

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: P838053

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-6STD-20-120-EDD**

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: P838053  
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-LD4-6STD-20-120-EDD  
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and RFI grid  
Light Source: 2000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

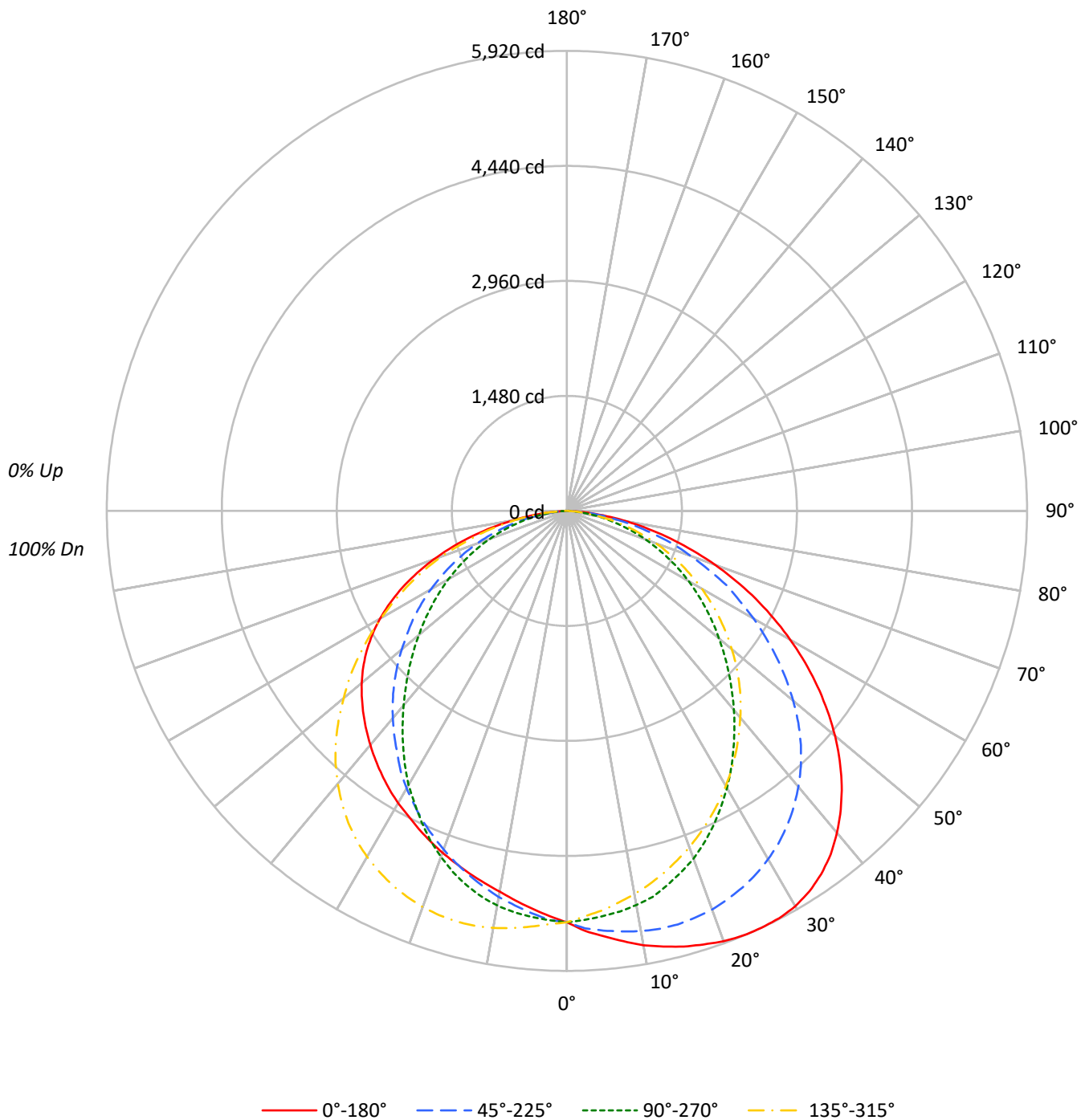
Lumens per Lamp: N/A  
Luminaire Lumens: 15532.2 lumens  
Efficiency: N/A  
Efficacy: 77.7 lumens/watt  
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 199.8  
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



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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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°  | 7123 | 7123 | 7123 | 7123 |
| 5°  | 7424 | 7072 | 6939 | 7084 |
| 10° | 7754 | 7036 | 6798 | 7046 |
| 15° | 8087 | 6946 | 6731 | 6948 |
| 20° | 8440 | 6820 | 6702 | 6781 |
| 25° | 8789 | 6629 | 6701 | 6562 |
| 30° | 9129 | 6399 | 6746 | 6328 |
| 35° | 9371 | 6136 | 6813 | 6039 |
| 40° | 9496 | 5872 | 6908 | 5739 |
| 45° | 9514 | 5604 | 7042 | 5463 |
| 50° | 9425 | 5348 | 7215 | 5206 |
| 55° | 9230 | 5110 | 7375 | 4968 |
| 60° | 8939 | 4862 | 7474 | 4736 |
| 65° | 8540 | 4577 | 7435 | 4470 |
| 70° | 7977 | 4241 | 7170 | 4163 |
| 75° | 7177 | 3781 | 6580 | 3762 |
| 80° | 6086 | 3168 | 5531 | 3215 |
| 85° | 4233 | 2096 | 3507 | 2154 |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838053

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-6STD-20-120-EDD

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 502.6   | 3.2       |
| 10°-20°   | 1455.5  | 9.4       |
| 20°-30°   | 2230.7  | 14.4      |
| 30°-40°   | 2712.3  | 17.5      |
| 40°-50°   | 2819.6  | 18.2      |
| 50°-60°   | 2547.0  | 16.4      |
| 60°-70°   | 1936.4  | 12.5      |
| 70°-80°   | 1079.5  | 7.0       |
| 80°-90°   | 248.5   | 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°    | 4188.8  | 27.0      |
| 0°-40°    | 6901.2  | 44.4      |
| 0°-60°    | 12267.8 | 79.0      |
