

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: P838249

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-5HI-50-120-EDD-90**

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: P838249
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-LD4-5HI-50-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and RFI grid
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

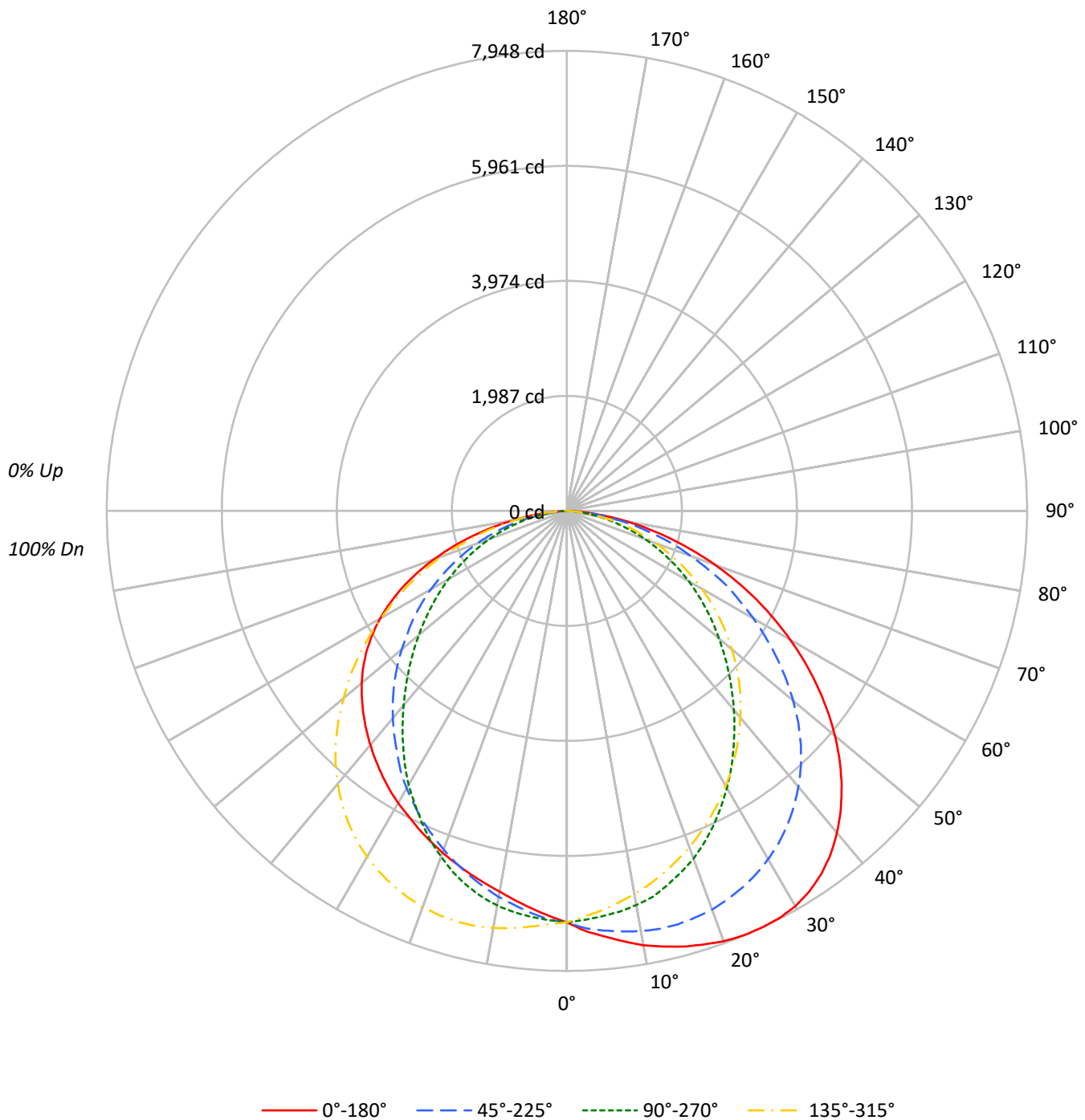
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20852.0 lumens
Efficiency: N/A
Efficacy: 94.8 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): 220
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°	9563	9563	9563	9563
5°	9967	9494	9315	9510
10°	10410	9445	9126	9459
15°	10856	9325	9037	9327
20°	11330	9156	8997	9104
25°	11799	8900	8996	8809
30°	12255	8590	9056	8495
35°	12581	8237	9147	8107
40°	12748	7883	9275	7705
45°	12773	7524	9454	7335
50°	12653	7180	9686	6989
55°	12390	6860	9902	6670
60°	12001	6527	10034	6357
65°	11464	6144	9981	6001
70°	10709	5694	9626	5589
75°	9636	5076	8834	5050
80°	8170	4252	7425	4316
85°	5683	2816	4710	2891

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	674.8	3.2
10°-20°	1954.1	9.4
20°-30°	2994.7	14.4
30°-40°	3641.3	17.5
40°-50°	3785.4	18.2
50°-60°	3419.3	16.4
60°-70°	2599.6	12.5
70°-80°	1449.2	7.0
80°-90°	333.7	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°	5623.5	27.0
0°-40°	9264.8	44.4
0°-60°	16469.5	79.0
0°-90°	20852.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20852.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	7107	7107	7107	7107	7107	
5°	7379	7029	6897	7041	7379	712
15°	7794	6694	6487	6696	7794	2210
25°	7948	5995	6060	5934	7948	3671
35°	7659	5015	5569	4936	7659	4784
45°	6713	3954	4969	3855	6713	5168
55°	5282	2924	4221	2843	5282	4715
65°	3601	1930	3135	1885	3601	3558
75°	1854	976	1699	972	1854	1969
85°	368	182	305	187	368	463
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°	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4
2.5°	7264.9	7158.7	7160.4	7253.2	7182.0	7216.8	7117.3	7155.4	7143.8	7152.1	7070.9
5°	7379.2	7264.9	7263.2	7342.8	7263.2	7278.1	7152.1	7177.0	7140.5	7117.3	7029.4
