

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: P838250

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-6LO-50-120-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: P838250  
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-LD4-6LO-50-120-EDD-90  
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and RFI grid  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

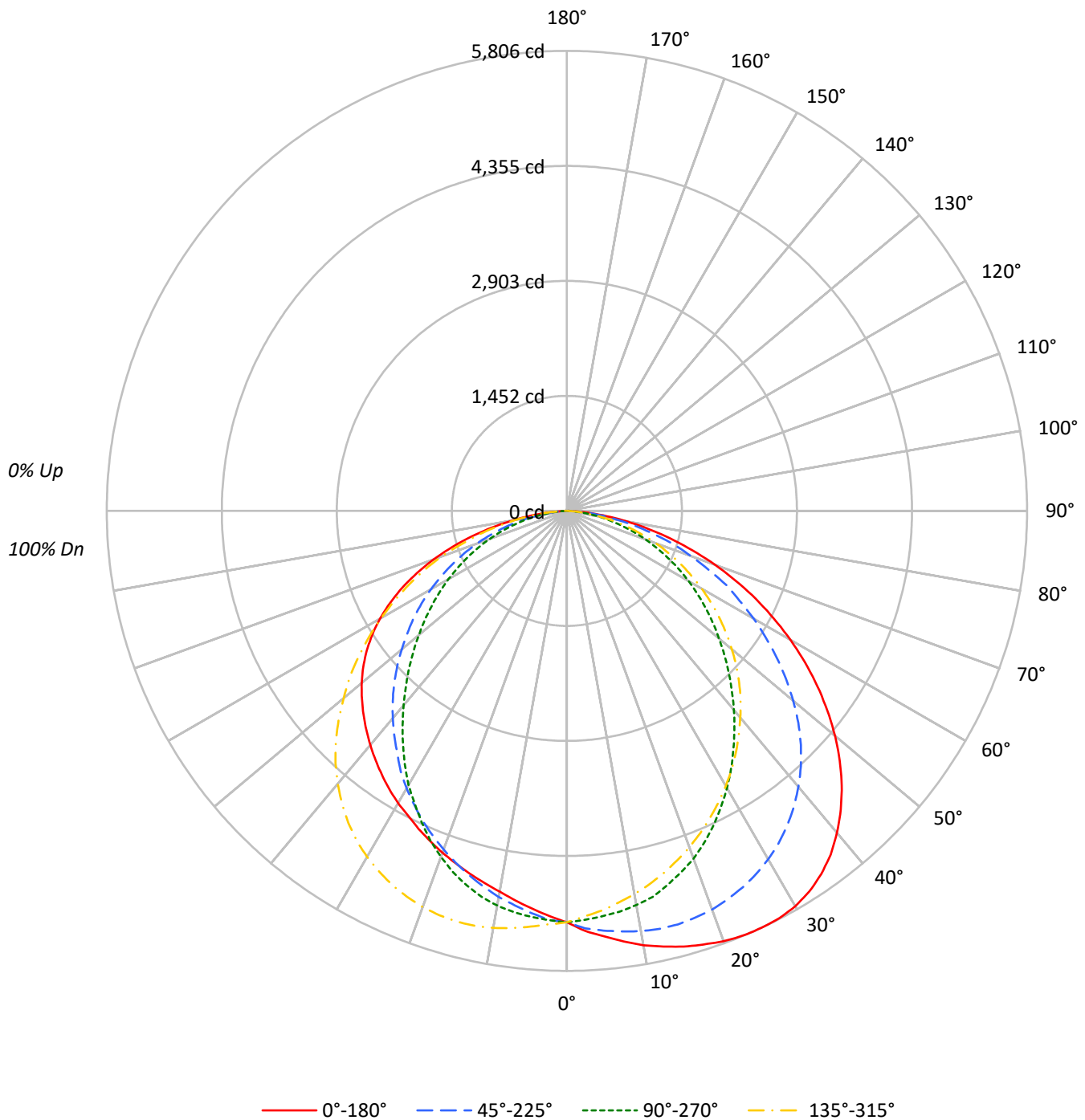
Lumens per Lamp: N/A  
Luminaire Lumens: 15233.5 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 140.4  
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: P838250

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-6LO-50-120-EDD-90

### 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  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  | 94  | 91  | 89  | 90  | 88  | 86  |
| 2   | 99  | 91  | 84  | 78  | 96  | 89  | 82  | 77  | 85  | 80  | 75  | 82  | 77  | 73  | 79  | 75  | 72  |
| 3   | 90  | 79  | 71  | 65  | 88  | 78  | 70  | 64  | 75  | 68  | 63  | 72  | 66  | 62  | 69  | 65  | 61  |
| 4   | 82  | 70  | 61  | 55  | 80  | 69  | 61  | 54  | 66  | 59  | 53  | 64  | 58  | 53  | 62  | 56  | 52  |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 59  | 52  | 46  | 57  | 51  | 46  | 56  | 50  | 45  |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 54  | 46  | 40  | 52  | 45  | 40  | 50  | 44  | 40  |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 40  | 35  | 46  | 40  | 35  |
| 8   | 60  | 47  | 38  | 32  | 59  | 46  | 38  | 32  | 45  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 31  |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 36  | 30  | 26  |

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

|     | 0°   | 90°  | 180° | 270° |
|-----|------|------|------|------|
| 0°  | 6986 | 6986 | 6986 | 6986 |
| 5°  | 7281 | 6936 | 6805 | 6948 |
| 10° | 7605 | 6900 | 6667 | 6910 |
| 15° | 7931 | 6813 | 6602 | 6814 |
| 20° | 8277 | 6689 | 6573 | 6651 |
| 25° | 8620 | 6502 | 6572 | 6435 |
| 30° | 8953 | 6276 | 6616 | 6206 |
| 35° | 9191 | 6018 | 6682 | 5923 |
| 40° | 9313 | 5759 | 6776 | 5629 |
| 45° | 9332 | 5497 | 6907 | 5358 |
| 50° | 9244 | 5245 | 7076 | 5106 |
| 55° | 9052 | 5012 | 7234 | 4873 |
| 60° | 8767 | 4768 | 7330 | 4644 |
| 65° | 8375 | 4488 | 7292 | 4384 |
| 70° | 7824 | 4160 | 7033 | 4083 |
| 75° | 7039 | 3709 | 6454 | 3689 |
