

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: P838209

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-4STD-35-120-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: P838209  
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-LD4-4STD-35-120-EDD-90  
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and  
RFI grid  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

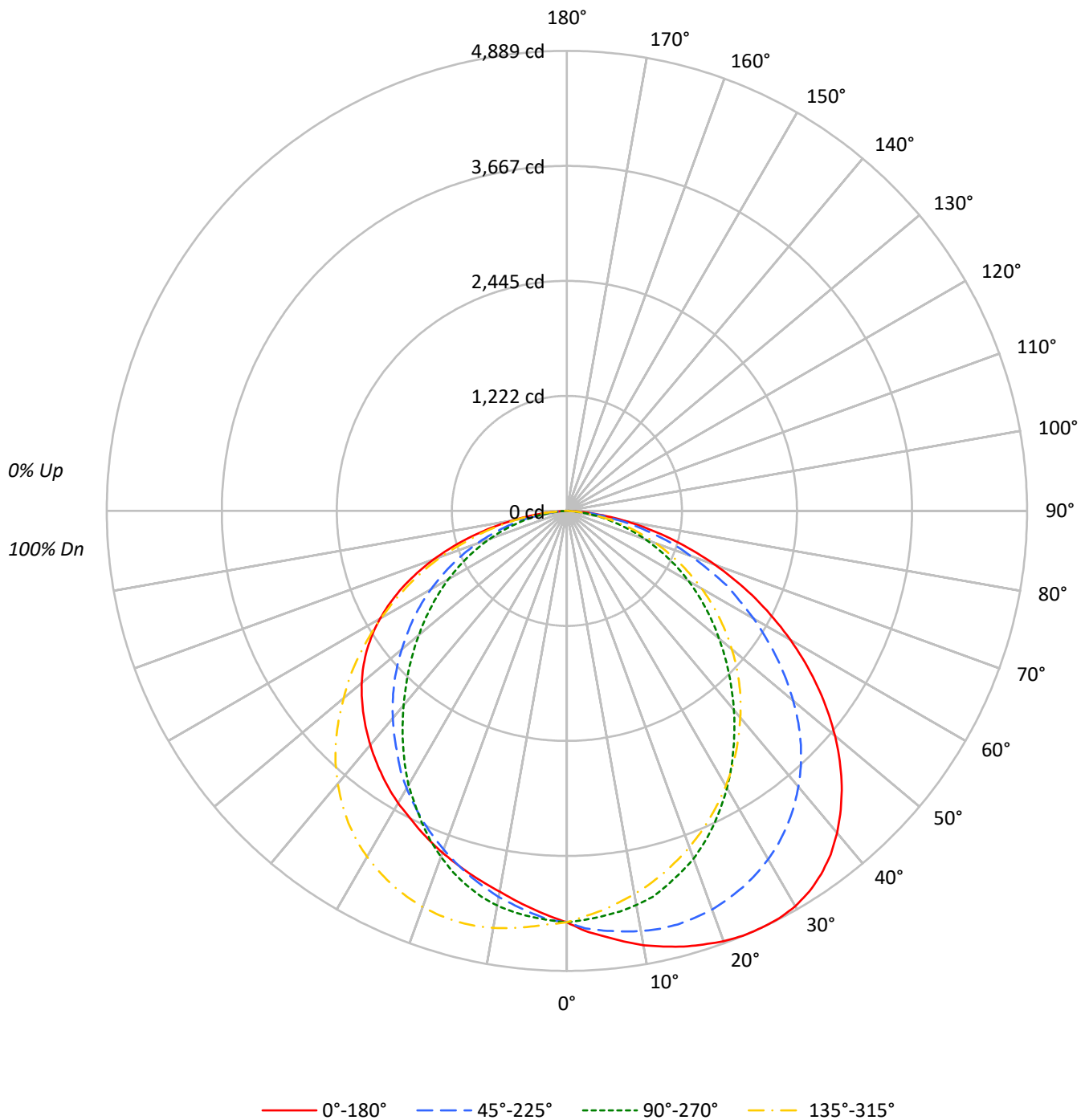
Lumens per Lamp: N/A  
Luminaire Lumens: 12827.6 lumens  
Efficiency: N/A  
Efficacy: 96.3 lumens/watt  
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 133.2  
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

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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  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  |  | 94  | 91  | 89  |  | 90  |
| 2   | 99  | 91  | 84  | 78  | 96  | 89  | 82  | 77  | 85  | 80  | 75  |  | 82  | 77  | 73  |  | 79  |
| 3   | 90  | 79  | 71  | 65  | 88  | 78  | 70  | 64  | 75  | 68  | 63  |  | 72  | 66  | 62  |  | 69  |
| 4   | 82  | 70  | 61  | 55  | 80  | 69  | 61  | 54  | 66  | 59  | 53  |  | 64  | 58  | 53  |  | 62  |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 59  | 52  | 46  |  | 57  | 51  | 46  |  | 56  |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 54  | 46  | 40  |  | 52  | 45  | 40  |  | 50  |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  |  | 47  | 40  | 35  |  | 46  |
| 8   | 60  | 47  | 38  | 32  | 59  | 46  | 38  | 32  | 45  | 37  | 32  |  | 43  | 37  | 32  |  | 42  |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 29  |  | 40  | 33  | 28  |  | 39  |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  |  | 37  | 30  | 26  |  | 36  |

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

|     | 0°   | 90°  | 180° | 270° |
|-----|------|------|------|------|
| 0°  | 5883 | 5883 | 5883 | 5883 |
| 5°  | 6131 | 5841 | 5730 | 5850 |
| 10° | 6404 | 5811 | 5614 | 5819 |
| 15° | 6679 | 5737 | 5559 | 5738 |
| 20° | 6970 | 5632 | 5535 | 5600 |
| 25° | 7259 | 5475 | 5534 | 5419 |
| 30° | 7539 | 5284 | 5571 | 5226 |
| 35° | 7739 | 5068 | 5627 | 4987 |
| 40° | 7843 | 4849 | 5705 | 4740 |
| 45° | 7858 | 4628 | 5816 | 4512 |
| 50° | 7784 | 4417 | 5958 | 4300 |
| 55° | 7622 | 4220 | 6091 | 4103 |
| 60° | 7383 | 4015 | 6172 | 3911 |
| 65° | 7053 | 3780 | 6140 | 3692 |
