

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: P838120

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-4HI-40-120-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: P838120
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-LD4-4HI-40-120-EDD
Description: 2FT 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

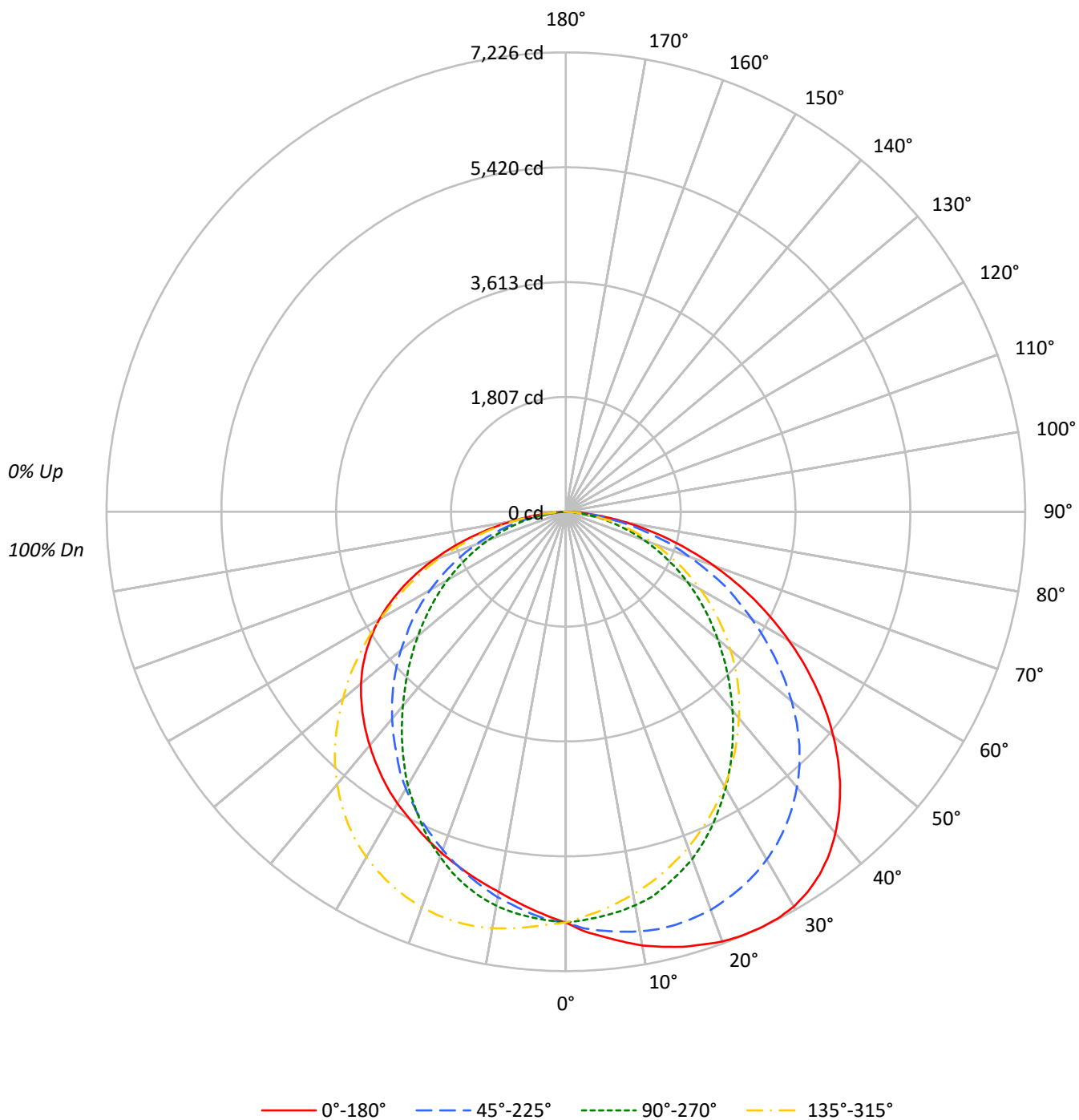
Lumens per Lamp: N/A
Luminaire Lumens: 18956.7 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 176
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	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°	8694	8694	8694	8694
5°	9061	8631	8468	8646
10°	9464	8587	8297	8599
15°	9869	8478	8215	8480
20°	10301	8324	8179	8276
25°	10727	8091	8178	8008
30°	11141	7809	8233	7723
35°	11437	7489	8316	7370
40°	11590	7166	8431	7005
45°	11612	6840	8595	6668
50°	11503	6527	8805	6354
55°	11264	6237	9001	6063
60°	10910	5934	9122	5780
65°	10422	5585	9074	5456
70°	9736	5176	8751	5081
75°	8760	4615	8031	4591
80°	7428	3866	6750	3924
85°	5165	2560	4281	2629

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	613.5	3.2
10°-20°	1776.4	9.4
20°-30°	2722.5	14.4
30°-40°	3310.4	17.5
40°-50°	3441.3	18.2
50°-60°	3108.5	16.4
60°-70°	2363.3	12.5
70°-80°	1317.5	7.0
80°-90°	303.3	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°	5112.4	27.0
0°-40°	8422.7	44.4
0°-60°	14972.6	79.0
0°-90°	18956.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18956.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	6461	6461	6461	6461	6461	
5°	6708	6390	6270	6401	6708	647
15°	7085	6086	5898	6088	7085	2009
25°	7226	5450	5509	5394	7226	3337
35°	6963	4559	5063	4487	6963	4349
45°	6103	3595	4517	3504	6103	4698
55°	4802	2659	3837	2585	4802	4287
65°	3274	1754	2850	1714	3274	3235
75°	1685	888	1545	883	1685	1790
85°	335	166	277	170	335	421
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°	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4
2.5°	6604.5	6508.1	6509.6	6594.0	6529.2	6560.8	6470.4	6505.1	6494.5	6502.0	6428.2
5°	6708.5	6604.5	6603.0	6675.4	6603.0	6616.6	6502.0	6524.7	6491.5	6470.4	6390.5
7.5°	6818.6	6714.6	6704.0	6767.3	6672.4	6661.8	6535.2	6535.2	6474.9	6422.2	6346.8