| 80° | 5969 | 3106 | 5425 | 3154 |
| 85° | 4151 | 2056 | 3441 | 2113 |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838250

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-6LO-50-120-EDD-90

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 493.0   | 3.2       |
| 10°-20°   | 1427.5  | 9.4       |
| 20°-30°   | 2187.8  | 14.4      |
| 30°-40°   | 2660.2  | 17.5      |
| 40°-50°   | 2765.4  | 18.2      |
| 50°-60°   | 2498.0  | 16.4      |
| 60°-70°   | 1899.1  | 12.5      |
| 70°-80°   | 1058.8  | 7.0       |
| 80°-90°   | 243.8   | 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°    | 4108.3  | 27.0      |
| 0°-40°    | 6768.5  | 44.4      |
| 0°-60°    | 12031.9 | 79.0      |
| 0°-90°    | 15233.5 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 15233.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 90°  | 180° | 270° | 360° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 5192 | 5192 | 5192 | 5192 | 5192 |      |
| 5°  | 5391 | 5135 | 5038 | 5144 | 5391 | 520  |
| 15° | 5694 | 4891 | 4739 | 4892 | 5694 | 1614 |
| 25° | 5806 | 4380 | 4427 | 4335 | 5806 | 2682 |
| 35° | 5596 | 3664 | 4068 | 3606 | 5596 | 3495 |
| 45° | 4904 | 2889 | 3630 | 2816 | 4904 | 3776 |
| 55° | 3859 | 2136 | 3084 | 2077 | 3859 | 3445 |
| 65° | 2631 | 1410 | 2290 | 1377 | 2631 | 2600 |
| 75° | 1354 | 713  | 1242 | 710  | 1354 | 1438 |
| 85° | 269  | 133  | 223  | 137  | 269  | 339  |
| 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°    | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 |
| 2.5°  | 5307.4 | 5229.9 | 5231.1 | 5298.9 | 5246.8 | 5272.3 | 5199.6 | 5227.4 | 5219.0 | 5225.0 | 5165.7 |
| 5°    | 5390.9 | 5307.4 | 5306.2 | 5364.3 | 5306.2 | 5317.1 | 5225.0 | 5243.2 | 5216.5 | 5199.6 | 5135.4 |
| 7.5°  | 5479.4 | 5395.8 | 5387.3 | 5438.2 | 5361.9 | 5353.4 | 5251.7 | 5251.7 | 5203.2 | 5160.8 | 5100.3 |
| 10°   | 5566.6 | 5480.6 | 5469.7 | 5508.4 | 5414.0 | 5386.1 | 5262.6 | 5243.2 | 5179.0 | 5116.0 | 5050.6 |
| 12.5° | 5632.0 | 5544.8 | 5536.3 | 5560.5 | 5453.9 | 5403.1 | 5262.6 | 5225.0 | 5130.5 | 5042.1 | 4991.3 |
| 15°   | 5693.7 | 5604.1 | 5581.1 | 5593.2 | 5470.9 | 5403.1 | 5245.6 | 5187.5 | 5066.4 | 4950.1 | 4890.7 |
| 17.5° | 5737.3 | 5651.4 | 5628.3 | 5627.1 | 5479.4 | 5382.5 | 5209.3 | 5129.3 | 4984.0 | 4843.5 | 4784.1 |
| 20°   | 5780.9 | 5695.0 | 5665.9 | 5644.1 | 5476.9 | 5354.6 | 5156.0 | 5048.2 | 4878.6 | 4721.2 | 4671.5 |
