

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: P838085

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-5LO-30-120-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: P838085
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-30-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

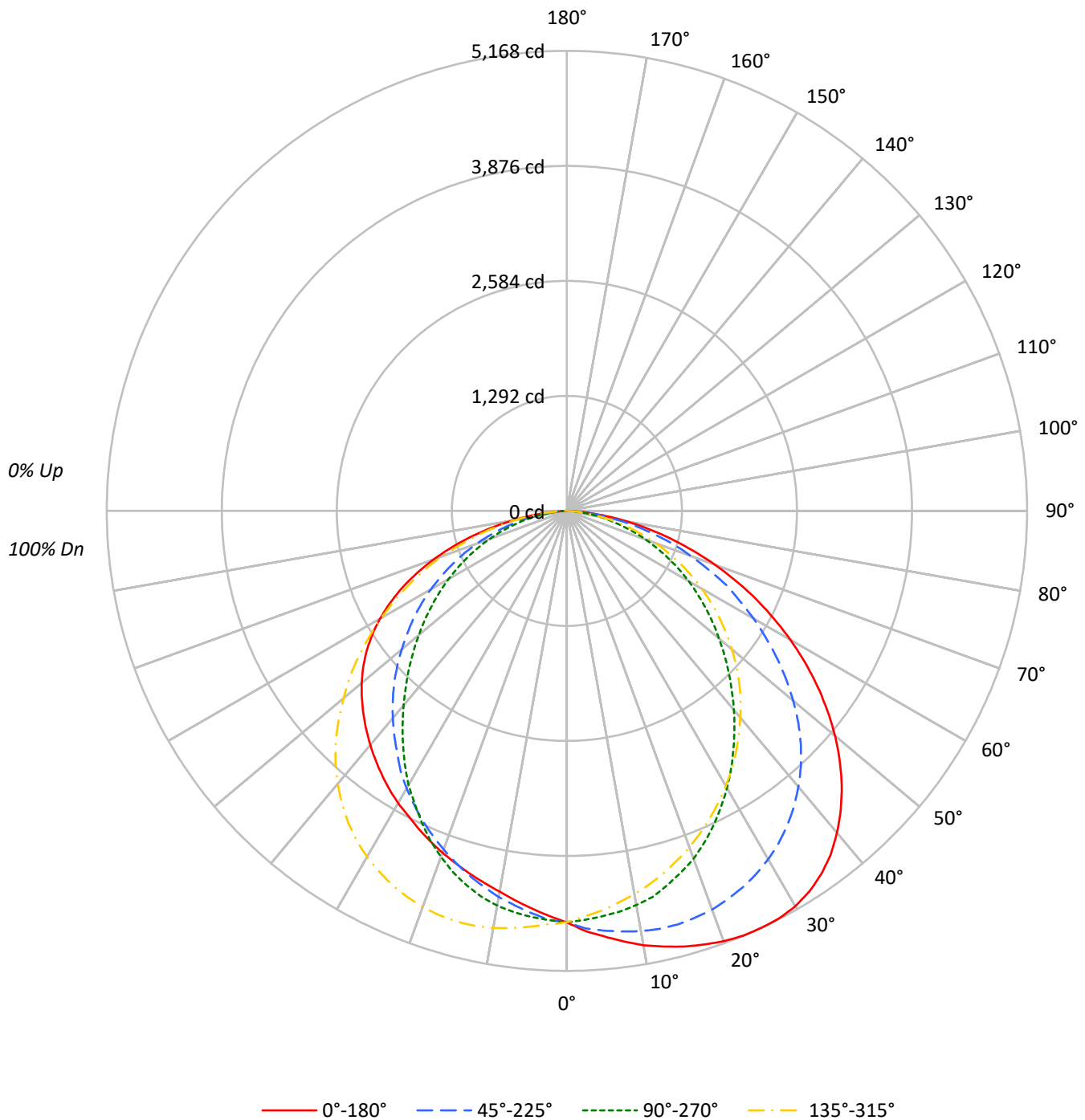
Lumens per Lamp: N/A
Luminaire Lumens: 13559.7 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	6219	6219	6219	6219
5°	6481	6174	6057	6184
10°	6770	6142	5935	6151
15°	7060	6064	5876	6065
20°	7368	5954	5850	5920
25°	7673	5787	5850	5728
30°	7970	5586	5889	5524
35°	8181	5357	5948	5272
40°	8290	5126	6031	5010
45°	8306	4893	6148	4770
50°	8228	4669	6298	4545
55°	8057	4461	6439	4337
60°	7804	4244	6525	4134
65°	7455	3995	6491	3903
70°	6964	3703	6260	3635
75°	6266	3301	5744	3284
80°	5313	2765	4828	2806
85°	3694	1831	3063	1880

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	438.8	3.2
10°-20°	1270.7	9.4
20°-30°	1947.4	14.4
30°-40°	2367.9	17.5
40°-50°	2461.6	18.2
50°-60°	2223.5	16.4
60°-70°	1690.5	12.5
70°-80°	942.4	7.0
80°-90°	217.0	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°	3656.9	27.0
0°-40°	6024.8	44.4
0°-60°	10709.9	79.0
0°-90°	13559.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13559.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4622	4622	4622	4622	4622	
5°	4799	4571	4485	4579	4799	463
15°	5068	4353	4219	4354	5068	1437
25°	5168	3898	3940	3858	5168	2387
35°	4981	3261	3621	3210	4981	3111
45°	4365	2571	3231	2507	4365	3361
55°	3435	1902	2745	1849	3435	3066
65°	2342	1255	2039	1226	2342	2314
75°	1205	635	1105	632	1205	1280
85°	239	119	198	122	239	301
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°	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8
2.5°	4724.2	4655.2	4656.3	4716.7	4670.3	4693.0	4628.3	4653.1	4645.5	4650.9	4598.1
5°	4798.6	4724.2	4723.1	4774.9	4723.1	4732.8	4650.9	4667.1	4643.4	4628.3	4571.1
7.5°	4877.3	4802.9	4795.4	4840.7	4772.7	4765.2	4674.6	4674.6	4631.5	4593.8	4539.9
10°	4954.9	4878.4	4868.7	4903.2	4819.1	4794.3	4684.3	4667.1	4609.9	4553.9	4495.7
