | 44 | 38 | 33 | 30 | 28 | 25 | 22 | 18 | 17 | 15 | 10 | 9 | 8 | 5 |
| 5 | 46 | 38 | 33 | 29 | 40 | 34 | 29 | 25 | 25 | 22 | 19 | 16 | 15 | 13 | 9 | 8 | 7 | 4 |
| 6 | 43 | 34 | 29 | 25 | 37 | 30 | 25 | 22 | 22 | 19 | 17 | 15 | 13 | 12 | 8 | 7 | 6 | 4 |
| 7 | 39 | 31 | 25 | 21 | 34 | 27 | 22 | 19 | 20 | 17 | 15 | 13 | 12 | 10 | 7 | 6 | 6 | 3 |
| 8 | 36 | 28 | 22 | 19 | 32 | 25 | 20 | 17 | 18 | 15 | 13 | 12 | 10 | 9 | 7 | 6 | 5 | 3 |
| 9 | 34 | 25 | 20 | 17 | 29 | 22 | 18 | 15 | 17 | 14 | 11 | 11 | 9 | 8 | 6 | 5 | 5 | 3 |
| 10 | 31 | 23 | 18 | 15 | 27 | 20 | 16 | 13 | 15 | 12 | 10 | 10 | 9 | 7 | 6 | 5 | 4 | 3 |

ALL CANDELA, LUMENS, LUMINANCE, COEFFICIENT OF UTILIZATION AND VCP VALUES IN THIS REPORT ARE BASED ON RELATIVE PHOTOMETRY WHICH ASSUMES A BALLAST FACTOR OF 1.000. ANY CALCULATIONS PREPARED FROM THESE DATA SHOULD INCLUDE AN APPROPRIATE BALLAST FACTOR.