| 70° | 6588 | 3503 | 5922 | 3438 |
| 75° | 5927 | 3123 | 5435 | 3107 |
| 80° | 5026 | 2616 | 4568 | 2655 |
| 85° | 3495 | 1732 | 2898 | 1778 |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 415.1   | 3.2       |
| 10°-20°   | 1202.1  | 9.4       |
| 20°-30°   | 1842.2  | 14.4      |
| 30°-40°   | 2240.0  | 17.5      |
| 40°-50°   | 2328.7  | 18.2      |
| 50°-60°   | 2103.5  | 16.4      |
| 60°-70°   | 1599.2  | 12.5      |
| 70°-80°   | 891.5   | 7.0       |
| 80°-90°   | 205.3   | 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°    | 3459.4  | 27.0      |
| 0°-40°    | 5699.5  | 44.4      |
| 0°-60°    | 10131.6 | 79.0      |
| 0°-90°    | 12827.6 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 12827.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 90°  | 180° | 270° | 360° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 4372 | 4372 | 4372 | 4372 | 4372 |      |
| 5°  | 4540 | 4324 | 4243 | 4332 | 4540 | 438  |
| 15° | 4794 | 4118 | 3991 | 4119 | 4794 | 1359 |
| 25° | 4889 | 3688 | 3728 | 3650 | 4889 | 2258 |
| 35° | 4712 | 3085 | 3426 | 3036 | 4712 | 2943 |
| 45° | 4130 | 2432 | 3057 | 2371 | 4130 | 3179 |
| 55° | 3249 | 1799 | 2597 | 1749 | 3249 | 2901 |
| 65° | 2215 | 1187 | 1929 | 1160 | 2215 | 2189 |
| 75° | 1140 | 601  | 1045 | 598  | 1140 | 1211 |
| 85° | 226  | 112  | 188  | 115  | 226  | 285  |
| 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°    | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 |
| 2.5°  | 4469.2 | 4403.9 | 4404.9 | 4462.0 | 4418.2 | 4439.6 | 4378.4 | 4401.8 | 4394.7 | 4399.8 | 4349.8 |
| 5°    | 4539.5 | 4469.2 | 4468.1 | 4517.1 | 4468.1 | 4477.3 | 4399.8 | 4415.1 | 4392.7 | 4378.4 | 4324.3 |
| 7.5°  | 4614.0 | 4543.6 | 4536.5 | 4579.3 | 4515.0 | 4507.9 | 4422.2 | 4422.2 | 4381.4 | 4345.7 | 4294.7 |
| 10°   | 4687.4 | 4615.0 | 4605.8 | 4638.5 | 4558.9 | 4535.4 | 4431.4 | 4415.1 | 4361.0 | 4308.0 | 4252.9 |
| 12.5° | 4742.5 | 4669.0 | 4661.9 | 4682.3 | 4592.6 | 4549.7 | 4431.4 | 4399.8 | 4320.2 | 4245.8 | 4203.0 |
| 15°   | 4794.5 | 4719.0 | 4699.6 | 4709.8 | 4606.8 | 4549.7 | 4417.1 | 4368.2 | 4266.2 | 4168.3 | 4118.3 |
| 17.5° | 4831.2 | 4758.8 | 4739.4 | 4738.4 | 4614.0 | 4532.4 | 4386.5 | 4319.2 | 4196.8 | 4078.5 | 4028.6 |
| 20°   | 4867.9 | 4795.5 | 4771.0 | 4752.7 | 4611.9 | 4508.9 | 4341.7 | 4250.9 | 4108.1 | 3975.5 | 3933.7 |