12.5°	5013.1	4935.5	4928.0	4949.5	4854.7	4809.4	4684.3	4650.9	4566.8	4488.1	4442.8
15°	5068.1	4988.4	4967.9	4978.6	4869.8	4809.4	4669.2	4617.5	4509.7	4406.2	4353.4
17.5°	5106.9	5030.4	5009.9	5008.8	4877.3	4791.1	4636.9	4565.7	4436.4	4311.3	4258.5
20°	5145.8	5069.2	5043.3	5023.9	4875.2	4766.3	4589.5	4493.5	4342.6	4202.4	4158.2
22.5°	5165.2	5086.5	5058.4	5029.3	4861.1	4721.0	4531.2	4409.4	4236.9	4069.8	4033.2
25°	5168.4	5087.5	5057.4	5015.3	4833.1	4667.1	4455.8	4308.1	4115.1	3929.7	3898.4
27.5°	5159.8	5071.4	5041.2	4990.5	4791.1	4601.3	4366.3	4192.7	3985.7	3780.9	3747.5
30°	5129.6	5040.1	5011.0	4945.2	4731.8	4520.5	4268.2	4064.4	3842.3	3624.6	3595.5
32.5°	5069.2	4981.9	4958.2	4892.4	4667.1	4426.7	4153.9	3926.4	3683.9	3475.8	3432.7
35°	4980.8	4893.5	4878.4	4809.4	4576.5	4314.5	4028.8	3775.5	3515.7	3303.3	3261.2
37.5°	4865.4	4792.1	4769.5	4701.6	4469.8	4187.3	3885.5	3611.6	3344.3	3115.7	3089.8
40°	4719.9	4650.9	4633.7	4573.3	4345.8	4046.1	3730.2	3442.4	3167.4	2955.1	2918.4
42.5°	4553.9	4489.2	4479.5	4417.0	4192.7	3889.8	3562.0	3266.6	2983.1	2778.3	2741.6
45°	4365.2	4302.7	4300.5	4241.2	4025.6	3716.2	3385.2	3088.7	2803.1	2590.7	2571.3
47.5°	4157.1	4101.1	4101.1	4046.1	3839.1	3525.4	3203.0	2903.3	2621.9	2434.3	2399.8
50°	3930.7	3877.9	3861.7	3834.8	3633.2	3317.3	3011.1	2722.2	2443.0	2264.0	2230.6
52.5°	3689.2	3644.0	3654.7	3605.2	3410.0	3100.6	2817.1	2518.4	2262.9	2100.1	2066.7
55°	3434.8	3370.1	3379.8	3361.5	3177.2	2877.4	2599.3	2350.3	2086.1	1933.0	1901.8
57.5°	3170.7	3086.6	3121.1	3110.3	2929.2	2648.9	2399.8	2159.4	1910.4	1769.2	1739.0
60°	2900.1	2819.2	2854.8	2845.1	2674.8	2420.3	2193.9	1970.8	1735.7	1607.4	1577.3
62.5°	2621.9	2547.5	2579.9	2572.3	2416.0	2186.4	1989.1	1784.2	1560.0	1444.6	1416.6
65°	2341.6	2270.5	2299.6	2294.2	2149.7	1975.1	1778.9	1591.3	1383.2	1282.9	1254.9
67.5°	2054.9	1989.1	2016.0	2016.0	1883.4	1716.3	1567.6	1396.1	1209.6	1123.4	1097.5
70°	1770.2	1708.8	1732.5	1730.3	1618.2	1482.4	1354.1	1201.0	1033.9	962.7	941.2
72.5°	1483.5	1429.6	1451.1	1449.0	1355.2	1267.8	1140.6	1008.0	862.5	805.3	785.9
75°	1205.3	1154.6	1175.1	1173.0	1096.4	1014.5	929.3	819.4	694.3	654.4	635.0
