

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P838186

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-2HI-30-120-EDD-90**

Issue Date: 5/21/2024

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08  
Report Number: P838186  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ORLG-24-4-INS-ASY2R-LD4-2HI-30-120-EDD-90  
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and  
RFI grid  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

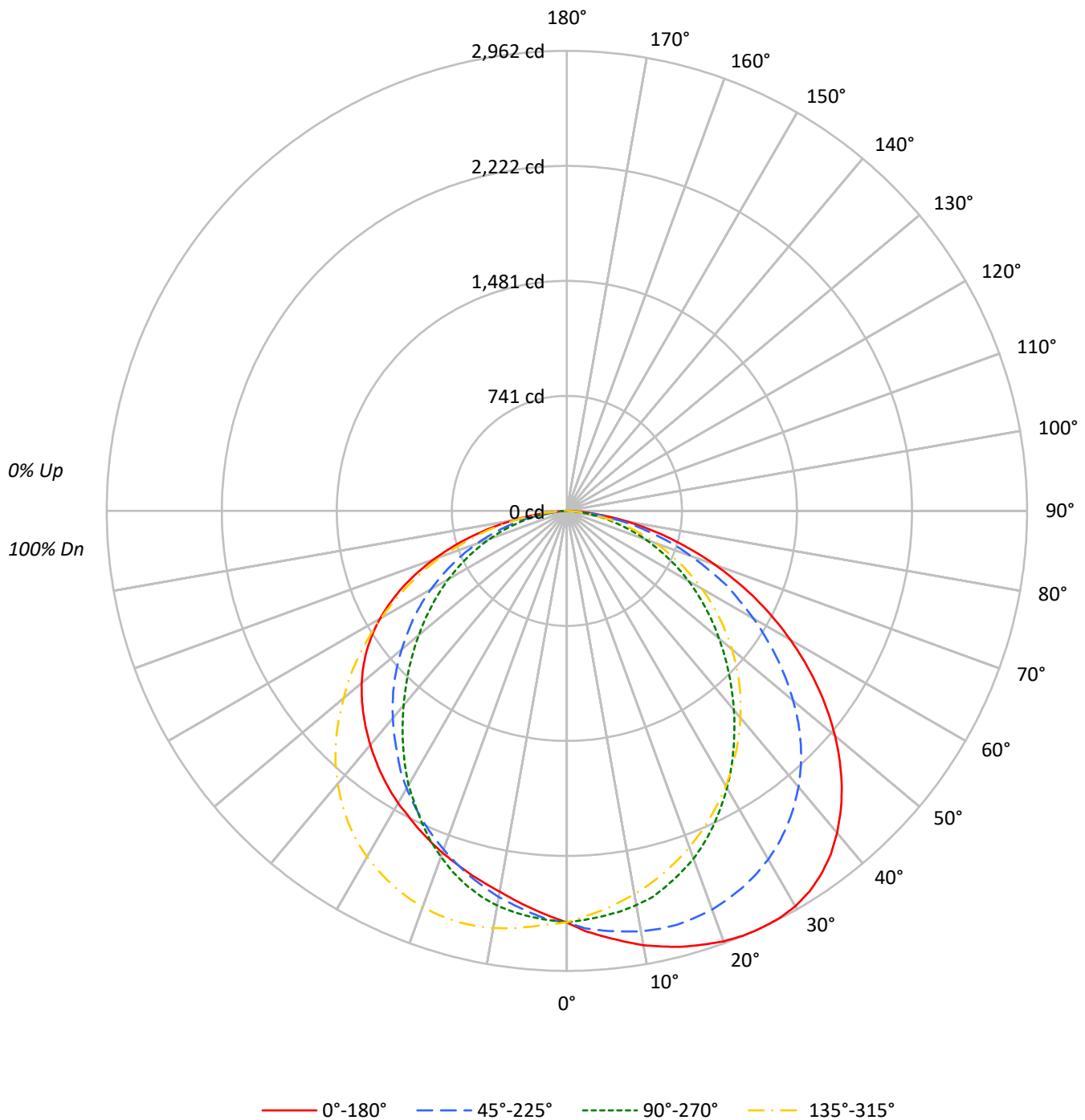
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7772.3 lumens  
Efficiency: N/A  
Efficacy: 88.3 lumens/watt  
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 88  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

TEST NUMBER: P838186  
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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| RF  | 20  |     |     |     | 20  |     |     |     |     | 20  |     |     |     |     | 20  |     |     |     |    | 20 |
| RC  | 80  |     |     |     | 70  |     |     |     |     | 50  |     |     |     |     | 30  |     |     |     |    | 10 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 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  | 94  | 97  | 94  | 91  | 94  | 91  | 89  | 90  | 88  | 86  | 84  |    |    |
| 2   | 99  | 91  | 84  | 78  | 96  | 89  | 82  | 77  | 85  | 80  | 75  | 82  | 77  | 73  | 79  | 75  | 72  | 70  |    |    |
| 3   | 90  | 79  | 71  | 65  | 88  | 78  | 70  | 64  | 75  | 68  | 63  | 72  | 66  | 62  | 69  | 65  | 61  | 59  |    |    |
| 4   | 82  | 70  | 61  | 55  | 80  | 69  | 61  | 54  | 66  | 59  | 53  | 64  | 58  | 53  | 62  | 56  | 52  | 50  |    |    |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 59  | 52  | 46  | 57  | 51  | 46  | 56  | 50  | 45  | 43  |    |    |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 54  | 46  | 40  | 52  | 45  | 40  | 50  | 44  | 40  | 38  |    |    |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 40  | 35  | 46  | 40  | 35  | 33  |    |    |
| 8   | 60  | 47  | 38  | 32  | 59  | 46  | 38  | 32  | 45  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 31  | 29  |    |    |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  | 26  |    |    |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 36  | 30  | 26  | 24  |    |    |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 90°  | 180° | 270° |
|-----|------|------|------|------|
