

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: P838139

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-5LO-50-120-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: P838139
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-LD4-5LO-50-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and RFI grid
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

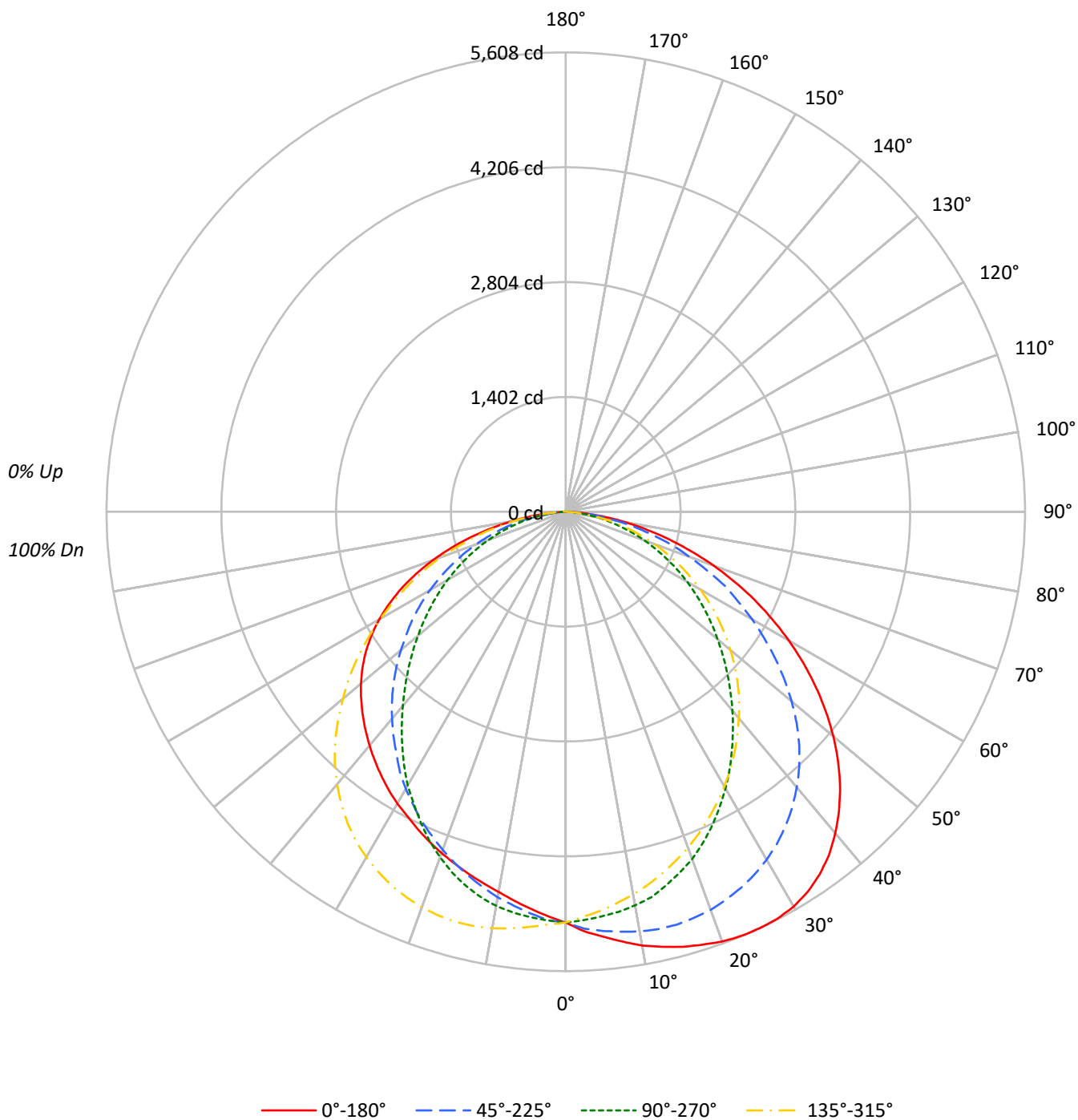
Lumens per Lamp: N/A
Luminaire Lumens: 14713.7 lumens
Efficiency: N/A
Efficacy: 125.8 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 117
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°	6748	6748	6748	6748
5°	7033	6699	6573	6710
10°	7346	6665	6440	6675
15°	7661	6580	6376	6582
20°	7995	6461	6348	6424
25°	8326	6280	6348	6216
30°	8648	6061	6390	5994
35°	8877	5813	6454	5720
40°	8996	5562	6544	5437
45°	9013	5309	6671	5175
50°	8928	5066	6834	4932
55°	8743	4841	6987	4706
60°	8468	4606	7080	4486
65°	8089	4335	7043	4235
70°	7557	4018	6793	3944
75°	6799	3582	6234	3564
80°	5765	3000	5239	3046
85°	4009	1987	3324	2041

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	476.2	3.2
10°-20°	1378.8	9.4
20°-30°	2113.1	14.4
30°-40°	2569.4	17.5
40°-50°	2671.1	18.2
50°-60°	2412.8	16.4
60°-70°	1834.3	12.5
70°-80°	1022.6	7.0
80°-90°	235.4	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°	3968.1	27.0
0°-40°	6537.5	44.4
0°-60°	11621.3	79.0
0°-90°	14713.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14713.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5015	5015	5015	5015	5015	
5°	5207	4960	4867	4968	5207	502
15°	5500	4724	4578	4725	5500	1559
25°	5608	4230	4276	4187	5608	2590
35°	5405	3539	3930	3483	5405	3376
45°	4737	2790	3506	2720	4737	3647
55°	3727	2064	2978	2006	3727	3327
65°	2541	1362	2212	1330	2541	2511
75°	1308	689	1199	686	1308	1389
85°	260	129	215	132	260	327
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°	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1
2.5°	5126.3	5051.4	5052.6	5118.1	5067.8	5092.4	5022.2	5049.1	5040.9	5046.7	4989.4
5°	5207.0	5126.3	5125.1	5181.3	5125.1	5135.6	5046.7	5064.3	5038.5	5022.2	4960.2
7.5°	5292.4	5211.7	5203.5	5252.6	5178.9	5170.7	5072.5	5072.5	5025.7	4984.7	4926.2