10°	6927.1	6820.1	6806.5	6854.7	6737.2	6702.5	6548.8	6524.7	6444.8	6366.4	6285.0
12.5°	7008.5	6899.9	6889.4	6919.5	6786.9	6723.6	6548.8	6502.0	6384.5	6274.5	6211.2
15°	7085.3	6973.8	6945.2	6960.2	6808.0	6723.6	6527.7	6455.3	6304.6	6159.9	6086.1
17.5°	7139.6	7032.6	7003.9	7002.4	6818.6	6698.0	6482.5	6383.0	6202.1	6027.3	5953.4
20°	7193.9	7086.8	7050.7	7023.5	6815.5	6663.3	6416.1	6282.0	6071.0	5875.1	5813.3
22.5°	7221.0	7111.0	7071.8	7031.1	6796.0	6600.0	6334.8	6164.4	5923.3	5689.7	5638.4
25°	7225.5	7112.5	7070.3	7011.5	6756.8	6524.7	6229.2	6022.8	5753.0	5493.7	5450.0
27.5°	7213.4	7089.9	7047.7	6976.8	6698.0	6432.7	6104.1	5861.5	5572.1	5285.7	5239.0
30°	7171.2	7046.1	7005.5	6913.5	6615.1	6319.7	5967.0	5682.1	5371.7	5067.2	5026.5
32.5°	7086.8	6964.8	6931.6	6839.7	6524.7	6188.6	5807.2	5489.2	5150.1	4859.2	4798.9
35°	6963.3	6841.2	6820.1	6723.6	6398.1	6031.8	5632.4	5278.2	4915.0	4618.1	4559.3
37.5°	6802.0	6699.5	6667.8	6572.9	6248.8	5854.0	5431.9	5049.1	4675.3	4355.8	4319.6
40°	6598.5	6502.0	6477.9	6393.5	6075.5	5656.5	5214.9	4812.5	4428.1	4131.2	4080.0
42.5°	6366.4	6276.0	6262.4	6175.0	5861.5	5438.0	4979.8	4566.8	4170.4	3884.0	3832.8
45°	6102.6	6015.2	6012.2	5929.3	5627.9	5195.3	4732.6	4318.1	3918.7	3621.8	3594.7
47.5°	5811.8	5733.4	5733.4	5656.5	5367.1	4928.5	4477.9	4058.9	3665.5	3403.3	3355.0
50°	5495.2	5421.4	5398.8	5361.1	5079.3	4637.6	4209.6	3805.7	3415.3	3165.1	3118.4
52.5°	5157.6	5094.3	5109.4	5040.1	4767.3	4334.7	3938.3	3520.8	3163.6	2936.0	2889.3
55°	4801.9	4711.5	4725.1	4699.4	4441.7	4022.7	3633.9	3285.7	2916.4	2702.4	2658.7
57.5°	4432.7	4315.1	4363.3	4348.3	4095.1	3703.2	3355.0	3018.9	2670.8	2473.3	2431.1
60°	4054.4	3941.3	3991.1	3977.5	3739.4	3383.7	3067.1	2755.2	2426.6	2247.2	2205.0
62.5°	3665.5	3561.5	3606.7	3596.2	3377.6	3056.6	2780.8	2494.4	2180.9	2019.6	1980.5
65°	3273.6	3174.2	3214.9	3207.3	3005.4	2761.2	2486.9	2224.6	1933.7	1793.6	1754.4
67.5°	2872.7	2780.8	2818.5	2818.5	2633.1	2399.5	2191.5	1951.8	1691.1	1570.5	1534.3
70°	2474.8	2388.9	2422.1	2419.1	2262.3	2072.4	1893.0	1679.0	1445.4	1345.9	1315.8
72.5°	2073.9	1998.5	2028.7	2025.7	1894.5	1772.5	1594.6	1409.2	1205.8	1125.9	1098.7
