

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: P838107

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-6STD-35-120-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: P838107
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-35-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

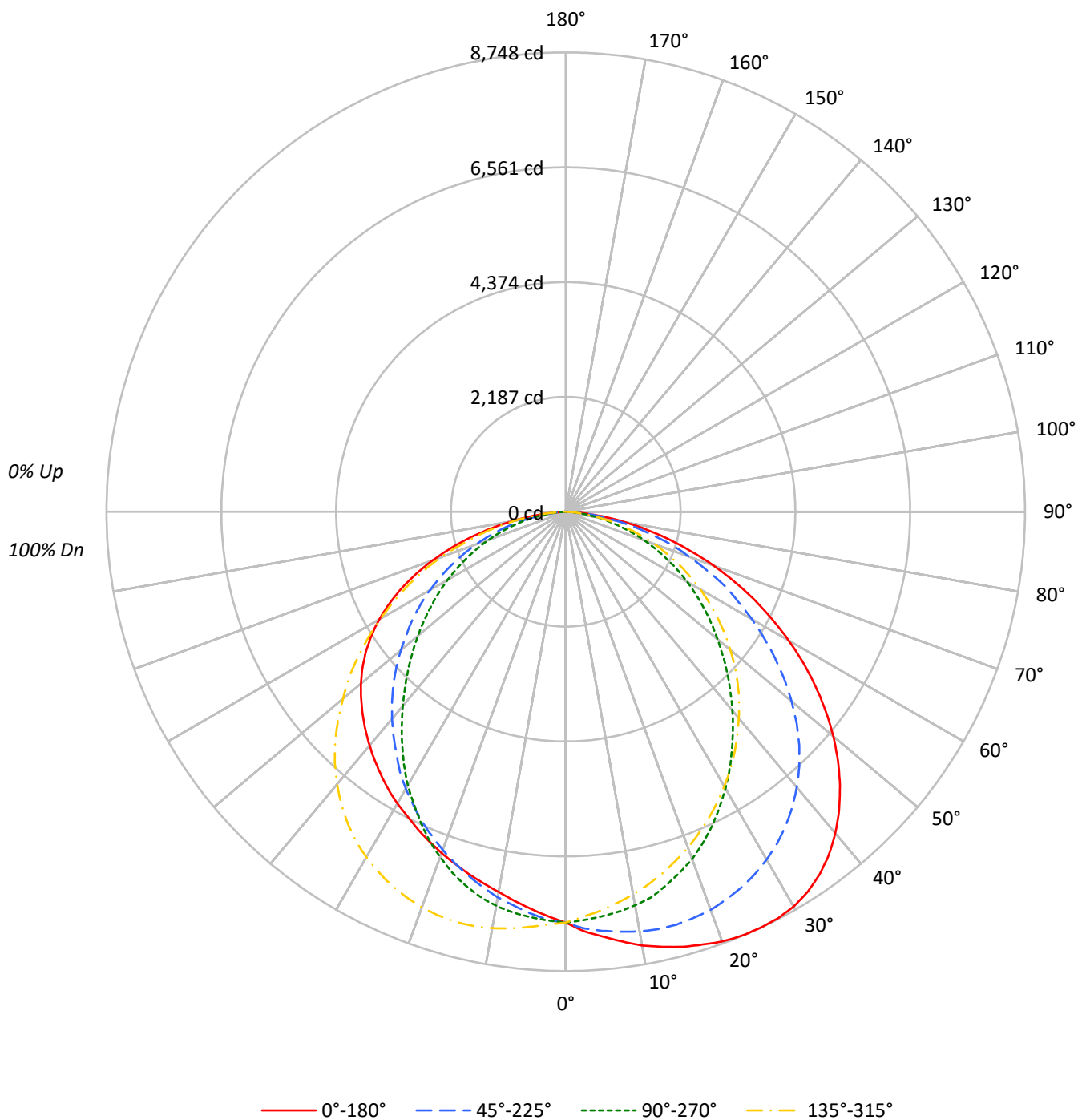
Lumens per Lamp: N/A
Luminaire Lumens: 22950.6 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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



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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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	94	97	94	91		94	91	89		90
2	99	91	84	78	96	89	82	77	85	80	75		82	77	73		79
3	90	79	71	65	88	78	70	64	75	68	63		72	66	62		69
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		62
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		56
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	36		47	40	35		46
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		42
9	56	43	34	29	55	42	34	29	41	34	29		40	33	28		39
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10525	10525	10525	10525
5°	10970	10450	10252	10467
10°	11458	10396	10045	10411
15°	11949	10264	9946	10266
20°	12471	10077	9902	10020
25°	12987	9796	9901	9695
30°	13489	9455	9968	9350
35°	13847	9066	10068	8923
40°	14031	8676	10208	8480
45°	14059	8281	10406	8073
50°	13926	7903	10660	7693
55°	13637	7551	10898	7341
60°	13209	7184	11043	6997
65°	12618	6762	10986	6605
70°	11787	6267	10595	6152
75°	10606	5587	9723	5559
80°	8992	4680	8172	4751
85°	6254	3098	5184	3183

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	742.7	3.2
10°-20°	2150.7	9.4
20°-30°	3296.1	14.4
30°-40°	4007.8	17.5
40°-50°	4166.3	18.2
50°-60°	3763.5	16.4
60°-70°	2861.2	12.5
70°-80°	1595.1	7.0
80°-90°	367.3	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°	6189.5	27.0
0°-40°	10197.3	44.4
0°-60°	18127.1	79.0
0°-90°	22950.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	22950.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	7823	7823	7823	7823	7823	
5°	8122	7737	7591	7750	8122	783
15°	8578	7368	7140	7370	8578	2432
25°	8748	6598	6669	6531	8748	4040
35°	8430	5520	6129	5432	8430	5265
45°	7388	4352	5469	4242	7388	5688
