

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: P838140

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-5STD-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: P838140
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-LD4-5STD-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

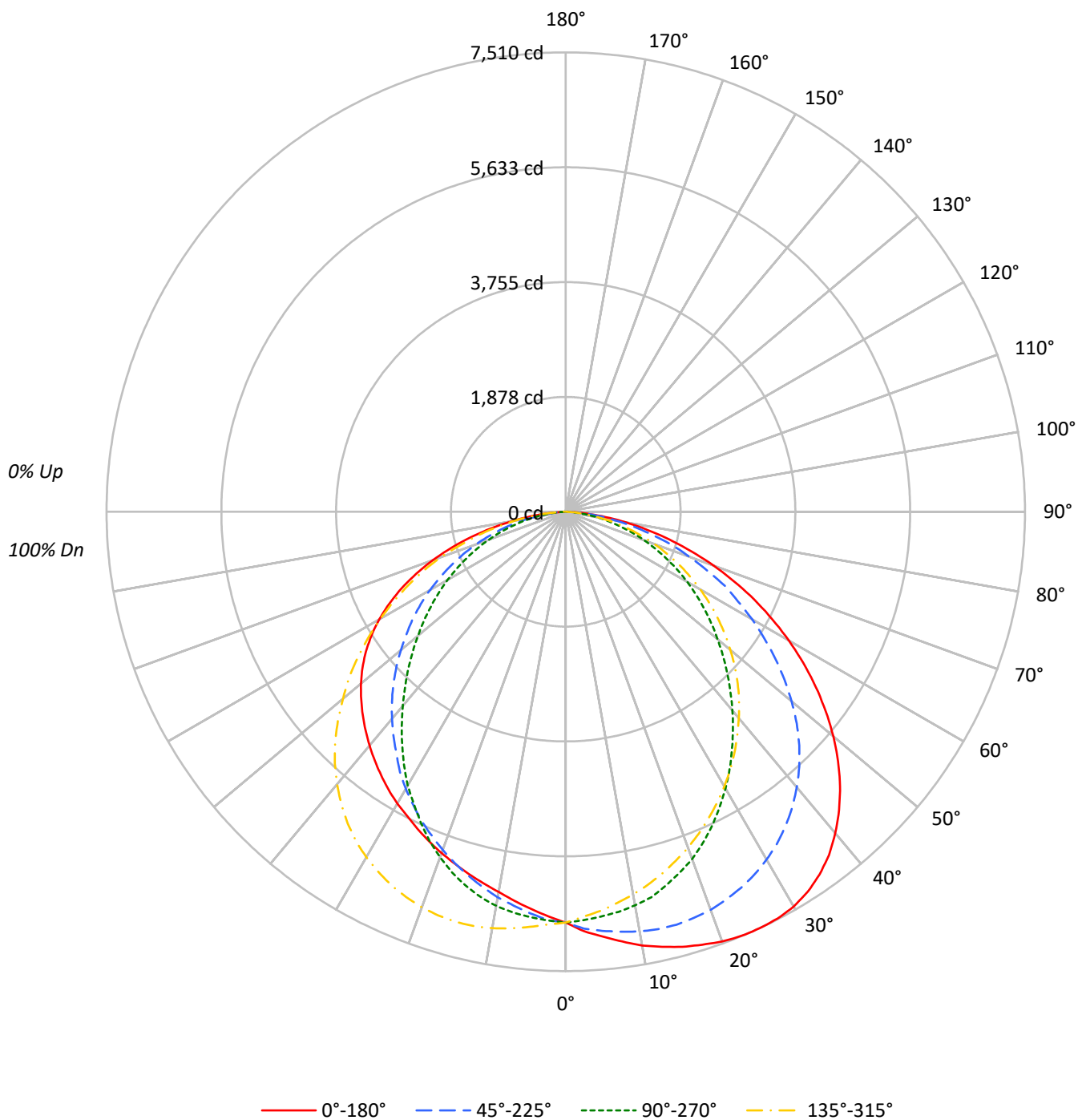
Lumens per Lamp: N/A
Luminaire Lumens: 19704.1 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 166.5
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°	9036	9036	9036	9036
5°	9418	8972	8802	8986
10°	9837	8925	8624	8938
15°	10259	8812	8539	8814
20°	10707	8652	8502	8602
25°	11150	8410	8501	8324
30°	11581	8117	8558	8027
35°	11888	7784	8644	7660
40°	12047	7449	8764	7281
45°	12070	7110	8934	6931
50°	11956	6785	9152	6604
55°	11709	6483	9356	6303
60°	11340	6168	9481	6007
65°	10833	5805	9432	5671
70°	10120	5380	9096	5282
75°	9105	4797	8348	4772
80°	7720	4018	7016	4079
85°	5369	2660	4451	2732

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	637.6	3.2
10°-20°	1846.5	9.4
20°-30°	2829.8	14.4
30°-40°	3440.9	17.5
40°-50°	3577.0	18.2
50°-60°	3231.1	16.4
60°-70°	2456.5	12.5
70°-80°	1369.5	7.0
80°-90°	315.3	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°	5313.9	27.0
0°-40°	8754.8	44.4
0°-60°	15562.9	79.0
0°-90°	19704.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19704.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	6716	6716	6716	6716	6716	
5°	6973	6642	6517	6653	6973	672
15°	7365	6326	6130	6328	7365	2088
25°	7510	5665	5726	5607	7510	3469
35°	7238	4739	5262	4664	7238	4521
45°	6343	3736	4695	3642	6343	4884
55°	4991	2764	3989	2687	4991	4456
65°	3403	1824	2962	1781	3403	3363
75°	1752	923	1606	918	1752	1860
85°	348	172	288	177	348	438
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°	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1
2.5°	6864.9	6764.7	6766.2	6854.0	6786.6	6819.5	6725.5	6761.5	6750.6	6758.4	6681.6
5°	6973.0	6864.9	6863.4	6938.6	6863.4	6877.5	6758.4	6781.9	6747.4	6725.5	6642.5
7.5°	7087.4	6979.3	6968.3	7034.1	6935.4	6924.5	6792.9	6792.9	6730.2	6675.4	6597.0
10°	7200.2	7089.0	7074.9	7125.0	7002.8	6966.8	6807.0	6781.9	6698.9	6617.4	6532.8