| 0°-90°    | 15532.2 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 15532.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 90°  | 180° | 270° | 360° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 5294 | 5294 | 5294 | 5294 | 5294 |      |
| 5°  | 5497 | 5236 | 5137 | 5245 | 5497 | 530  |
| 15° | 5805 | 4987 | 4832 | 4988 | 5805 | 1646 |
| 25° | 5920 | 4466 | 4514 | 4420 | 5920 | 2734 |
| 35° | 5705 | 3736 | 4148 | 3676 | 5705 | 3563 |
| 45° | 5000 | 2945 | 3701 | 2871 | 5000 | 3850 |
| 55° | 3934 | 2178 | 3144 | 2118 | 3934 | 3512 |
| 65° | 2682 | 1438 | 2335 | 1404 | 2682 | 2651 |
| 75° | 1381 | 727  | 1266 | 724  | 1381 | 1467 |
| 85° | 274  | 136  | 227  | 140  | 274  | 345  |
| 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°    | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 |
| 2.5°  | 5411.4 | 5332.4 | 5333.6 | 5402.8 | 5349.7 | 5375.6 | 5301.5 | 5329.9 | 5321.3 | 5327.5 | 5267.0 |
| 5°    | 5496.7 | 5411.4 | 5410.2 | 5469.5 | 5410.2 | 5421.3 | 5327.5 | 5346.0 | 5318.8 | 5301.5 | 5236.1 |
| 7.5°  | 5586.8 | 5501.6 | 5492.9 | 5544.8 | 5467.0 | 5458.4 | 5354.6 | 5354.6 | 5305.2 | 5262.0 | 5200.3 |
| 10°   | 5675.7 | 5588.0 | 5576.9 | 5616.4 | 5520.1 | 5491.7 | 5365.7 | 5346.0 | 5280.5 | 5216.3 | 5149.6 |
| 12.5° | 5742.4 | 5653.5 | 5644.8 | 5669.5 | 5560.9 | 5509.0 | 5365.7 | 5327.5 | 5231.1 | 5141.0 | 5089.1 |
| 15°   | 5805.4 | 5714.0 | 5690.5 | 5702.9 | 5578.2 | 5509.0 | 5348.5 | 5289.2 | 5165.7 | 5047.1 | 4986.6 |
| 17.5° | 5849.8 | 5762.2 | 5738.7 | 5737.5 | 5586.8 | 5488.0 | 5311.4 | 5229.9 | 5081.7 | 4938.5 | 4878.0 |
| 20°   | 5894.3 | 5806.6 | 5777.0 | 5754.8 | 5584.3 | 5459.6 | 5257.1 | 5147.2 | 4974.3 | 4813.7 | 4763.1 |
| 22.5° | 5916.5 | 5826.4 | 5794.3 | 5760.9 | 5568.3 | 5407.7 | 5190.4 | 5050.8 | 4853.3 | 4661.8 | 4619.9 |
| 25°   | 5920.2 | 5827.6 | 5793.0 | 5744.9 | 5536.2 | 5346.0 | 5103.9 | 4934.8 | 4713.7 | 4501.3 | 4465.5 |
| 27.5° | 5910.4 | 5809.1 | 5774.5 | 5716.5 | 5488.0 | 5270.7 | 5001.4 | 4802.6 | 4565.5 | 4330.9 | 4292.6 |
| 30°   | 5875.8 | 5773.3 | 5739.9 | 5664.6 | 5420.1 | 5178.0 | 4889.1 | 4655.7 | 4401.3 | 4151.8 | 4118.5 |
| 32.5° | 5806.6 | 5706.6 | 5679.4 | 5604.1 | 5346.0 | 5070.6 | 4758.2 | 4497.6 | 4219.7 | 3981.4 | 3932.0 |
| 35°   | 5705.4 | 5605.3 | 5588.0 | 5509.0 | 5242.3 | 4942.2 | 4614.9 | 4324.7 | 4027.1 | 3783.8 | 3735.6 |