77.5°	940.1	888.4	905.6	905.6	849.5	790.2	722.3	637.2	548.8	505.6	491.6
80°	685.7	660.9	652.2	653.3	615.6	576.8	542.3	460.3	395.7	366.6	356.8
82.5°	450.6	430.2	421.5	423.7	402.1	378.4	356.8	299.7	256.6	239.3	233.9
85°	239.3	224.2	216.7	222.1	217.8	204.8	194.1	155.2	128.3	121.8	118.6
87.5°	75.5	65.8	60.4	79.8	67.9	60.4	58.2	46.4	35.6	35.6	34.5
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°	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8
2.5°	4615.3	4615.3	4573.3	4563.6	4559.3	4564.7	4522.6	4515.1	4575.4	4555.0	4508.6
5°	4578.7	4576.5	4517.2	4506.4	4506.4	4500.0	4452.5	4441.8	4502.1	4484.9	4434.2
7.5°	4533.4	4526.9	4456.9	4449.3	4438.5	4434.2	4381.4	4373.8	4425.6	4414.8	4367.4
10°	4478.4	4471.9	4388.9	4383.5	4371.7	4363.1	4313.5	4308.1	4360.9	4343.7	4305.9
12.5°	4406.2	4394.3	4309.2	4303.8	4294.1	4290.8	4242.3	4240.2	4298.4	4281.1	4241.2
15°	4311.3	4301.6	4206.7	4208.9	4210.0	4210.0	4171.2	4169.0	4226.1	4218.6	4175.5
17.5°	4206.7	4193.8	4103.2	4109.7	4117.3	4125.9	4095.7	4101.1	4161.5	4151.7	4112.9
20°	4088.1	4075.2	3986.8	4005.1	4021.3	4038.5	4019.1	4034.2	4090.3	4086.0	4056.9
22.5°	3955.5	3942.6	3860.7	3888.7	3915.6	3948.0	3939.4	3956.6	4015.9	4014.8	3989.0
25°	3793.8	3797.1	3724.8	3759.3	3804.6	3849.9	3853.1	3881.1	3946.9	3940.4	3916.7
27.5°	3642.9	3647.2	3570.7	3628.9	3689.2	3747.5	3761.5	3800.3	3867.1	3861.7	3841.3
30°	3484.4	3489.8	3415.4	3495.2	3568.5	3639.7	3669.8	3722.7	3790.6	3790.6	3769.0
32.5°	3319.5	3329.2	3251.5	3358.3	3443.4	3526.5	3579.3	3634.3	3711.9	3709.7	3691.4
35°	3150.2	3161.0	3089.8	3225.7	3310.8	3412.2	3477.9	3551.2	3620.2	3621.3	3607.3
37.5°	2977.7	2990.6	2926.0	3074.7	3171.8	3291.4	3375.5	3448.8	3525.4	3529.7	3516.8
40°	2806.3	2820.3	2764.2	2907.6	3030.5	3164.2	3261.2	3347.5	3431.6	3433.7	3425.1
42.5°	2634.9	2650.0	2607.9	2748.1	2887.1	3030.5	3144.8	3242.9	3329.2	3334.6	3324.8
45°	2467.8	2480.7	2450.5	2603.6	2737.3	2893.6	3025.1	3136.2	3223.5	3231.1	3227.8
47.5°	2301.7	2313.6	2286.6	2426.8	2581.0	2747.0	2899.0	3021.9	3114.6	3123.2	3121.1
50°	2138.9	2148.6	2119.5	2266.2	2419.2	2596.1	2754.5	2896.8	3000.3	3009.0	3007.9
