

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: P838054

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-6HI-20-120-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: P838054
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-LD4-6HI-20-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and RFI grid
Light Source: 2000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

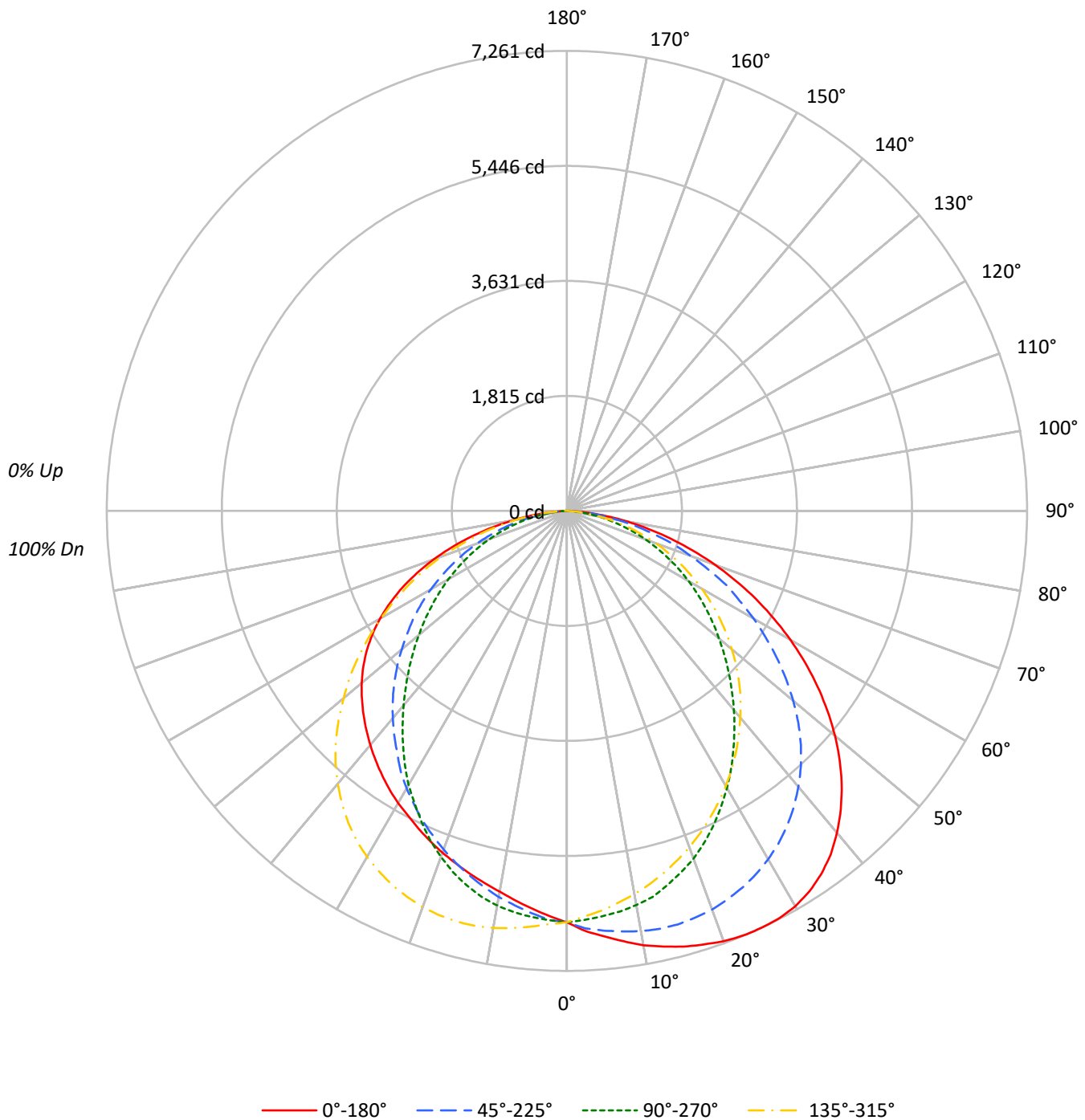
Lumens per Lamp: N/A
Luminaire Lumens: 19050.9 lumens
Efficiency: N/A
Efficacy: 72.2 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 264
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°	8737	8737	8737	8737
5°	9106	8674	8510	8688
10°	9511	8629	8338	8642
15°	9919	8520	8256	8522
20°	10352	8365	8220	8317
25°	10780	8131	8219	8048
30°	11197	7848	8274	7761
35°	11494	7526	8357	7407
40°	11647	7202	8473	7040
45°	11670	6874	8638	6701
50°	11560	6560	8849	6386
55°	11320	6268	9046	6094
60°	10964	5963	9167	5808
65°	10474	5613	9119	5483
70°	9784	5202	8795	5107
75°	8803	4638	8071	4614
80°	7464	3885	6784	3943
85°	5192	2572	4303	2643

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	616.5	3.2
10°-20°	1785.3	9.4
20°-30°	2736.0	14.4
30°-40°	3326.8	17.5
40°-50°	3458.4	18.2
50°-60°	3124.0	16.4
60°-70°	2375.0	12.5
70°-80°	1324.1	7.0
80°-90°	304.8	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°	5137.8	27.0
0°-40°	8464.6	44.4
0°-60°	15047.0	79.0
0°-90°	19050.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19050.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	6494	6494	6494	6494	6494	
5°	6742	6422	6301	6433	6742	650
15°	7120	6116	5927	6118	7120	2019
25°	7261	5477	5536	5421	7261	3354
35°	6998	4582	5088	4509	6998	4371
45°	6133	3612	4540	3522	6133	4722
55°	4826	2672	3856	2598	4826	4308
65°	3290	1763	2864	1722	3290	3251
75°	1693	892	1553	888	1693	1799
85°	336	167	279	171	336	423
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°	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5
2.5°	6637.3	6540.4	6541.9	6626.7	6561.6	6593.4	6502.5	6537.4	6526.8	6534.3	6460.1
5°	6741.9	6637.3	6635.8	6708.5	6635.8	6649.5	6534.3	6557.1	6523.7	6502.5	6422.3