10°	5376.6	5293.6	5283.0	5320.5	5229.2	5202.3	5083.0	5064.3	5002.3	4941.4	4878.3
12.5°	5439.8	5355.6	5347.4	5370.8	5267.8	5218.7	5083.0	5046.7	4955.5	4870.1	4820.9
15°	5499.5	5412.9	5390.7	5402.4	5284.2	5218.7	5066.6	5010.5	4893.5	4781.2	4723.9
17.5°	5541.6	5458.5	5436.3	5435.1	5292.4	5198.8	5031.5	4954.3	4813.9	4678.2	4620.9
20°	5583.7	5500.6	5472.6	5451.5	5290.1	5171.9	4980.0	4875.9	4712.2	4560.1	4512.1
22.5°	5604.7	5519.3	5488.9	5457.3	5274.9	5122.8	4916.9	4784.7	4597.5	4416.2	4376.4
25°	5608.3	5520.5	5487.8	5442.1	5244.4	5064.3	4835.0	4674.7	4465.3	4264.1	4230.2
27.5°	5598.9	5503.0	5470.2	5415.2	5198.8	4992.9	4737.9	4549.5	4324.9	4102.7	4066.4
30°	5566.1	5469.0	5437.5	5366.1	5134.5	4905.2	4631.4	4410.3	4169.3	3933.0	3901.4
32.5°	5500.6	5405.9	5380.1	5308.8	5064.3	4803.4	4507.4	4260.6	3997.4	3771.6	3724.8
35°	5404.7	5309.9	5293.6	5218.7	4966.0	4681.7	4371.7	4096.8	3814.9	3584.4	3538.8
37.5°	5279.5	5200.0	5175.4	5101.7	4850.2	4543.7	4216.1	3919.0	3628.9	3380.9	3352.8
40°	5121.6	5046.7	5028.0	4962.5	4715.7	4390.4	4047.7	3735.3	3437.0	3206.6	3166.8
42.5°	4941.4	4871.3	4860.7	4792.9	4549.5	4220.8	3865.2	3544.6	3237.0	3014.7	2974.9
45°	4736.7	4668.9	4666.5	4602.2	4368.2	4032.5	3673.3	3351.6	3041.6	2811.1	2790.1
47.5°	4510.9	4450.1	4450.1	4390.4	4165.8	3825.4	3475.6	3150.4	2845.1	2641.5	2604.1
50°	4265.3	4207.9	4190.4	4161.2	3942.4	3599.6	3267.4	2953.9	2650.9	2456.7	2420.4
52.5°	4003.2	3954.1	3965.8	3912.0	3700.2	3364.5	3056.8	2732.8	2455.5	2278.9	2242.6
55°	3727.1	3656.9	3667.5	3647.6	3447.5	3122.3	2820.5	2550.3	2263.7	2097.5	2063.6
57.5°	3440.5	3349.3	3386.7	3375.0	3178.5	2874.3	2604.1	2343.2	2073.0	1919.7	1887.0
60°	3146.9	3059.2	3097.8	3087.2	2902.4	2626.3	2380.6	2138.5	1883.5	1744.2	1711.5
62.5°	2845.1	2764.4	2799.4	2791.3	2621.6	2372.5	2158.4	1936.1	1692.8	1567.6	1537.2
65°	2540.9	2463.7	2495.3	2489.4	2332.7	2143.2	1930.3	1726.7	1500.9	1392.1	1361.7
67.5°	2229.7	2158.4	2187.6	2187.6	2043.7	1862.4	1701.0	1515.0	1312.6	1219.0	1190.9
70°	1920.9	1854.2	1879.9	1877.6	1755.9	1608.5	1469.3	1303.2	1121.9	1044.7	1021.3
72.5°	1609.7	1551.2	1574.6	1572.3	1470.5	1375.7	1237.7	1093.8	935.9	873.9	852.8