52.5°	1977.2	1986.9	1962.1	2116.3	2255.4	2441.9	2614.4	2768.6	2871.0	2883.9	2886.1
55°	1820.9	1825.2	1805.8	1953.5	2088.3	2283.4	2481.8	2631.6	2734.1	2744.8	2751.3
57.5°	1664.6	1665.7	1649.5	1790.7	1920.1	2119.5	2327.6	2485.0	2582.0	2592.8	2602.5
60°	1509.3	1508.3	1489.9	1626.8	1750.8	1948.1	2164.8	2321.1	2414.9	2424.6	2437.6
62.5°	1355.2	1351.9	1335.8	1461.9	1578.3	1773.5	1991.2	2142.2	2231.7	2238.1	2255.4
65°	1202.1	1198.8	1183.7	1300.2	1405.8	1592.3	1805.8	1949.2	2030.1	2038.7	2035.4
67.5°	1051.1	1044.7	1032.8	1137.4	1233.3	1405.8	1610.7	1747.6	1814.4	1822.0	1842.5
70°	900.2	892.7	865.7	976.8	1060.8	1215.0	1405.8	1527.7	1583.7	1591.3	1588.0
72.5°	751.4	743.9	714.8	817.2	888.4	1023.1	1193.5	1294.8	1343.3	1349.8	1349.8
75°	607.0	602.7	584.3	662.0	721.2	831.2	975.7	1059.8	1097.5	1105.0	1102.9
77.5°	467.9	464.7	446.3	513.2	559.5	641.5	757.9	823.7	851.7	860.3	878.6
80°	335.3	334.2	305.1	370.9	391.3	460.3	545.5	596.2	611.3	623.1	636.1
82.5°	214.5	215.6	186.5	242.6	251.2	295.4	348.2	379.5	390.3	400.0	409.7
85°	104.6	108.9	92.7	128.3	129.4	152.0	174.7	186.5	190.8	198.4	207.0
87.5°	27.0	31.3	17.2	36.7	32.3	42.0	48.5	51.7	50.7	56.1	59.3
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°	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8
2.5°	4523.7	4558.2	4540.9	4597.0	4618.6	4584.1	4644.4	4645.5	4602.4	4653.1	4681.1
5°	4453.6	4489.2	4478.4	4536.6	4563.6	4533.4	4606.7	4620.7	4578.7	4635.8	4681.1
7.5°	4382.5	4424.5	4410.5	4469.8	4502.1	4478.4	4557.1	4579.8	4547.4	4609.9	4670.3
10°	4321.0	4356.6	4341.5	4404.0	4432.1	4412.6	4490.3	4532.3	4502.1	4578.7	4650.9
12.5°	4260.6	4289.7	4272.5	4324.2	4351.2	4326.4	4421.3	4460.1	4438.5	4518.3	4611.0
15°	4183.0	4215.4	4191.6	4238.0	4258.5	4236.9	4314.5	4381.4	4354.4	4441.8	4544.2
17.5°	4123.7	4142.0	4109.7	4146.4	4158.2	4129.1	4207.8	4273.6	4254.2	4349.0	4467.6
20°	4058.0	4073.0	4027.8	4048.3	4047.2	4010.5	4082.8	4147.4	4134.5	4239.1	4373.8
22.5°	3984.6	3992.2	3939.4	3943.7	3941.5	3881.1	3945.8	4011.6	4006.2	4111.9	4262.8
25°	3907.0	3908.1	3840.2	3838.0	3814.3	3743.2	3800.3	3874.7	3858.5	3972.8	4131.3
27.5°	3830.5	3819.7	3737.8	3718.4	3680.6	3595.5	3646.1	3713.0	3703.3	3815.4	3991.1