12.5°	7284.8	7172.0	7161.0	7192.4	7054.5	6988.7	6807.0	6758.4	6636.2	6521.8	6456.0
15°	7364.7	7248.8	7219.0	7234.7	7076.4	6988.7	6785.0	6709.8	6553.2	6402.8	6326.0
17.5°	7421.1	7309.9	7280.1	7278.5	7087.4	6962.1	6738.0	6634.6	6446.6	6264.9	6188.2
20°	7477.5	7366.3	7328.7	7300.5	7084.3	6926.0	6669.1	6529.7	6310.4	6106.7	6042.5
22.5°	7505.7	7391.3	7350.6	7308.3	7063.9	6860.2	6584.5	6407.5	6156.8	5914.0	5860.7
25°	7510.4	7392.9	7349.0	7287.9	7023.2	6781.9	6474.8	6260.2	5979.8	5710.3	5664.9
27.5°	7497.8	7369.4	7325.5	7251.9	6962.1	6686.3	6344.8	6092.6	5791.8	5494.1	5445.6
30°	7454.0	7324.0	7281.7	7186.1	6875.9	6568.8	6202.3	5906.2	5583.4	5267.0	5224.7
32.5°	7366.3	7239.4	7204.9	7109.3	6781.9	6432.5	6036.2	5705.6	5353.1	5050.8	4988.1
35°	7237.8	7110.9	7089.0	6988.7	6650.3	6269.6	5854.5	5486.3	5108.8	4800.1	4739.0
37.5°	7070.2	6963.6	6930.7	6832.0	6495.2	6084.8	5646.1	5248.2	4859.7	4527.5	4489.9
40°	6858.7	6758.4	6733.3	6645.6	6315.1	5879.5	5420.5	5002.2	4602.7	4294.1	4240.8
42.5°	6617.4	6523.4	6509.3	6418.4	6092.6	5652.4	5176.1	4746.9	4334.8	4037.2	3983.9
45°	6343.2	6252.4	6249.3	6163.1	5849.8	5400.1	4919.2	4488.4	4073.2	3764.6	3736.4
47.5°	6040.9	5959.4	5959.4	5879.5	5578.7	5122.9	4654.4	4218.9	3810.0	3537.4	3487.3
50°	5711.9	5635.1	5611.6	5572.5	5279.5	4820.5	4375.6	3955.7	3550.0	3289.9	3241.3
52.5°	5361.0	5295.2	5310.8	5238.8	4955.2	4505.6	4093.6	3659.6	3288.3	3051.8	3003.2
55°	4991.3	4897.3	4911.4	4884.7	4616.8	4181.3	3777.1	3415.2	3031.4	2809.0	2763.5
57.5°	4607.4	4485.2	4535.4	4519.7	4256.5	3849.2	3487.3	3137.9	2776.1	2570.8	2527.0
60°	4214.2	4096.7	4148.4	4134.3	3886.8	3517.1	3188.1	2863.8	2522.3	2335.8	2292.0
62.5°	3810.0	3701.9	3748.9	3738.0	3510.8	3177.1	2890.4	2592.8	2266.9	2099.3	2058.5
65°	3402.7	3299.3	3341.6	3333.8	3123.8	2870.1	2584.9	2312.3	2010.0	1864.3	1823.5
67.5°	2986.0	2890.4	2929.6	2929.6	2736.9	2494.1	2277.9	2028.8	1757.7	1632.4	1594.8
70°	2572.4	2483.1	2517.6	2514.4	2351.5	2154.1	1967.7	1745.2	1502.4	1399.0	1367.7
72.5°	2155.7	2077.3	2108.7	2105.5	1969.2	1842.3	1657.5	1464.8	1253.3	1170.3	1142.1
75°	1751.5	1677.9	1707.6	1704.5	1593.3	1474.2	1350.4	1190.6	1008.9	950.9	922.7