75°	1307.9	1252.9	1275.1	1272.8	1189.7	1100.8	1008.4	889.1	753.4	710.1	689.0
77.5°	1020.1	964.0	982.7	982.7	921.8	857.5	783.8	691.4	595.5	548.7	533.5
80°	744.0	717.1	707.8	708.9	668.0	625.9	588.4	499.5	429.3	397.7	387.2
82.5°	489.0	466.8	457.4	459.8	436.4	410.6	387.2	325.2	278.4	259.7	253.9
85°	259.7	243.3	235.1	241.0	236.3	222.3	210.6	168.5	139.2	132.2	128.7
87.5°	81.9	71.4	65.5	86.6	73.7	65.5	63.2	50.3	38.6	38.6	37.4
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°	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1
2.5°	5008.1	5008.1	4962.5	4952.0	4947.3	4953.1	4907.5	4899.3	4964.8	4942.6	4892.3
5°	4968.4	4966.0	4901.7	4890.0	4890.0	4883.0	4831.5	4819.8	4885.3	4866.6	4811.6
7.5°	4919.2	4912.2	4836.2	4828.0	4816.3	4811.6	4754.3	4746.1	4802.2	4790.5	4739.1
10°	4859.6	4852.5	4762.5	4756.6	4743.7	4734.4	4680.6	4674.7	4732.0	4713.3	4672.4
12.5°	4781.2	4768.3	4675.9	4670.0	4659.5	4656.0	4603.4	4601.0	4664.2	4645.5	4602.2
15°	4678.2	4667.7	4564.8	4567.1	4568.3	4568.3	4526.1	4523.8	4585.8	4577.6	4530.8
17.5°	4564.8	4550.7	4452.4	4459.5	4467.7	4477.0	4444.3	4450.1	4515.6	4505.1	4463.0
20°	4436.1	4422.0	4326.1	4346.0	4363.5	4382.3	4361.2	4377.6	4438.4	4433.7	4402.1
22.5°	4292.2	4278.1	4189.2	4219.6	4248.9	4284.0	4274.6	4293.3	4357.7	4356.5	4328.4
25°	4116.7	4120.2	4041.8	4079.3	4128.4	4177.5	4181.0	4211.5	4282.8	4275.8	4250.1
27.5°	3952.9	3957.6	3874.5	3937.7	4003.2	4066.4	4081.6	4123.7	4196.2	4190.4	4168.2
30°	3781.0	3786.8	3706.1	3792.7	3872.2	3949.4	3982.2	4039.5	4113.2	4113.2	4089.8
32.5°	3602.0	3612.5	3528.3	3644.1	3736.5	3826.6	3883.9	3943.6	4027.8	4025.5	4005.6
35°	3418.3	3430.0	3352.8	3500.2	3592.6	3702.6	3773.9	3853.5	3928.4	3929.5	3914.3
37.5°	3231.1	3245.2	3175.0	3336.4	3441.7	3571.6	3662.8	3742.3	3825.4	3830.1	3816.0
40°	3045.1	3060.3	2999.5	3155.1	3288.4	3433.5	3538.8	3632.4	3723.6	3726.0	3716.6
42.5°	2859.1	2875.5	2829.9	2981.9	3132.9	3288.4	3412.5	3518.9	3612.5	3618.3	3607.8
45°	2677.8	2691.8	2659.1	2825.2	2970.2	3139.9	3282.6	3403.1	3497.8	3506.0	3502.5
47.5°	2497.6	2510.5	2481.3	2633.3	2800.6	2980.8	3145.7	3279.1	3379.7	3389.1	3386.7