| 22.5° | 5802.7 | 5714.3 | 5682.8 | 5650.1 | 5461.2 | 5303.7 | 5090.6 | 4953.7 | 4759.9 | 4572.2 | 4531.0 |
| 25°   | 5806.4 | 5715.5 | 5681.6 | 5634.4 | 5429.7 | 5243.2 | 5005.8 | 4839.9 | 4623.1 | 4414.7 | 4379.6 |
| 27.5° | 5796.7 | 5697.4 | 5663.5 | 5606.5 | 5382.5 | 5169.3 | 4905.3 | 4710.3 | 4477.7 | 4247.6 | 4210.1 |
| 30°   | 5762.8 | 5662.3 | 5629.6 | 5555.7 | 5315.9 | 5078.5 | 4795.0 | 4566.1 | 4316.6 | 4072.0 | 4039.3 |
| 32.5° | 5695.0 | 5596.8 | 5570.2 | 5496.3 | 5243.2 | 4973.1 | 4666.7 | 4411.1 | 4138.6 | 3904.8 | 3856.4 |
| 35°   | 5595.6 | 5497.5 | 5480.6 | 5403.1 | 5141.4 | 4847.1 | 4526.2 | 4241.5 | 3949.6 | 3711.0 | 3663.8 |
| 37.5° | 5466.0 | 5383.7 | 5358.2 | 5281.9 | 5021.5 | 4704.2 | 4365.1 | 4057.4 | 3757.1 | 3500.3 | 3471.2 |
| 40°   | 5302.5 | 5225.0 | 5205.6 | 5137.8 | 4882.3 | 4545.5 | 4190.7 | 3867.3 | 3558.4 | 3319.8 | 3278.7 |
| 42.5° | 5116.0 | 5043.3 | 5032.4 | 4962.2 | 4710.3 | 4369.9 | 4001.7 | 3669.9 | 3351.3 | 3121.2 | 3080.0 |
| 45°   | 4904.1 | 4833.8 | 4831.4 | 4764.8 | 4522.5 | 4174.9 | 3803.1 | 3470.0 | 3149.1 | 2910.5 | 2888.7 |
| 47.5° | 4670.3 | 4607.3 | 4607.3 | 4545.5 | 4313.0 | 3960.5 | 3598.4 | 3261.7 | 2945.6 | 2734.8 | 2696.1 |
| 50°   | 4416.0 | 4356.6 | 4338.4 | 4308.2 | 4081.7 | 3726.8 | 3382.8 | 3058.2 | 2744.5 | 2543.5 | 2505.9 |
| 52.5° | 4144.6 | 4093.8 | 4105.9 | 4050.2 | 3831.0 | 3483.3 | 3164.8 | 2829.3 | 2542.3 | 2359.4 | 2321.8 |
| 55°   | 3858.8 | 3786.1 | 3797.0 | 3776.4 | 3569.3 | 3232.6 | 2920.1 | 2640.4 | 2343.6 | 2171.6 | 2136.5 |
| 57.5° | 3562.1 | 3467.6 | 3506.4 | 3494.2 | 3290.8 | 2975.9 | 2696.1 | 2426.0 | 2146.2 | 1987.5 | 1953.6 |
| 60°   | 3258.1 | 3167.2 | 3207.2 | 3196.3 | 3004.9 | 2719.1 | 2464.7 | 2214.0 | 1950.0 | 1805.9 | 1772.0 |
| 62.5° | 2945.6 | 2862.0 | 2898.3 | 2889.9 | 2714.2 | 2456.3 | 2234.6 | 2004.5 | 1752.6 | 1623.0 | 1591.5 |
| 65°   | 2630.7 | 2550.7 | 2583.4 | 2577.4 | 2415.1 | 2218.9 | 1998.4 | 1787.7 | 1553.9 | 1441.3 | 1409.8 |
| 67.5° | 2308.5 | 2234.6 | 2264.9 | 2264.9 | 2115.9 | 1928.2 | 1761.1 | 1568.5 | 1358.9 | 1262.0 | 1233.0 |
| 70°   | 1988.8 | 1919.7 | 1946.4 | 1943.9 | 1818.0 | 1665.4 | 1521.2 | 1349.3 | 1161.5 | 1081.6 | 1057.4 |
| 72.5° | 1666.6 | 1606.0 | 1630.2 | 1627.8 | 1522.4 | 1424.3 | 1281.4 | 1132.5 | 968.9  | 904.7  | 882.9  |