55°	5814	3219	4646	3129	5814	5190
65°	3963	2124	3451	2075	3963	3917
75°	2040	1075	1870	1069	2040	2167
85°	405	201	336	206	405	510
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°	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7
2.5°	7996.0	7879.2	7881.1	7983.2	7904.8	7943.1	7833.6	7875.6	7862.8	7871.9	7782.5
5°	8121.9	7996.0	7994.2	8081.8	7994.2	8010.6	7871.9	7899.3	7859.2	7833.6	7736.9
7.5°	8255.1	8129.2	8116.4	8193.1	8078.1	8065.4	7912.1	7912.1	7839.1	7775.2	7684.0
10°	8386.5	8256.9	8240.5	8298.9	8156.6	8114.6	7928.5	7899.3	7802.6	7707.7	7609.2
12.5°	8485.0	8353.7	8340.9	8377.4	8216.8	8140.2	7928.5	7871.9	7729.6	7596.4	7519.8
15°	8578.1	8443.1	8408.4	8426.6	8242.4	8140.2	7902.9	7815.4	7632.9	7457.7	7368.3
17.5°	8643.8	8514.2	8479.6	8477.7	8255.1	8109.1	7848.2	7727.8	7508.8	7297.1	7207.7
20°	8709.5	8579.9	8536.1	8503.3	8251.5	8067.2	7767.9	7605.5	7350.1	7112.8	7038.0
22.5°	8742.3	8609.1	8561.7	8512.4	8227.8	7990.5	7669.4	7463.2	7171.2	6888.4	6826.4
25°	8747.8	8610.9	8559.9	8488.7	8180.3	7899.3	7541.7	7291.7	6965.0	6651.2	6598.3
27.5°	8733.2	8583.6	8532.5	8446.7	8109.1	7788.0	7390.2	7096.4	6746.1	6399.4	6342.8
30°	8682.1	8530.7	8481.4	8370.1	8008.8	7651.1	7224.1	6879.3	6503.4	6134.8	6085.5
32.5°	8579.9	8432.1	8392.0	8280.7	7899.3	7492.4	7030.7	6645.7	6235.1	5883.0	5810.0
35°	8430.3	8282.5	8256.9	8140.2	7746.0	7302.6	6819.1	6390.2	5950.5	5591.0	5519.8
37.5°	8235.1	8111.0	8072.6	7957.7	7565.4	7087.3	6576.4	6112.9	5660.3	5273.5	5229.7
40°	7988.7	7871.9	7842.7	7740.5	7355.5	6848.2	6313.6	5826.4	5361.1	5001.6	4939.6
42.5°	7707.7	7598.2	7581.8	7476.0	7096.4	6583.7	6028.9	5529.0	5049.1	4702.4	4640.3
45°	7388.4	7282.5	7278.9	7178.5	6813.6	6289.9	5729.7	5227.9	4744.3	4384.9	4352.0
47.5°	7036.2	6941.3	6941.3	6848.2	6497.9	5966.9	5421.3	4914.0	4437.8	4120.3	4061.9
50°	6653.0	6563.6	6536.2	6490.6	6149.4	5614.7	5096.5	4607.5	4134.9	3832.0	3775.4
52.5°	6244.3	6167.6	6185.9	6101.9	5771.7	5248.0	4768.0	4262.6	3830.1	3554.6	3498.0
55°	5813.6	5704.1	5720.6	5689.5	5377.5	4870.2	4399.4	3977.9	3530.9	3271.8	3218.8
57.5°	5366.6	5224.2	5282.6	5264.4	4957.8	4483.4	4061.9	3655.0	3233.4	2994.4	2943.3
60°	4908.6	4771.7	4831.9	4815.5	4527.2	4096.5	3713.3	3335.6	2937.8	2720.7	2669.6