50°	2321.0	2331.5	2299.9	2459.0	2625.1	2817.0	2989.0	3143.4	3255.7	3265.0	3263.9
52.5°	2145.5	2156.0	2129.1	2296.4	2447.3	2649.7	2836.9	3004.2	3115.3	3129.3	3131.7
55°	1975.9	1980.6	1959.5	2119.8	2266.0	2477.7	2693.0	2855.6	2966.7	2978.4	2985.5
57.5°	1806.2	1807.4	1789.9	1943.1	2083.5	2299.9	2525.7	2696.5	2801.8	2813.5	2824.0
60°	1637.8	1636.6	1616.7	1765.3	1899.8	2113.9	2349.1	2518.7	2620.5	2631.0	2645.0
62.5°	1470.5	1467.0	1449.4	1586.3	1712.7	1924.4	2160.7	2324.5	2421.6	2428.6	2447.3
65°	1304.4	1300.9	1284.5	1410.8	1525.5	1727.9	1959.5	2115.1	2202.8	2212.2	2208.7
67.5°	1140.6	1133.6	1120.7	1234.2	1338.3	1525.5	1747.8	1896.3	1968.9	1977.0	1999.3
70°	976.8	968.6	939.4	1059.9	1151.1	1318.4	1525.5	1657.7	1718.5	1726.7	1723.2
72.5°	815.4	807.2	775.6	886.7	964.0	1110.2	1295.0	1405.0	1457.6	1464.7	1464.7
75°	658.6	653.9	634.1	718.3	782.6	902.0	1058.7	1150.0	1190.9	1199.1	1196.8
77.5°	507.7	504.2	484.3	556.8	607.2	696.1	822.4	893.8	924.2	933.5	953.4
80°	363.8	362.7	331.1	402.4	424.7	499.5	591.9	646.9	663.3	676.2	690.2
82.5°	232.8	234.0	202.4	263.2	272.6	320.5	377.9	411.8	423.5	434.0	444.5
85°	113.5	118.2	100.6	139.2	140.4	164.9	189.5	202.4	207.1	215.3	224.6
87.5°	29.2	33.9	18.7	39.8	35.1	45.6	52.6	56.2	55.0	60.8	64.3
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°	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1
2.5°	4908.7	4946.1	4927.4	4988.2	5011.6	4974.2	5039.7	5040.9	4994.1	5049.1	5079.5
5°	4832.6	4871.3	4859.6	4922.7	4952.0	4919.2	4998.8	5014.0	4968.4	5030.4	5079.5
7.5°	4755.4	4801.1	4785.9	4850.2	4885.3	4859.6	4945.0	4969.5	4934.4	5002.3	5067.8
10°	4688.8	4727.4	4711.0	4778.8	4809.3	4788.2	4872.4	4918.0	4885.3	4968.4	5046.7
12.5°	4623.2	4654.8	4636.1	4692.3	4721.5	4694.6	4797.6	4839.7	4816.3	4902.8	5003.4
15°	4539.0	4574.1	4548.4	4598.7	4620.9	4597.5	4681.7	4754.3	4725.0	4819.8	4930.9
17.5°	4474.7	4494.6	4459.5	4499.2	4512.1	4480.5	4565.9	4637.3	4616.2	4719.2	4847.9
20°	4403.3	4419.7	4370.6	4392.8	4391.6	4351.8	4430.2	4500.4	4486.4	4599.8	4746.1
22.5°	4323.8	4332.0	4274.6	4279.3	4277.0	4211.5	4281.6	4353.0	4347.2	4461.8	4625.6
25°	4239.5	4240.7	4167.0	4164.7	4138.9	4061.7	4123.7	4204.4	4186.9	4310.9	4482.9