| 22.5° | 4886.3 | 4811.8 | 4785.3 | 4757.8 | 4598.7 | 4466.1 | 4286.6 | 4171.3 | 4008.2 | 3850.1 | 3815.4 |
| 25°   | 4889.3 | 4812.9 | 4784.3 | 4744.5 | 4572.2 | 4415.1 | 4215.2 | 4075.5 | 3892.9 | 3717.5 | 3687.9 |
| 27.5° | 4881.2 | 4797.6 | 4769.0 | 4721.1 | 4532.4 | 4352.9 | 4130.5 | 3966.3 | 3770.5 | 3576.7 | 3545.1 |
| 30°   | 4852.6 | 4768.0 | 4740.4 | 4678.2 | 4476.3 | 4276.4 | 4037.7 | 3845.0 | 3634.9 | 3428.9 | 3401.3 |
| 32.5° | 4795.5 | 4712.9 | 4690.5 | 4628.3 | 4415.1 | 4187.7 | 3929.6 | 3714.4 | 3485.0 | 3288.1 | 3247.3 |
| 35°   | 4711.9 | 4629.3 | 4615.0 | 4549.7 | 4329.4 | 4081.6 | 3811.3 | 3571.6 | 3325.9 | 3124.9 | 3085.2 |
| 37.5° | 4602.8 | 4533.4 | 4512.0 | 4447.7 | 4228.5 | 3961.2 | 3675.7 | 3416.6 | 3163.7 | 2947.5 | 2923.0 |
| 40°   | 4465.1 | 4399.8 | 4383.5 | 4326.4 | 4111.2 | 3827.6 | 3528.8 | 3256.5 | 2996.4 | 2795.5 | 2760.8 |
| 42.5° | 4308.0 | 4246.8 | 4237.6 | 4178.5 | 3966.3 | 3679.8 | 3369.7 | 3090.3 | 2822.0 | 2628.3 | 2593.6 |
| 45°   | 4129.5 | 4070.4 | 4068.3 | 4012.2 | 3808.3 | 3515.6 | 3202.4 | 2922.0 | 2651.7 | 2450.8 | 2432.4 |
| 47.5° | 3932.7 | 3879.7 | 3879.7 | 3827.6 | 3631.8 | 3335.0 | 3030.1 | 2746.6 | 2480.4 | 2302.9 | 2270.3 |
| 50°   | 3718.5 | 3668.5 | 3653.2 | 3627.7 | 3437.0 | 3138.2 | 2848.5 | 2575.2 | 2311.1 | 2141.8 | 2110.1 |
| 52.5° | 3490.1 | 3447.2 | 3457.4 | 3410.5 | 3225.9 | 2933.2 | 2665.0 | 2382.5 | 2140.7 | 1986.7 | 1955.1 |
| 55°   | 3249.4 | 3188.2 | 3197.3 | 3180.0 | 3005.6 | 2722.1 | 2459.0 | 2223.4 | 1973.5 | 1828.7 | 1799.1 |
| 57.5° | 2999.5 | 2919.9 | 2952.6 | 2942.4 | 2771.0 | 2505.9 | 2270.3 | 2042.8 | 1807.2 | 1673.6 | 1645.1 |
| 60°   | 2743.5 | 2667.0 | 2700.7 | 2691.5 | 2530.3 | 2289.6 | 2075.5 | 1864.4 | 1642.0 | 1520.7 | 1492.1 |
| 62.5° | 2480.4 | 2410.0 | 2440.6 | 2433.5 | 2285.6 | 2068.3 | 1881.7 | 1687.9 | 1475.8 | 1366.7 | 1340.1 |
| 65°   | 2215.2 | 2147.9 | 2175.4 | 2170.3 | 2033.7 | 1868.4 | 1682.8 | 1505.4 | 1308.5 | 1213.7 | 1187.2 |
| 67.5° | 1943.9 | 1881.7 | 1907.2 | 1907.2 | 1781.7 | 1623.7 | 1482.9 | 1320.8 | 1144.3 | 1062.7 | 1038.2 |
| 70°   | 1674.7 | 1616.5 | 1639.0 | 1636.9 | 1530.9 | 1402.3 | 1281.0 | 1136.2 | 978.1  | 910.8  | 890.4  |
| 72.5° | 1403.4 | 1352.4 | 1372.8 | 1370.7 | 1282.0 | 1199.4 | 1079.0 | 953.6  | 815.9  | 761.9  | 743.5  |
| 75°   | 1140.2 | 1092.3 | 1111.7 | 1109.6 | 1037.2 | 959.7  | 879.1  | 775.1  | 656.8  | 619.1  | 600.7  |