75°	1685.0	1614.2	1642.8	1639.8	1532.8	1418.3	1299.2	1145.5	970.6	914.9	887.7
77.5°	1314.3	1241.9	1266.0	1266.0	1187.7	1104.8	1009.8	890.8	767.2	706.9	687.3
80°	958.6	923.9	911.9	913.4	860.6	806.4	758.1	643.6	553.1	512.4	498.9
82.5°	630.0	601.4	589.3	592.3	562.2	529.0	498.9	419.0	358.7	334.6	327.1
85°	334.6	313.5	302.9	310.5	304.5	286.4	271.3	217.0	179.4	170.3	165.8
87.5°	105.5	91.9	84.4	111.5	95.0	84.4	81.4	64.8	49.7	49.7	48.2
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4
2.5°	6452.3	6452.3	6393.5	6380.0	6373.9	6381.5	6322.7	6312.1	6396.5	6367.9	6303.1
5°	6401.1	6398.1	6315.2	6300.1	6300.1	6291.0	6224.7	6209.7	6294.1	6269.9	6199.1
7.5°	6337.8	6328.7	6230.8	6220.2	6205.1	6199.1	6125.3	6114.7	6187.0	6172.0	6105.7
10°	6260.9	6251.9	6135.8	6128.3	6111.7	6099.6	6030.3	6022.8	6096.6	6072.5	6019.7
12.5°	6159.9	6143.3	6024.3	6016.7	6003.2	5998.6	5930.8	5927.8	6009.2	5985.1	5929.3
15°	6027.3	6013.7	5881.1	5884.1	5885.6	5885.6	5831.3	5828.3	5908.2	5897.7	5837.4
17.5°	5881.1	5863.0	5736.4	5745.4	5756.0	5768.0	5725.8	5733.4	5817.8	5804.2	5750.0
20°	5715.3	5697.2	5573.6	5599.2	5621.8	5646.0	5618.8	5639.9	5718.3	5712.3	5671.6
22.5°	5529.9	5511.8	5397.3	5436.5	5474.1	5519.4	5507.3	5531.4	5614.3	5612.8	5576.6
25°	5303.8	5308.3	5207.4	5255.6	5318.9	5382.2	5386.7	5425.9	5517.8	5508.8	5475.6
27.5°	5092.8	5098.8	4991.8	5073.2	5157.6	5239.0	5258.6	5312.9	5406.3	5398.8	5370.1
30°	4871.3	4878.8	4774.8	4886.3	4988.8	5088.3	5130.5	5204.4	5299.3	5299.3	5269.2
32.5°	4640.7	4654.2	4545.7	4694.9	4814.0	4930.0	5003.9	5080.8	5189.3	5186.3	5160.6
35°	4404.0	4419.1	4319.6	4509.5	4628.6	4770.3	4862.2	4964.7	5061.2	5062.7	5043.1
37.5°	4162.9	4181.0	4090.5	4298.5	4434.2	4601.5	4719.0	4821.5	4928.5	4934.6	4916.5
40°	3923.2	3942.8	3864.5	4064.9	4236.7	4423.6	4559.3	4679.8	4797.4	4800.4	4788.4
42.5°	3683.6	3704.7	3645.9	3841.8	4036.3	4236.7	4396.5	4533.6	4654.2	4661.8	4648.2
45°	3450.0	3468.1	3425.9	3639.9	3826.8	4045.3	4229.2	4384.4	4506.5	4517.1	4512.5
47.5°	3217.9	3234.4	3196.8	3392.7	3608.2	3840.3	4052.9	4224.7	4354.3	4366.4	4363.3
50°	2990.3	3003.8	2963.2	3168.1	3382.2	3629.3	3850.9	4049.8	4194.5	4206.6	4205.1