77.5°	1366.1	1290.9	1316.0	1316.0	1234.5	1148.3	1049.6	925.9	797.4	734.7	714.4
80°	996.4	960.3	947.8	949.4	894.5	838.1	788.0	668.9	574.9	532.7	518.6
82.5°	654.8	625.1	612.5	615.7	584.3	549.9	518.6	435.5	372.9	347.8	340.0
85°	347.8	325.9	314.9	322.7	316.5	297.7	282.0	225.6	186.4	177.0	172.3
87.5°	109.7	95.6	87.7	115.9	98.7	87.7	84.6	67.4	51.7	51.7	50.1
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°	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1
2.5°	6706.7	6706.7	6645.6	6631.5	6625.2	6633.1	6572.0	6561.0	6648.7	6619.0	6551.6
5°	6653.4	6650.3	6564.1	6548.5	6548.5	6539.1	6470.1	6454.5	6542.2	6517.1	6443.5
7.5°	6587.6	6578.2	6476.4	6465.4	6449.8	6443.5	6366.7	6355.8	6431.0	6415.3	6346.4
10°	6507.7	6498.3	6377.7	6369.9	6352.6	6340.1	6268.1	6260.2	6337.0	6311.9	6257.1
12.5°	6402.8	6385.5	6261.8	6254.0	6239.9	6235.2	6164.7	6161.5	6246.1	6221.1	6163.1
15°	6264.9	6250.8	6113.0	6116.1	6117.7	6117.7	6061.3	6058.1	6141.2	6130.2	6067.5
17.5°	6113.0	6094.2	5962.6	5972.0	5982.9	5995.5	5951.6	5959.4	6047.2	6033.1	5976.7
20°	5940.6	5921.8	5793.4	5820.0	5843.5	5868.6	5840.4	5862.3	5943.8	5937.5	5895.2
22.5°	5747.9	5729.1	5610.1	5650.8	5690.0	5737.0	5724.4	5749.5	5835.7	5834.1	5796.5
25°	5512.9	5517.6	5412.7	5462.8	5528.6	5594.4	5599.1	5639.8	5735.4	5726.0	5691.5
27.5°	5293.6	5299.9	5188.6	5273.2	5361.0	5445.6	5465.9	5522.3	5619.5	5611.6	5581.9
30°	5063.3	5071.2	4963.1	5079.0	5185.5	5288.9	5332.8	5409.5	5508.2	5508.2	5476.9
32.5°	4823.6	4837.7	4724.9	4880.0	5003.8	5124.4	5201.2	5281.1	5393.9	5390.7	5364.1
35°	4577.7	4593.3	4489.9	4687.3	4811.1	4958.4	5053.9	5160.5	5260.7	5262.3	5241.9
37.5°	4327.0	4345.8	4251.8	4468.0	4609.0	4782.9	4905.1	5011.6	5122.9	5129.1	5110.3
40°	4077.9	4098.3	4016.8	4225.2	4403.8	4598.0	4739.0	4864.4	4986.6	4989.7	4977.2
42.5°	3828.8	3850.8	3789.7	3993.3	4195.4	4403.8	4569.8	4712.4	4837.7	4845.6	4831.5
45°	3586.0	3604.8	3560.9	3783.4	3977.7	4204.8	4395.9	4557.3	4684.2	4695.2	4690.5
47.5°	3344.7	3362.0	3322.8	3526.5	3750.5	3991.8	4212.6	4391.2	4526.0	4538.5	4535.4
50°	3108.2	3122.3	3080.0	3293.0	3515.5	3772.4	4002.7	4209.5	4359.9	4372.4	4370.9