| 77.5° | 889.3  | 840.4  | 856.7  | 856.7  | 803.7  | 747.6  | 683.3  | 602.8  | 519.1  | 478.3  | 465.1  |
| 80°   | 648.6  | 625.2  | 617.0  | 618.1  | 582.4  | 545.6  | 513.0  | 435.5  | 374.3  | 346.8  | 337.6  |
| 82.5° | 426.3  | 406.9  | 398.8  | 400.8  | 380.4  | 358.0  | 337.6  | 283.5  | 242.7  | 226.4  | 221.3  |
| 85°   | 226.4  | 212.1  | 205.0  | 210.1  | 206.0  | 193.8  | 183.6  | 146.9  | 121.4  | 115.2  | 112.2  |
| 87.5° | 71.4   | 62.2   | 57.1   | 75.5   | 64.3   | 57.1   | 55.1   | 43.9   | 33.7   | 33.7   | 32.6   |
| 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°    | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 |
| 2.5°  | 4366.1 | 4366.1 | 4326.4 | 4317.2 | 4313.1 | 4318.2 | 4278.4 | 4271.3 | 4328.4 | 4309.0 | 4265.2 |
| 5°    | 4331.5 | 4329.4 | 4273.3 | 4263.1 | 4263.1 | 4257.0 | 4212.1 | 4201.9 | 4259.1 | 4242.7 | 4194.8 |
| 7.5°  | 4288.6 | 4282.5 | 4216.2 | 4209.1 | 4198.9 | 4194.8 | 4144.8 | 4137.7 | 4186.6 | 4176.4 | 4131.6 |
| 10°   | 4236.6 | 4230.5 | 4152.0 | 4146.9 | 4135.6 | 4127.5 | 4080.6 | 4075.5 | 4125.4 | 4109.1 | 4073.4 |
| 12.5° | 4168.3 | 4157.1 | 4076.5 | 4071.4 | 4062.2 | 4059.2 | 4013.3 | 4011.2 | 4066.3 | 4050.0 | 4012.2 |
| 15°   | 4078.5 | 4069.4 | 3979.6 | 3981.6 | 3982.7 | 3982.7 | 3945.9 | 3943.9 | 3998.0 | 3990.8 | 3950.0 |
| 17.5° | 3979.6 | 3967.4 | 3881.7 | 3887.8 | 3895.0 | 3903.1 | 3874.6 | 3879.7 | 3936.8 | 3927.6 | 3890.9 |
| 20°   | 3867.4 | 3855.2 | 3771.5 | 3788.9 | 3804.2 | 3820.5 | 3802.1 | 3816.4 | 3869.5 | 3865.4 | 3837.8 |
| 22.5° | 3742.0 | 3729.7 | 3652.2 | 3678.7 | 3704.2 | 3734.8 | 3726.7 | 3743.0 | 3799.1 | 3798.1 | 3773.6 |
| 25°   | 3589.0 | 3592.0 | 3523.7 | 3556.4 | 3599.2 | 3642.0 | 3645.1 | 3671.6 | 3733.8 | 3727.7 | 3705.3 |
| 27.5° | 3446.2 | 3450.3 | 3377.9 | 3432.9 | 3490.1 | 3545.1 | 3558.4 | 3595.1 | 3658.3 | 3653.2 | 3633.9 |
| 30°   | 3296.3 | 3301.4 | 3231.0 | 3306.5 | 3375.8 | 3443.1 | 3471.7 | 3521.7 | 3585.9 | 3585.9 | 3565.5 |
| 32.5° | 3140.2 | 3149.4 | 3076.0 | 3177.0 | 3257.5 | 3336.1 | 3386.0 | 3438.0 | 3511.5 | 3509.4 | 3492.1 |
| 35°   | 2980.1 | 2990.3 | 2923.0 | 3051.5 | 3132.1 | 3227.9 | 3290.2 | 3359.5 | 3424.8 | 3425.8 | 3412.5 |
| 37.5° | 2816.9 | 2829.2 | 2768.0 | 2908.7 | 3000.5 | 3113.7 | 3193.3 | 3262.6 | 3335.0 | 3339.1 | 3326.9 |