7.5°	6852.4	6747.9	6737.3	6800.9	6705.5	6694.9	6567.7	6567.7	6507.1	6454.1	6378.3
10°	6961.5	6853.9	6840.3	6888.8	6770.6	6735.8	6581.3	6557.1	6476.8	6398.0	6316.2
12.5°	7043.3	6934.2	6923.6	6953.9	6820.6	6757.0	6581.3	6534.3	6416.2	6305.6	6242.0
15°	7120.5	7008.4	6979.7	6994.8	6841.8	6757.0	6560.1	6487.4	6335.9	6190.5	6116.3
17.5°	7175.1	7067.5	7038.7	7037.2	6852.4	6731.3	6514.7	6414.7	6232.9	6057.2	5983.0
20°	7229.6	7122.0	7085.7	7058.4	6849.4	6696.4	6448.0	6313.2	6101.1	5904.2	5842.1
22.5°	7256.9	7146.3	7106.9	7066.0	6829.7	6632.8	6366.2	6195.1	5952.7	5717.9	5666.4
25°	7261.4	7147.8	7105.4	7046.3	6790.3	6557.1	6260.2	6052.7	5781.6	5521.0	5477.1
27.5°	7249.3	7125.1	7082.7	7011.5	6731.3	6464.7	6134.5	5890.6	5599.8	5312.0	5265.0
30°	7206.9	7081.1	7040.3	6947.9	6647.9	6351.1	5996.6	5710.4	5398.3	5092.4	5051.5
32.5°	7122.0	6999.4	6966.0	6873.6	6557.1	6219.3	5836.1	5516.5	5175.7	4883.3	4822.8
35°	6997.8	6875.2	6853.9	6757.0	6429.8	6061.8	5660.4	5304.4	4939.4	4641.0	4581.9
37.5°	6835.8	6732.8	6701.0	6605.5	6279.9	5883.0	5458.9	5074.2	4698.6	4377.4	4341.1
40°	6631.3	6534.3	6510.1	6425.3	6105.7	5684.6	5240.8	4836.4	4450.1	4151.7	4100.3
42.5°	6398.0	6307.1	6293.5	6205.7	5890.6	5465.0	5004.5	4589.5	4191.1	3903.3	3851.8
45°	6133.0	6045.1	6042.1	5958.8	5655.8	5221.1	4756.1	4339.6	3938.2	3639.8	3612.5
47.5°	5840.6	5761.9	5761.9	5684.6	5393.8	4953.0	4500.1	4079.0	3683.7	3420.2	3371.7
50°	5522.5	5448.3	5425.6	5387.7	5104.5	4660.7	4230.5	3824.6	3432.3	3180.8	3133.9
52.5°	5183.2	5119.6	5134.8	5065.1	4790.9	4356.2	3957.9	3538.3	3179.3	2950.6	2903.6
55°	4825.8	4734.9	4748.5	4722.8	4463.8	4042.7	3651.9	3302.0	2930.9	2715.8	2671.9
57.5°	4454.7	4336.5	4385.0	4369.9	4115.4	3721.6	3371.7	3033.9	2684.0	2485.6	2443.2
60°	4074.5	3960.9	4010.9	3997.3	3757.9	3400.5	3082.4	2768.8	2438.6	2258.4	2216.0
62.5°	3683.7	3579.2	3624.6	3614.0	3394.4	3071.8	2794.6	2506.8	2191.7	2029.7	1990.3
65°	3289.9	3189.9	3230.8	3223.2	3020.3	2774.9	2499.2	2235.7	1943.3	1802.5	1763.1
67.5°	2887.0	2794.6	2832.5	2832.5	2646.2	2411.4	2202.4	1961.5	1699.5	1578.3	1541.9
70°	2487.1	2400.8	2434.1	2431.1	2273.5	2082.7	1902.4	1687.4	1452.6	1352.6	1322.3
72.5°	2084.2	2008.5	2038.8	2035.7	1904.0	1781.3	1602.5	1416.2	1211.7	1131.5	1104.2