7.5°	7500.3	7385.9	7374.3	7443.9	7339.5	7327.9	7188.6	7188.6	7122.3	7064.2	6981.4
10°	7619.6	7501.9	7487.0	7540.1	7410.7	7372.6	7203.5	7177.0	7089.1	7002.9	6913.4
12.5°	7709.2	7589.8	7578.2	7611.3	7465.5	7395.8	7203.5	7152.1	7022.8	6901.8	6832.1
15°	7793.7	7671.0	7639.5	7656.1	7488.7	7395.8	7180.3	7100.7	6934.9	6775.8	6694.5
17.5°	7853.4	7735.7	7704.2	7702.5	7500.3	7367.6	7130.6	7021.1	6822.2	6629.9	6548.6
20°	7913.1	7795.4	7755.6	7725.7	7497.0	7329.5	7057.6	6910.1	6678.0	6462.4	6394.5
22.5°	7942.9	7821.9	7778.8	7734.0	7475.4	7259.9	6968.1	6780.7	6515.5	6258.5	6202.1
25°	7947.9	7823.6	7777.1	7712.5	7432.3	7177.0	6852.0	6624.9	6328.1	6043.0	5994.9
27.5°	7934.6	7798.7	7752.3	7674.3	7367.6	7075.9	6714.4	6447.5	6129.2	5814.2	5762.8
30°	7888.2	7750.6	7705.8	7604.7	7276.5	6951.5	6563.6	6250.2	5908.7	5573.8	5529.0
32.5°	7795.4	7661.1	7624.6	7523.5	7177.0	6807.3	6387.8	6038.0	5665.0	5345.0	5278.7
35°	7659.4	7525.1	7501.9	7395.8	7037.7	6634.9	6195.5	5805.9	5406.4	5079.8	5015.1
37.5°	7482.0	7369.3	7334.5	7230.0	6873.6	6439.2	5975.0	5553.9	5142.8	4791.3	4751.5
40°	7258.2	7152.1	7125.6	7032.7	6682.9	6222.0	5736.3	5293.6	4870.9	4544.3	4487.9
42.5°	7002.9	6903.4	6888.5	6792.4	6447.5	5981.6	5477.7	5023.4	4587.4	4272.4	4216.0
45°	6712.8	6616.6	6613.3	6522.1	6190.5	5714.7	5205.8	4749.8	4310.5	3983.9	3954.1
47.5°	6392.8	6306.6	6306.6	6222.0	5903.7	5421.3	4925.6	4464.7	4032.0	3743.5	3690.5
50°	6044.6	5963.4	5938.5	5897.1	5587.1	5101.3	4630.5	4186.2	3756.8	3481.6	3430.2
52.5°	5673.3	5603.7	5620.2	5544.0	5243.9	4768.1	4332.1	3872.8	3479.9	3229.6	3178.2
55°	5282.0	5182.5	5197.5	5169.3	4885.8	4424.9	3997.2	3614.2	3208.0	2972.6	2924.5
57.5°	4875.8	4746.5	4799.6	4783.0	4504.5	4073.4	3690.5	3320.7	2937.8	2720.6	2674.2
60°	4459.7	4335.4	4390.1	4375.2	4113.2	3722.0	3373.8	3030.6	2669.2	2471.9	2425.5
62.5°	4032.0	3917.6	3967.3	3955.7	3715.3	3362.2	3058.8	2743.8	2399.0	2221.6	2178.5
65°	3600.9	3491.5	3536.3	3528.0	3305.8	3037.2	2735.5	2447.0	2127.1	1972.9	1929.8
67.5°	3159.9	3058.8	3100.2	3100.2	2896.3	2639.4	2410.6	2147.0	1860.1	1727.5	1687.7
70°	2722.2	2627.7	2664.2	2660.9	2488.5	2279.6	2082.3	1846.9	1589.9	1480.5	1447.3
72.5°	2281.2	2198.4	2231.5	2228.2	2084.0	1949.7	1754.0	1550.1	1326.3	1238.4	1208.6