| 37.5° | 5573.2 | 5489.2 | 5463.3 | 5385.5 | 5120.0 | 4796.4 | 4450.7 | 4137.0 | 3830.7 | 3568.9 | 3539.3 |
| 40°   | 5406.5 | 5327.5 | 5307.7 | 5238.6 | 4978.0 | 4634.7 | 4272.8 | 3943.1 | 3628.2 | 3384.9 | 3342.9 |
| 42.5° | 5216.3 | 5142.2 | 5131.1 | 5059.5 | 4802.6 | 4455.6 | 4080.2 | 3741.8 | 3417.0 | 3182.4 | 3140.4 |
| 45°   | 5000.2 | 4928.6 | 4926.1 | 4858.2 | 4611.2 | 4256.8 | 3877.7 | 3538.1 | 3210.8 | 2967.5 | 2945.3 |
| 47.5° | 4761.9 | 4697.7 | 4697.7 | 4634.7 | 4397.6 | 4038.2 | 3669.0 | 3325.7 | 3003.3 | 2788.5 | 2748.9 |
| 50°   | 4502.5 | 4442.0 | 4423.5 | 4392.6 | 4161.7 | 3799.9 | 3449.1 | 3118.2 | 2798.3 | 2593.3 | 2555.1 |
| 52.5° | 4225.9 | 4174.0 | 4186.4 | 4129.6 | 3906.1 | 3551.6 | 3226.9 | 2884.8 | 2592.1 | 2405.6 | 2367.4 |
| 55°   | 3934.5 | 3860.4 | 3871.5 | 3850.5 | 3639.3 | 3296.0 | 2977.4 | 2692.1 | 2389.6 | 2214.2 | 2178.4 |
| 57.5° | 3631.9 | 3535.6 | 3575.1 | 3562.8 | 3355.3 | 3034.2 | 2748.9 | 2473.6 | 2188.3 | 2026.5 | 1991.9 |
| 60°   | 3321.9 | 3229.3 | 3270.1 | 3259.0 | 3063.8 | 2772.4 | 2513.1 | 2257.4 | 1988.2 | 1841.3 | 1806.7 |
| 62.5° | 3003.3 | 2918.1 | 2955.2 | 2946.5 | 2767.5 | 2504.4 | 2278.4 | 2043.8 | 1786.9 | 1654.8 | 1622.7 |
| 65°   | 2682.3 | 2600.8 | 2634.1 | 2627.9 | 2462.4 | 2262.4 | 2037.6 | 1822.7 | 1584.4 | 1469.6 | 1437.5 |
| 67.5° | 2353.8 | 2278.4 | 2309.3 | 2309.3 | 2157.4 | 1966.0 | 1795.6 | 1599.2 | 1385.6 | 1286.8 | 1257.2 |
| 70°   | 2027.7 | 1957.4 | 1984.5 | 1982.1 | 1853.6 | 1698.0 | 1551.1 | 1375.7 | 1184.3 | 1102.8 | 1078.1 |
| 72.5° | 1699.3 | 1637.5 | 1662.2 | 1659.7 | 1552.3 | 1452.3 | 1306.6 | 1154.7 | 987.9  | 922.5  | 900.3  |
| 75°   | 1380.6 | 1322.6 | 1346.1 | 1343.6 | 1255.9 | 1162.1 | 1064.5 | 938.5  | 795.3  | 749.6  | 727.4  |
| 77.5° | 1076.9 | 1017.6 | 1037.3 | 1037.3 | 973.1  | 905.2  | 827.4  | 729.8  | 628.6  | 579.2  | 563.1  |
| 80°   | 785.4  | 757.0  | 747.1  | 748.4  | 705.1  | 660.7  | 621.2  | 527.3  | 453.2  | 419.9  | 408.8  |
| 82.5° | 516.2  | 492.7  | 482.9  | 485.3  | 460.6  | 433.5  | 408.8  | 343.3  | 293.9  | 274.2  | 268.0  |
| 85°   | 274.2  | 256.9  | 248.2  | 254.4  | 249.5  | 234.6  | 222.3  | 177.8  | 147.0  | 139.5  | 135.8  |