| 0°  | 3564 | 3564 | 3564 | 3564 |
| 5°  | 3715 | 3539 | 3472 | 3545 |
| 10° | 3880 | 3521 | 3402 | 3526 |
| 15° | 4047 | 3476 | 3368 | 3477 |
| 20° | 4223 | 3413 | 3353 | 3393 |
| 25° | 4398 | 3317 | 3353 | 3283 |
| 30° | 4568 | 3202 | 3376 | 3166 |
| 35° | 4689 | 3070 | 3409 | 3022 |
| 40° | 4752 | 2938 | 3457 | 2872 |
| 45° | 4761 | 2804 | 3524 | 2734 |
| 50° | 4716 | 2676 | 3610 | 2605 |
| 55° | 4618 | 2557 | 3691 | 2486 |
| 60° | 4473 | 2433 | 3740 | 2370 |
| 65° | 4273 | 2290 | 3720 | 2237 |
| 70° | 3992 | 2122 | 3588 | 2083 |
| 75° | 3592 | 1892 | 3293 | 1882 |
| 80° | 3045 | 1585 | 2768 | 1609 |
| 85° | 2118 | 1050 | 1755 | 1078 |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 251.5  | 3.2       |
| 10°-20°   | 728.3  | 9.4       |
| 20°-30°   | 1116.2 | 14.4      |
| 30°-40°   | 1357.2 | 17.5      |
| 40°-50°   | 1410.9 | 18.2      |
| 50°-60°   | 1274.5 | 16.4      |
| 60°-70°   | 969.0  | 12.5      |
| 70°-80°   | 540.2  | 7.0       |
| 80°-90°   | 124.4  | 1.6       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 2096.1 | 27.0      |
| 0°-40°    | 3453.3 | 44.4      |
| 0°-60°    | 6138.8 | 79.0      |
| 0°-90°    | 7772.3 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 7772.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 90°  | 180° | 270° | 360° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 2649 | 2649 | 2649 | 2649 | 2649 |      |
| 5°  | 2750 | 2620 | 2571 | 2624 | 2750 | 265  |
| 15° | 2905 | 2495 | 2418 | 2496 | 2905 | 824  |
| 25° | 2962 | 2234 | 2259 | 2212 | 2962 | 1368 |
| 35° | 2855 | 1869 | 2076 | 1840 | 2855 | 1783 |
| 45° | 2502 | 1474 | 1852 | 1437 | 2502 | 1926 |
| 55° | 1969 | 1090 | 1573 | 1060 | 1969 | 1758 |
| 65° | 1342 | 719  | 1168 | 703  | 1342 | 1326 |
| 75° | 691  | 364  | 633  | 362  | 691  | 734  |
| 85° | 137  | 68   | 114  | 70   | 137  | 173  |
| 90° | 0    | 0    | 0    | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 |
| 2.5°  | 2707.9 | 2668.3 | 2668.9 | 2703.5 | 2677.0 | 2689.9 | 2652.9 | 2667.1 | 2662.8 | 2665.8 | 2635.6 |
| 5°    | 2750.5 | 2707.9 | 2707.2 | 2736.9 | 2707.2 | 2712.8 | 2665.8 | 2675.1 | 2661.5 | 2652.9 | 2620.1 |
| 7.5°  | 2795.6 | 2753.0 | 2748.6 | 2774.6 | 2735.7 | 2731.3 | 2679.4 | 2679.4 | 2654.7 | 2633.1 | 2602.2 |
| 10°   | 2840.1 | 2796.2 | 2790.7 | 2810.4 | 2762.2 | 2748.0 | 2685.0 | 2675.1 | 2642.4 | 2610.2 | 2576.9 |
| 12.5° | 2873.5 | 2829.0 | 2824.7 | 2837.0 | 2782.6 | 2756.7 | 2685.0 | 2665.8 | 2617.6 | 2572.5 | 2546.6 |