| 40°   | 2654.8 | 2668.0 | 2615.0 | 2750.6 | 2866.9 | 2993.4 | 3085.2 | 3166.8 | 3246.3 | 3248.3 | 3240.2 |
| 42.5° | 2492.6 | 2506.9 | 2467.1 | 2599.7 | 2731.3 | 2866.9 | 2975.0 | 3067.8 | 3149.4 | 3154.5 | 3145.3 |
| 45°   | 2334.5 | 2346.8 | 2318.2 | 2463.0 | 2589.5 | 2737.4 | 2861.8 | 2966.9 | 3049.5 | 3056.6 | 3053.5 |
| 47.5° | 2177.5 | 2188.7 | 2163.2 | 2295.8 | 2441.6 | 2598.7 | 2742.5 | 2858.7 | 2946.5 | 2954.6 | 2952.6 |
| 50°   | 2023.5 | 2032.6 | 2005.1 | 2143.8 | 2288.6 | 2455.9 | 2605.8 | 2740.4 | 2838.3 | 2846.5 | 2845.5 |
| 52.5° | 1870.5 | 1879.7 | 1856.2 | 2002.0 | 2133.6 | 2310.0 | 2473.2 | 2619.1 | 2716.0 | 2728.2 | 2730.2 |
| 55°   | 1722.6 | 1726.7 | 1708.3 | 1848.0 | 1975.5 | 2160.1 | 2347.8 | 2489.5 | 2586.4 | 2596.6 | 2602.8 |
| 57.5° | 1574.7 | 1575.7 | 1560.4 | 1694.0 | 1816.4 | 2005.1 | 2201.9 | 2350.8 | 2442.6 | 2452.8 | 2462.0 |
| 60°   | 1427.8 | 1426.8 | 1409.5 | 1539.0 | 1656.3 | 1842.9 | 2047.9 | 2195.8 | 2284.5 | 2293.7 | 2306.0 |
| 62.5° | 1282.0 | 1278.9 | 1263.6 | 1383.0 | 1493.1 | 1677.7 | 1883.7 | 2026.5 | 2111.2 | 2117.3 | 2133.6 |
| 65°   | 1137.2 | 1134.1 | 1119.8 | 1230.0 | 1329.9 | 1506.4 | 1708.3 | 1844.0 | 1920.4 | 1928.6 | 1925.5 |
| 67.5° | 994.4  | 988.3  | 977.1  | 1076.0 | 1166.8 | 1329.9 | 1523.7 | 1653.2 | 1716.5 | 1723.6 | 1743.0 |
| 70°   | 851.6  | 844.5  | 819.0  | 924.0  | 1003.6 | 1149.4 | 1329.9 | 1445.2 | 1498.2 | 1505.4 | 1502.3 |
| 72.5° | 710.9  | 703.7  | 676.2  | 773.1  | 840.4  | 967.9  | 1129.0 | 1224.9 | 1270.8 | 1276.9 | 1276.9 |
| 75°   | 574.2  | 570.1  | 552.8  | 626.2  | 682.3  | 786.3  | 923.0  | 1002.6 | 1038.2 | 1045.4 | 1043.3 |
| 77.5° | 442.6  | 439.6  | 422.2  | 485.5  | 529.3  | 606.8  | 717.0  | 779.2  | 805.7  | 813.9  | 831.2  |
| 80°   | 317.2  | 316.2  | 288.6  | 350.8  | 370.2  | 435.5  | 516.1  | 564.0  | 578.3  | 589.5  | 601.7  |
| 82.5° | 203.0  | 204.0  | 176.4  | 229.5  | 237.6  | 279.4  | 329.4  | 359.0  | 369.2  | 378.4  | 387.6  |
| 85°   | 98.9   | 103.0  | 87.7   | 121.4  | 122.4  | 143.8  | 165.2  | 176.4  | 180.5  | 187.7  | 195.8  |
| 87.5° | 25.5   | 29.6   | 16.3   | 34.7   | 30.6   | 39.8   | 45.9   | 49.0   | 47.9   | 53.0   | 56.1   |
| 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):**

|       | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°   | 275°   | 285°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 |