52.5°	2873.2	2887.3	2851.3	3075.3	3277.4	3548.4	3799.1	4023.1	4171.9	4190.7	4193.8
55°	2646.0	2652.3	2624.1	2838.7	3034.5	3318.1	3606.4	3824.1	3973.0	3988.6	3998.0
57.5°	2418.9	2420.4	2396.9	2602.2	2790.2	3080.0	3382.3	3611.1	3752.1	3767.7	3781.8
60°	2193.3	2191.7	2165.1	2364.0	2544.2	2830.9	3145.8	3372.9	3509.2	3523.3	3542.1
62.5°	1969.2	1964.5	1941.0	2124.3	2293.5	2577.1	2893.5	3112.9	3242.9	3252.3	3277.4
65°	1746.8	1742.1	1720.2	1889.3	2042.9	2313.9	2624.1	2832.5	2949.9	2962.5	2957.8
67.5°	1527.5	1518.1	1500.8	1652.8	1792.2	2042.9	2340.5	2539.5	2636.6	2647.6	2677.4
70°	1308.1	1297.2	1258.0	1419.4	1541.6	1765.6	2042.9	2219.9	2301.4	2312.3	2307.6
72.5°	1091.9	1081.0	1038.7	1187.5	1290.9	1486.7	1734.2	1881.5	1952.0	1961.4	1961.4
75°	882.0	875.7	849.1	961.9	1048.1	1207.9	1417.8	1540.0	1594.8	1605.8	1602.7
77.5°	679.9	675.2	648.6	745.7	813.1	932.1	1101.3	1196.9	1237.6	1250.2	1276.8
80°	487.2	485.7	443.4	538.9	568.7	668.9	792.7	866.3	888.3	905.5	924.3
82.5°	311.8	313.3	271.0	352.5	365.0	429.3	506.0	551.5	567.1	581.2	595.3
85°	152.0	158.2	134.7	186.4	188.0	220.9	253.8	271.0	277.3	288.3	300.8
87.5°	39.2	45.4	25.1	53.3	47.0	61.1	70.5	75.2	73.6	81.5	86.2
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°	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1
2.5°	6573.5	6623.7	6598.6	6680.1	6711.4	6661.3	6749.0	6750.6	6687.9	6761.5	6802.3
5°	6471.7	6523.4	6507.7	6592.3	6631.5	6587.6	6694.2	6714.5	6653.4	6736.5	6802.3
7.5°	6368.3	6429.4	6409.0	6495.2	6542.2	6507.7	6622.1	6655.0	6608.0	6698.9	6786.6
10°	6279.0	6330.7	6308.8	6399.6	6440.4	6412.2	6525.0	6586.1	6542.2	6653.4	6758.4
12.5°	6191.3	6233.6	6208.5	6283.7	6322.9	6286.9	6424.7	6481.1	6449.8	6565.7	6700.4
15°	6078.5	6125.5	6091.0	6158.4	6188.2	6156.8	6269.6	6366.7	6327.6	6454.5	6603.3
17.5°	5992.3	6019.0	5972.0	6025.2	6042.5	6000.2	6114.5	6210.1	6181.9	6319.8	6492.1
20°	5896.8	5918.7	5852.9	5882.7	5881.1	5827.8	5932.8	6026.8	6008.0	6160.0	6355.8
22.5°	5790.2	5801.2	5724.4	5730.7	5727.6	5639.8	5733.8	5829.4	5821.6	5975.1	6194.4
25°	5677.4	5679.0	5580.3	5577.2	5542.7	5439.3	5522.3	5630.4	5606.9	5773.0	6003.3
27.5°	5566.2	5550.5	5431.5	5403.3	5348.4	5224.7	5298.3	5395.4	5381.3	5544.3	5799.6