| 75°   | 1354.1 | 1297.2 | 1320.2 | 1317.8 | 1231.8 | 1139.7 | 1044.0 | 920.5  | 780.0  | 735.2  | 713.4  |
| 77.5° | 1056.1 | 998.0  | 1017.4 | 1017.4 | 954.4  | 887.8  | 811.5  | 715.8  | 616.5  | 568.0  | 552.3  |
| 80°   | 770.3  | 742.5  | 732.8  | 734.0  | 691.6  | 648.0  | 609.2  | 517.2  | 444.5  | 411.8  | 400.9  |
| 82.5° | 506.3  | 483.3  | 473.6  | 476.0  | 451.8  | 425.1  | 400.9  | 336.7  | 288.3  | 268.9  | 262.8  |
| 85°   | 268.9  | 251.9  | 243.4  | 249.5  | 244.7  | 230.1  | 218.0  | 174.4  | 144.1  | 136.9  | 133.2  |
| 87.5° | 84.8   | 73.9   | 67.8   | 89.6   | 76.3   | 67.8   | 65.4   | 52.1   | 40.0   | 40.0   | 38.8   |
| 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°    | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 |
| 2.5°  | 5185.0 | 5185.0 | 5137.8 | 5126.9 | 5122.1 | 5128.1 | 5080.9 | 5072.4 | 5140.2 | 5117.2 | 5065.1 |
| 5°    | 5143.9 | 5141.4 | 5074.8 | 5062.7 | 5062.7 | 5055.5 | 5002.2 | 4990.0 | 5057.9 | 5038.5 | 4981.6 |
| 7.5°  | 5093.0 | 5085.7 | 5007.0 | 4998.5 | 4986.4 | 4981.6 | 4922.2 | 4913.7 | 4971.9 | 4959.8 | 4906.5 |
| 10°   | 5031.2 | 5024.0 | 4930.7 | 4924.6 | 4911.3 | 4901.6 | 4845.9 | 4839.9 | 4899.2 | 4879.8 | 4837.4 |
| 12.5° | 4950.1 | 4936.8 | 4841.1 | 4835.0 | 4824.1 | 4820.5 | 4766.0 | 4763.6 | 4829.0 | 4809.6 | 4764.8 |
| 15°   | 4843.5 | 4832.6 | 4726.0 | 4728.4 | 4729.6 | 4729.6 | 4686.0 | 4683.6 | 4747.8 | 4739.3 | 4690.9 |
| 17.5° | 4726.0 | 4711.5 | 4609.7 | 4617.0 | 4625.5 | 4635.2 | 4601.3 | 4607.3 | 4675.1 | 4664.2 | 4620.6 |
| 20°   | 4592.8 | 4578.2 | 4478.9 | 4499.5 | 4517.7 | 4537.1 | 4515.3 | 4532.2 | 4595.2 | 4590.4 | 4557.7 |
| 22.5° | 4443.8 | 4429.3 | 4337.2 | 4368.7 | 4399.0 | 4435.3 | 4425.6 | 4445.0 | 4511.6 | 4510.4 | 4481.4 |
| 25°   | 4262.1 | 4265.8 | 4184.6 | 4223.4 | 4274.2 | 4325.1 | 4328.7 | 4360.2 | 4434.1 | 4426.9 | 4400.2 |
| 27.5° | 4092.6 | 4097.4 | 4011.4 | 4076.8 | 4144.6 | 4210.1 | 4225.8 | 4269.4 | 4344.5 | 4338.4 | 4315.4 |
| 30°   | 3914.5 | 3920.6 | 3837.0 | 3926.6 | 4009.0 | 4088.9 | 4122.8 | 4182.2 | 4258.5 | 4258.5 | 4234.3 |
| 32.5° | 3729.2 | 3740.1 | 3652.9 | 3772.8 | 3868.5 | 3961.8 | 4021.1 | 4082.9 | 4170.1 | 4167.7 | 4147.1 |
| 35°   | 3539.1 | 3551.2 | 3471.2 | 3623.8 | 3719.5 | 3833.4 | 3907.3 | 3989.6 | 4067.1 | 4068.3 | 4052.6 |
| 37.5° | 3345.3 | 3359.8 | 3287.1 | 3454.3 | 3563.3 | 3697.7 | 3792.2 | 3874.6 | 3960.5 | 3965.4 | 3950.9 |