| 2.5°  | 4279.5 | 4312.1 | 4295.8 | 4348.8 | 4369.2 | 4336.6 | 4393.7 | 4394.7 | 4353.9 | 4401.8 | 4428.4 |
| 5°    | 4213.2 | 4246.8 | 4236.6 | 4291.7 | 4317.2 | 4288.6 | 4358.0 | 4371.2 | 4331.5 | 4385.5 | 4428.4 |
| 7.5°  | 4145.8 | 4185.6 | 4172.4 | 4228.5 | 4259.1 | 4236.6 | 4311.1 | 4332.5 | 4301.9 | 4361.0 | 4418.2 |
| 10°   | 4087.7 | 4121.4 | 4107.1 | 4166.2 | 4192.8 | 4174.4 | 4247.8 | 4287.6 | 4259.1 | 4331.5 | 4399.8 |
| 12.5° | 4030.6 | 4058.1 | 4041.8 | 4090.8 | 4116.3 | 4092.8 | 4182.6 | 4219.3 | 4198.9 | 4274.4 | 4362.1 |
| 15°   | 3957.2 | 3987.8 | 3965.3 | 4009.2 | 4028.6 | 4008.2 | 4081.6 | 4144.8 | 4119.3 | 4201.9 | 4298.8 |
| 17.5° | 3901.1 | 3918.4 | 3887.8 | 3922.5 | 3933.7 | 3906.2 | 3980.6 | 4042.8 | 4024.5 | 4114.2 | 4226.4 |
| 20°   | 3838.9 | 3853.1 | 3810.3 | 3829.7 | 3828.7 | 3794.0 | 3862.3 | 3923.5 | 3911.3 | 4010.2 | 4137.7 |
| 22.5° | 3769.5 | 3776.6 | 3726.7 | 3730.8 | 3728.7 | 3671.6 | 3732.8 | 3795.0 | 3789.9 | 3889.9 | 4032.6 |
| 25°   | 3696.1 | 3697.1 | 3632.8 | 3630.8 | 3608.4 | 3541.1 | 3595.1 | 3665.5 | 3650.2 | 3758.3 | 3908.2 |
| 27.5° | 3623.7 | 3613.5 | 3536.0 | 3517.6 | 3481.9 | 3401.3 | 3449.3 | 3512.5 | 3503.3 | 3609.4 | 3775.6 |
| 30°   | 3546.2 | 3532.9 | 3438.0 | 3404.4 | 3352.4 | 3259.6 | 3299.3 | 3358.5 | 3363.6 | 3456.4 | 3630.8 |
| 32.5° | 3472.7 | 3439.1 | 3334.0 | 3285.1 | 3219.8 | 3111.7 | 3133.1 | 3193.3 | 3201.4 | 3295.3 | 3474.8 |
| 35°   | 3377.9 | 3355.4 | 3225.9 | 3142.3 | 3078.0 | 2959.7 | 2982.2 | 3024.0 | 3036.2 | 3128.0 | 3310.6 |
| 37.5° | 3288.1 | 3252.4 | 3114.7 | 3012.8 | 2930.1 | 2805.7 | 2811.8 | 2854.7 | 2866.9 | 2959.7 | 3140.2 |
| 40°   | 3195.3 | 3144.3 | 2996.4 | 2877.1 | 2782.3 | 2651.7 | 2644.6 | 2689.4 | 2698.6 | 2789.4 | 2952.6 |
| 42.5° | 3096.4 | 3035.2 | 2868.9 | 2738.4 | 2629.3 | 2496.7 | 2482.4 | 2521.2 | 2531.4 | 2620.1 | 2780.2 |
| 45°   | 2996.4 | 2923.0 | 2738.4 | 2595.6 | 2476.3 | 2340.6 | 2326.4 | 2355.9 | 2371.2 | 2454.9 | 2608.9 |
| 47.5° | 2890.4 | 2804.7 | 2603.8 | 2444.7 | 2321.3 | 2185.6 | 2168.3 | 2197.9 | 2210.1 | 2292.7 | 2438.6 |
| 50°   | 2779.2 | 2675.2 | 2465.1 | 2289.6 | 2167.3 | 2033.7 | 2008.2 | 2042.8 | 2054.1 | 2131.6 | 2274.4 |
| 52.5° | 2656.8 | 2541.6 | 2317.2 | 2133.6 | 2011.2 | 1883.7 | 1853.1 | 1886.8 | 1900.1 | 1975.5 | 2107.1 |