| 15°   | 2905.0 | 2859.3 | 2847.5 | 2853.7 | 2791.3 | 2756.7 | 2676.3 | 2646.7 | 2584.9 | 2525.6 | 2495.3 |
| 17.5° | 2927.2 | 2883.4 | 2871.6 | 2871.0 | 2795.6 | 2746.2 | 2657.8 | 2617.0 | 2542.9 | 2471.2 | 2440.9 |
| 20°   | 2949.5 | 2905.6 | 2890.8 | 2879.7 | 2794.4 | 2732.0 | 2630.6 | 2575.6 | 2489.1 | 2408.8 | 2383.4 |
| 22.5° | 2960.6 | 2915.5 | 2899.4 | 2882.7 | 2786.3 | 2706.0 | 2597.2 | 2527.4 | 2428.5 | 2332.8 | 2311.8 |
| 25°   | 2962.5 | 2916.1 | 2898.8 | 2874.7 | 2770.3 | 2675.1 | 2554.0 | 2469.3 | 2358.7 | 2252.4 | 2234.5 |
| 27.5° | 2957.5 | 2906.8 | 2889.5 | 2860.5 | 2746.2 | 2637.4 | 2502.7 | 2403.2 | 2284.6 | 2167.2 | 2148.0 |
| 30°   | 2940.2 | 2888.9 | 2872.2 | 2834.5 | 2712.2 | 2591.1 | 2446.5 | 2329.7 | 2202.4 | 2077.6 | 2060.9 |
| 32.5° | 2905.6 | 2855.6 | 2842.0 | 2804.3 | 2675.1 | 2537.3 | 2381.0 | 2250.6 | 2111.5 | 1992.3 | 1967.6 |
| 35°   | 2854.9 | 2804.9 | 2796.2 | 2756.7 | 2623.2 | 2473.0 | 2309.3 | 2164.1 | 2015.1 | 1893.4 | 1869.3 |
| 37.5° | 2788.8 | 2746.8 | 2733.8 | 2694.9 | 2562.0 | 2400.1 | 2227.1 | 2070.1 | 1916.9 | 1785.9 | 1771.0 |
| 40°   | 2705.4 | 2665.8 | 2656.0 | 2621.3 | 2491.0 | 2319.2 | 2138.1 | 1973.1 | 1815.5 | 1693.8 | 1672.8 |
| 42.5° | 2610.2 | 2573.1 | 2567.6 | 2531.7 | 2403.2 | 2229.6 | 2041.7 | 1872.4 | 1709.9 | 1592.5 | 1571.4 |
| 45°   | 2502.1 | 2466.2 | 2465.0 | 2431.0 | 2307.4 | 2130.1 | 1940.4 | 1770.4 | 1606.7 | 1484.9 | 1473.8 |
| 47.5° | 2382.8 | 2350.7 | 2350.7 | 2319.2 | 2200.5 | 2020.7 | 1835.9 | 1664.1 | 1502.9 | 1395.3 | 1375.6 |
| 50°   | 2253.0 | 2222.8 | 2213.5 | 2198.1 | 2082.5 | 1901.4 | 1725.9 | 1560.3 | 1400.3 | 1297.7 | 1278.5 |
| 52.5° | 2114.6 | 2088.7 | 2094.9 | 2066.4 | 1954.6 | 1777.2 | 1614.7 | 1443.5 | 1297.1 | 1203.8 | 1184.6 |
| 55°   | 1968.8 | 1931.7 | 1937.3 | 1926.8 | 1821.1 | 1649.3 | 1489.9 | 1347.1 | 1195.7 | 1108.0 | 1090.1 |
| 57.5° | 1817.4 | 1769.2 | 1789.0 | 1782.8 | 1679.0 | 1518.3 | 1375.6 | 1237.8 | 1095.0 | 1014.1 | 996.8  |
| 60°   | 1662.3 | 1615.9 | 1636.3 | 1630.8 | 1533.1 | 1387.3 | 1257.5 | 1129.6 | 994.9  | 921.4  | 904.1  |
| 62.5° | 1502.9 | 1460.2 | 1478.8 | 1474.4 | 1384.8 | 1253.2 | 1140.1 | 1022.7 | 894.2  | 828.1  | 812.0  |
| 65°   | 1342.2 | 1301.4 | 1318.1 | 1315.0 | 1232.2 | 1132.1 | 1019.6 | 912.1  | 792.8  | 735.4  | 719.3  |
| 67.5° | 1177.8 | 1140.1 | 1155.6 | 1155.6 | 1079.6 | 983.8  | 898.5  | 800.2  | 693.3  | 643.9  | 629.1  |