30°	3748.5	3734.5	3634.3	3598.7	3543.7	3445.6	3487.6	3550.2	3555.6	3653.7	3838.0
32.5°	3670.9	3635.3	3524.3	3472.5	3403.6	3289.3	3311.9	3375.5	3384.1	3483.3	3673.1
35°	3570.7	3546.9	3410.0	3321.6	3253.7	3128.6	3152.4	3196.6	3209.5	3306.5	3499.5
37.5°	3475.8	3438.0	3292.5	3184.7	3097.4	2965.8	2972.3	3017.6	3030.5	3128.6	3319.5
40°	3377.7	3323.8	3167.4	3041.3	2941.0	2803.1	2795.5	2842.9	2852.6	2948.6	3121.1
42.5°	3273.1	3208.4	3032.7	2894.7	2779.3	2639.2	2624.1	2665.1	2675.8	2769.6	2938.9
45°	3167.4	3089.8	2894.7	2743.8	2617.6	2474.2	2459.1	2490.4	2506.6	2595.0	2757.8
47.5°	3055.3	2964.8	2752.4	2584.2	2453.7	2310.4	2292.0	2323.3	2336.2	2423.6	2577.7
50°	2937.8	2827.8	2605.8	2420.3	2291.0	2149.7	2122.8	2159.4	2171.3	2253.2	2404.2
52.5°	2808.4	2686.6	2449.4	2255.4	2126.0	1991.2	1958.9	1994.5	2008.5	2088.3	2227.3
55°	2671.5	2540.0	2292.0	2103.4	1963.2	1831.7	1804.7	1818.7	1848.9	1924.4	2053.8
57.5°	2517.4	2386.9	2126.0	1934.1	1799.3	1673.2	1650.6	1663.5	1691.5	1764.8	1881.3
60°	2353.5	2215.5	1956.7	1764.8	1634.4	1514.7	1494.2	1506.1	1536.3	1603.1	1710.9
62.5°	2191.8	2036.5	1782.1	1591.3	1472.7	1361.6	1356.2	1351.9	1380.0	1444.6	1539.5
65°	1995.6	1846.8	1599.9	1418.8	1311.0	1210.7	1189.1	1198.8	1225.8	1285.1	1384.3
67.5°	1785.3	1650.6	1413.4	1246.3	1150.3	1060.8	1042.5	1046.8	1074.9	1126.6	1212.9
70°	1562.2	1443.6	1222.6	1072.7	991.8	907.8	895.9	897.0	923.9	969.2	1044.7
72.5°	1328.2	1221.5	1029.6	901.3	834.4	774.1	763.3	750.4	775.2	814.0	878.6
75°	1090.0	996.2	837.7	733.1	680.3	629.6	619.9	607.0	631.8	665.2	715.9
77.5°	849.5	774.1	651.2	570.3	529.3	491.6	483.0	469.0	493.8	518.6	558.5
80°	614.5	559.5	486.2	401.1	387.0	362.2	353.6	338.5	362.2	378.4	408.6
82.5°	396.7	360.1	318.0	258.7	256.6	238.3	233.9	216.7	238.3	248.0	270.6
85°	200.5	183.3	172.5	131.5	135.8	124.0	122.9	104.6	121.8	126.1	139.1
87.5°	57.1	60.4	53.9	32.3	41.0	38.8	38.8	28.0	38.8	38.8	44.2
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: P838085

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5LO-30-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8	4621.8