52.5°	2764.2	2777.8	2743.1	2958.6	3153.1	3413.8	3655.0	3870.5	4013.7	4031.8	4034.8
55°	2545.7	2551.7	2524.6	2731.0	2919.4	3192.2	3469.6	3679.1	3822.3	3837.3	3846.4
57.5°	2327.1	2328.6	2306.0	2503.5	2684.3	2963.2	3254.0	3474.1	3609.7	3624.8	3638.4
60°	2110.1	2108.6	2082.9	2274.4	2447.7	2723.5	3026.5	3245.0	3376.1	3389.7	3407.8
62.5°	1894.5	1890.0	1867.4	2043.8	2206.5	2479.3	2783.8	2994.8	3119.9	3128.9	3153.1
65°	1680.5	1676.0	1654.9	1817.7	1965.4	2226.1	2524.6	2725.0	2838.1	2850.1	2845.6
67.5°	1469.5	1460.5	1443.9	1590.1	1724.2	1965.4	2251.8	2443.2	2536.6	2547.2	2575.8
70°	1258.5	1248.0	1210.3	1365.5	1483.1	1698.6	1965.4	2135.7	2214.1	2224.6	2220.1
72.5°	1050.5	1040.0	999.3	1142.5	1241.9	1430.3	1668.5	1810.1	1878.0	1887.0	1887.0
75°	848.6	842.5	816.9	925.4	1008.3	1162.0	1364.0	1481.6	1534.3	1544.9	1541.9
77.5°	654.1	649.6	624.0	717.4	782.2	896.8	1059.6	1151.5	1190.7	1202.7	1228.4
80°	468.7	467.2	426.5	518.5	547.1	643.6	762.6	833.5	854.6	871.2	889.2
82.5°	299.9	301.4	260.7	339.1	351.2	413.0	486.8	530.5	545.6	559.2	572.7
85°	146.2	152.2	129.6	179.4	180.9	212.5	244.2	260.7	266.8	277.3	289.4
87.5°	37.7	43.7	24.1	51.2	45.2	58.8	67.8	72.3	70.8	78.4	82.9
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°	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4
2.5°	6324.2	6372.4	6348.3	6426.7	6456.8	6408.6	6493.0	6494.5	6434.2	6505.1	6544.3
5°	6226.2	6276.0	6260.9	6342.3	6380.0	6337.8	6440.3	6459.8	6401.1	6480.9	6544.3
7.5°	6126.8	6185.5	6165.9	6248.8	6294.1	6260.9	6370.9	6402.6	6357.4	6444.8	6529.2
10°	6040.8	6090.6	6069.5	6156.9	6196.1	6169.0	6277.5	6336.3	6294.1	6401.1	6502.0
12.5°	5956.4	5997.1	5973.0	6045.4	6083.0	6048.4	6181.0	6235.3	6205.1	6316.7	6446.3
15°	5847.9	5893.1	5860.0	5924.8	5953.4	5923.3	6031.8	6125.3	6087.6	6209.7	6352.8
17.5°	5765.0	5790.7	5745.4	5796.7	5813.3	5772.6	5882.6	5974.5	5947.4	6080.0	6245.8
20°	5673.1	5694.2	5630.9	5659.5	5658.0	5606.8	5707.8	5798.2	5780.1	5926.3	6114.7
22.5°	5570.6	5581.2	5507.3	5513.3	5510.3	5425.9	5516.3	5608.3	5600.7	5748.5	5959.5
25°	5462.1	5463.6	5368.6	5365.6	5332.5	5233.0	5312.9	5416.9	5394.3	5554.0	5775.6
27.5°	5355.1	5340.0	5225.5	5198.3	5145.6	5026.5	5097.3	5190.8	5177.2	5334.0	5579.6