75°	1853.5	1775.6	1807.1	1803.8	1686.1	1560.1	1429.1	1260.0	1067.7	1006.3	976.5
77.5°	1445.7	1366.1	1392.6	1392.6	1306.4	1215.2	1110.8	979.8	843.9	777.5	756.0
80°	1054.4	1016.3	1003.0	1004.7	946.7	887.0	833.9	707.9	608.4	563.7	548.8
82.5°	693.0	661.5	648.2	651.5	618.4	581.9	548.8	460.9	394.6	368.1	359.8
85°	368.1	344.8	333.2	341.5	334.9	315.0	298.4	238.7	197.3	187.3	182.4
87.5°	116.1	101.1	92.8	122.7	104.4	92.8	89.5	71.3	54.7	54.7	53.1
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°	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4
2.5°	7097.4	7097.4	7032.7	7017.8	7011.2	7019.5	6954.8	6943.2	7036.1	7004.6	6933.3
5°	7041.0	7037.7	6946.5	6930.0	6930.0	6920.0	6847.1	6830.5	6923.3	6896.8	6818.9
7.5°	6971.4	6961.5	6853.7	6842.1	6825.5	6818.9	6737.6	6726.0	6805.6	6789.0	6716.1
10°	6886.9	6876.9	6749.2	6741.0	6722.7	6709.5	6633.2	6624.9	6706.1	6679.6	6621.6
12.5°	6775.8	6757.5	6626.6	6618.3	6603.4	6598.4	6523.8	6520.5	6610.0	6583.5	6522.1
15°	6629.9	6615.0	6469.1	6472.4	6474.0	6474.0	6414.4	6411.0	6498.9	6487.3	6421.0
17.5°	6469.1	6449.2	6309.9	6319.9	6331.5	6344.7	6298.3	6306.6	6399.4	6384.5	6324.8
20°	6286.7	6266.8	6130.9	6159.0	6183.9	6210.4	6180.6	6203.8	6290.0	6283.4	6238.6
22.5°	6082.8	6062.9	5936.9	5980.0	6021.4	6071.2	6057.9	6084.4	6175.6	6174.0	6134.2
25°	5834.1	5839.1	5728.0	5781.0	5850.7	5920.3	5925.3	5968.4	6069.5	6059.6	6023.1
27.5°	5602.0	5608.6	5490.9	5580.4	5673.3	5762.8	5784.4	5844.0	5946.8	5938.5	5907.0
30°	5358.3	5366.6	5252.2	5374.9	5487.6	5597.0	5643.4	5724.7	5829.1	5829.1	5796.0
32.5°	5104.6	5119.5	5000.2	5164.3	5295.3	5422.9	5504.2	5588.7	5708.1	5704.8	5676.6
35°	4844.3	4860.9	4751.5	4960.4	5091.4	5247.2	5348.3	5461.1	5567.2	5568.8	5547.3
37.5°	4579.1	4599.0	4499.5	4728.3	4877.5	5061.5	5190.8	5303.6	5421.3	5427.9	5408.0
40°	4315.5	4337.0	4250.8	4471.3	4660.3	4865.9	5015.1	5147.7	5277.0	5280.4	5267.1
42.5°	4051.9	4075.1	4010.4	4225.9	4439.8	4660.3	4836.1	4986.9	5119.5	5127.8	5112.9
45°	3794.9	3814.8	3768.4	4003.8	4209.4	4449.8	4652.0	4822.8	4957.1	4968.7	4963.7
47.5°	3539.6	3557.8	3516.4	3731.9	3969.0	4224.3	4458.1	4647.1	4789.6	4802.9	4799.6