62.5°	4437.8	4311.9	4366.6	4353.8	4089.2	3700.6	3366.6	3019.9	2640.4	2445.2	2397.7
65°	3963.3	3842.9	3892.2	3883.0	3638.5	3342.9	3010.8	2693.3	2341.1	2171.4	2124.0
67.5°	3478.0	3366.6	3412.3	3412.3	3187.8	2905.0	2653.2	2363.0	2047.4	1901.4	1857.6
70°	2996.2	2892.2	2932.4	2928.7	2738.9	2509.0	2291.9	2032.8	1749.9	1629.5	1593.0
72.5°	2510.8	2419.6	2456.1	2452.5	2293.7	2145.9	1930.6	1706.1	1459.8	1363.1	1330.2
75°	2040.1	1954.3	1989.0	1985.3	1855.8	1717.1	1572.9	1386.8	1175.1	1107.6	1074.8
77.5°	1591.2	1503.6	1532.8	1532.8	1437.9	1337.5	1222.6	1078.4	928.8	855.8	832.1
80°	1160.5	1118.6	1104.0	1105.8	1041.9	976.2	917.8	779.2	669.7	620.4	604.0
82.5°	762.7	728.1	713.5	717.1	680.6	640.5	604.0	507.3	434.3	405.1	396.0
85°	405.1	379.5	366.8	375.9	368.6	346.7	328.5	262.8	217.1	206.2	200.7
87.5°	127.7	111.3	102.2	135.0	115.0	102.2	98.5	78.5	60.2	60.2	58.4
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°	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7
2.5°	7811.7	7811.7	7740.5	7724.1	7716.8	7725.9	7654.8	7642.0	7744.2	7709.5	7631.1
5°	7749.7	7746.0	7645.7	7627.4	7627.4	7616.5	7536.2	7517.9	7620.1	7590.9	7505.2
7.5°	7673.0	7662.1	7543.5	7530.7	7512.5	7505.2	7415.7	7403.0	7490.6	7472.3	7392.0
10°	7580.0	7569.0	7428.5	7419.4	7399.3	7384.7	7300.8	7291.7	7381.1	7351.9	7288.0
12.5°	7457.7	7437.6	7293.5	7284.4	7267.9	7262.5	7180.4	7176.7	7275.2	7246.0	7178.5
15°	7297.1	7280.7	7120.1	7123.8	7125.6	7125.6	7059.9	7056.3	7153.0	7140.2	7067.2
17.5°	7120.1	7098.2	6945.0	6955.9	6968.7	6983.3	6932.2	6941.3	7043.5	7027.1	6961.4
20°	6919.4	6897.5	6747.9	6778.9	6806.3	6835.5	6802.6	6828.2	6923.1	6915.8	6866.5
22.5°	6695.0	6673.1	6534.4	6581.8	6627.5	6682.2	6667.6	6696.8	6797.2	6795.3	6751.5
25°	6421.3	6426.7	6304.5	6362.9	6439.5	6516.1	6521.6	6569.1	6680.4	6669.4	6629.3
27.5°	6165.8	6173.1	6043.5	6142.1	6244.3	6342.8	6366.5	6432.2	6545.3	6536.2	6501.5
30°	5897.6	5906.7	5780.8	5915.8	6039.9	6160.3	6211.4	6300.8	6415.8	6415.8	6379.3
32.5°	5618.4	5634.8	5503.4	5684.1	5828.2	5968.7	6058.1	6151.2	6282.6	6278.9	6247.9
35°	5331.9	5350.1	5229.7	5459.6	5603.8	5775.3	5886.6	6010.7	6127.5	6129.3	6105.6
37.5°	5039.9	5061.8	4952.3	5204.2	5368.4	5570.9	5713.3	5837.3	5966.9	5974.2	5952.3
40°	4749.8	4773.5	4678.6	4921.3	5129.3	5355.6	5519.8	5665.8	5808.1	5811.8	5797.2
