

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



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: P837757

Luminaire Tested: **ORLG-12-4-INS-ASY2R-LD4-3HI-40-120-EDD**

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-08
Report Number: P837757
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-12-4-INS-ASY2R-LD4-3HI-40-120-EDD
Description: 1FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and RFI grid
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

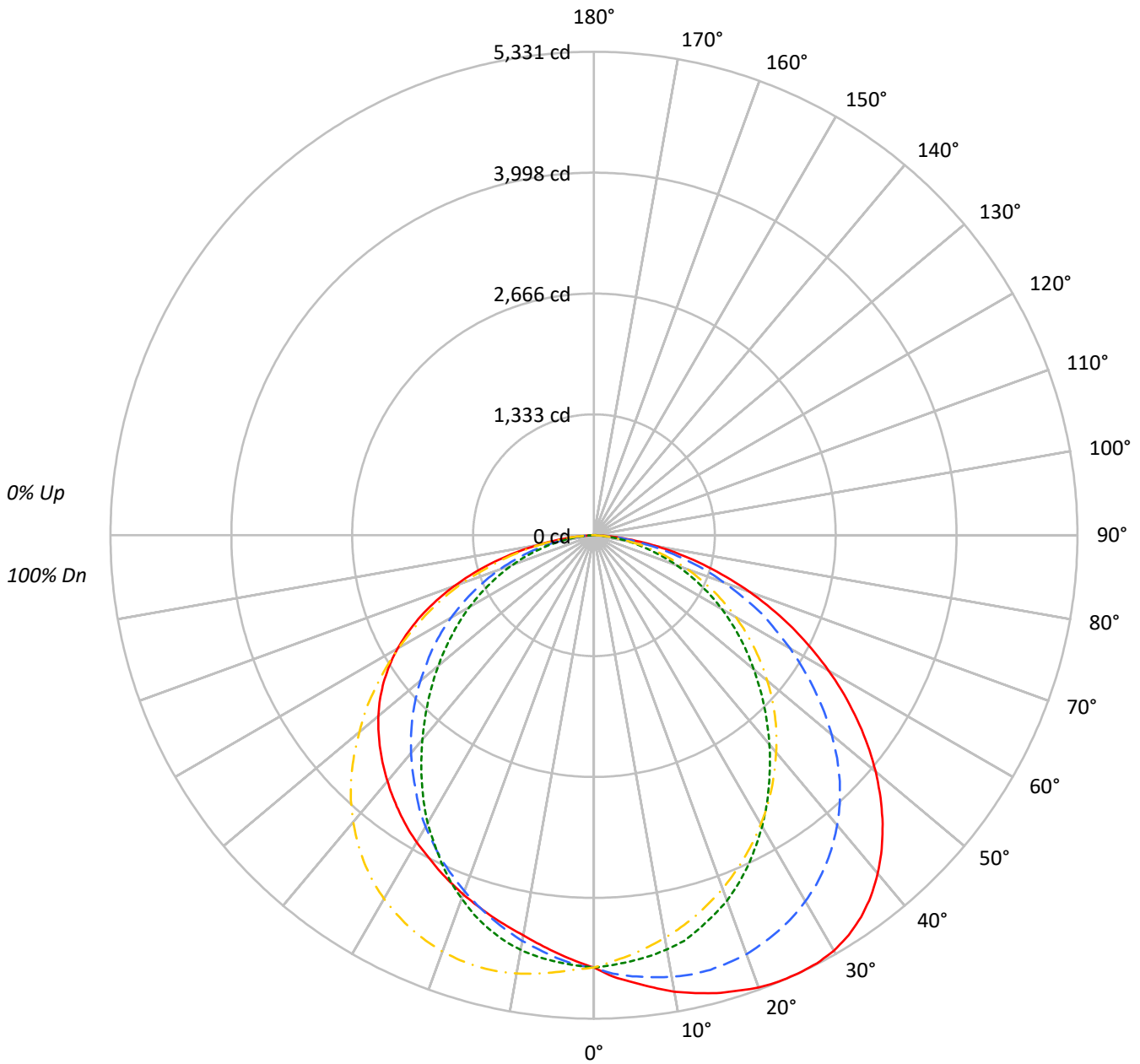
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13985.8 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 132
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: P837757
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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - 90°-270° - · · - 135°-315°



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | 20 | | | 20 | | | 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 |
| 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° | 12828 | 12828 | 12828 | 12828 |
| 5° | 13370 | 12736 | 12495 | 12757 |
| 10° | 13965 | 12670 | 12242 | 12689 |
| 15° | 14563 | 12509 | 12122 | 12512 |
| 20° | 15199 | 12282 | 12069 | 12212 |
| 25° | 15828 | 11939 | 12068 | 11817 |
| 30° | 16440 | 11523 | 12149 | 11395 |
| 35° | 16876 | 11050 | 12270 | 10875 |
| 40° | 17101 | 10574 | 12441 | 10336 |
| 45° | 17134 | 10093 | 12683 | 9839 |
| 50° | 16973 | 9632 | 12993 | 9375 |
| 55° | 16621 | 9203 | 13282 | 8947 |
| 60° | 16099 | 8755 | 13459 | 8528 |
| 65° | 15379 | 8241 | 13389 | 8050 |
| 70° | 14366 | 7638 | 12914 | 7498 |
| 75° | 12926 | 6810 | 11851 | 6775 |
| 80° | 10959 | 5704 | 9960 | 5790 |
| 85° | 7623 | 3776 | 6317 | 3881 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 452.6 | 3.2 |
| 10°-20° | 1310.6 | 9.4 |
| 20°-30° | 2008.6 | 14.4 |
| 30°-40° | 2442.3 | 17.5 |
| 40°-50° | 2538.9 | 18.2 |
| 50°-60° | 2293.4 | 16.4 |
| 60°-70° | 1743.6 | 12.5 |
| 70°-80° | 972.0 | 7.0 |
| 80°-90° | 223.8 | 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° | 3771.8 | 27.0 |
| 0°-40° | 6214.1 | 44.4 |
| 0°-60° | 11046.4 | 79.0 |