| 40°   | 3152.7 | 3168.4 | 3105.5 | 3266.5 | 3404.6 | 3554.8 | 3663.8 | 3760.7 | 3855.2 | 3857.6 | 3847.9 |
| 42.5° | 2960.1 | 2977.1 | 2929.8 | 3087.3 | 3243.5 | 3404.6 | 3533.0 | 3643.2 | 3740.1 | 3746.2 | 3735.3 |
| 45°   | 2772.4 | 2786.9 | 2753.0 | 2925.0 | 3075.2 | 3250.8 | 3398.6 | 3523.3 | 3621.4 | 3629.9 | 3626.3 |
| 47.5° | 2585.9 | 2599.2 | 2568.9 | 2726.4 | 2899.6 | 3086.1 | 3256.9 | 3394.9 | 3499.1 | 3508.8 | 3506.4 |
| 50°   | 2403.0 | 2413.9 | 2381.2 | 2545.9 | 2717.9 | 2916.5 | 3094.6 | 3254.4 | 3370.7 | 3380.4 | 3379.2 |
| 52.5° | 2221.3 | 2232.2 | 2204.3 | 2377.5 | 2533.8 | 2743.3 | 2937.1 | 3110.3 | 3225.4 | 3239.9 | 3242.3 |
| 55°   | 2045.7 | 2050.5 | 2028.7 | 2194.7 | 2346.0 | 2565.3 | 2788.1 | 2956.5 | 3071.5 | 3083.7 | 3090.9 |
| 57.5° | 1870.1 | 1871.3 | 1853.1 | 2011.8 | 2157.1 | 2381.2 | 2614.9 | 2791.8 | 2900.8 | 2912.9 | 2923.8 |
| 60°   | 1695.6 | 1694.4 | 1673.8 | 1827.7 | 1967.0 | 2188.6 | 2432.0 | 2607.7 | 2713.0 | 2723.9 | 2738.5 |
| 62.5° | 1522.4 | 1518.8 | 1500.6 | 1642.4 | 1773.2 | 1992.4 | 2237.0 | 2406.6 | 2507.1 | 2514.4 | 2533.8 |
| 65°   | 1350.5 | 1346.8 | 1329.9 | 1460.7 | 1579.4 | 1788.9 | 2028.7 | 2189.8 | 2280.6 | 2290.3 | 2286.7 |
| 67.5° | 1180.9 | 1173.6 | 1160.3 | 1277.8 | 1385.6 | 1579.4 | 1809.5 | 1963.3 | 2038.4 | 2046.9 | 2069.9 |
| 70°   | 1011.3 | 1002.9 | 972.6  | 1097.3 | 1191.8 | 1365.0 | 1579.4 | 1716.2 | 1779.2 | 1787.7 | 1784.1 |
| 72.5° | 844.2  | 835.7  | 803.0  | 918.1  | 998.0  | 1149.4 | 1340.8 | 1454.6 | 1509.1 | 1516.4 | 1516.4 |
| 75°   | 681.9  | 677.0  | 656.5  | 743.7  | 810.3  | 933.8  | 1096.1 | 1190.6 | 1233.0 | 1241.5 | 1239.0 |
| 77.5° | 525.7  | 522.0  | 501.4  | 576.5  | 628.6  | 720.7  | 851.5  | 925.3  | 956.8  | 966.5  | 987.1  |
| 80°   | 376.7  | 375.5  | 342.8  | 416.6  | 439.7  | 517.2  | 612.9  | 669.8  | 686.7  | 700.1  | 714.6  |
| 82.5° | 241.0  | 242.2  | 209.5  | 272.5  | 282.2  | 331.9  | 391.2  | 426.3  | 438.4  | 449.3  | 460.2  |
| 85°   | 117.5  | 122.3  | 104.2  | 144.1  | 145.3  | 170.8  | 196.2  | 209.5  | 214.4  | 222.9  | 232.5  |
| 87.5° | 30.3   | 35.1   | 19.4   | 41.2   | 36.3   | 47.2   | 54.5   | 58.1   | 56.9   | 63.0   | 66.6   |
| 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):**

|       | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°   | 275°   | 285°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 |