30°	5447.1	5426.8	5281.1	5229.4	5149.5	5006.9	5068.0	5158.9	5166.7	5309.3	5577.2
32.5°	5334.3	5282.6	5121.3	5046.1	4945.8	4779.8	4812.7	4905.1	4917.6	5061.8	5337.5
35°	5188.6	5154.2	4955.2	4826.8	4728.1	4546.3	4580.8	4645.0	4663.8	4804.8	5085.3
37.5°	5050.8	4996.0	4784.5	4627.8	4500.9	4309.8	4319.2	4385.0	4403.8	4546.3	4823.6
40°	4908.2	4829.9	4602.7	4419.4	4273.7	4073.2	4062.2	4131.2	4145.3	4284.7	4535.4
42.5°	4756.3	4662.3	4406.9	4206.4	4038.7	3835.1	3813.2	3872.7	3888.4	4024.6	4270.6
45°	4602.7	4489.9	4206.4	3987.1	3803.8	3595.4	3573.5	3618.9	3642.4	3770.9	4007.4
47.5°	4439.8	4308.2	3999.6	3755.2	3565.6	3357.3	3330.6	3376.1	3394.9	3521.8	3745.8
50°	4269.0	4109.2	3786.5	3517.1	3329.1	3123.8	3084.7	3137.9	3155.2	3274.2	3493.6
52.5°	4081.0	3904.0	3559.4	3277.4	3089.4	2893.5	2846.6	2898.2	2918.6	3034.5	3236.6
55°	3882.1	3691.0	3330.6	3056.5	2852.8	2661.7	2622.5	2642.9	2686.8	2796.4	2984.4
57.5°	3658.1	3468.5	3089.4	2810.5	2614.7	2431.4	2398.5	2417.3	2458.0	2564.6	2733.8
60°	3419.9	3219.4	2843.4	2564.6	2375.0	2201.1	2171.3	2188.6	2232.4	2329.6	2486.2
62.5°	3184.9	2959.3	2589.6	2312.3	2140.0	1978.6	1970.8	1964.5	2005.3	2099.3	2237.1
65°	2899.8	2683.6	2324.9	2061.7	1905.0	1759.3	1728.0	1742.1	1781.2	1867.4	2011.5
67.5°	2594.3	2398.5	2053.8	1811.0	1671.6	1541.6	1514.9	1521.2	1561.9	1637.1	1762.4
70°	2270.0	2097.7	1776.5	1558.8	1441.3	1319.1	1301.9	1303.4	1342.6	1408.4	1518.1
72.5°	1930.1	1775.0	1496.1	1309.7	1212.6	1124.8	1109.2	1090.4	1126.4	1182.8	1276.8
75°	1583.9	1447.6	1217.3	1065.3	988.5	914.9	900.8	882.0	918.0	966.6	1040.2
77.5°	1234.5	1124.8	946.2	828.7	769.2	714.4	701.8	681.5	717.5	753.5	811.5
80°	893.0	813.1	706.5	582.8	562.4	526.4	513.9	491.9	526.4	549.9	593.7
82.5°	576.5	523.3	462.2	376.0	372.9	346.2	340.0	314.9	346.2	360.3	393.2
85°	291.4	266.3	250.7	191.1	197.4	180.2	178.6	152.0	177.0	183.3	202.1
87.5°	83.0	87.7	78.3	47.0	59.5	56.4	56.4	40.7	56.4	56.4	64.2
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: P838140

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

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1	6716.1