| 0°-90° | 13985.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 13985.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 4767 | 4767 | 4767 | 4767 | 4767 | |
| 5° | 4949 | 4715 | 4626 | 4723 | 4949 | 477 |
| 15° | 5227 | 4490 | 4351 | 4491 | 5227 | 1482 |
| 25° | 5331 | 4021 | 4064 | 3980 | 5331 | 2462 |
| 35° | 5137 | 3364 | 3735 | 3310 | 5137 | 3209 |
| 45° | 4502 | 2652 | 3333 | 2585 | 4502 | 3466 |
| 55° | 3543 | 1962 | 2831 | 1907 | 3543 | 3163 |
| 65° | 2415 | 1294 | 2103 | 1264 | 2415 | 2387 |
| 75° | 1243 | 655 | 1140 | 652 | 1243 | 1321 |
| 85° | 247 | 122 | 205 | 126 | 247 | 311 |
| 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° | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 |
| 2.5° | 4872.7 | 4801.5 | 4802.6 | 4864.9 | 4817.1 | 4840.4 | 4773.7 | 4799.3 | 4791.5 | 4797.1 | 4742.6 |
| 5° | 4949.4 | 4872.7 | 4871.6 | 4924.9 | 4871.6 | 4881.6 | 4797.1 | 4813.7 | 4789.3 | 4773.7 | 4714.8 |
| 7.5° | 5030.6 | 4953.8 | 4946.1 | 4992.8 | 4922.7 | 4914.9 | 4821.5 | 4821.5 | 4777.0 | 4738.1 | 4682.5 |
| 10° | 5110.6 | 5031.7 | 5021.7 | 5057.3 | 4970.5 | 4944.9 | 4831.5 | 4813.7 | 4754.8 | 4697.0 | 4636.9 |
| 12.5° | 5170.7 | 5090.6 | 5082.8 | 5105.1 | 5007.2 | 4960.5 | 4831.5 | 4797.1 | 4710.3 | 4629.1 | 4582.4 |
| 15° | 5227.4 | 5145.1 | 5124.0 | 5135.1 | 5022.8 | 4960.5 | 4816.0 | 4762.6 | 4651.4 | 4544.6 | 4490.1 |
| 17.5° | 5267.4 | 5188.5 | 5167.3 | 5166.2 | 5030.6 | 4941.6 | 4782.6 | 4709.2 | 4575.8 | 4446.8 | 4392.3 |
| 20° | 5307.5 | 5228.5 | 5201.8 | 5181.8 | 5028.3 | 4916.0 | 4733.7 | 4634.7 | 4479.0 | 4334.5 | 4288.9 |
| 22.5° | 5327.5 | 5246.3 | 5217.4 | 5187.4 | 5013.9 | 4869.3 | 4673.6 | 4548.0 | 4370.1 | 4197.7 | 4159.9 |
| 25° | 5330.8 | 5247.4 | 5216.3 | 5172.9 | 4985.0 | 4813.7 | 4595.8 | 4443.4 | 4244.4 | 4053.1 | 4020.9 |
| 27.5° | 5321.9 | 5230.7 | 5199.6 | 5147.3 | 4941.6 | 4745.9 | 4503.5 | 4324.5 | 4111.0 | 3899.7 | 3865.2 |
| 30° | 5290.8 | 5198.5 | 5168.5 | 5100.6 | 4880.5 | 4662.5 | 4402.3 | 4192.1 | 3963.1 | 3738.5 | 3708.4 |
| 32.5° | 5228.5 | 5138.4 | 5114.0 | 5046.1 | 4813.7 | 4565.8 | 4284.4 | 4049.8 | 3799.6 | 3585.0 | 3540.5 |
| 35° | 5137.3 | 5047.2 | 5031.7 | 4960.5 | 4720.3 | 4450.1 | 4155.4 | 3894.1 | 3626.1 | 3407.1 | 3363.7 |