50°	3289.2	3304.2	3259.4	3484.9	3720.3	3992.2	4235.9	4454.7	4613.9	4627.2	4625.5
52.5°	3040.6	3055.5	3017.4	3254.4	3468.3	3755.1	4020.4	4257.4	4414.9	4434.8	4438.2
55°	2800.2	2806.8	2777.0	3004.1	3211.3	3511.4	3816.5	4046.9	4204.4	4221.0	4230.9
57.5°	2559.8	2561.4	2536.6	2753.7	2952.7	3259.4	3579.4	3821.4	3970.6	3987.2	4002.1
60°	2321.0	2319.4	2291.2	2501.7	2692.4	2995.8	3329.0	3569.4	3713.7	3728.6	3748.5
62.5°	2084.0	2079.0	2054.1	2248.1	2427.1	2727.2	3062.1	3294.2	3431.8	3441.8	3468.3
65°	1848.5	1843.6	1820.4	1999.4	2161.9	2448.7	2777.0	2997.5	3121.8	3135.1	3130.1
67.5°	1616.4	1606.5	1588.3	1749.1	1896.6	2161.9	2476.9	2687.4	2790.2	2801.8	2833.3
70°	1384.3	1372.7	1331.3	1502.0	1631.4	1868.4	2161.9	2349.2	2435.4	2447.0	2442.1
72.5°	1155.5	1143.9	1099.2	1256.7	1366.1	1573.3	1835.3	1991.1	2065.7	2075.7	2075.7
75°	933.4	926.8	898.6	1017.9	1109.1	1278.2	1500.4	1629.7	1687.7	1699.3	1696.0
77.5°	719.5	714.5	686.4	789.2	860.4	986.4	1165.5	1266.6	1309.7	1323.0	1351.2
80°	515.6	513.9	469.2	570.3	601.8	707.9	838.9	916.8	940.0	958.3	978.2
82.5°	329.9	331.6	286.8	373.0	386.3	454.3	535.5	583.6	600.2	615.1	630.0
85°	160.8	167.4	142.6	197.3	198.9	233.8	268.6	286.8	293.4	305.1	318.3
87.5°	41.4	48.1	26.5	56.4	49.7	64.7	74.6	79.6	77.9	86.2	91.2
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°	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4
2.5°	6956.5	7009.5	6983.0	7069.2	7102.4	7049.3	7142.2	7143.8	7077.5	7155.4	7198.5
5°	6848.7	6903.4	6886.9	6976.4	7017.8	6971.4	7084.1	7105.7	7041.0	7128.9	7198.5
7.5°	6739.3	6804.0	6782.4	6873.6	6923.3	6886.9	7007.9	7042.7	6993.0	7089.1	7182.0
10°	6644.8	6699.5	6676.3	6772.5	6815.6	6785.7	6905.1	6969.7	6923.3	7041.0	7152.1
12.5°	6552.0	6596.7	6570.2	6649.8	6691.2	6653.1	6799.0	6858.7	6825.5	6948.2	7090.8
15°	6432.6	6482.3	6445.9	6517.1	6548.6	6515.5	6634.9	6737.6	6696.2	6830.5	6988.0
17.5°	6341.4	6369.6	6319.9	6376.2	6394.5	6349.7	6470.7	6571.9	6542.0	6687.9	6870.3
20°	6240.3	6263.5	6193.9	6225.4	6223.7	6167.3	6278.4	6377.9	6358.0	6518.8	6726.0
22.5°	6127.5	6139.1	6057.9	6064.5	6061.2	5968.4	6067.9	6169.0	6160.7	6323.2	6555.3
25°	6008.2	6009.8	5905.4	5902.1	5865.6	5756.2	5844.0	5958.4	5933.6	6109.3	6353.0