| 87.5° | 86.4   | 75.3   | 69.2   | 91.4   | 77.8   | 69.2   | 66.7   | 53.1   | 40.8   | 40.8   | 39.5   |
| 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°    | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 |
| 2.5°  | 5286.7 | 5286.7 | 5238.6 | 5227.4 | 5222.5 | 5228.7 | 5180.5 | 5171.9 | 5241.0 | 5217.6 | 5164.5 |
| 5°    | 5244.7 | 5242.3 | 5174.3 | 5162.0 | 5162.0 | 5154.6 | 5100.2 | 5087.9 | 5157.0 | 5137.3 | 5079.2 |
| 7.5°  | 5192.9 | 5185.5 | 5105.2 | 5096.5 | 5084.2 | 5079.2 | 5018.7 | 5010.1 | 5069.4 | 5057.0 | 5002.7 |
| 10°   | 5129.9 | 5122.5 | 5027.4 | 5021.2 | 5007.6 | 4997.7 | 4940.9 | 4934.8 | 4995.3 | 4975.5 | 4932.3 |
| 12.5° | 5047.1 | 5033.6 | 4936.0 | 4929.8 | 4918.7 | 4915.0 | 4859.4 | 4857.0 | 4923.6 | 4903.9 | 4858.2 |
| 15°   | 4938.5 | 4927.4 | 4818.7 | 4821.1 | 4822.4 | 4822.4 | 4777.9 | 4775.5 | 4840.9 | 4832.3 | 4782.9 |
| 17.5° | 4818.7 | 4803.9 | 4700.1 | 4707.5 | 4716.2 | 4726.1 | 4691.5 | 4697.7 | 4766.8 | 4755.7 | 4711.2 |
| 20°   | 4682.8 | 4668.0 | 4566.8 | 4587.7 | 4606.3 | 4626.0 | 4603.8 | 4621.1 | 4685.3 | 4680.4 | 4647.0 |
| 22.5° | 4530.9 | 4516.1 | 4422.3 | 4454.4 | 4485.2 | 4522.3 | 4512.4 | 4532.2 | 4600.1 | 4598.9 | 4569.2 |
| 25°   | 4345.7 | 4349.4 | 4266.7 | 4306.2 | 4358.1 | 4409.9 | 4413.6 | 4445.7 | 4521.1 | 4513.7 | 4486.5 |
| 27.5° | 4172.8 | 4177.8 | 4090.1 | 4156.8 | 4225.9 | 4292.6 | 4308.7 | 4353.1 | 4429.7 | 4423.5 | 4400.0 |
| 30°   | 3991.3 | 3997.5 | 3912.2 | 4003.6 | 4087.6 | 4169.1 | 4203.7 | 4264.2 | 4342.0 | 4342.0 | 4317.3 |
| 32.5° | 3802.3 | 3813.4 | 3724.5 | 3846.8 | 3944.4 | 4039.4 | 4100.0 | 4162.9 | 4251.8 | 4249.4 | 4228.4 |
| 35°   | 3608.5 | 3620.8 | 3539.3 | 3694.9 | 3792.5 | 3908.5 | 3983.9 | 4067.8 | 4146.9 | 4148.1 | 4132.1 |
| 37.5° | 3410.9 | 3425.7 | 3351.6 | 3522.0 | 3633.1 | 3770.2 | 3866.6 | 3950.5 | 4038.2 | 4043.1 | 4028.3 |
| 40°   | 3214.5 | 3230.6 | 3166.3 | 3330.6 | 3471.4 | 3624.5 | 3735.6 | 3834.4 | 3930.8 | 3933.2 | 3923.4 |
| 42.5° | 3018.2 | 3035.4 | 2987.3 | 3147.8 | 3307.1 | 3471.4 | 3602.3 | 3714.7 | 3813.4 | 3819.6 | 3808.5 |
| 45°   | 2826.7 | 2841.6 | 2807.0 | 2982.3 | 3135.5 | 3314.5 | 3465.2 | 3592.4 | 3692.4 | 3701.1 | 3697.4 |
| 47.5° | 2636.6 | 2650.1 | 2619.3 | 2779.8 | 2956.4 | 3146.6 | 3320.7 | 3461.5 | 3567.7 | 3577.6 | 3575.1 |
