

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: P838195

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-5HI-30-120-EDD-90**

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-08
Report Number: P838195
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-30-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

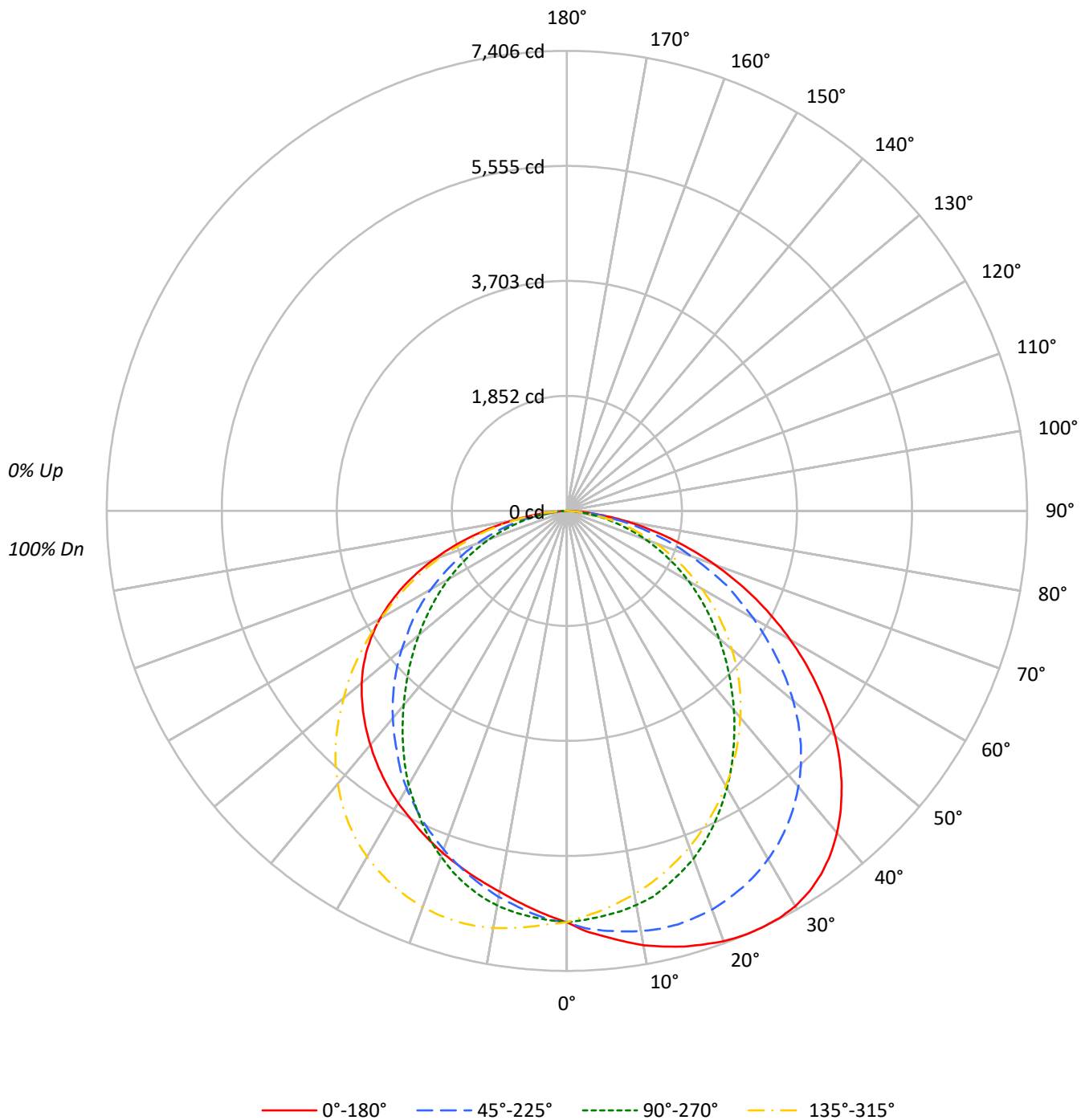
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19430.3 lumens
Efficiency: N/A
Efficacy: 88.3 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): 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



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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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°	8911	8911	8911	8911
5°	9287	8847	8680	8861
10°	9700	8801	8504	8814
15°	10116	8689	8420	8691
20°	10558	8532	8383	8483
25°	10995	8293	8383	8208
30°	11420	8004	8439	7916
35°	11723	7676	8523	7554
40°	11879	7345	8642	7180
45°	11902	7011	8810	6835
50°	11790	6691	9025	6513
55°	11546	6393	9226	6215
60°	11183	6082	9350	5924
65°	10683	5725	9301	5592
70°	9979	5306	8970	5208
75°	8978	4730	8232	4706
80°	7613	3962	6919	4022
85°	5295	2623	4389	2695