| 55°   | 2527.3 | 2402.9 | 2168.3 | 1989.8 | 1857.2 | 1732.8 | 1707.3 | 1720.6 | 1749.1 | 1820.5 | 1942.9 |
| 57.5° | 2381.4 | 2258.0 | 2011.2 | 1829.7 | 1702.2 | 1582.9 | 1561.4 | 1573.7 | 1600.2 | 1669.6 | 1779.7 |
| 60°   | 2226.4 | 2095.9 | 1851.1 | 1669.6 | 1546.2 | 1432.9 | 1413.6 | 1424.8 | 1453.3 | 1516.6 | 1618.6 |
| 62.5° | 2073.4 | 1926.6 | 1685.9 | 1505.4 | 1393.2 | 1288.1 | 1283.0 | 1278.9 | 1305.5 | 1366.7 | 1456.4 |
| 65°   | 1887.8 | 1747.1 | 1513.5 | 1342.2 | 1240.2 | 1145.3 | 1124.9 | 1134.1 | 1159.6 | 1215.7 | 1309.5 |
| 67.5° | 1688.9 | 1561.4 | 1337.1 | 1179.0 | 1088.2 | 1003.6 | 986.2  | 990.3  | 1016.8 | 1065.8 | 1147.4 |
| 70°   | 1477.8 | 1365.6 | 1156.6 | 1014.8 | 938.3  | 858.7  | 847.5  | 848.5  | 874.0  | 916.9  | 988.3  |
| 72.5° | 1256.5 | 1155.5 | 974.0  | 852.6  | 789.4  | 732.3  | 722.1  | 709.8  | 733.3  | 770.0  | 831.2  |
| 75°   | 1031.1 | 942.4  | 792.5  | 693.5  | 643.5  | 595.6  | 586.4  | 574.2  | 597.7  | 629.3  | 677.2  |
| 77.5° | 803.7  | 732.3  | 616.0  | 539.5  | 500.8  | 465.1  | 456.9  | 443.7  | 467.1  | 490.6  | 528.3  |
| 80°   | 581.3  | 529.3  | 460.0  | 379.4  | 366.1  | 342.7  | 334.5  | 320.2  | 342.7  | 358.0  | 386.5  |
| 82.5° | 375.3  | 340.6  | 300.9  | 244.8  | 242.7  | 225.4  | 221.3  | 205.0  | 225.4  | 234.6  | 256.0  |
| 85°   | 189.7  | 173.4  | 163.2  | 124.4  | 128.5  | 117.3  | 116.3  | 98.9   | 115.2  | 119.3  | 131.6  |
| 87.5° | 54.1   | 57.1   | 51.0   | 30.6   | 38.8   | 36.7   | 36.7   | 26.5   | 36.7   | 36.7   | 41.8   |
| 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: P838209

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-4STD-35-120-EDD-90

**CANDELA DISTRIBUTION (continued):**

|       | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°   | 360°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 | 4372.3 |
| 2.5°  | 4376.3 | 4393.7 | 4397.8 | 4396.7 | 4408.0 | 4469.2 | 4448.8 | 4469.2 |
| 5°    | 4386.5 | 4425.3 | 4435.5 | 4449.8 | 4468.1 | 4537.5 | 4515.0 | 4539.5 |
| 7.5°  | 4392.7 | 4450.8 | 4473.2 | 4500.8 | 4530.3 | 4607.9 | 4589.5 | 4614.0 |
| 10°   | 4392.7 | 4468.1 | 4500.8 | 4546.7 | 4586.4 | 4676.2 | 4658.8 | 4687.4 |
| 12.5° | 4374.3 | 4471.2 | 4517.1 | 4581.3 | 4632.3 | 4729.2 | 4722.1 | 4742.5 |
| 15°   | 4336.6 | 4455.9 | 4519.1 | 4601.7 | 4665.0 | 4773.1 | 4770.0 | 4794.5 |
| 17.5° | 4285.6 | 4429.4 | 4505.9 | 4609.9 | 4689.4 | 4810.8 | 4818.0 | 4831.2 |