| 50°   | 2450.1 | 2461.2 | 2427.9 | 2595.8 | 2771.2 | 2973.7 | 3155.2 | 3318.2 | 3436.8 | 3446.7 | 3445.4 |
| 52.5° | 2264.9 | 2276.0 | 2247.6 | 2424.2 | 2583.5 | 2797.1 | 2994.7 | 3171.3 | 3288.6 | 3303.4 | 3305.9 |
| 55°   | 2085.8 | 2090.7 | 2068.5 | 2237.7 | 2392.0 | 2615.6 | 2842.8 | 3014.5 | 3131.8 | 3144.1 | 3151.5 |
| 57.5° | 1906.7 | 1908.0 | 1889.4 | 2051.2 | 2199.4 | 2427.9 | 2666.2 | 2846.5 | 2957.6 | 2970.0 | 2981.1 |
| 60°   | 1728.9 | 1727.7 | 1706.7 | 1863.5 | 2005.5 | 2231.5 | 2479.7 | 2658.8 | 2766.2 | 2777.3 | 2792.2 |
| 62.5° | 1552.3 | 1548.6 | 1530.1 | 1674.6 | 1807.9 | 2031.5 | 2280.9 | 2453.8 | 2556.3 | 2563.7 | 2583.5 |
| 65°   | 1376.9 | 1373.2 | 1355.9 | 1489.3 | 1610.3 | 1824.0 | 2068.5 | 2232.7 | 2325.4 | 2335.2 | 2331.5 |
| 67.5° | 1204.1 | 1196.6 | 1183.1 | 1302.8 | 1412.8 | 1610.3 | 1845.0 | 2001.8 | 2078.4 | 2087.0 | 2110.5 |
| 70°   | 1031.2 | 1022.5 | 991.6  | 1118.8 | 1215.2 | 1391.8 | 1610.3 | 1749.9 | 1814.1 | 1822.7 | 1819.0 |
| 72.5° | 860.7  | 852.1  | 818.8  | 936.1  | 1017.6 | 1171.9 | 1367.1 | 1483.1 | 1538.7 | 1546.1 | 1546.1 |
| 75°   | 695.3  | 690.3  | 669.3  | 758.2  | 826.2  | 952.1  | 1117.6 | 1213.9 | 1257.2 | 1265.8 | 1263.3 |
| 77.5° | 536.0  | 532.3  | 511.3  | 587.8  | 640.9  | 734.8  | 868.2  | 943.5  | 975.6  | 985.5  | 1006.5 |
| 80°   | 384.1  | 382.8  | 349.5  | 424.8  | 448.3  | 527.3  | 624.9  | 682.9  | 700.2  | 713.8  | 728.6  |
| 82.5° | 245.8  | 247.0  | 213.6  | 277.9  | 287.7  | 338.4  | 398.9  | 434.7  | 447.0  | 458.2  | 469.3  |
| 85°   | 119.8  | 124.7  | 106.2  | 147.0  | 148.2  | 174.1  | 200.1  | 213.6  | 218.6  | 227.2  | 237.1  |
| 87.5° | 30.9   | 35.8   | 19.8   | 42.0   | 37.0   | 48.2   | 55.6   | 59.3   | 58.0   | 64.2   | 67.9   |
| 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°    | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 |
| 2.5°  | 5181.7 | 5221.3 | 5201.5 | 5265.7 | 5290.4 | 5250.9 | 5320.1 | 5321.3 | 5271.9 | 5329.9 | 5362.0 |
| 5°    | 5101.5 | 5142.2 | 5129.9 | 5196.6 | 5227.4 | 5192.9 | 5276.8 | 5292.9 | 5244.7 | 5310.2 | 5362.0 |
| 7.5°  | 5020.0 | 5068.1 | 5052.1 | 5120.0 | 5157.0 | 5129.9 | 5220.0 | 5246.0 | 5208.9 | 5280.5 | 5349.7 |