42.5°	4459.7	4485.2	4414.0	4651.3	4886.7	5129.3	5322.8	5488.8	5634.8	5643.9	5627.5
45°	4176.8	4198.7	4147.6	4406.7	4633.0	4897.6	5120.2	5308.2	5456.0	5468.7	5463.3
47.5°	3895.8	3915.9	3870.3	4107.5	4368.4	4649.4	4906.7	5114.7	5271.7	5286.3	5282.6
50°	3620.3	3636.7	3587.4	3835.6	4094.7	4394.0	4662.2	4903.1	5078.3	5092.8	5091.0
52.5°	3346.6	3363.0	3321.0	3582.0	3817.4	4133.0	4425.0	4685.9	4859.3	4881.2	4884.8
55°	3082.0	3089.3	3056.4	3306.4	3534.5	3864.8	4200.6	4454.2	4627.5	4645.8	4656.7
57.5°	2817.4	2819.2	2791.9	3030.9	3249.9	3587.4	3939.6	4206.0	4370.3	4388.5	4404.9
60°	2554.6	2552.8	2521.8	2753.5	2963.4	3297.3	3664.1	3928.7	4087.4	4103.8	4125.7
62.5°	2293.7	2288.2	2260.9	2474.3	2671.4	3001.7	3370.3	3625.8	3777.2	3788.2	3817.4
65°	2034.6	2029.1	2003.6	2200.6	2379.5	2695.1	3056.4	3299.1	3436.0	3450.6	3445.1
67.5°	1779.1	1768.2	1748.1	1925.1	2087.5	2379.5	2726.2	2957.9	3071.0	3083.8	3118.5
70°	1523.7	1510.9	1465.3	1653.2	1795.5	2056.5	2379.5	2585.7	2680.5	2693.3	2687.8
72.5°	1271.8	1259.1	1209.8	1383.2	1503.6	1731.7	2020.0	2191.5	2273.6	2284.6	2284.6
75°	1027.3	1020.0	989.0	1120.4	1220.8	1406.9	1651.4	1793.7	1857.6	1870.4	1866.7
77.5°	791.9	786.5	755.4	868.6	947.0	1085.7	1282.8	1394.1	1441.5	1456.1	1487.2
80°	567.5	565.7	516.4	627.7	662.4	779.2	923.3	1009.1	1034.6	1054.7	1076.6
82.5°	363.1	364.9	315.7	410.6	425.2	500.0	589.4	642.3	660.6	677.0	693.4
85°	177.0	184.3	156.9	217.1	219.0	257.3	295.6	315.7	323.0	335.8	350.4
87.5°	45.6	52.9	29.2	62.0	54.7	71.2	82.1	87.6	85.8	94.9	100.4
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7
2.5°	7656.6	7715.0	7685.8	7780.7	7817.2	7758.8	7861.0	7862.8	7789.8	7875.6	7923.0
5°	7538.0	7598.2	7580.0	7678.5	7724.1	7673.0	7797.1	7820.8	7749.7	7846.4	7923.0
7.5°	7417.6	7488.7	7465.0	7565.4	7620.1	7580.0	7713.2	7751.5	7696.8	7802.6	7904.8
10°	7313.6	7373.8	7348.2	7454.1	7501.5	7468.7	7600.0	7671.2	7620.1	7749.7	7871.9
12.5°	7211.4	7260.6	7231.4	7319.0	7364.7	7322.7	7483.3	7548.9	7512.5	7647.5	7804.4
15°	7080.0	7134.7	7094.6	7173.1	7207.7	7171.2	7302.6	7415.7	7370.1	7517.9	7691.3
17.5°	6979.6	7010.7	6955.9	7017.9	7038.0	6988.8	7122.0	7233.3	7200.4	7361.0	7561.7
20°	6868.3	6893.9	6817.2	6851.9	6850.1	6788.0	6910.3	7019.8	6997.9	7174.9	7403.0