| 20°   | 4221.3 | 4379.4 | 4479.3 | 4606.8 | 4706.8 | 4840.4 | 4849.6 | 4867.9 |
| 22.5° | 4136.7 | 4319.2 | 4439.6 | 4593.6 | 4708.8 | 4852.6 | 4868.9 | 4886.3 |
| 25°   | 4036.7 | 4246.8 | 4387.6 | 4568.1 | 4698.6 | 4851.6 | 4874.0 | 4889.3 |
| 27.5° | 3922.5 | 4153.0 | 4321.3 | 4527.3 | 4670.1 | 4835.3 | 4862.8 | 4881.2 |
| 30°   | 3789.9 | 4053.0 | 4245.8 | 4474.3 | 4631.3 | 4804.7 | 4834.3 | 4852.6 |
| 32.5° | 3653.2 | 3942.9 | 4156.0 | 4405.9 | 4575.2 | 4755.7 | 4781.2 | 4795.5 |
| 35°   | 3504.3 | 3809.3 | 4047.9 | 4318.2 | 4502.8 | 4677.2 | 4696.6 | 4711.9 |
| 37.5° | 3342.2 | 3664.5 | 3924.5 | 4219.3 | 4400.8 | 4568.1 | 4585.4 | 4602.8 |
| 40°   | 3174.9 | 3512.5 | 3785.8 | 4097.9 | 4279.5 | 4434.5 | 4452.8 | 4465.1 |
| 42.5° | 3006.6 | 3344.2 | 3637.9 | 3955.1 | 4135.6 | 4284.6 | 4295.8 | 4308.0 |
| 45°   | 2836.3 | 3169.8 | 3471.7 | 3797.0 | 3975.5 | 4115.2 | 4119.3 | 4129.5 |
| 47.5° | 2662.9 | 2989.3 | 3289.1 | 3616.5 | 3793.0 | 3920.5 | 3924.5 | 3932.7 |
| 50°   | 2488.5 | 2808.8 | 3094.3 | 3421.7 | 3594.1 | 3728.7 | 3710.4 | 3718.5 |
| 52.5° | 2317.2 | 2619.1 | 2910.8 | 3211.6 | 3381.9 | 3501.3 | 3506.4 | 3490.1 |
| 55°   | 2148.9 | 2433.5 | 2701.7 | 2991.3 | 3153.5 | 3246.3 | 3243.2 | 3249.4 |
| 57.5° | 1978.6 | 2245.8 | 2491.6 | 2756.8 | 2914.8 | 3002.6 | 3020.9 | 2999.5 |
| 60°   | 1805.2 | 2056.1 | 2276.4 | 2516.1 | 2669.0 | 2742.5 | 2763.9 | 2743.5 |
| 62.5° | 1632.8 | 1863.3 | 2063.2 | 2272.3 | 2414.1 | 2504.8 | 2502.8 | 2480.4 |
| 65°   | 1460.5 | 1669.6 | 1848.0 | 2025.5 | 2148.9 | 2239.7 | 2235.6 | 2215.2 |
| 67.5° | 1301.4 | 1473.7 | 1633.9 | 1777.7 | 1884.8 | 1947.0 | 1968.4 | 1943.9 |
| 70°   | 1126.0 | 1274.9 | 1415.6 | 1530.9 | 1619.6 | 1675.7 | 1696.1 | 1674.7 |
| 72.5° | 950.5  | 1077.0 | 1175.9 | 1287.1 | 1355.4 | 1402.3 | 1423.8 | 1403.4 |
| 75°   | 777.2  | 881.2  | 961.8  | 1048.4 | 1096.4 | 1136.2 | 1160.6 | 1140.2 |
| 77.5° | 608.9  | 689.4  | 753.7  | 816.9  | 872.0  | 881.2  | 902.6  | 889.3  |
| 80°   | 448.8  | 506.9  | 553.8  | 595.6  | 635.4  | 639.5  | 656.8  | 648.6  |
| 82.5° | 298.8  | 337.6  | 349.8  | 393.7  | 419.2  | 415.1  | 432.4  | 426.3  |
| 85°   | 158.1  | 181.5  | 203.0  | 216.2  | 230.5  | 217.2  | 232.5  | 226.4  |
| 87.5° | 53.0   | 56.1   | 49.0   | 69.4   | 76.5   | 65.3   | 74.5   | 71.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)