2.5°	6722.4	6749.0	6755.3	6753.7	6770.9	6864.9	6833.6	6864.9
5°	6738.0	6797.6	6813.2	6835.2	6863.4	6969.9	6935.4	6973.0
7.5°	6747.4	6836.7	6871.2	6913.5	6958.9	7078.0	7049.8	7087.4
10°	6747.4	6863.4	6913.5	6984.0	7045.1	7183.0	7156.3	7200.2
12.5°	6719.2	6868.1	6938.6	7037.3	7115.6	7264.4	7253.5	7284.8
15°	6661.3	6844.6	6941.7	7068.6	7165.7	7331.8	7327.1	7364.7
17.5°	6582.9	6803.8	6921.3	7081.1	7203.3	7389.8	7400.7	7421.1
20°	6484.2	6727.1	6880.6	7076.4	7230.0	7435.2	7449.3	7477.5
22.5°	6354.2	6634.6	6819.5	7056.1	7233.1	7454.0	7479.0	7505.7
25°	6200.7	6523.4	6739.6	7016.9	7217.4	7452.4	7486.9	7510.4
27.5°	6025.2	6379.3	6637.8	6954.2	7173.6	7427.4	7469.6	7497.8
30°	5821.6	6225.8	6521.8	6872.8	7114.0	7380.4	7425.8	7454.0
32.5°	5611.6	6056.6	6384.0	6767.8	7027.9	7305.2	7344.3	7366.3
35°	5382.9	5851.3	6217.9	6633.1	6916.6	7184.5	7214.3	7237.8
37.5°	5133.8	5628.9	6028.4	6481.1	6760.0	7016.9	7043.5	7070.2
40°	4876.9	5395.4	5815.3	6294.7	6573.5	6811.7	6839.9	6858.7
42.5°	4618.4	5137.0	5588.1	6075.4	6352.6	6581.4	6598.6	6617.4
45°	4356.8	4869.1	5332.8	5832.5	6106.7	6321.3	6327.6	6343.2
47.5°	4090.4	4591.8	5052.4	5555.2	5826.3	6022.1	6028.4	6040.9
50°	3822.6	4314.5	4753.1	5256.0	5520.8	5727.6	5699.4	5711.9
52.5°	3559.4	4023.1	4471.1	4933.3	5194.9	5378.2	5386.0	5361.0
55°	3300.9	3738.0	4150.0	4594.9	4844.0	4986.6	4981.9	4991.3
57.5°	3039.2	3449.7	3827.3	4234.6	4477.4	4612.1	4640.3	4607.4
60°	2772.9	3158.3	3496.7	3864.9	4099.8	4212.6	4245.5	4214.2
62.5°	2508.2	2862.2	3169.3	3490.4	3708.2	3847.6	3844.5	3810.0
65°	2243.4	2564.6	2838.7	3111.3	3300.9	3440.3	3434.0	3402.7
67.5°	1999.0	2263.8	2509.7	2730.6	2895.1	2990.7	3023.6	2986.0
70°	1729.5	1958.3	2174.5	2351.5	2487.8	2574.0	2605.3	2572.4
72.5°	1460.1	1654.4	1806.3	1977.1	2082.0	2154.1	2187.0	2155.7
75°	1193.8	1353.6	1477.3	1610.5	1684.1	1745.2	1782.8	1751.5
77.5°	935.3	1059.0	1157.7	1254.9	1339.5	1353.6	1386.5	1366.1
80°	689.3	778.6	850.7	914.9	976.0	982.3	1008.9	996.4
82.5°	459.0	518.6	537.4	604.7	643.9	637.6	664.2	654.8
85°	242.8	278.9	311.8	332.1	354.1	333.7	357.2	347.8
87.5°	81.5	86.2	75.2	106.5	117.5	100.3	114.4	109.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)