22.5°	6744.2	6757.0	6667.6	6674.9	6671.2	6569.1	6678.5	6789.9	6780.7	6959.6	7215.0
25°	6612.9	6614.7	6499.7	6496.1	6455.9	6335.5	6432.2	6558.1	6530.7	6724.2	6992.4
27.5°	6483.3	6465.1	6326.4	6293.5	6229.7	6085.5	6171.3	6284.4	6268.0	6457.8	6755.2
30°	6344.6	6320.9	6151.2	6091.0	5997.9	5831.9	5903.0	6008.9	6018.0	6184.0	6496.1
32.5°	6213.2	6153.0	5965.1	5877.5	5760.7	5567.3	5605.6	5713.3	5727.9	5895.7	6216.9
35°	6043.5	6003.4	5771.7	5622.0	5507.1	5295.4	5335.5	5410.4	5432.3	5596.5	5923.1
37.5°	5883.0	5819.1	5572.8	5390.3	5242.5	5019.9	5030.8	5107.4	5129.3	5295.4	5618.4
40°	5716.9	5625.7	5361.1	5147.6	4977.9	4744.3	4731.6	4811.8	4828.3	4990.7	5282.6
42.5°	5539.9	5430.4	5133.0	4899.4	4704.2	4467.0	4441.4	4510.8	4529.0	4687.8	4974.2
45°	5361.1	5229.7	4899.4	4644.0	4430.5	4187.8	4162.2	4215.1	4242.5	4392.1	4667.7
47.5°	5171.3	5018.0	4658.6	4373.9	4153.1	3910.4	3879.4	3932.3	3954.2	4102.0	4363.0
50°	4972.4	4786.3	4410.4	4096.5	3877.6	3638.5	3592.9	3655.0	3675.0	3813.7	4069.2
52.5°	4753.4	4547.3	4145.8	3817.4	3598.4	3370.3	3315.6	3375.8	3399.5	3534.5	3769.9
55°	4521.7	4299.1	3879.4	3560.1	3322.9	3100.2	3054.6	3078.3	3129.4	3257.2	3476.1
57.5°	4260.8	4040.0	3598.4	3273.6	3045.5	2832.0	2793.7	2815.6	2863.0	2987.1	3184.2
60°	3983.4	3749.8	3311.9	2987.1	2766.3	2563.8	2529.1	2549.2	2600.3	2713.4	2895.9
62.5°	3709.7	3446.9	3016.3	2693.3	2492.6	2304.6	2295.5	2288.2	2335.7	2445.2	2605.7
65°	3377.6	3125.8	2707.9	2401.4	2218.9	2049.2	2012.7	2029.1	2074.7	2175.1	2343.0
67.5°	3021.8	2793.7	2392.2	2109.4	1947.0	1795.5	1764.5	1771.8	1819.3	1906.9	2052.8
70°	2644.0	2443.3	2069.3	1815.6	1678.8	1536.4	1516.4	1518.2	1563.8	1640.4	1768.2
72.5°	2248.1	2067.4	1742.6	1525.5	1412.3	1310.2	1291.9	1270.0	1312.0	1377.7	1487.2
75°	1844.8	1686.1	1417.8	1240.8	1151.4	1065.6	1049.2	1027.3	1069.3	1125.9	1211.6
77.5°	1437.9	1310.2	1102.1	965.3	895.9	832.1	817.5	793.8	835.7	877.7	945.2
80°	1040.1	947.0	823.0	678.8	655.1	613.1	598.5	573.0	613.1	640.5	691.6
82.5°	671.5	609.5	538.3	437.9	434.3	403.3	396.0	366.8	403.3	419.7	458.0
85°	339.4	310.2	292.0	222.6	229.9	209.8	208.0	177.0	206.2	213.5	235.4
87.5°	96.7	102.2	91.2	54.7	69.3	65.7	65.7	47.4	65.7	65.7	74.8
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: P838107