| 2.5°  | 5082.1 | 5120.9 | 5101.5 | 5164.5 | 5188.7 | 5149.9 | 5217.7 | 5219.0 | 5170.5 | 5227.4 | 5258.9 |
| 5°    | 5003.4 | 5043.3 | 5031.2 | 5096.6 | 5126.9 | 5093.0 | 5175.4 | 5191.1 | 5143.9 | 5208.1 | 5258.9 |
| 7.5°  | 4923.4 | 4970.7 | 4954.9 | 5021.5 | 5057.9 | 5031.2 | 5119.6 | 5145.1 | 5108.7 | 5179.0 | 5246.8 |
| 10°   | 4854.4 | 4894.4 | 4877.4 | 4947.7 | 4979.1 | 4957.3 | 5044.6 | 5091.8 | 5057.9 | 5143.9 | 5225.0 |
| 12.5° | 4786.6 | 4819.3 | 4799.9 | 4858.0 | 4888.3 | 4860.5 | 4967.0 | 5010.6 | 4986.4 | 5076.0 | 5180.2 |
| 15°   | 4699.4 | 4735.7 | 4709.1 | 4761.1 | 4784.1 | 4759.9 | 4847.1 | 4922.2 | 4891.9 | 4990.0 | 5105.1 |
| 17.5° | 4632.8 | 4653.3 | 4617.0 | 4658.2 | 4671.5 | 4638.8 | 4727.2 | 4801.1 | 4779.3 | 4885.9 | 5019.1 |
| 20°   | 4558.9 | 4575.8 | 4525.0 | 4548.0 | 4546.8 | 4505.6 | 4586.7 | 4659.4 | 4644.9 | 4762.3 | 4913.7 |
| 22.5° | 4476.5 | 4485.0 | 4425.6 | 4430.5 | 4428.1 | 4360.2 | 4432.9 | 4506.8 | 4500.7 | 4619.4 | 4789.0 |
| 25°   | 4389.3 | 4390.5 | 4314.2 | 4311.8 | 4285.1 | 4205.2 | 4269.4 | 4353.0 | 4334.8 | 4463.2 | 4641.2 |
| 27.5° | 4303.3 | 4291.2 | 4199.2 | 4177.3 | 4135.0 | 4039.3 | 4096.2 | 4171.3 | 4160.4 | 4286.4 | 4483.8 |
| 30°   | 4211.3 | 4195.5 | 4082.9 | 4042.9 | 3981.1 | 3870.9 | 3918.2 | 3988.4 | 3994.5 | 4104.7 | 4311.8 |
| 32.5° | 4124.1 | 4084.1 | 3959.3 | 3901.2 | 3823.7 | 3695.3 | 3720.7 | 3792.2 | 3801.9 | 3913.3 | 4126.5 |
| 35°   | 4011.4 | 3984.8 | 3831.0 | 3731.6 | 3655.3 | 3514.8 | 3541.5 | 3591.1 | 3605.7 | 3714.7 | 3931.5 |
| 37.5° | 3904.8 | 3862.4 | 3698.9 | 3577.8 | 3479.7 | 3331.9 | 3339.2 | 3390.1 | 3404.6 | 3514.8 | 3729.2 |
| 40°   | 3794.6 | 3734.1 | 3558.4 | 3416.7 | 3304.1 | 3149.1 | 3140.6 | 3193.9 | 3204.8 | 3312.6 | 3506.4 |
| 42.5° | 3677.1 | 3604.5 | 3407.0 | 3252.0 | 3122.4 | 2965.0 | 2948.0 | 2994.0 | 3006.1 | 3111.5 | 3301.7 |
| 45°   | 3558.4 | 3471.2 | 3252.0 | 3082.4 | 2940.7 | 2779.7 | 2762.7 | 2797.8 | 2816.0 | 2915.3 | 3098.2 |
| 47.5° | 3432.5 | 3330.7 | 3092.1 | 2903.2 | 2756.6 | 2595.6 | 2575.0 | 2610.1 | 2624.6 | 2722.7 | 2895.9 |
| 50°   | 3300.5 | 3176.9 | 2927.4 | 2719.1 | 2573.8 | 2415.1 | 2384.8 | 2426.0 | 2439.3 | 2531.4 | 2700.9 |
| 52.5° | 3155.1 | 3018.3 | 2751.8 | 2533.8 | 2388.4 | 2237.0 | 2200.7 | 2240.7 | 2256.4 | 2346.0 | 2502.3 |