75°	1693.4	1622.2	1651.0	1648.0	1540.4	1425.3	1305.7	1151.2	975.5	919.4	892.1
77.5°	1320.8	1248.1	1272.3	1272.3	1193.6	1110.3	1014.8	895.2	771.0	710.4	690.7
80°	963.3	928.5	916.4	917.9	864.9	810.4	761.9	646.8	555.9	515.0	501.4
82.5°	633.1	604.4	592.2	595.3	565.0	531.7	501.4	421.1	360.5	336.3	328.7
85°	336.3	315.1	304.5	312.0	306.0	287.8	272.6	218.1	180.2	171.2	166.6
87.5°	106.0	92.4	84.8	112.1	95.4	84.8	81.8	65.1	50.0	50.0	48.5
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°	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5
2.5°	6484.4	6484.4	6425.3	6411.7	6405.6	6413.2	6354.1	6343.5	6428.3	6399.5	6334.4
5°	6432.9	6429.8	6346.5	6331.4	6331.4	6322.3	6255.6	6240.5	6325.3	6301.1	6229.9
7.5°	6369.2	6360.2	6261.7	6251.1	6236.0	6229.9	6155.7	6145.1	6217.8	6202.6	6136.0
10°	6292.0	6282.9	6166.3	6158.7	6142.0	6129.9	6060.3	6052.7	6126.9	6102.7	6049.6
12.5°	6190.5	6173.9	6054.2	6046.6	6033.0	6028.4	5960.3	5957.3	6039.0	6014.8	5958.8
15°	6057.2	6043.6	5910.3	5913.3	5914.8	5914.8	5860.3	5857.3	5937.6	5927.0	5866.4
17.5°	5910.3	5892.1	5764.9	5774.0	5784.6	5796.7	5754.3	5761.9	5846.7	5833.0	5778.5
20°	5743.7	5725.5	5601.3	5627.1	5649.8	5674.0	5646.7	5667.9	5746.7	5740.7	5699.8
22.5°	5557.4	5539.2	5424.1	5463.5	5501.3	5546.8	5534.7	5558.9	5642.2	5640.7	5604.3
25°	5330.2	5334.7	5233.2	5281.7	5345.3	5408.9	5413.5	5452.9	5545.3	5536.2	5502.8
27.5°	5118.1	5124.2	5016.6	5098.4	5183.2	5265.0	5284.7	5339.3	5433.2	5425.6	5396.8
30°	4895.5	4903.0	4798.5	4910.6	5013.6	5113.6	5156.0	5230.2	5325.6	5325.6	5295.3
32.5°	4663.7	4677.3	4568.3	4718.2	4837.9	4954.5	5028.8	5106.0	5215.1	5212.0	5186.3
35°	4425.9	4441.1	4341.1	4531.9	4651.6	4794.0	4886.4	4989.4	5086.3	5087.8	5068.1
37.5°	4183.6	4201.7	4110.9	4319.9	4456.2	4624.3	4742.5	4845.5	4953.0	4959.1	4940.9
40°	3942.7	3962.4	3883.7	4085.1	4257.8	4445.6	4581.9	4703.1	4821.2	4824.3	4812.2
42.5°	3701.9	3723.1	3664.0	3860.9	4056.3	4257.8	4418.3	4556.2	4677.3	4684.9	4671.3
45°	3467.1	3485.3	3442.9	3658.0	3845.8	4065.4	4250.2	4406.2	4528.9	4539.5	4535.0
47.5°	3233.9	3250.5	3212.6	3409.6	3626.2	3859.4	4073.0	4245.7	4375.9	4388.0	4385.0