27.5°	5890.5	5873.9	5747.9	5718.0	5660.0	5529.0	5607.0	5709.8	5694.8	5867.3	6137.5
30°	5764.5	5742.9	5588.7	5534.0	5449.5	5298.6	5363.3	5459.4	5467.7	5618.6	5902.1
32.5°	5645.1	5590.4	5419.6	5340.0	5233.9	5058.2	5093.0	5190.8	5204.1	5356.6	5648.4
35°	5490.9	5454.4	5243.9	5107.9	5003.5	4811.2	4847.7	4915.6	4935.5	5084.7	5381.5
37.5°	5345.0	5287.0	5063.2	4897.4	4763.1	4560.8	4570.8	4640.4	4660.3	4811.2	5104.6
40°	5194.2	5111.3	4870.9	4676.9	4522.7	4310.5	4298.9	4371.8	4386.8	4534.3	4799.6
42.5°	5033.3	4933.9	4663.6	4451.4	4274.0	4058.5	4035.3	4098.3	4114.9	4259.1	4519.4
45°	4870.9	4751.5	4451.4	4219.3	4025.3	3804.8	3781.6	3829.7	3854.6	3990.5	4240.9
47.5°	4698.4	4559.2	4232.6	3974.0	3773.3	3552.8	3524.7	3572.7	3592.6	3726.9	3964.0
50°	4517.7	4348.6	4007.1	3722.0	3523.0	3305.8	3264.4	3320.7	3339.0	3465.0	3697.1
52.5°	4318.8	4131.4	3766.7	3468.3	3269.3	3062.1	3012.4	3067.1	3088.6	3211.3	3425.2
55°	4108.2	3906.0	3524.7	3234.5	3019.0	2816.7	2775.3	2796.9	2843.3	2959.3	3158.3
57.5°	3871.2	3670.6	3269.3	2974.2	2767.0	2573.0	2538.2	2558.1	2601.2	2714.0	2893.0
60°	3619.2	3407.0	3009.1	2714.0	2513.4	2329.3	2297.8	2316.1	2362.5	2465.3	2631.1
62.5°	3370.5	3131.7	2740.5	2447.0	2264.7	2093.9	2085.6	2079.0	2122.1	2221.6	2367.5
65°	3068.7	2840.0	2460.3	2181.8	2016.0	1861.8	1828.6	1843.6	1885.0	1976.2	2128.7
67.5°	2745.5	2538.2	2173.5	1916.5	1769.0	1631.4	1603.2	1609.8	1652.9	1732.5	1865.1
70°	2402.3	2219.9	1880.0	1649.6	1525.3	1395.9	1377.7	1379.4	1420.8	1490.4	1606.5
72.5°	2042.5	1878.4	1583.3	1386.0	1283.2	1190.4	1173.8	1153.9	1192.0	1251.7	1351.2
75°	1676.1	1531.9	1288.2	1127.4	1046.1	968.2	953.3	933.4	971.5	1022.9	1100.8
77.5°	1306.4	1190.4	1001.4	877.0	814.0	756.0	742.7	721.2	759.3	797.4	858.8
80°	945.0	860.4	747.7	616.7	595.2	557.0	543.8	520.6	557.0	581.9	628.3
82.5°	610.1	553.7	489.1	397.9	394.6	366.4	359.8	333.2	366.4	381.3	416.1
85°	308.4	281.8	265.3	202.3	208.9	190.7	189.0	160.8	187.3	194.0	213.9
87.5°	87.9	92.8	82.9	49.7	63.0	59.7	59.7	43.1	59.7	59.7	68.0
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: P838249

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-50-120-EDD-90

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4	7107.4