| 37.5° | 5018.3 | 4942.7 | 4919.4 | 4849.3 | 4610.2 | 4318.9 | 4007.6 | 3725.1 | 3449.3 | 3213.6 | 3186.9 |
| 40° | 4868.2 | 4797.1 | 4779.3 | 4717.0 | 4482.4 | 4173.2 | 3847.4 | 3550.5 | 3267.0 | 3047.9 | 3010.1 |
| 42.5° | 4697.0 | 4630.3 | 4620.3 | 4555.8 | 4324.5 | 4012.0 | 3674.0 | 3369.3 | 3076.8 | 2865.6 | 2827.7 |
| 45° | 4502.4 | 4437.9 | 4435.7 | 4374.5 | 4152.1 | 3833.0 | 3491.6 | 3185.8 | 2891.1 | 2672.1 | 2652.1 |
| 47.5° | 4287.8 | 4229.9 | 4229.9 | 4173.2 | 3959.7 | 3636.2 | 3303.7 | 2994.5 | 2704.3 | 2510.8 | 2475.3 |
| 50° | 4054.3 | 3999.8 | 3983.1 | 3955.3 | 3747.4 | 3421.5 | 3105.7 | 2807.7 | 2519.7 | 2335.1 | 2300.7 |
| 52.5° | 3805.2 | 3758.5 | 3769.6 | 3718.4 | 3517.2 | 3198.0 | 2905.6 | 2597.6 | 2334.0 | 2166.1 | 2131.7 |
| 55° | 3542.7 | 3476.0 | 3486.0 | 3467.1 | 3277.0 | 2967.9 | 2681.0 | 2424.1 | 2151.7 | 1993.8 | 1961.5 |
| 57.5° | 3270.3 | 3183.6 | 3219.2 | 3208.0 | 3021.2 | 2732.1 | 2475.3 | 2227.3 | 1970.4 | 1824.7 | 1793.6 |
| 60° | 2991.2 | 2907.8 | 2944.5 | 2934.5 | 2758.8 | 2496.4 | 2262.9 | 2032.7 | 1790.3 | 1658.0 | 1626.8 |
| 62.5° | 2704.3 | 2627.6 | 2661.0 | 2653.2 | 2491.9 | 2255.1 | 2051.6 | 1840.3 | 1609.0 | 1490.0 | 1461.1 |
| 65° | 2415.2 | 2341.8 | 2371.8 | 2366.3 | 2217.3 | 2037.1 | 1834.8 | 1641.3 | 1426.7 | 1323.2 | 1294.3 |
| 67.5° | 2119.4 | 2051.6 | 2079.4 | 2079.4 | 1942.6 | 1770.3 | 1616.8 | 1440.0 | 1247.6 | 1158.7 | 1132.0 |
| 70° | 1825.9 | 1762.5 | 1786.9 | 1784.7 | 1669.1 | 1529.0 | 1396.6 | 1238.7 | 1066.4 | 993.0 | 970.8 |
| 72.5° | 1530.1 | 1474.5 | 1496.7 | 1494.5 | 1397.8 | 1307.7 | 1176.5 | 1039.7 | 889.6 | 830.6 | 810.6 |
| 75° | 1243.2 | 1190.9 | 1212.1 | 1209.8 | 1130.9 | 1046.4 | 958.5 | 845.1 | 716.1 | 675.0 | 655.0 |
| 77.5° | 969.6 | 916.3 | 934.1 | 934.1 | 876.2 | 815.1 | 745.0 | 657.2 | 566.0 | 521.5 | 507.1 |
| 80° | 707.2 | 681.6 | 672.7 | 673.9 | 634.9 | 594.9 | 559.3 | 474.8 | 408.1 | 378.1 | 368.1 |
| 82.5° | 464.8 | 443.7 | 434.8 | 437.0 | 414.8 | 390.3 | 368.1 | 309.1 | 264.6 | 246.9 | 241.3 |
| 85° | 246.9 | 231.3 | 223.5 | 229.1 | 224.6 | 211.3 | 200.2 | 160.1 | 132.3 | 125.7 | 122.3 |