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	628.8	3.2
10°-20°	1820.8	9.4
20°-30°	2790.5	14.4
30°-40°	3393.1	17.5
40°-50°	3527.3	18.2
50°-60°	3186.2	16.4
60°-70°	2422.3	12.5
70°-80°	1350.4	7.0
80°-90°	310.9	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°	5240.1	27.0
0°-40°	8633.1	44.4
0°-60°	15346.6	79.0
0°-90°	19430.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19430.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	6623	6623	6623	6623	6623	
5°	6876	6550	6427	6561	6876	663
15°	7262	6238	6045	6240	7262	2059
25°	7406	5586	5646	5529	7406	3421
35°	7137	4673	5189	4599	7137	4458
45°	6255	3684	4630	3592	6255	4816
55°	4922	2725	3933	2649	4922	4394
65°	3355	1798	2921	1756	3355	3316
75°	1727	910	1584	905	1727	1835
85°	343	170	284	175	343	432
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°	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8
2.5°	6769.5	6670.7	6672.2	6758.7	6692.3	6724.7	6632.0	6667.6	6656.7	6664.5	6588.8
5°	6876.1	6769.5	6768.0	6842.1	6768.0	6781.9	6664.5	6687.6	6653.7	6632.0	6550.2
7.5°	6988.9	6882.3	6871.5	6936.4	6839.0	6828.2	6698.5	6698.5	6636.7	6582.6	6505.4
10°	7100.1	6990.4	6976.5	7026.0	6905.5	6869.9	6712.4	6687.6	6605.8	6525.4	6442.0
12.5°	7183.5	7072.3	7061.5	7092.4	6956.4	6891.6	6712.4	6664.5	6544.0	6431.2	6366.3
15°	7262.3	7148.0	7118.7	7134.1	6978.1	6891.6	6690.7	6616.6	6462.1	6313.8	6238.1
17.5°	7317.9	7208.3	7178.9	7177.4	6988.9	6865.3	6644.4	6542.4	6357.0	6177.8	6102.1
20°	7373.6	7263.9	7226.8	7199.0	6985.8	6829.8	6576.4	6438.9	6222.6	6021.8	5958.5
22.5°	7401.4	7288.6	7248.4	7206.7	6965.7	6764.9	6493.0	6318.4	6071.3	5831.8	5779.3
25°	7406.0	7290.1	7246.9	7186.6	6925.6	6687.6	6384.9	6173.2	5896.7	5631.0	5586.2
27.5°	7393.6	7267.0	7223.7	7151.1	6865.3	6593.4	6256.6	6007.9	5711.3	5417.8	5369.9
30°	7350.4	7222.2	7180.5	7086.2	6780.3	6477.5	6116.1	5824.1	5505.8	5193.8	5152.1
32.5°	7263.9	7138.7	7104.8	7010.5	6687.6	6343.1	5952.3	5626.3	5278.7	4980.6	4918.8
35°	7137.2	7012.1	6990.4	6891.6	6557.9	6182.5	5773.1	5410.1	5037.7	4733.4	4673.2
37.5°	6971.9	6866.8	6834.4	6737.1	6404.9	6000.2	5567.6	5175.2	4792.1	4464.6	4427.5
40°	6763.3	6664.5	6639.8	6553.2	6227.3	5797.8	5345.2	4932.7	4538.8	4234.4	4181.9
42.5°	6525.4	6432.7	6418.8	6329.2	6007.9	5573.8	5104.2	4680.9	4274.6	3981.1	3928.5
45°	6255.1	6165.5	6162.4	6077.4	5768.5	5325.1	4850.8	4426.0	4016.6	3712.3	3684.5
47.5°	5956.9	5876.6	5876.6	5797.8	5501.2	5051.7	4589.7	4160.3	3757.1	3488.3	3438.8
50°	5632.5	5556.8	5533.6	5495.0	5206.1	4753.5	4314.8	3900.7	3500.6	3244.2	3196.3
52.5°	5286.5	5221.6	5237.0	5166.0	4886.4	4443.0	4036.7	3608.8	3242.6	3009.4	2961.5
55°	4921.9	4829.2	4843.1	4816.8	4552.7	4123.2	3724.6	3367.8	2989.3	2769.9	2725.1
57.5°	4543.4	4422.9	4472.3	4456.9	4197.4	3795.7	3438.8	3094.3	2737.5	2535.1	2491.8
60°	4155.6	4039.8	4090.8	4076.9	3832.8	3468.2	3143.8	2824.0	2487.2	2303.4	2260.1
62.5°	3757.1	3650.5	3696.8	3686.0	3462.0	3133.0	2850.2	2556.7	2235.4	2070.1	2029.9