| 10°   | 4949.6 | 4990.3 | 4973.0 | 5044.7 | 5076.8 | 5054.5 | 5143.5 | 5191.6 | 5157.0 | 5244.7 | 5327.5 |
| 12.5° | 4880.4 | 4913.8 | 4894.0 | 4953.3 | 4984.2 | 4955.8 | 5064.4 | 5108.9 | 5084.2 | 5175.6 | 5281.8 |
| 15°   | 4791.5 | 4828.6 | 4801.4 | 4854.5 | 4878.0 | 4853.3 | 4942.2 | 5018.7 | 4987.9 | 5087.9 | 5205.2 |
| 17.5° | 4723.6 | 4744.6 | 4707.5 | 4749.5 | 4763.1 | 4729.8 | 4819.9 | 4895.2 | 4873.0 | 4981.7 | 5117.5 |
| 20°   | 4648.3 | 4665.5 | 4613.7 | 4637.1 | 4635.9 | 4593.9 | 4676.7 | 4750.8 | 4735.9 | 4855.7 | 5010.1 |
| 22.5° | 4564.3 | 4572.9 | 4512.4 | 4517.4 | 4514.9 | 4445.7 | 4519.8 | 4595.2 | 4589.0 | 4710.0 | 4882.9 |
| 25°   | 4475.4 | 4476.6 | 4398.8 | 4396.3 | 4369.2 | 4287.7 | 4353.1 | 4438.3 | 4419.8 | 4550.7 | 4732.2 |
| 27.5° | 4387.7 | 4375.3 | 4281.5 | 4259.3 | 4216.0 | 4118.5 | 4176.5 | 4253.1 | 4242.0 | 4370.4 | 4571.7 |
| 30°   | 4293.8 | 4277.8 | 4162.9 | 4122.2 | 4059.2 | 3946.8 | 3995.0 | 4066.6 | 4072.8 | 4185.2 | 4396.3 |
| 32.5° | 4204.9 | 4164.2 | 4037.0 | 3977.7 | 3898.7 | 3767.8 | 3793.7 | 3866.6 | 3876.4 | 3990.0 | 4207.4 |
| 35°   | 4090.1 | 4062.9 | 3906.1 | 3804.8 | 3727.0 | 3583.8 | 3610.9 | 3661.6 | 3676.4 | 3787.5 | 4008.6 |
| 37.5° | 3981.4 | 3938.2 | 3771.5 | 3648.0 | 3547.9 | 3397.3 | 3404.7 | 3456.6 | 3471.4 | 3583.8 | 3802.3 |
| 40°   | 3869.0 | 3807.3 | 3628.2 | 3483.7 | 3368.9 | 3210.8 | 3202.2 | 3256.5 | 3267.6 | 3377.5 | 3575.1 |
| 42.5° | 3749.2 | 3675.1 | 3473.8 | 3315.8 | 3183.6 | 3023.1 | 3005.8 | 3052.7 | 3065.1 | 3172.5 | 3366.4 |
| 45°   | 3628.2 | 3539.3 | 3315.8 | 3142.9 | 2998.4 | 2834.2 | 2816.9 | 2852.7 | 2871.2 | 2972.5 | 3158.9 |
| 47.5° | 3499.8 | 3396.0 | 3152.8 | 2960.1 | 2810.7 | 2646.4 | 2625.5 | 2661.3 | 2676.1 | 2776.1 | 2952.7 |
| 50°   | 3365.2 | 3239.2 | 2984.8 | 2772.4 | 2624.2 | 2462.4 | 2431.6 | 2473.6 | 2487.1 | 2581.0 | 2753.9 |
| 52.5° | 3217.0 | 3077.4 | 2805.7 | 2583.5 | 2435.3 | 2280.9 | 2243.9 | 2284.6 | 2300.7 | 2392.0 | 2551.4 |
| 55°   | 3060.1 | 2909.5 | 2625.5 | 2409.3 | 2248.8 | 2098.1 | 2067.3 | 2083.3 | 2117.9 | 2204.3 | 2352.5 |
| 57.5° | 2883.5 | 2734.1 | 2435.3 | 2215.5 | 2061.1 | 1916.6 | 1890.7 | 1905.5 | 1937.6 | 2021.6 | 2154.9 |
| 60°   | 2695.8 | 2537.8 | 2241.4 | 2021.6 | 1872.1 | 1735.1 | 1711.6 | 1725.2 | 1759.8 | 1836.3 | 1959.8 |