| 70°   | 1014.7 | 979.5  | 993.0  | 991.8  | 927.5  | 849.7  | 776.1  | 688.4  | 592.6  | 551.8  | 539.5  |
| 72.5° | 850.3  | 819.4  | 831.8  | 830.5  | 776.8  | 726.7  | 653.8  | 577.8  | 494.4  | 461.6  | 450.5  |
| 75°   | 690.9  | 661.8  | 673.6  | 672.3  | 628.5  | 581.5  | 532.7  | 469.6  | 398.0  | 375.1  | 364.0  |
| 77.5° | 538.9  | 509.2  | 519.1  | 519.1  | 486.9  | 453.0  | 414.0  | 365.2  | 314.5  | 289.8  | 281.8  |
| 80°   | 393.0  | 378.8  | 373.9  | 374.5  | 352.8  | 330.6  | 310.8  | 263.9  | 226.8  | 210.1  | 204.5  |
| 82.5° | 258.3  | 246.6  | 241.6  | 242.9  | 230.5  | 216.9  | 204.5  | 171.8  | 147.1  | 137.2  | 134.1  |
| 85°   | 137.2  | 128.5  | 124.2  | 127.3  | 124.8  | 117.4  | 111.2  | 89.0   | 73.5   | 69.8   | 68.0   |
| 87.5° | 43.3   | 37.7   | 34.6   | 45.7   | 38.9   | 34.6   | 33.4   | 26.6   | 20.4   | 20.4   | 19.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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**CANDELA DISTRIBUTION (continued):**

|       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   | 185°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 |
| 2.5°  | 2645.4 | 2645.4 | 2621.3 | 2615.8 | 2613.3 | 2616.4 | 2592.3 | 2588.0 | 2622.6 | 2610.8 | 2584.3 |
| 5°    | 2624.4 | 2623.2 | 2589.2 | 2583.0 | 2583.0 | 2579.3 | 2552.1 | 2546.0 | 2580.6 | 2570.7 | 2541.6 |
| 7.5°  | 2598.5 | 2594.8 | 2554.6 | 2550.3 | 2544.1 | 2541.6 | 2511.4 | 2507.0 | 2536.7 | 2530.5 | 2503.3 |
| 10°   | 2567.0 | 2563.3 | 2515.7 | 2512.6 | 2505.8 | 2500.8 | 2472.4 | 2469.3 | 2499.6 | 2489.7 | 2468.1 |
| 12.5° | 2525.6 | 2518.8 | 2469.9 | 2466.9 | 2461.3 | 2459.4 | 2431.6 | 2430.4 | 2463.8 | 2453.9 | 2431.0 |
| 15°   | 2471.2 | 2465.6 | 2411.2 | 2412.5 | 2413.1 | 2413.1 | 2390.9 | 2389.6 | 2422.4 | 2418.0 | 2393.3 |
| 17.5° | 2411.2 | 2403.8 | 2351.9 | 2355.6 | 2360.0 | 2364.9 | 2347.6 | 2350.7 | 2385.3 | 2379.7 | 2357.5 |
| 20°   | 2343.3 | 2335.9 | 2285.2 | 2295.7 | 2305.0 | 2314.8 | 2303.7 | 2312.4 | 2344.5 | 2342.0 | 2325.3 |
| 22.5° | 2267.3 | 2259.8 | 2212.9 | 2228.9 | 2244.4 | 2262.9 | 2258.0 | 2267.9 | 2301.9 | 2301.2 | 2286.4 |
| 25°   | 2174.6 | 2176.4 | 2135.0 | 2154.8 | 2180.7 | 2206.7 | 2208.6 | 2224.6 | 2262.3 | 2258.6 | 2245.0 |
| 27.5° | 2088.1 | 2090.5 | 2046.7 | 2080.0 | 2114.6 | 2148.0 | 2156.0 | 2178.3 | 2216.6 | 2213.5 | 2201.8 |
| 30°   | 1997.2 | 2000.3 | 1957.7 | 2003.4 | 2045.4 | 2086.2 | 2103.5 | 2133.8 | 2172.7 | 2172.7 | 2160.4 |