| 87.5° | 77.8 | 67.8 | 62.3 | 82.3 | 70.1 | 62.3 | 60.0 | 47.8 | 36.7 | 36.7 | 35.6 |
| 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° | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 |
| 2.5° | 4760.4 | 4760.4 | 4717.0 | 4707.0 | 4702.5 | 4708.1 | 4664.7 | 4656.9 | 4719.2 | 4698.1 | 4650.3 |
| 5° | 4722.6 | 4720.3 | 4659.2 | 4648.0 | 4648.0 | 4641.4 | 4592.5 | 4581.3 | 4643.6 | 4625.8 | 4573.5 |
| 7.5° | 4675.8 | 4669.2 | 4596.9 | 4589.1 | 4578.0 | 4573.5 | 4519.1 | 4511.3 | 4564.7 | 4553.5 | 4504.6 |
| 10° | 4619.1 | 4612.5 | 4526.8 | 4521.3 | 4509.1 | 4500.2 | 4449.0 | 4443.4 | 4497.9 | 4480.1 | 4441.2 |
| 12.5° | 4544.6 | 4532.4 | 4444.6 | 4439.0 | 4429.0 | 4425.7 | 4375.6 | 4373.4 | 4433.4 | 4415.6 | 4374.5 |
| 15° | 4446.8 | 4436.8 | 4338.9 | 4341.1 | 4342.3 | 4342.3 | 4302.2 | 4300.0 | 4358.9 | 4351.2 | 4306.7 |
| 17.5° | 4338.9 | 4325.6 | 4232.2 | 4238.8 | 4246.6 | 4255.5 | 4224.4 | 4229.9 | 4292.2 | 4282.2 | 4242.2 |
| 20° | 4216.6 | 4203.3 | 4112.1 | 4131.0 | 4147.7 | 4165.5 | 4145.4 | 4161.0 | 4218.8 | 4214.4 | 4184.4 |
| 22.5° | 4079.8 | 4066.5 | 3982.0 | 4010.9 | 4038.7 | 4072.0 | 4063.2 | 4080.9 | 4142.1 | 4141.0 | 4114.3 |
| 25° | 3913.0 | 3916.4 | 3841.9 | 3877.5 | 3924.2 | 3970.9 | 3974.2 | 4003.1 | 4070.9 | 4064.3 | 4039.8 |
| 27.5° | 3757.4 | 3761.8 | 3682.9 | 3742.9 | 3805.2 | 3865.2 | 3879.7 | 3919.7 | 3988.6 | 3983.1 | 3962.0 |
| 30° | 3593.9 | 3599.5 | 3522.7 | 3605.0 | 3680.6 | 3754.0 | 3785.2 | 3839.6 | 3909.7 | 3909.7 | 3887.5 |
| 32.5° | 3423.8 | 3433.8 | 3353.7 | 3463.8 | 3551.6 | 3637.3 | 3691.8 | 3748.5 | 3828.5 | 3826.3 | 3807.4 |
| 35° | 3249.2 | 3260.3 | 3186.9 | 3327.0 | 3414.9 | 3519.4 | 3587.2 | 3662.8 | 3734.0 | 3735.1 | 3720.7 |
| 37.5° | 3071.3 | 3084.6 | 3017.9 | 3171.3 | 3271.4 | 3394.9 | 3481.6 | 3557.2 | 3636.2 | 3640.6 | 3627.3 |
| 40° | 2894.5 | 2908.9 | 2851.1 | 2999.0 | 3125.8 | 3263.6 | 3363.7 | 3452.7 | 3539.4 | 3541.6 | 3532.7 |
| 42.5° | 2717.7 | 2733.2 | 2689.9 | 2834.4 | 2977.9 | 3125.8 | 3243.6 | 3344.8 | 3433.8 | 3439.3 | 3429.3 |
| 45° | 2545.3 | 2558.7 | 2527.5 | 2685.4 | 2823.3 | 2984.5 | 3120.2 | 3234.7 | 3324.8 | 3332.6 | 3329.2 |