| 62.5° | 2510.6 | 2332.8 | 2041.3 | 1822.7 | 1686.9 | 1559.7 | 1553.5 | 1548.6 | 1580.7 | 1654.8 | 1763.5 |
| 65°   | 2285.8 | 2115.4 | 1832.6 | 1625.2 | 1501.7 | 1386.8 | 1362.1 | 1373.2 | 1404.1 | 1472.0 | 1585.6 |
| 67.5° | 2045.0 | 1890.7 | 1619.0 | 1427.6 | 1317.7 | 1215.2 | 1194.2 | 1199.1 | 1231.2 | 1290.5 | 1389.3 |
| 70°   | 1789.4 | 1653.6 | 1400.4 | 1228.8 | 1136.1 | 1039.8 | 1026.2 | 1027.5 | 1058.3 | 1110.2 | 1196.6 |
| 72.5° | 1521.4 | 1399.2 | 1179.4 | 1032.4 | 955.8  | 886.7  | 874.3  | 859.5  | 887.9  | 932.4  | 1006.5 |
| 75°   | 1248.5 | 1141.1 | 959.5  | 839.7  | 779.2  | 721.2  | 710.1  | 695.3  | 723.7  | 761.9  | 820.0  |
| 77.5° | 973.1  | 886.7  | 745.9  | 653.3  | 606.3  | 563.1  | 553.2  | 537.2  | 565.6  | 594.0  | 639.7  |
| 80°   | 703.9  | 640.9  | 557.0  | 459.4  | 443.3  | 414.9  | 405.1  | 387.8  | 414.9  | 433.5  | 468.0  |
| 82.5° | 454.5  | 412.5  | 364.3  | 296.4  | 293.9  | 272.9  | 268.0  | 248.2  | 272.9  | 284.0  | 310.0  |
| 85°   | 229.7  | 209.9  | 197.6  | 150.7  | 155.6  | 142.0  | 140.8  | 119.8  | 139.5  | 144.5  | 159.3  |
| 87.5° | 65.5   | 69.2   | 61.7   | 37.0   | 46.9   | 44.5   | 44.5   | 32.1   | 44.5   | 44.5   | 50.6   |
| 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: P838053

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-6STD-20-120-EDD

**CANDELA DISTRIBUTION (continued):**

|       | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°   | 360°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 | 5294.1 |
| 2.5°  | 5299.1 | 5320.1 | 5325.0 | 5323.8 | 5337.3 | 5411.4 | 5386.7 | 5411.4 |
| 5°    | 5311.4 | 5358.3 | 5370.7 | 5388.0 | 5410.2 | 5494.2 | 5467.0 | 5496.7 |
| 7.5°  | 5318.8 | 5389.2 | 5416.4 | 5449.7 | 5485.5 | 5579.4 | 5557.2 | 5586.8 |
| 10°   | 5318.8 | 5410.2 | 5449.7 | 5505.3 | 5553.5 | 5662.1 | 5641.1 | 5675.7 |
| 12.5° | 5296.6 | 5413.9 | 5469.5 | 5547.3 | 5609.0 | 5726.3 | 5717.7 | 5742.4 |
| 15°   | 5250.9 | 5395.4 | 5472.0 | 5572.0 | 5648.5 | 5779.4 | 5775.7 | 5805.4 |
| 17.5° | 5189.2 | 5363.3 | 5455.9 | 5581.9 | 5678.2 | 5825.1 | 5833.8 | 5849.8 |
| 20°   | 5111.4 | 5302.8 | 5423.8 | 5578.2 | 5699.2 | 5861.0 | 5872.1 | 5894.3 |