| 32.5° | 1902.7 | 1908.2 | 1863.7 | 1924.9 | 1973.7 | 2021.3 | 2051.6 | 2083.1 | 2127.6 | 2126.4 | 2115.9 |
| 35°   | 1805.7 | 1811.8 | 1771.0 | 1848.9 | 1897.7 | 1955.8 | 1993.5 | 2035.5 | 2075.1 | 2075.7 | 2067.7 |
| 37.5° | 1706.8 | 1714.2 | 1677.1 | 1762.4 | 1818.0 | 1886.6 | 1934.8 | 1976.8 | 2020.7 | 2023.2 | 2015.8 |
| 40°   | 1608.5 | 1616.6 | 1584.4 | 1666.6 | 1737.1 | 1813.7 | 1869.3 | 1918.7 | 1966.9 | 1968.2 | 1963.2 |
| 42.5° | 1510.3 | 1518.9 | 1494.8 | 1575.2 | 1654.9 | 1737.1 | 1802.6 | 1858.8 | 1908.2 | 1911.3 | 1905.8 |
| 45°   | 1414.5 | 1421.9 | 1404.6 | 1492.4 | 1569.0 | 1658.6 | 1734.0 | 1797.6 | 1847.7 | 1852.0 | 1850.1 |
| 47.5° | 1319.3 | 1326.1 | 1310.7 | 1391.0 | 1479.4 | 1574.5 | 1661.7 | 1732.1 | 1785.3 | 1790.2 | 1789.0 |
| 50°   | 1226.0 | 1231.6 | 1214.9 | 1298.9 | 1386.7 | 1488.0 | 1578.9 | 1660.4 | 1719.8 | 1724.7 | 1724.1 |
| 52.5° | 1133.3 | 1138.9 | 1124.7 | 1213.0 | 1292.8 | 1399.7 | 1498.5 | 1586.9 | 1645.6 | 1653.0 | 1654.3 |
| 55°   | 1043.7 | 1046.2 | 1035.1 | 1119.7 | 1197.0 | 1308.8 | 1422.5 | 1508.4 | 1567.1 | 1573.3 | 1577.0 |
| 57.5° | 954.1  | 954.7  | 945.5  | 1026.4 | 1100.6 | 1214.9 | 1334.2 | 1424.4 | 1480.0 | 1486.2 | 1491.7 |
| 60°   | 865.1  | 864.5  | 854.0  | 932.5  | 1003.6 | 1116.6 | 1240.8 | 1330.4 | 1384.2 | 1389.8 | 1397.2 |
| 62.5° | 776.8  | 774.9  | 765.6  | 837.9  | 904.7  | 1016.5 | 1141.4 | 1227.9 | 1279.2 | 1282.9 | 1292.8 |
| 65°   | 689.0  | 687.2  | 678.5  | 745.2  | 805.8  | 912.7  | 1035.1 | 1117.3 | 1163.6 | 1168.5 | 1166.7 |
| 67.5° | 602.5  | 598.8  | 592.0  | 651.9  | 706.9  | 805.8  | 923.2  | 1001.7 | 1040.0 | 1044.3 | 1056.1 |
| 70°   | 516.0  | 511.7  | 496.2  | 559.9  | 608.1  | 696.4  | 805.8  | 875.6  | 907.8  | 912.1  | 910.2  |
| 72.5° | 430.7  | 426.4  | 409.7  | 468.4  | 509.2  | 586.4  | 684.1  | 742.2  | 770.0  | 773.7  | 773.7  |
| 75°   | 347.9  | 345.4  | 334.9  | 379.4  | 413.4  | 476.4  | 559.2  | 607.4  | 629.1  | 633.4  | 632.2  |
| 77.5° | 268.2  | 266.3  | 255.8  | 294.1  | 320.7  | 367.7  | 434.4  | 472.1  | 488.2  | 493.1  | 503.6  |
| 80°   | 192.2  | 191.6  | 174.9  | 212.6  | 224.3  | 263.9  | 312.7  | 341.7  | 350.4  | 357.2  | 364.6  |
| 82.5° | 123.0  | 123.6  | 106.9  | 139.0  | 144.0  | 169.3  | 199.6  | 217.5  | 223.7  | 229.3  | 234.8  |
| 85°   | 59.9   | 62.4   | 53.1   | 73.5   | 74.2   | 87.1   | 100.1  | 106.9  | 109.4  | 113.7  | 118.6  |