| 47.5° | 2374.1 | 2386.3 | 2358.5 | 2503.1 | 2662.1 | 2833.3 | 2990.1 | 3116.9 | 3212.5 | 3221.4 | 3219.2 |
| 50° | 2206.2 | 2216.2 | 2186.1 | 2337.4 | 2495.3 | 2677.6 | 2841.1 | 2987.9 | 3094.6 | 3103.5 | 3102.4 |
| 52.5° | 2039.4 | 2049.4 | 2023.8 | 2182.8 | 2326.2 | 2518.6 | 2696.5 | 2855.5 | 2961.2 | 2974.5 | 2976.8 |
| 55° | 1878.1 | 1882.6 | 1862.6 | 2014.9 | 2153.9 | 2355.2 | 2559.8 | 2714.3 | 2820.0 | 2831.1 | 2837.8 |
| 57.5° | 1716.9 | 1718.0 | 1701.3 | 1847.0 | 1980.4 | 2186.1 | 2400.8 | 2563.1 | 2663.2 | 2674.3 | 2684.3 |
| 60° | 1556.8 | 1555.7 | 1536.7 | 1678.0 | 1805.8 | 2009.3 | 2232.8 | 2394.1 | 2490.8 | 2500.8 | 2514.2 |
| 62.5° | 1397.8 | 1394.4 | 1377.7 | 1507.8 | 1627.9 | 1829.2 | 2053.8 | 2209.5 | 2301.8 | 2308.5 | 2326.2 |
| 65° | 1239.9 | 1236.5 | 1220.9 | 1341.0 | 1450.0 | 1642.4 | 1862.6 | 2010.4 | 2093.8 | 2102.7 | 2099.4 |
| 67.5° | 1084.2 | 1077.5 | 1065.3 | 1173.1 | 1272.1 | 1450.0 | 1661.3 | 1802.5 | 1871.5 | 1879.2 | 1900.4 |
| 70° | 928.5 | 920.7 | 892.9 | 1007.4 | 1094.2 | 1253.2 | 1450.0 | 1575.7 | 1633.5 | 1641.3 | 1637.9 |
| 72.5° | 775.0 | 767.3 | 737.2 | 842.9 | 916.3 | 1055.3 | 1231.0 | 1335.5 | 1385.5 | 1392.2 | 1392.2 |
| 75° | 626.0 | 621.6 | 602.7 | 682.8 | 743.9 | 857.3 | 1006.3 | 1093.1 | 1132.0 | 1139.8 | 1137.5 |
| 77.5° | 482.6 | 479.3 | 460.4 | 529.3 | 577.1 | 661.6 | 781.7 | 849.5 | 878.5 | 887.4 | 906.3 |
| 80° | 345.8 | 344.7 | 314.7 | 382.5 | 403.6 | 474.8 | 562.7 | 614.9 | 630.5 | 642.7 | 656.1 |
| 82.5° | 221.3 | 222.4 | 192.4 | 250.2 | 259.1 | 304.7 | 359.2 | 391.4 | 402.5 | 412.5 | 422.5 |
| 85° | 107.9 | 112.3 | 95.6 | 132.3 | 133.4 | 156.8 | 180.1 | 192.4 | 196.8 | 204.6 | 213.5 |
| 87.5° | 27.8 | 32.2 | 17.8 | 37.8 | 33.4 | 43.4 | 50.0 | 53.4 | 52.3 | 57.8 | 61.2 |
| 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° | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 |
| 2.5° | 4665.8 | 4701.4 | 4683.6 | 4741.5 | 4763.7 | 4728.1 | 4790.4 | 4791.5 | 4747.0 | 4799.3 | 4828.2 |
| 5° | 4593.6 | 4630.3 | 4619.1 | 4679.2 | 4707.0 | 4675.8 | 4751.5 | 4765.9 | 4722.6 | 4781.5 | 4828.2 |
| 7.5° | 4520.2 | 4563.5 | 4549.1 | 4610.2 | 4643.6 | 4619.1 | 4700.3 | 4723.7 | 4690.3 | 4754.8 | 4817.1 |