27.5°	4156.5	4144.8	4055.9	4034.8	3993.9	3901.4	3956.4	4029.0	4018.4	4140.1	4330.8
30°	4067.6	4052.4	3943.6	3905.0	3845.3	3738.8	3784.5	3852.3	3858.2	3964.6	4164.7
32.5°	3983.3	3944.7	3824.2	3768.1	3693.2	3569.2	3593.8	3662.8	3672.2	3779.8	3985.7
35°	3874.5	3848.8	3700.2	3604.3	3530.6	3394.9	3420.6	3468.6	3482.6	3587.9	3797.3
37.5°	3771.6	3730.6	3572.7	3455.7	3361.0	3218.3	3225.3	3274.4	3288.4	3394.9	3602.0
40°	3665.1	3606.6	3437.0	3300.1	3191.3	3041.6	3033.4	3084.9	3095.4	3199.5	3386.7
42.5°	3551.7	3481.5	3290.8	3141.0	3015.9	2863.8	2847.4	2891.9	2903.6	3005.3	3189.0
45°	3437.0	3352.8	3141.0	2977.3	2840.4	2684.8	2668.4	2702.4	2719.9	2815.8	2992.5
47.5°	3315.4	3217.1	2986.6	2804.1	2662.6	2507.0	2487.1	2521.0	2535.1	2629.8	2797.1
50°	3187.8	3068.5	2827.5	2626.3	2485.9	2332.7	2303.4	2343.2	2356.1	2445.0	2608.8
52.5°	3047.5	2915.3	2657.9	2447.3	2306.9	2160.7	2125.6	2164.2	2179.4	2266.0	2416.9
55°	2898.9	2756.2	2487.1	2282.4	2130.3	1987.6	1958.3	1973.5	2006.3	2088.2	2228.6
57.5°	2731.6	2590.0	2306.9	2098.7	1952.5	1815.6	1791.0	1805.1	1835.5	1915.0	2041.4
60°	2553.8	2404.0	2123.3	1915.0	1773.5	1643.6	1621.4	1634.3	1667.0	1739.6	1856.6
62.5°	2378.3	2209.8	1933.8	1726.7	1598.0	1477.5	1471.7	1467.0	1497.4	1567.6	1670.5
65°	2165.4	2004.0	1736.1	1539.5	1422.5	1313.7	1290.3	1300.9	1330.1	1394.5	1502.1
67.5°	1937.3	1791.0	1533.7	1352.3	1248.2	1151.1	1131.2	1135.9	1166.3	1222.5	1316.1
70°	1695.1	1566.4	1326.6	1164.0	1076.3	985.0	972.1	973.3	1002.6	1051.7	1133.6
72.5°	1441.3	1325.4	1117.2	978.0	905.5	840.0	828.3	814.2	841.1	883.2	953.4
75°	1182.7	1080.9	909.0	795.5	738.2	683.2	672.7	658.6	685.5	721.8	776.8
77.5°	921.8	840.0	706.6	618.9	574.4	533.5	524.1	508.9	535.8	562.7	606.0
80°	666.8	607.2	527.6	435.2	420.0	393.1	383.7	367.3	393.1	410.6	443.4
82.5°	430.5	390.7	345.1	280.8	278.4	258.5	253.9	235.1	258.5	269.1	293.6
85°	217.6	198.9	187.2	142.7	147.4	134.5	133.4	113.5	132.2	136.9	150.9
87.5°	62.0	65.5	58.5	35.1	44.5	42.1	42.1	30.4	42.1	42.1	48.0
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: P838139

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5LO-50-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1	5015.1