| 55°   | 3001.3 | 2853.5 | 2575.0 | 2363.0 | 2205.6 | 2057.8 | 2027.5 | 2043.3 | 2077.2 | 2162.0 | 2307.3 |
| 57.5° | 2828.1 | 2681.5 | 2388.4 | 2172.9 | 2021.5 | 1879.7 | 1854.3 | 1868.8 | 1900.3 | 1982.7 | 2113.5 |
| 60°   | 2644.0 | 2489.0 | 2198.3 | 1982.7 | 1836.1 | 1701.7 | 1678.7 | 1692.0 | 1725.9 | 1801.0 | 1922.1 |
| 62.5° | 2462.3 | 2287.9 | 2002.1 | 1787.7 | 1654.5 | 1529.7 | 1523.7 | 1518.8 | 1550.3 | 1623.0 | 1729.6 |
| 65°   | 2241.9 | 2074.7 | 1797.4 | 1593.9 | 1472.8 | 1360.2 | 1335.9 | 1346.8 | 1377.1 | 1443.7 | 1555.2 |
| 67.5° | 2005.7 | 1854.3 | 1587.9 | 1400.1 | 1292.3 | 1191.8 | 1171.2 | 1176.1 | 1207.5 | 1265.7 | 1362.6 |
| 70°   | 1755.0 | 1621.8 | 1373.5 | 1205.1 | 1114.3 | 1019.8 | 1006.5 | 1007.7 | 1038.0 | 1088.8 | 1173.6 |
| 72.5° | 1492.2 | 1372.3 | 1156.7 | 1012.5 | 937.5  | 869.6  | 857.5  | 843.0  | 870.8  | 914.4  | 987.1  |
| 75°   | 1224.5 | 1119.1 | 941.1  | 823.6  | 764.3  | 707.3  | 696.4  | 681.9  | 709.7  | 747.3  | 804.2  |
| 77.5° | 954.4  | 869.6  | 731.6  | 640.7  | 594.7  | 552.3  | 542.6  | 526.9  | 554.7  | 582.6  | 627.4  |
| 80°   | 690.4  | 628.6  | 546.2  | 450.6  | 434.8  | 407.0  | 397.3  | 380.3  | 407.0  | 425.1  | 459.0  |
| 82.5° | 445.7  | 404.5  | 357.3  | 290.7  | 288.3  | 267.7  | 262.8  | 243.4  | 267.7  | 278.6  | 304.0  |
| 85°   | 225.3  | 205.9  | 193.8  | 147.8  | 152.6  | 139.3  | 138.1  | 117.5  | 136.9  | 141.7  | 156.2  |
| 87.5° | 64.2   | 67.8   | 60.6   | 36.3   | 46.0   | 43.6   | 43.6   | 31.5   | 43.6   | 43.6   | 49.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



TEST NUMBER: P838250

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-6LO-50-120-EDD-90

**CANDELA DISTRIBUTION (continued):**

|       | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°   | 360°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 | 5192.3 |
| 2.5°  | 5197.2 | 5217.7 | 5222.6 | 5221.4 | 5234.7 | 5307.4 | 5283.2 | 5307.4 |
| 5°    | 5209.3 | 5255.3 | 5267.4 | 5284.4 | 5306.2 | 5388.5 | 5361.9 | 5390.9 |
| 7.5°  | 5216.5 | 5285.6 | 5312.2 | 5344.9 | 5380.0 | 5472.1 | 5450.3 | 5479.4 |
| 10°   | 5216.5 | 5306.2 | 5344.9 | 5399.4 | 5446.7 | 5553.2 | 5532.7 | 5566.6 |
| 12.5° | 5194.7 | 5309.8 | 5364.3 | 5440.6 | 5501.2 | 5616.2 | 5607.7 | 5632.0 |
| 15°   | 5149.9 | 5291.6 | 5366.7 | 5464.8 | 5539.9 | 5668.3 | 5664.7 | 5693.7 |
| 17.5° | 5089.4 | 5260.1 | 5351.0 | 5474.5 | 5569.0 | 5713.1 | 5721.6 | 5737.3 |