| 10° | 4456.8 | 4493.5 | 4477.9 | 4542.4 | 4571.3 | 4551.3 | 4631.4 | 4674.7 | 4643.6 | 4722.6 | 4797.1 |
| 12.5° | 4394.5 | 4424.5 | 4406.8 | 4460.1 | 4487.9 | 4462.4 | 4560.2 | 4600.2 | 4578.0 | 4660.3 | 4755.9 |
| 15° | 4314.5 | 4347.8 | 4323.4 | 4371.2 | 4392.3 | 4370.1 | 4450.1 | 4519.1 | 4491.3 | 4581.3 | 4687.0 |
| 17.5° | 4253.3 | 4272.2 | 4238.8 | 4276.7 | 4288.9 | 4258.9 | 4340.0 | 4407.9 | 4387.8 | 4485.7 | 4608.0 |
| 20° | 4185.5 | 4201.0 | 4154.3 | 4175.5 | 4174.3 | 4136.5 | 4211.0 | 4277.8 | 4264.4 | 4372.3 | 4511.3 |
| 22.5° | 4109.9 | 4117.6 | 4063.2 | 4067.6 | 4065.4 | 4003.1 | 4069.8 | 4137.7 | 4132.1 | 4241.1 | 4396.7 |
| 25° | 4029.8 | 4030.9 | 3960.9 | 3958.6 | 3934.2 | 3860.8 | 3919.7 | 3996.4 | 3979.8 | 4097.6 | 4261.1 |
| 27.5° | 3950.8 | 3939.7 | 3855.2 | 3835.2 | 3796.3 | 3708.4 | 3760.7 | 3829.6 | 3819.6 | 3935.3 | 4116.5 |
| 30° | 3866.3 | 3851.9 | 3748.5 | 3711.8 | 3655.1 | 3553.9 | 3597.2 | 3661.7 | 3667.3 | 3768.5 | 3958.6 |
| 32.5° | 3786.3 | 3749.6 | 3635.0 | 3581.7 | 3510.5 | 3392.6 | 3416.0 | 3481.6 | 3490.5 | 3592.8 | 3788.5 |
| 35° | 3682.9 | 3658.4 | 3517.2 | 3426.0 | 3355.9 | 3226.9 | 3251.4 | 3297.0 | 3310.3 | 3410.4 | 3609.5 |
| 37.5° | 3585.0 | 3546.1 | 3396.0 | 3284.8 | 3194.7 | 3059.0 | 3065.7 | 3112.4 | 3125.8 | 3226.9 | 3423.8 |
| 40° | 3483.8 | 3428.2 | 3267.0 | 3136.9 | 3033.5 | 2891.1 | 2883.3 | 2932.3 | 2942.3 | 3041.2 | 3219.2 |
| 42.5° | 3376.0 | 3309.2 | 3128.0 | 2985.6 | 2866.7 | 2722.1 | 2706.5 | 2748.8 | 2759.9 | 2856.7 | 3031.2 |
| 45° | 3267.0 | 3186.9 | 2985.6 | 2830.0 | 2699.9 | 2552.0 | 2536.4 | 2568.7 | 2585.3 | 2676.5 | 2844.4 |
| 47.5° | 3151.3 | 3057.9 | 2838.9 | 2665.4 | 2530.9 | 2383.0 | 2364.1 | 2396.3 | 2409.6 | 2499.7 | 2658.7 |
| 50° | 3030.1 | 2916.7 | 2687.6 | 2496.4 | 2362.9 | 2217.3 | 2189.5 | 2227.3 | 2239.5 | 2324.0 | 2479.7 |
| 52.5° | 2896.7 | 2771.0 | 2526.4 | 2326.2 | 2192.8 | 2053.8 | 2020.5 | 2057.2 | 2071.6 | 2153.9 | 2297.3 |
| 55° | 2755.5 | 2619.8 | 2364.1 | 2169.5 | 2024.9 | 1889.2 | 1861.4 | 1875.9 | 1907.0 | 1984.9 | 2118.3 |
| 57.5° | 2596.5 | 2461.9 | 2192.8 | 1994.9 | 1855.9 | 1725.8 | 1702.4 | 1715.8 | 1744.7 | 1820.3 | 1940.4 |