50°	3005.1	3018.8	2977.9	3183.9	3399.0	3647.4	3870.0	4070.0	4215.4	4227.5	4226.0
52.5°	2777.9	2791.6	2756.7	2973.3	3168.7	3430.8	3673.1	3889.7	4033.6	4051.8	4054.8
55°	2558.3	2564.4	2537.1	2744.6	2933.9	3208.1	3486.8	3697.3	3841.2	3856.4	3865.5
57.5°	2338.7	2340.2	2317.5	2515.9	2697.7	2977.9	3270.2	3491.3	3627.7	3642.8	3656.4
60°	2120.6	2119.0	2093.3	2285.7	2459.8	2737.0	3041.5	3261.1	3392.9	3406.5	3424.7
62.5°	1904.0	1899.4	1876.7	2053.9	2217.5	2491.7	2797.6	3009.7	3135.4	3144.5	3168.7
65°	1688.9	1684.3	1663.1	1826.7	1975.1	2237.2	2537.1	2738.5	2852.2	2864.3	2859.7
67.5°	1476.8	1467.7	1451.1	1598.0	1732.8	1975.1	2262.9	2455.3	2549.2	2559.8	2588.6
70°	1264.8	1254.2	1216.3	1372.3	1490.4	1707.0	1975.1	2146.3	2225.1	2235.7	2231.1
72.5°	1055.7	1045.1	1004.2	1148.1	1248.1	1437.4	1676.8	1819.1	1887.3	1896.4	1896.4
75°	852.8	846.7	821.0	930.0	1013.3	1167.8	1370.8	1488.9	1541.9	1552.6	1549.5
77.5°	657.4	652.8	627.1	721.0	786.1	901.2	1064.8	1157.2	1196.6	1208.7	1234.5
80°	471.1	469.6	428.7	521.1	549.8	646.8	766.4	837.6	858.8	875.5	893.7
82.5°	301.4	302.9	262.0	340.8	352.9	415.0	489.2	533.2	548.3	561.9	575.6
85°	146.9	153.0	130.3	180.2	181.8	213.6	245.4	262.0	268.1	278.7	290.8
87.5°	37.9	43.9	24.2	51.5	45.4	59.1	68.2	72.7	71.2	78.8	83.3
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°	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5
2.5°	6355.6	6404.1	6379.9	6458.6	6488.9	6440.4	6525.3	6526.8	6466.2	6537.4	6576.8
5°	6257.2	6307.1	6292.0	6373.8	6411.7	6369.2	6472.2	6491.9	6432.9	6513.1	6576.8
7.5°	6157.2	6216.3	6196.6	6279.9	6325.3	6292.0	6402.6	6434.4	6388.9	6476.8	6561.6
10°	6070.9	6120.8	6099.6	6187.5	6226.9	6199.6	6308.7	6367.7	6325.3	6432.9	6534.3
12.5°	5986.0	6026.9	6002.7	6075.4	6113.3	6078.4	6211.7	6266.2	6236.0	6348.0	6478.3
15°	5877.0	5922.4	5889.1	5954.2	5983.0	5952.7	6061.8	6155.7	6117.8	6240.5	6384.4
17.5°	5793.7	5819.4	5774.0	5825.5	5842.1	5801.2	5911.8	6004.2	5976.9	6110.2	6276.9
20°	5701.3	5722.5	5658.9	5687.6	5686.1	5634.6	5736.1	5827.0	5808.8	5955.7	6145.1
22.5°	5598.3	5608.9	5534.7	5540.7	5537.7	5452.9	5543.7	5636.1	5628.6	5777.0	5989.1
25°	5489.2	5490.7	5395.3	5392.3	5359.0	5259.0	5339.3	5443.8	5421.1	5581.6	5804.3