| 20°   | 5013.1 | 5200.8 | 5319.5 | 5470.9 | 5589.6 | 5748.2 | 5759.1 | 5780.9 |
| 22.5° | 4912.5 | 5129.3 | 5272.3 | 5455.1 | 5592.0 | 5762.8 | 5782.2 | 5802.7 |
| 25°   | 4793.8 | 5043.3 | 5210.5 | 5424.9 | 5579.9 | 5761.6 | 5788.2 | 5806.4 |
| 27.5° | 4658.2 | 4931.9 | 5131.8 | 5376.4 | 5546.0 | 5742.2 | 5774.9 | 5796.7 |
| 30°   | 4500.7 | 4813.2 | 5042.1 | 5313.4 | 5500.0 | 5705.9 | 5741.0 | 5762.8 |
| 32.5° | 4338.4 | 4682.4 | 4935.5 | 5232.3 | 5433.3 | 5647.7 | 5678.0 | 5695.0 |
| 35°   | 4161.6 | 4523.7 | 4807.2 | 5128.1 | 5347.3 | 5554.5 | 5577.5 | 5595.6 |
| 37.5° | 3969.0 | 4351.8 | 4660.6 | 5010.6 | 5226.2 | 5424.9 | 5445.5 | 5466.0 |
| 40°   | 3770.4 | 4171.3 | 4495.9 | 4866.5 | 5082.1 | 5266.2 | 5288.0 | 5302.5 |
| 42.5° | 3570.5 | 3971.4 | 4320.3 | 4696.9 | 4911.3 | 5088.2 | 5101.5 | 5116.0 |
| 45°   | 3368.3 | 3764.3 | 4122.8 | 4509.2 | 4721.2 | 4887.1 | 4891.9 | 4904.1 |
| 47.5° | 3162.4 | 3550.0 | 3906.0 | 4294.8 | 4504.4 | 4655.8 | 4660.6 | 4670.3 |
| 50°   | 2955.3 | 3335.6 | 3674.7 | 4063.5 | 4268.2 | 4428.1 | 4406.3 | 4416.0 |
| 52.5° | 2751.8 | 3110.3 | 3456.7 | 3814.0 | 4016.3 | 4158.0 | 4164.0 | 4144.6 |
| 55°   | 2551.9 | 2889.9 | 3208.4 | 3552.4 | 3745.0 | 3855.2 | 3851.5 | 3858.8 |
| 57.5° | 2349.7 | 2667.0 | 2958.9 | 3273.8 | 3461.5 | 3565.7 | 3587.5 | 3562.1 |
| 60°   | 2143.8 | 2441.7 | 2703.3 | 2988.0 | 3169.6 | 3256.9 | 3282.3 | 3258.1 |
| 62.5° | 1939.1 | 2212.8 | 2450.2 | 2698.5 | 2866.9 | 2974.7 | 2972.2 | 2945.6 |
| 65°   | 1734.4 | 1982.7 | 2194.7 | 2405.4 | 2551.9 | 2659.7 | 2654.9 | 2630.7 |
| 67.5° | 1545.5 | 1750.2 | 1940.3 | 2111.1 | 2238.3 | 2312.1 | 2337.6 | 2308.5 |
| 70°   | 1337.1 | 1514.0 | 1681.1 | 1818.0 | 1923.3 | 1990.0 | 2014.2 | 1988.8 |
| 72.5° | 1128.8 | 1279.0 | 1396.5 | 1528.5 | 1609.7 | 1665.4 | 1690.8 | 1666.6 |
| 75°   | 922.9  | 1046.5 | 1142.1 | 1245.1 | 1302.0 | 1349.3 | 1378.3 | 1354.1 |
| 77.5° | 723.1  | 818.8  | 895.1  | 970.2  | 1035.6 | 1046.5 | 1071.9 | 1056.1 |
| 80°   | 532.9  | 602.0  | 657.7  | 707.3  | 754.6  | 759.4  | 780.0  | 770.3  |
| 82.5° | 354.9  | 400.9  | 415.4  | 467.5  | 497.8  | 492.9  | 513.5  | 506.3  |
| 85°   | 187.7  | 215.6  | 241.0  | 256.8  | 273.7  | 258.0  | 276.1  | 268.9  |
| 87.5° | 63.0   | 66.6   | 58.1   | 82.4   | 90.8   | 77.5   | 88.4   | 84.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)