2.5°	4626.1	4644.4	4648.8	4647.7	4659.5	4724.2	4702.7	4724.2
5°	4636.9	4677.9	4688.6	4703.7	4723.1	4796.5	4772.7	4798.6
7.5°	4643.4	4704.8	4728.5	4757.6	4788.9	4870.8	4851.4	4877.3
10°	4643.4	4723.1	4757.6	4806.2	4848.2	4943.1	4924.7	4954.9
12.5°	4624.0	4726.4	4774.9	4842.8	4896.7	4999.1	4991.6	5013.1
15°	4584.1	4710.2	4777.0	4864.4	4931.2	5045.5	5042.3	5068.1
17.5°	4530.2	4682.2	4763.0	4873.0	4957.1	5085.4	5092.9	5106.9
20°	4462.2	4629.3	4735.0	4869.8	4975.4	5116.6	5126.3	5145.8
22.5°	4372.8	4565.7	4693.0	4855.7	4977.6	5129.6	5146.8	5165.2
25°	4267.1	4489.2	4638.0	4828.8	4966.8	5128.5	5152.2	5168.4
27.5°	4146.4	4390.0	4567.9	4785.7	4936.6	5111.3	5140.4	5159.8
30°	4006.2	4284.4	4488.1	4729.6	4895.6	5078.9	5110.2	5129.6
32.5°	3861.7	4167.9	4393.2	4657.4	4836.3	5027.2	5054.1	5069.2
35°	3704.3	4026.7	4279.0	4564.7	4759.8	4944.2	4964.6	4980.8
37.5°	3532.9	3873.6	4148.5	4460.1	4652.0	4828.8	4847.1	4865.4
40°	3356.1	3713.0	4001.9	4331.8	4523.7	4687.6	4707.0	4719.9
42.5°	3178.2	3535.1	3845.6	4180.9	4371.7	4529.1	4540.9	4553.9
45°	2998.2	3350.7	3669.8	4013.8	4202.4	4350.1	4354.4	4365.2
47.5°	2814.9	3159.9	3476.9	3822.9	4009.4	4144.2	4148.5	4157.1
50°	2630.6	2969.1	3270.9	3617.0	3799.2	3941.5	3922.1	3930.7
52.5°	2449.4	2768.6	3076.9	3394.9	3575.0	3701.1	3706.5	3689.2
55°	2271.5	2572.3	2855.9	3162.1	3333.5	3431.6	3428.3	3434.8
57.5°	2091.5	2374.0	2633.8	2914.1	3081.2	3173.9	3193.3	3170.7
60°	1908.2	2173.4	2406.3	2659.7	2821.4	2899.0	2921.6	2900.1
62.5°	1726.0	1969.7	2181.0	2402.0	2551.9	2647.8	2645.6	2621.9
65°	1543.8	1764.8	1953.5	2141.1	2271.5	2367.5	2363.2	2341.6
67.5°	1375.7	1557.8	1727.1	1879.1	1992.3	2058.1	2080.7	2054.9
70°	1190.2	1347.6	1496.4	1618.2	1712.0	1771.3	1792.9	1770.2
72.5°	1004.8	1138.5	1243.0	1360.6	1432.8	1482.4	1505.0	1483.5
75°	821.5	931.5	1016.6	1108.3	1159.0	1201.0	1226.9	1205.3
77.5°	643.6	728.8	796.7	863.6	921.8	931.5	954.1	940.1
80°	474.4	535.8	585.4	629.6	671.7	676.0	694.3	685.7
82.5°	315.9	356.8	369.8	416.1	443.1	438.8	457.1	450.6
85°	167.1	191.9	214.5	228.6	243.6	229.6	245.8	239.3
87.5°	56.1	59.3	51.7	73.3	80.9	69.0	78.7	75.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)