27.5°	5381.7	5366.5	5251.4	5224.1	5171.1	5051.5	5122.7	5216.6	5202.9	5360.5	5607.4
30°	5266.6	5246.9	5106.0	5056.0	4978.8	4840.9	4900.0	4987.9	4995.4	5133.3	5392.3
32.5°	5157.5	5107.5	4951.5	4878.8	4781.9	4621.3	4653.1	4742.5	4754.6	4893.9	5160.5
35°	5016.6	4983.3	4790.9	4666.7	4571.3	4395.6	4428.9	4491.0	4509.2	4645.5	4916.7
37.5°	4883.3	4830.3	4625.8	4474.4	4351.7	4166.9	4176.0	4239.6	4257.8	4395.6	4663.7
40°	4745.5	4669.8	4450.1	4272.9	4132.1	3938.2	3927.6	3994.2	4007.9	4142.7	4385.0
42.5°	4598.6	4507.7	4260.8	4066.9	3904.9	3707.9	3686.7	3744.3	3759.4	3891.2	4129.0
45°	4450.1	4341.1	4066.9	3854.9	3677.7	3476.2	3455.0	3498.9	3521.6	3645.8	3874.6
47.5°	4292.6	4165.4	3867.0	3630.7	3447.4	3246.0	3220.2	3264.1	3282.3	3405.0	3621.6
50°	4127.5	3973.0	3661.0	3400.5	3218.7	3020.3	2982.4	3033.9	3050.6	3165.7	3377.7
52.5°	3945.8	3774.6	3441.4	3168.7	2987.0	2797.6	2752.2	2802.2	2821.9	2933.9	3129.3
55°	3753.4	3568.6	3220.2	2955.1	2758.2	2573.4	2535.6	2555.3	2597.7	2703.7	2885.5
57.5°	3536.8	3353.5	2987.0	2717.3	2528.0	2350.8	2319.0	2337.2	2376.5	2479.5	2643.1
60°	3306.6	3112.7	2749.2	2479.5	2296.3	2128.1	2099.4	2116.0	2158.4	2252.3	2403.8
62.5°	3079.4	2861.2	2503.8	2235.7	2069.1	1913.0	1905.5	1899.4	1938.8	2029.7	2163.0
65°	2803.7	2594.7	2247.8	1993.3	1841.9	1701.0	1670.7	1684.3	1722.2	1805.5	1944.9
67.5°	2508.3	2319.0	1985.8	1751.0	1616.2	1490.4	1464.7	1470.8	1510.1	1582.8	1704.0
70°	2194.8	2028.2	1717.7	1507.1	1393.5	1275.4	1258.7	1260.2	1298.1	1361.7	1467.7
72.5°	1866.1	1716.1	1446.5	1266.3	1172.4	1087.5	1072.4	1054.2	1089.1	1143.6	1234.5
75°	1531.3	1399.6	1176.9	1030.0	955.8	884.6	870.9	852.8	887.6	934.6	1005.8
77.5°	1193.6	1087.5	914.9	801.3	743.7	690.7	678.6	658.9	693.7	728.6	784.6
80°	863.4	786.1	683.1	563.5	543.8	508.9	496.8	475.6	508.9	531.7	574.1
82.5°	557.4	505.9	446.8	363.5	360.5	334.7	328.7	304.5	334.7	348.4	380.2
85°	281.7	257.5	242.3	184.8	190.9	174.2	172.7	146.9	171.2	177.2	195.4
87.5°	80.3	84.8	75.7	45.4	57.6	54.5	54.5	39.4	54.5	54.5	62.1
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: P838054

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-6HI-20-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5	6493.5