| 87.5° | 15.4   | 17.9   | 9.9    | 21.0   | 18.5   | 24.1   | 27.8   | 29.7   | 29.0   | 32.1   | 34.0   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-2HI-30-120-EDD-90

**CANDELA DISTRIBUTION (continued):**

|       | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°   | 275°   | 285°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 |
| 2.5°  | 2592.9 | 2612.7 | 2602.8 | 2634.9 | 2647.3 | 2627.5 | 2662.1 | 2662.8 | 2638.0 | 2667.1 | 2683.1 |
| 5°    | 2552.8 | 2573.1 | 2567.0 | 2600.3 | 2615.8 | 2598.5 | 2640.5 | 2648.5 | 2624.4 | 2657.2 | 2683.1 |
| 7.5°  | 2512.0 | 2536.1 | 2528.0 | 2562.0 | 2580.6 | 2567.0 | 2612.1 | 2625.1 | 2606.5 | 2642.4 | 2677.0 |
| 10°   | 2476.7 | 2497.1 | 2488.5 | 2524.3 | 2540.4 | 2529.3 | 2573.8 | 2597.9 | 2580.6 | 2624.4 | 2665.8 |
| 12.5° | 2442.1 | 2458.8 | 2448.9 | 2478.6 | 2494.1 | 2479.8 | 2534.2 | 2556.5 | 2544.1 | 2589.8 | 2643.0 |
| 15°   | 2397.6 | 2416.2 | 2402.6 | 2429.2 | 2440.9 | 2428.5 | 2473.0 | 2511.4 | 2495.9 | 2546.0 | 2604.7 |
| 17.5° | 2363.7 | 2374.2 | 2355.6 | 2376.6 | 2383.4 | 2366.8 | 2411.9 | 2449.6 | 2438.4 | 2492.8 | 2560.8 |
| 20°   | 2326.0 | 2334.6 | 2308.7 | 2320.4 | 2319.8 | 2298.8 | 2340.2 | 2377.3 | 2369.8 | 2429.8 | 2507.0 |
| 22.5° | 2283.9 | 2288.3 | 2258.0 | 2260.5 | 2259.2 | 2224.6 | 2261.7 | 2299.4 | 2296.3 | 2356.9 | 2443.4 |
| 25°   | 2239.5 | 2240.1 | 2201.1 | 2199.9 | 2186.3 | 2145.5 | 2178.3 | 2220.9 | 2211.6 | 2277.1 | 2368.0 |
| 27.5° | 2195.6 | 2189.4 | 2142.4 | 2131.3 | 2109.7 | 2060.9 | 2089.9 | 2128.2 | 2122.7 | 2186.9 | 2287.7 |
| 30°   | 2148.6 | 2140.6 | 2083.1 | 2062.7 | 2031.2 | 1975.0 | 1999.1 | 2034.9 | 2038.0 | 2094.2 | 2199.9 |
| 32.5° | 2104.1 | 2083.7 | 2020.1 | 1990.4 | 1950.9 | 1885.4 | 1898.3 | 1934.8 | 1939.7 | 1996.6 | 2105.4 |
| 35°   | 2046.7 | 2033.1 | 1954.6 | 1903.9 | 1865.0 | 1793.3 | 1806.9 | 1832.2 | 1839.6 | 1895.3 | 2005.9 |
| 37.5° | 1992.3 | 1970.6 | 1887.2 | 1825.4 | 1775.4 | 1700.0 | 1703.7 | 1729.6 | 1737.1 | 1793.3 | 1902.7 |
| 40°   | 1936.0 | 1905.1 | 1815.5 | 1743.2 | 1685.8 | 1606.7 | 1602.3 | 1629.5 | 1635.1 | 1690.1 | 1789.0 |
| 42.5° | 1876.1 | 1839.0 | 1738.3 | 1659.2 | 1593.1 | 1512.7 | 1504.1 | 1527.6 | 1533.8 | 1587.5 | 1684.5 |
| 45°   | 1815.5 | 1771.0 | 1659.2 | 1572.7 | 1500.4 | 1418.2 | 1409.5 | 1427.5 | 1436.7 | 1487.4 | 1580.7 |
| 47.5° | 1751.3 | 1699.4 | 1577.6 | 1481.2 | 1406.5 | 1324.3 | 1313.8 | 1331.7 | 1339.1 | 1389.2 | 1477.5 |
| 50°   | 1683.9 | 1620.9 | 1493.6 | 1387.3 | 1313.1 | 1232.2 | 1216.7 | 1237.8 | 1244.6 | 1291.5 | 1378.0 |