2.5°	5019.8	5039.7	5044.4	5043.2	5056.1	5126.3	5102.9	5126.3
5°	5031.5	5076.0	5087.7	5104.1	5125.1	5204.7	5178.9	5207.0
7.5°	5038.5	5105.2	5131.0	5162.5	5196.5	5285.4	5264.3	5292.4
10°	5038.5	5125.1	5162.5	5215.2	5260.8	5363.8	5343.9	5376.6
12.5°	5017.5	5128.6	5181.3	5255.0	5313.5	5424.6	5416.4	5439.8
15°	4974.2	5111.1	5183.6	5278.4	5350.9	5474.9	5471.4	5499.5
17.5°	4915.7	5080.7	5168.4	5287.7	5379.0	5518.2	5526.4	5541.6
20°	4842.0	5023.3	5138.0	5284.2	5398.9	5552.1	5562.6	5583.7
22.5°	4744.9	4954.3	5092.4	5269.0	5401.2	5566.1	5584.9	5604.7
25°	4630.3	4871.3	5032.7	5239.8	5389.5	5565.0	5590.7	5608.3
27.5°	4499.2	4763.6	4956.7	5193.0	5356.7	5546.3	5577.8	5598.9
30°	4347.2	4649.0	4870.1	5132.1	5312.3	5511.2	5545.1	5566.1
32.5°	4190.4	4522.6	4767.1	5053.7	5247.9	5455.0	5484.3	5500.6
35°	4019.6	4369.4	4643.1	4953.1	5164.9	5364.9	5387.2	5404.7
37.5°	3833.6	4203.3	4501.6	4839.7	5047.9	5239.8	5259.6	5279.5
40°	3641.7	4029.0	4342.5	4700.5	4908.7	5086.5	5107.6	5121.6
42.5°	3448.7	3835.9	4172.9	4536.7	4743.7	4914.5	4927.4	4941.4
45°	3253.4	3635.9	3982.2	4355.3	4560.1	4720.3	4725.0	4736.7
47.5°	3054.5	3428.8	3772.8	4148.3	4350.7	4496.9	4501.6	4510.9
50°	2854.4	3221.8	3549.3	3924.8	4122.5	4277.0	4255.9	4265.3
52.5°	2657.9	3004.2	3338.8	3683.9	3879.2	4016.1	4021.9	4003.2
55°	2464.9	2791.3	3098.9	3431.2	3617.2	3723.6	3720.1	3727.1
57.5°	2269.5	2576.0	2857.9	3162.1	3343.4	3444.0	3465.1	3440.5
60°	2070.6	2358.4	2611.1	2886.0	3061.5	3145.7	3170.3	3146.9
62.5°	1872.9	2137.3	2366.6	2606.4	2769.0	2873.2	2870.8	2845.1
65°	1675.2	1915.0	2119.8	2323.3	2464.9	2569.0	2564.3	2540.9
67.5°	1492.7	1690.4	1874.1	2039.0	2161.9	2233.2	2257.8	2229.7
70°	1291.5	1462.3	1623.8	1755.9	1857.7	1922.1	1945.5	1920.9
72.5°	1090.3	1235.4	1348.8	1476.3	1554.7	1608.5	1633.1	1609.7
75°	891.4	1010.7	1103.2	1202.6	1257.6	1303.2	1331.3	1307.9
77.5°	698.4	790.8	864.5	937.0	1000.2	1010.7	1035.3	1020.1
80°	514.7	581.4	635.2	683.2	728.8	733.5	753.4	744.0
82.5°	342.8	387.2	401.3	451.6	480.8	476.1	496.0	489.0
85°	181.3	208.2	232.8	248.0	264.4	249.2	266.7	259.7
87.5°	60.8	64.3	56.2	79.5	87.7	74.9	85.4	81.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)