2.5°	6499.5	6525.3	6531.3	6529.8	6546.5	6637.3	6607.1	6637.3
5°	6514.7	6572.2	6587.4	6608.6	6635.8	6738.8	6705.5	6741.9
7.5°	6523.7	6610.1	6643.4	6684.3	6728.2	6843.3	6816.1	6852.4
10°	6523.7	6635.8	6684.3	6752.5	6811.5	6944.8	6919.1	6961.5
12.5°	6496.5	6640.4	6708.5	6804.0	6879.7	7023.6	7013.0	7043.3
15°	6440.4	6617.7	6711.6	6834.3	6928.2	7088.7	7084.2	7120.5
17.5°	6364.7	6578.3	6691.9	6846.4	6964.5	7144.8	7155.4	7175.1
20°	6269.3	6504.1	6652.5	6841.8	6990.3	7188.7	7202.3	7229.6
22.5°	6143.6	6414.7	6593.4	6822.1	6993.3	7206.9	7231.1	7256.9
25°	5995.1	6307.1	6516.2	6784.3	6978.2	7205.4	7238.7	7261.4
27.5°	5825.5	6167.8	6417.7	6723.7	6935.7	7181.1	7222.0	7249.3
30°	5628.6	6019.4	6305.6	6644.9	6878.2	7135.7	7179.6	7206.9
32.5°	5425.6	5855.8	6172.3	6543.4	6794.9	7063.0	7100.8	7122.0
35°	5204.5	5657.3	6011.8	6413.2	6687.3	6946.3	6975.1	6997.8
37.5°	4963.6	5442.3	5828.5	6266.2	6535.9	6784.3	6810.0	6835.8
40°	4715.2	5216.6	5622.5	6086.0	6355.6	6585.8	6613.1	6631.3
42.5°	4465.3	4966.6	5402.9	5873.9	6142.0	6363.2	6379.9	6398.0
45°	4212.3	4707.6	5156.0	5639.2	5904.2	6111.8	6117.8	6133.0
47.5°	3954.8	4439.5	4884.9	5371.1	5633.1	5822.4	5828.5	5840.6
50°	3695.8	4171.4	4595.6	5081.8	5337.7	5537.7	5510.4	5522.5
52.5°	3441.4	3889.7	4322.9	4769.7	5022.7	5199.9	5207.5	5183.2
55°	3191.4	3614.0	4012.4	4442.6	4683.4	4821.2	4816.7	4825.8
57.5°	2938.5	3335.3	3700.4	4094.2	4329.0	4459.2	4486.5	4454.7
60°	2681.0	3053.6	3380.8	3736.7	3963.9	4073.0	4104.8	4074.5
62.5°	2425.0	2767.3	3064.2	3374.7	3585.3	3720.1	3717.0	3683.7
65°	2169.0	2479.5	2744.6	3008.2	3191.4	3326.2	3320.2	3289.9
67.5°	1932.7	2188.7	2426.5	2640.1	2799.1	2891.5	2923.3	2887.0
70°	1672.2	1893.4	2102.4	2273.5	2405.3	2488.6	2518.9	2487.1
72.5°	1411.7	1599.5	1746.4	1911.5	2013.0	2082.7	2114.5	2084.2
75°	1154.2	1308.7	1428.3	1557.1	1628.3	1687.4	1723.7	1693.4
77.5°	904.3	1023.9	1119.4	1213.3	1295.1	1308.7	1340.5	1320.8
80°	666.5	752.8	822.5	884.6	943.6	949.7	975.5	963.3
82.5°	443.8	501.4	519.5	584.7	622.5	616.5	642.2	633.1
85°	234.8	269.6	301.4	321.1	342.3	322.6	345.3	336.3
87.5°	78.8	83.3	72.7	103.0	113.6	96.9	110.6	106.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)