| 22.5° | 5008.9 | 5229.9 | 5375.6 | 5562.1 | 5701.6 | 5875.8 | 5895.5 | 5916.5 |
| 25°   | 4887.8 | 5142.2 | 5312.6 | 5531.2 | 5689.3 | 5874.5 | 5901.7 | 5920.2 |
| 27.5° | 4749.5 | 5028.6 | 5232.4 | 5481.8 | 5654.7 | 5854.8 | 5888.1 | 5910.4 |
| 30°   | 4589.0 | 4907.6 | 5141.0 | 5417.6 | 5607.8 | 5817.7 | 5853.5 | 5875.8 |
| 32.5° | 4423.5 | 4774.2 | 5032.3 | 5334.9 | 5539.9 | 5758.5 | 5789.3 | 5806.6 |
| 35°   | 4243.2 | 4612.4 | 4901.4 | 5228.7 | 5452.2 | 5663.4 | 5686.8 | 5705.4 |
| 37.5° | 4046.8 | 4437.1 | 4752.0 | 5108.9 | 5328.7 | 5531.2 | 5552.2 | 5573.2 |
| 40°   | 3844.3 | 4253.1 | 4584.0 | 4961.9 | 5181.7 | 5369.5 | 5391.7 | 5406.5 |
| 42.5° | 3640.6 | 4049.3 | 4405.0 | 4789.0 | 5007.6 | 5187.9 | 5201.5 | 5216.3 |
| 45°   | 3434.3 | 3838.1 | 4203.7 | 4597.6 | 4813.7 | 4982.9 | 4987.9 | 5000.2 |
| 47.5° | 3224.4 | 3619.6 | 3982.6 | 4379.0 | 4592.7 | 4747.1 | 4752.0 | 4761.9 |
| 50°   | 3013.2 | 3401.0 | 3746.8 | 4143.2 | 4351.9 | 4514.9 | 4492.7 | 4502.5 |
| 52.5° | 2805.7 | 3171.3 | 3524.5 | 3888.8 | 4095.0 | 4239.5 | 4245.7 | 4225.9 |
| 55°   | 2602.0 | 2946.5 | 3271.3 | 3622.0 | 3818.4 | 3930.8 | 3927.1 | 3934.5 |
| 57.5° | 2395.8 | 2719.3 | 3016.9 | 3338.0 | 3529.4 | 3635.6 | 3657.8 | 3631.9 |
| 60°   | 2185.8 | 2489.6 | 2756.4 | 3046.6 | 3231.8 | 3320.7 | 3346.6 | 3321.9 |
| 62.5° | 1977.1 | 2256.2 | 2498.3 | 2751.4 | 2923.1 | 3033.0 | 3030.5 | 3003.3 |
| 65°   | 1768.4 | 2021.6 | 2237.7 | 2452.6 | 2602.0 | 2711.9 | 2707.0 | 2682.3 |
| 67.5° | 1575.8 | 1784.5 | 1978.3 | 2152.5 | 2282.1 | 2357.5 | 2383.4 | 2353.8 |
| 70°   | 1363.4 | 1543.7 | 1714.1 | 1853.6 | 1961.1 | 2029.0 | 2053.7 | 2027.7 |
| 72.5° | 1151.0 | 1304.1 | 1423.9 | 1558.5 | 1641.2 | 1698.0 | 1724.0 | 1699.3 |
| 75°   | 941.0  | 1067.0 | 1164.5 | 1269.5 | 1327.5 | 1375.7 | 1405.3 | 1380.6 |
| 77.5° | 737.3  | 834.8  | 912.6  | 989.2  | 1055.9 | 1067.0 | 1092.9 | 1076.9 |
| 80°   | 543.4  | 613.8  | 670.6  | 721.2  | 769.4  | 774.3  | 795.3  | 785.4  |
| 82.5° | 361.8  | 408.8  | 423.6  | 476.7  | 507.6  | 502.6  | 523.6  | 516.2  |
| 85°   | 191.4  | 219.8  | 245.8  | 261.8  | 279.1  | 263.0  | 281.6  | 274.2  |
| 87.5° | 64.2   | 67.9   | 59.3   | 84.0   | 92.6   | 79.0   | 90.1   | 86.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)