| 60° | 2427.4 | 2285.1 | 2018.2 | 1820.3 | 1685.8 | 1562.3 | 1541.2 | 1553.4 | 1584.6 | 1653.5 | 1764.7 |
| 62.5° | 2260.6 | 2100.5 | 1838.1 | 1641.3 | 1519.0 | 1404.4 | 1398.9 | 1394.4 | 1423.3 | 1490.0 | 1587.9 |
| 65° | 2058.3 | 1904.8 | 1650.2 | 1463.4 | 1352.2 | 1248.7 | 1226.5 | 1236.5 | 1264.3 | 1325.5 | 1427.8 |
| 67.5° | 1841.4 | 1702.4 | 1457.8 | 1285.4 | 1186.5 | 1094.2 | 1075.3 | 1079.7 | 1108.6 | 1162.0 | 1251.0 |
| 70° | 1611.2 | 1488.9 | 1261.0 | 1106.4 | 1023.0 | 936.3 | 924.1 | 925.2 | 953.0 | 999.7 | 1077.5 |
| 72.5° | 1370.0 | 1259.9 | 1061.9 | 929.6 | 860.7 | 798.4 | 787.3 | 773.9 | 799.5 | 839.5 | 906.3 |
| 75° | 1124.2 | 1027.5 | 864.0 | 756.1 | 701.7 | 649.4 | 639.4 | 626.0 | 651.6 | 686.1 | 738.4 |
| 77.5° | 876.2 | 798.4 | 671.6 | 588.2 | 546.0 | 507.1 | 498.2 | 483.7 | 509.3 | 534.9 | 576.0 |
| 80° | 633.8 | 577.1 | 501.5 | 413.7 | 399.2 | 373.6 | 364.7 | 349.2 | 373.6 | 390.3 | 421.4 |
| 82.5° | 409.2 | 371.4 | 328.0 | 266.9 | 264.6 | 245.7 | 241.3 | 223.5 | 245.7 | 255.8 | 279.1 |
| 85° | 206.8 | 189.0 | 177.9 | 135.7 | 140.1 | 127.9 | 126.8 | 107.9 | 125.7 | 130.1 | 143.4 |
| 87.5° | 58.9 | 62.3 | 55.6 | 33.4 | 42.3 | 40.0 | 40.0 | 28.9 | 40.0 | 40.0 | 45.6 |
| 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: P837757

CATALOG NUMBER: ORLG-12-4-INS-ASY2R-LD4-3HI-40-120-EDD

CANDELA DISTRIBUTION (continued):

| | 295° | 305° | 315° | 325° | 335° | 345° | 355° | 360° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 | 4767.0 |
| 2.5° | 4771.5 | 4790.4 | 4794.8 | 4793.7 | 4806.0 | 4872.7 | 4850.4 | 4872.7 |
| 5° | 4782.6 | 4824.9 | 4836.0 | 4851.5 | 4871.6 | 4947.2 | 4922.7 | 4949.4 |
| 7.5° | 4789.3 | 4852.7 | 4877.1 | 4907.1 | 4939.4 | 5023.9 | 5003.9 | 5030.6 |
| 10° | 4789.3 | 4871.6 | 4907.1 | 4957.2 | 5000.5 | 5098.4 | 5079.5 | 5110.6 |
| 12.5° | 4769.3 | 4874.9 | 4924.9 | 4995.0 | 5050.6 | 5156.2 | 5148.4 | 5170.7 |
| 15° | 4728.1 | 4858.2 | 4927.2 | 5017.2 | 5086.2 | 5204.0 | 5200.7 | 5227.4 |
| 17.5° | 4672.5 | 4829.3 | 4912.7 | 5026.1 | 5112.9 | 5245.2 | 5253.0 | 5267.4 |
| 20° | 4602.5 | 4774.8 | 4883.8 | 5022.8 | 5131.8 | 5277.4 | 5287.4 | 5307.5 |