| 52.5° | 1609.8 | 1539.9 | 1404.0 | 1292.8 | 1218.6 | 1141.4 | 1122.8 | 1143.2 | 1151.2 | 1197.0 | 1276.7 |
| 55°   | 1531.3 | 1455.9 | 1313.8 | 1205.6 | 1125.3 | 1049.9 | 1034.4 | 1042.5 | 1059.8 | 1103.0 | 1177.2 |
| 57.5° | 1442.9 | 1368.1 | 1218.6 | 1108.6 | 1031.4 | 959.1  | 946.1  | 953.5  | 969.6  | 1011.6 | 1078.3 |
| 60°   | 1349.0 | 1269.9 | 1121.6 | 1011.6 | 936.8  | 868.2  | 856.5  | 863.3  | 880.6  | 918.9  | 980.7  |
| 62.5° | 1256.3 | 1167.3 | 1021.5 | 912.1  | 844.1  | 780.5  | 777.4  | 774.9  | 791.0  | 828.1  | 882.4  |
| 65°   | 1143.8 | 1058.5 | 917.0  | 813.2  | 751.4  | 694.0  | 681.6  | 687.2  | 702.6  | 736.6  | 793.4  |
| 67.5° | 1023.3 | 946.1  | 810.1  | 714.4  | 659.4  | 608.1  | 597.6  | 600.0  | 616.1  | 645.8  | 695.2  |
| 70°   | 895.4  | 827.4  | 700.8  | 614.9  | 568.5  | 520.3  | 513.5  | 514.1  | 529.6  | 555.5  | 598.8  |
| 72.5° | 761.3  | 700.1  | 590.1  | 516.6  | 478.3  | 443.7  | 437.5  | 430.1  | 444.3  | 466.6  | 503.6  |
| 75°   | 624.7  | 571.0  | 480.1  | 420.2  | 389.9  | 360.9  | 355.3  | 347.9  | 362.1  | 381.3  | 410.3  |
| 77.5° | 486.9  | 443.7  | 373.2  | 326.9  | 303.4  | 281.8  | 276.8  | 268.8  | 283.0  | 297.2  | 320.1  |
| 80°   | 352.2  | 320.7  | 278.7  | 229.9  | 221.8  | 207.6  | 202.7  | 194.0  | 207.6  | 216.9  | 234.2  |
| 82.5° | 227.4  | 206.4  | 182.3  | 148.3  | 147.1  | 136.6  | 134.1  | 124.2  | 136.6  | 142.1  | 155.1  |
| 85°   | 114.9  | 105.1  | 98.9   | 75.4   | 77.9   | 71.1   | 70.4   | 59.9   | 69.8   | 72.3   | 79.7   |
| 87.5° | 32.8   | 34.6   | 30.9   | 18.5   | 23.5   | 22.2   | 22.2   | 16.1   | 22.2   | 22.2   | 25.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838186

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-2HI-30-120-EDD-90

**CANDELA DISTRIBUTION (continued):**

|       | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°   | 360°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 | 2649.2 |
| 2.5°  | 2651.6 | 2662.1 | 2664.6 | 2664.0 | 2670.8 | 2707.9 | 2695.5 | 2707.9 |
| 5°    | 2657.8 | 2681.3 | 2687.5 | 2696.1 | 2707.2 | 2749.3 | 2735.7 | 2750.5 |
| 7.5°  | 2661.5 | 2696.7 | 2710.3 | 2727.0 | 2744.9 | 2791.9 | 2780.8 | 2795.6 |
| 10°   | 2661.5 | 2707.2 | 2727.0 | 2754.8 | 2778.9 | 2833.3 | 2822.8 | 2840.1 |
| 12.5° | 2650.4 | 2709.1 | 2736.9 | 2775.8 | 2806.7 | 2865.4 | 2861.1 | 2873.5 |
| 15°   | 2627.5 | 2699.8 | 2738.1 | 2788.2 | 2826.5 | 2892.0 | 2890.2 | 2905.0 |