2.5°	7114.0	7142.2	7148.8	7147.1	7165.4	7264.9	7231.7	7264.9
5°	7130.6	7193.6	7210.1	7233.4	7263.2	7375.9	7339.5	7379.2
7.5°	7140.5	7235.0	7271.5	7316.2	7364.3	7490.3	7460.5	7500.3
10°	7140.5	7263.2	7316.2	7390.9	7455.5	7601.4	7573.2	7619.6
12.5°	7110.7	7268.2	7342.8	7447.2	7530.1	7687.6	7676.0	7709.2
15°	7049.3	7243.3	7346.1	7480.4	7583.2	7758.9	7753.9	7793.7
17.5°	6966.4	7200.2	7324.5	7493.6	7623.0	7820.2	7831.8	7853.4
20°	6862.0	7119.0	7281.4	7488.7	7651.1	7868.3	7883.2	7913.1
22.5°	6724.4	7021.1	7216.8	7467.1	7654.5	7888.2	7914.7	7942.9
25°	6561.9	6903.4	7132.2	7425.7	7637.9	7886.6	7923.0	7947.9
27.5°	6376.2	6750.9	7024.5	7359.4	7591.5	7860.0	7904.8	7934.6
30°	6160.7	6588.4	6901.8	7273.1	7528.5	7810.3	7858.4	7888.2
32.5°	5938.5	6409.4	6755.9	7162.1	7437.3	7730.7	7772.2	7795.4
35°	5696.5	6192.2	6580.1	7019.5	7319.6	7603.1	7634.6	7659.4
37.5°	5432.9	5956.8	6379.5	6858.7	7153.8	7425.7	7453.9	7482.0
40°	5161.0	5709.8	6154.1	6661.4	6956.5	7208.5	7238.3	7258.2
42.5°	4887.4	5436.2	5913.7	6429.3	6722.7	6964.8	6983.0	7002.9
45°	4610.6	5152.7	5643.4	6172.3	6462.4	6689.6	6696.2	6712.8
47.5°	4328.7	4859.3	5346.7	5878.9	6165.7	6372.9	6379.5	6392.8
50°	4045.2	4565.8	5030.0	5562.2	5842.4	6061.2	6031.4	6044.6
52.5°	3766.7	4257.4	4731.6	5220.7	5497.5	5691.5	5699.8	5673.3
55°	3493.2	3955.7	4391.7	4862.6	5126.2	5277.0	5272.1	5282.0
57.5°	3216.3	3650.7	4050.2	4481.3	4738.2	4880.8	4910.7	4875.8
60°	2934.5	3342.3	3700.4	4090.0	4338.7	4458.1	4492.9	4459.7
62.5°	2654.3	3029.0	3353.9	3693.8	3924.2	4071.8	4068.4	4032.0
65°	2374.1	2714.0	3004.1	3292.6	3493.2	3640.7	3634.1	3600.9
67.5°	2115.5	2395.6	2655.9	2889.7	3063.8	3164.9	3199.7	3159.9
70°	1830.3	2072.4	2301.1	2488.5	2632.7	2723.9	2757.1	2722.2
72.5°	1545.1	1750.7	1911.5	2092.3	2203.3	2279.6	2314.4	2281.2
75°	1263.3	1432.4	1563.4	1704.3	1782.2	1846.9	1886.7	1853.5
77.5°	989.8	1120.7	1225.2	1328.0	1417.5	1432.4	1467.2	1445.7
80°	729.5	824.0	900.2	968.2	1032.9	1039.5	1067.7	1054.4
82.5°	485.8	548.8	568.7	639.9	681.4	674.8	702.9	693.0
85°	257.0	295.1	329.9	351.5	374.7	353.1	378.0	368.1
87.5°	86.2	91.2	79.6	112.7	124.3	106.1	121.0	116.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)