| 22.5° | 4510.2 | 4709.2 | 4840.4 | 5008.3 | 5134.0 | 5290.8 | 5308.6 | 5327.5 |
| 25° | 4401.2 | 4630.3 | 4783.7 | 4980.5 | 5122.9 | 5289.7 | 5314.1 | 5330.8 |
| 27.5° | 4276.7 | 4528.0 | 4711.4 | 4936.1 | 5091.7 | 5271.9 | 5301.9 | 5321.9 |
| 30° | 4132.1 | 4419.0 | 4629.1 | 4878.2 | 5049.5 | 5238.5 | 5270.8 | 5290.8 |
| 32.5° | 3983.1 | 4298.9 | 4531.3 | 4803.7 | 4988.3 | 5185.1 | 5212.9 | 5228.5 |
| 35° | 3820.7 | 4153.2 | 4413.4 | 4708.1 | 4909.4 | 5099.5 | 5120.6 | 5137.3 |
| 37.5° | 3643.9 | 3995.3 | 4278.9 | 4600.2 | 4798.2 | 4980.5 | 4999.4 | 5018.3 |
| 40° | 3461.6 | 3829.6 | 4127.6 | 4467.9 | 4665.8 | 4834.9 | 4854.9 | 4868.2 |
| 42.5° | 3278.1 | 3646.2 | 3966.4 | 4312.2 | 4509.1 | 4671.4 | 4683.6 | 4697.0 |
| 45° | 3092.4 | 3456.0 | 3785.2 | 4139.9 | 4334.5 | 4486.8 | 4491.3 | 4502.4 |
| 47.5° | 2903.4 | 3259.2 | 3586.1 | 3943.1 | 4135.4 | 4274.4 | 4278.9 | 4287.8 |
| 50° | 2713.2 | 3062.4 | 3373.7 | 3730.7 | 3918.6 | 4065.4 | 4045.4 | 4054.3 |
| 52.5° | 2526.4 | 2855.5 | 3173.6 | 3501.6 | 3687.3 | 3817.4 | 3823.0 | 3805.2 |
| 55° | 2342.9 | 2653.2 | 2945.6 | 3261.4 | 3438.2 | 3539.4 | 3536.1 | 3542.7 |
| 57.5° | 2157.2 | 2448.6 | 2716.6 | 3005.7 | 3178.0 | 3273.7 | 3293.7 | 3270.3 |
| 60° | 1968.2 | 2241.7 | 2481.9 | 2743.2 | 2910.0 | 2990.1 | 3013.4 | 2991.2 |
| 62.5° | 1780.3 | 2031.6 | 2249.5 | 2477.5 | 2632.0 | 2731.0 | 2728.8 | 2704.3 |
| 65° | 1592.3 | 1820.3 | 2014.9 | 2208.4 | 2342.9 | 2441.9 | 2437.4 | 2415.2 |
| 67.5° | 1418.9 | 1606.8 | 1781.4 | 1938.2 | 2054.9 | 2122.8 | 2146.1 | 2119.4 |
| 70° | 1227.6 | 1390.0 | 1543.4 | 1669.1 | 1765.8 | 1827.0 | 1849.2 | 1825.9 |
| 72.5° | 1036.4 | 1174.2 | 1282.1 | 1403.3 | 1477.8 | 1529.0 | 1552.3 | 1530.1 |
| 75° | 847.3 | 960.7 | 1048.6 | 1143.1 | 1195.4 | 1238.7 | 1265.4 | 1243.2 |
| 77.5° | 663.8 | 751.7 | 821.7 | 890.7 | 950.7 | 960.7 | 984.1 | 969.6 |
| 80° | 489.3 | 552.7 | 603.8 | 649.4 | 692.8 | 697.2 | 716.1 | 707.2 |
| 82.5° | 325.8 | 368.1 | 381.4 | 429.2 | 457.0 | 452.6 | 471.5 | 464.8 |
| 85° | 172.4 | 197.9 | 221.3 | 235.7 | 251.3 | 236.9 | 253.5 | 246.9 |
| 87.5° | 57.8 | 61.2 | 53.4 | 75.6 | 83.4 | 71.2 | 81.2 | 77.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)