| 17.5° | 2596.6 | 2683.8 | 2730.1 | 2793.1 | 2841.3 | 2914.9 | 2919.2 | 2927.2 |
| 20°   | 2557.7 | 2653.5 | 2714.0 | 2791.3 | 2851.8 | 2932.8 | 2938.4 | 2949.5 |
| 22.5° | 2506.4 | 2617.0 | 2689.9 | 2783.3 | 2853.1 | 2940.2 | 2950.1 | 2960.6 |
| 25°   | 2445.8 | 2573.1 | 2658.4 | 2767.8 | 2846.9 | 2939.6 | 2953.2 | 2962.5 |
| 27.5° | 2376.6 | 2516.3 | 2618.3 | 2743.1 | 2829.6 | 2929.7 | 2946.4 | 2957.5 |
| 30°   | 2296.3 | 2455.7 | 2572.5 | 2711.0 | 2806.1 | 2911.2 | 2929.1 | 2940.2 |
| 32.5° | 2213.5 | 2389.0 | 2518.2 | 2669.5 | 2772.1 | 2881.5 | 2897.0 | 2905.6 |
| 35°   | 2123.3 | 2308.0 | 2452.6 | 2616.4 | 2728.3 | 2833.9 | 2845.7 | 2854.9 |
| 37.5° | 2025.0 | 2220.3 | 2377.9 | 2556.5 | 2666.5 | 2767.8 | 2778.3 | 2788.8 |
| 40°   | 1923.7 | 2128.2 | 2293.8 | 2482.9 | 2592.9 | 2686.9 | 2698.0 | 2705.4 |
| 42.5° | 1821.7 | 2026.3 | 2204.2 | 2396.4 | 2505.8 | 2596.0 | 2602.8 | 2610.2 |
| 45°   | 1718.5 | 1920.6 | 2103.5 | 2300.6 | 2408.8 | 2493.4 | 2495.9 | 2502.1 |
| 47.5° | 1613.5 | 1811.2 | 1992.9 | 2191.3 | 2298.2 | 2375.4 | 2377.9 | 2382.8 |
| 50°   | 1507.8 | 1701.8 | 1874.9 | 2073.2 | 2177.7 | 2259.2 | 2248.1 | 2253.0 |
| 52.5° | 1404.0 | 1586.9 | 1763.6 | 1945.9 | 2049.1 | 2121.4 | 2124.5 | 2114.6 |
| 55°   | 1302.0 | 1474.4 | 1637.0 | 1812.5 | 1910.7 | 1966.9 | 1965.1 | 1968.8 |
| 57.5° | 1198.8 | 1360.7 | 1509.7 | 1670.3 | 1766.1 | 1819.2 | 1830.4 | 1817.4 |
| 60°   | 1093.8 | 1245.8 | 1379.3 | 1524.5 | 1617.2 | 1661.7 | 1674.6 | 1662.3 |
| 62.5° | 989.3  | 1129.0 | 1250.1 | 1376.8 | 1462.7 | 1517.7 | 1516.5 | 1502.9 |
| 65°   | 884.9  | 1011.6 | 1119.7 | 1227.3 | 1302.0 | 1357.0 | 1354.5 | 1342.2 |
| 67.5° | 788.5  | 892.9  | 990.0  | 1077.1 | 1142.0 | 1179.7 | 1192.6 | 1177.8 |
| 70°   | 682.2  | 772.4  | 857.7  | 927.5  | 981.3  | 1015.3 | 1027.7 | 1014.7 |
| 72.5° | 575.9  | 652.6  | 712.5  | 779.9  | 821.3  | 849.7  | 862.7  | 850.3  |
| 75°   | 470.9  | 533.9  | 582.7  | 635.3  | 664.3  | 688.4  | 703.2  | 690.9  |
| 77.5° | 368.9  | 417.7  | 456.7  | 495.0  | 528.3  | 533.9  | 546.9  | 538.9  |
| 80°   | 271.9  | 307.1  | 335.5  | 360.9  | 385.0  | 387.5  | 398.0  | 393.0  |
| 82.5° | 181.1  | 204.5  | 212.0  | 238.5  | 254.0  | 251.5  | 262.0  | 258.3  |
| 85°   | 95.8   | 110.0  | 123.0  | 131.0  | 139.7  | 131.6  | 140.9  | 137.2  |
| 87.5° | 32.1   | 34.0   | 29.7   | 42.0   | 46.3   | 39.5   | 45.1   | 43.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)