30°	5240.5	5220.9	5080.8	5031.0	4954.2	4817.0	4875.8	4963.2	4970.7	5107.9	5365.6
32.5°	5132.0	5082.3	4927.0	4854.7	4758.2	4598.5	4630.1	4719.0	4731.1	4869.8	5135.0
35°	4991.8	4958.7	4767.3	4643.7	4548.7	4373.9	4407.0	4468.8	4486.9	4622.6	4892.4
37.5°	4859.2	4806.5	4603.0	4452.3	4330.2	4146.3	4155.3	4218.6	4236.7	4373.9	4640.7
40°	4722.0	4646.7	4428.1	4251.8	4111.6	3918.7	3908.2	3974.5	3988.0	4122.2	4363.3
42.5°	4575.9	4485.4	4239.7	4046.8	3885.6	3689.6	3668.5	3725.8	3740.9	3872.0	4108.6
45°	4428.1	4319.6	4046.8	3835.8	3659.5	3459.0	3437.9	3481.6	3504.2	3627.8	3855.4
47.5°	4271.4	4144.8	3847.9	3612.8	3430.4	3229.9	3204.3	3248.0	3266.1	3388.2	3603.7
50°	4107.1	3953.4	3642.9	3383.7	3202.8	3005.4	2967.7	3018.9	3035.5	3150.0	3361.1
52.5°	3926.2	3755.9	3424.4	3153.1	2972.2	2783.8	2738.6	2788.3	2807.9	2919.4	3113.9
55°	3734.8	3551.0	3204.3	2940.5	2744.6	2560.7	2523.0	2542.6	2584.8	2690.3	2871.2
57.5°	3519.3	3336.9	2972.2	2703.9	2515.5	2339.2	2307.5	2325.6	2364.8	2467.3	2630.1
60°	3290.2	3097.3	2735.6	2467.3	2284.9	2117.6	2089.0	2105.6	2147.8	2241.2	2391.9
62.5°	3064.1	2847.1	2491.4	2224.6	2058.8	1903.6	1896.1	1890.0	1929.2	2019.6	2152.3
65°	2789.8	2581.8	2236.7	1983.5	1832.8	1692.6	1662.4	1676.0	1713.7	1796.6	1935.2
67.5°	2495.9	2307.5	1975.9	1742.3	1608.2	1483.1	1457.5	1463.5	1502.7	1575.0	1695.6
70°	2183.9	2018.1	1709.2	1499.7	1386.6	1269.1	1252.5	1254.0	1291.7	1355.0	1460.5
72.5°	1856.9	1707.7	1439.4	1260.0	1166.6	1082.2	1067.1	1049.0	1083.7	1137.9	1228.4
75°	1523.8	1392.7	1171.1	1024.9	951.0	880.2	866.6	848.6	883.2	929.9	1000.8
77.5°	1187.7	1082.2	910.3	797.3	740.0	687.3	675.2	655.6	690.3	725.0	780.7
80°	859.1	782.2	679.7	560.7	541.1	506.4	494.4	473.3	506.4	529.0	571.2
82.5°	554.6	503.4	444.6	361.7	358.7	333.1	327.1	302.9	333.1	346.7	378.3
85°	280.3	256.2	241.2	183.9	189.9	173.3	171.8	146.2	170.3	176.3	194.4
87.5°	79.9	84.4	75.4	45.2	57.3	54.3	54.3	39.2	54.3	54.3	61.8
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: P838120

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-4HI-40-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4	6461.4