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-6STD-35-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7	7822.7
2.5°	7830.0	7861.0	7868.3	7866.5	7886.5	7996.0	7959.5	7996.0
5°	7848.2	7917.5	7935.8	7961.3	7994.2	8118.3	8078.1	8121.9
7.5°	7859.2	7963.2	8003.3	8052.6	8105.5	8244.2	8211.3	8255.1
10°	7859.2	7994.2	8052.6	8134.7	8205.9	8366.4	8335.4	8386.5
12.5°	7826.3	7999.7	8081.8	8196.7	8288.0	8461.3	8448.5	8485.0
15°	7758.8	7972.3	8085.4	8233.2	8346.4	8539.8	8534.3	8578.1
17.5°	7667.6	7924.8	8061.7	8247.8	8390.2	8607.3	8620.1	8643.8
20°	7552.6	7835.4	8014.3	8242.4	8421.2	8660.2	8676.6	8709.5
22.5°	7401.1	7727.8	7943.1	8218.6	8424.8	8682.1	8711.3	8742.3
25°	7222.3	7598.2	7850.0	8173.0	8406.6	8680.3	8720.4	8747.8
27.5°	7017.9	7430.3	7731.4	8100.0	8355.5	8651.1	8700.4	8733.2
30°	6780.7	7251.5	7596.4	8005.1	8286.1	8596.3	8649.3	8682.1
32.5°	6536.2	7054.4	7435.8	7882.9	8185.8	8508.8	8554.4	8579.9
35°	6269.8	6815.4	7242.4	7725.9	8056.2	8368.3	8402.9	8430.3
37.5°	5979.7	6556.3	7021.6	7548.9	7873.8	8173.0	8204.0	8235.1
40°	5680.4	6284.4	6773.4	7331.8	7656.6	7934.0	7966.8	7988.7
42.5°	5379.3	5983.3	6508.8	7076.3	7399.3	7665.7	7685.8	7707.7
45°	5074.6	5671.3	6211.4	6793.5	7112.8	7362.8	7370.1	7388.4
47.5°	4764.4	5348.3	5884.8	6470.5	6786.2	7014.3	7021.6	7036.2
50°	4452.4	5025.3	5536.3	6122.0	6430.4	6671.2	6638.4	6653.0
52.5°	4145.8	4685.9	5207.8	5746.1	6050.8	6264.3	6273.5	6244.3
55°	3844.7	4353.8	4833.7	5352.0	5642.1	5808.1	5802.7	5813.6
57.5°	3540.0	4018.1	4457.8	4932.3	5215.1	5372.0	5404.9	5366.6
60°	3229.8	3678.7	4072.8	4501.6	4775.3	4906.7	4945.0	4908.6
62.5°	2921.4	3333.8	3691.4	4065.5	4319.2	4481.6	4477.9	4437.8
65°	2613.0	2987.1	3306.4	3623.9	3844.7	4007.1	3999.8	3963.3
67.5°	2328.4	2636.7	2923.2	3180.5	3372.1	3483.4	3521.7	3478.0
70°	2014.5	2280.9	2532.7	2738.9	2897.7	2998.0	3034.5	2996.2
72.5°	1700.7	1926.9	2103.9	2302.8	2425.1	2509.0	2547.3	2510.8
75°	1390.5	1576.6	1720.7	1875.8	1961.6	2032.8	2076.6	2040.1
77.5°	1089.4	1233.5	1348.5	1461.6	1560.2	1576.6	1614.9	1591.2
80°	802.9	906.9	990.8	1065.6	1136.8	1144.1	1175.1	1160.5
82.5°	534.6	604.0	625.9	704.3	750.0	742.7	773.7	762.7
85°	282.8	324.8	363.1	386.8	412.4	388.7	416.0	405.1
87.5°	94.9	100.4	87.6	124.1	136.9	116.8	133.2	127.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)