2.5°	6467.4	6493.0	6499.0	6497.5	6514.1	6604.5	6574.4	6604.5
5°	6482.5	6539.7	6554.8	6575.9	6603.0	6705.5	6672.4	6708.5
7.5°	6491.5	6577.4	6610.6	6651.3	6695.0	6809.5	6782.4	6818.6
10°	6491.5	6603.0	6651.3	6719.1	6777.9	6910.5	6884.9	6927.1
12.5°	6464.4	6607.6	6675.4	6770.3	6845.7	6988.9	6978.3	7008.5
15°	6408.6	6584.9	6678.4	6800.5	6893.9	7053.7	7049.2	7085.3
17.5°	6333.2	6545.8	6658.8	6812.5	6930.1	7109.5	7120.0	7139.6
20°	6238.3	6471.9	6619.6	6808.0	6955.7	7153.2	7166.7	7193.9
22.5°	6113.2	6383.0	6560.8	6788.4	6958.7	7171.2	7195.4	7221.0
25°	5965.5	6276.0	6484.0	6750.7	6943.7	7169.7	7202.9	7225.5
27.5°	5796.7	6137.3	6386.0	6690.4	6901.5	7145.6	7186.3	7213.4
30°	5600.7	5989.6	6274.5	6612.1	6844.2	7100.4	7144.1	7171.2
32.5°	5398.8	5826.8	6141.8	6511.1	6761.3	7028.1	7065.7	7086.8
35°	5178.7	5629.4	5982.1	6381.5	6654.3	6912.0	6940.6	6963.3
37.5°	4939.1	5415.4	5799.7	6235.3	6503.6	6750.7	6776.4	6802.0
40°	4691.9	5190.8	5594.7	6055.9	6324.2	6553.3	6580.4	6598.5
42.5°	4443.2	4942.1	5376.2	5844.9	6111.7	6331.7	6348.3	6366.4
45°	4191.5	4684.4	5130.5	5611.3	5875.1	6081.5	6087.6	6102.6
47.5°	3935.3	4417.6	4860.7	5344.5	5605.3	5793.7	5799.7	5811.8
50°	3677.6	4150.8	4572.8	5056.6	5311.4	5510.3	5483.2	5495.2
52.5°	3424.4	3870.5	4301.5	4746.2	4997.9	5174.2	5181.7	5157.6
55°	3175.7	3596.2	3992.6	4420.6	4660.3	4797.4	4792.9	4801.9
57.5°	2924.0	3318.8	3682.1	4074.0	4307.6	4437.2	4464.3	4432.7
60°	2667.7	3038.5	3364.1	3718.3	3944.3	4052.9	4084.5	4054.4
62.5°	2413.0	2753.6	3049.1	3358.0	3567.5	3701.7	3698.7	3665.5
65°	2158.3	2467.3	2731.0	2993.3	3175.7	3309.8	3303.8	3273.6
67.5°	1923.2	2177.9	2414.5	2627.0	2785.3	2877.2	2908.9	2872.7
70°	1663.9	1884.0	2092.0	2262.3	2393.4	2476.3	2506.5	2474.8
72.5°	1404.7	1591.6	1737.8	1902.1	2003.1	2072.4	2104.0	2073.9
75°	1148.5	1302.2	1421.3	1549.4	1620.2	1679.0	1715.2	1685.0
77.5°	899.8	1018.9	1113.8	1207.3	1288.7	1302.2	1333.9	1314.3
80°	663.2	749.1	818.4	880.2	939.0	945.0	970.6	958.6
82.5°	441.6	498.9	517.0	581.8	619.5	613.4	639.1	630.0
85°	233.6	268.3	299.9	319.5	340.6	321.0	343.6	334.6
87.5°	78.4	82.9	72.3	102.5	113.0	96.5	110.0	105.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)