65°	3355.4	3253.4	3295.2	3287.4	3080.4	2830.2	2549.0	2280.2	1982.0	1838.4	1798.2
67.5°	2944.5	2850.2	2888.9	2888.9	2698.8	2459.4	2246.2	2000.6	1733.3	1609.7	1572.7
70°	2536.6	2448.6	2482.6	2479.5	2318.8	2124.2	1940.3	1721.0	1481.5	1379.5	1348.7
72.5°	2125.7	2048.5	2079.4	2076.3	1941.9	1816.7	1634.4	1444.4	1235.9	1154.0	1126.2
75°	1727.1	1654.5	1683.9	1680.8	1571.1	1453.7	1331.7	1174.1	994.9	937.7	909.9
77.5°	1347.1	1273.0	1297.7	1297.7	1217.3	1132.4	1035.0	913.0	786.3	724.5	704.5
80°	982.5	947.0	934.6	936.2	882.1	826.5	777.1	659.6	567.0	525.2	511.3
82.5°	645.7	616.4	604.0	607.1	576.2	542.2	511.3	429.5	367.7	343.0	335.2
85°	343.0	321.3	310.5	318.2	312.1	293.5	278.1	222.5	183.8	174.6	169.9
87.5°	108.1	94.2	86.5	114.3	97.3	86.5	83.4	66.4	51.0	51.0	49.4
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°	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8
2.5°	6613.5	6613.5	6553.2	6539.3	6533.2	6540.9	6480.6	6469.8	6556.3	6527.0	6460.6
5°	6561.0	6557.9	6472.9	6457.5	6457.5	6448.2	6380.2	6364.8	6451.3	6426.6	6354.0
7.5°	6496.1	6486.8	6386.4	6375.6	6360.1	6354.0	6278.3	6267.4	6341.6	6326.1	6258.2
10°	6417.3	6408.0	6289.1	6281.3	6264.4	6252.0	6180.9	6173.2	6248.9	6224.2	6170.1
12.5°	6313.8	6296.8	6174.8	6167.0	6153.1	6148.5	6079.0	6075.9	6159.3	6134.6	6077.4
15°	6177.8	6163.9	6028.0	6031.1	6032.6	6032.6	5977.0	5973.9	6055.8	6045.0	5983.2
17.5°	6028.0	6009.5	5879.7	5889.0	5899.8	5912.1	5868.9	5876.6	5963.1	5949.2	5893.6
20°	5858.1	5839.5	5712.8	5739.1	5762.3	5787.0	5759.2	5780.8	5861.2	5855.0	5813.3
22.5°	5668.0	5649.5	5532.1	5572.3	5610.9	5657.2	5644.9	5669.6	5754.6	5753.0	5715.9
25°	5436.3	5441.0	5337.4	5386.9	5451.8	5516.6	5521.3	5561.5	5655.7	5646.4	5612.4
27.5°	5220.0	5226.2	5116.5	5200.0	5286.5	5369.9	5390.0	5445.6	5541.4	5533.6	5504.3
30°	4992.9	5000.7	4894.1	5008.4	5113.4	5215.4	5258.7	5334.4	5431.7	5431.7	5400.8
32.5°	4756.6	4770.5	4659.3	4812.2	4934.2	5053.2	5128.9	5207.7	5318.9	5315.8	5289.6
35°	4514.0	4529.5	4427.5	4622.2	4744.2	4889.4	4983.7	5088.7	5187.6	5189.1	5169.1
37.5°	4266.9	4285.4	4192.7	4405.9	4544.9	4716.4	4836.9	4942.0	5051.7	5057.8	5039.3
40°	4021.2	4041.3	3961.0	4166.5	4342.6	4534.1	4673.2	4796.8	4917.2	4920.3	4908.0
42.5°	3775.6	3797.2	3737.0	3937.8	4137.1	4342.6	4506.3	4646.9	4770.5	4778.2	4764.3
45°	3536.2	3554.7	3511.4	3730.8	3922.4	4146.4	4334.8	4494.0	4619.1	4629.9	4625.3
47.5°	3298.2	3315.2	3276.6	3477.5	3698.4	3936.3	4154.1	4330.2	4463.1	4475.4	4472.3
50°	3065.0	3078.9	3037.2	3247.3	3466.6	3720.0	3947.1	4151.0	4299.3	4311.7	4310.1
52.5°	2833.3	2847.2	2811.6	3032.5	3231.8	3499.1	3746.3	3967.2	4113.9	4132.5	4135.6
55°	2609.2	2615.4	2587.6	2799.3	2992.4	3272.0	3556.2	3771.0	3917.7	3933.2	3942.5
57.5°	2385.2	2386.8	2363.6	2566.0	2751.4	3037.2	3335.3	3560.9	3699.9	3715.4	3729.3
60°	2162.8	2161.2	2135.0	2331.2	2508.8	2791.5	3102.1	3326.1	3460.5	3474.4	3492.9
62.5°	1941.9	1937.2	1914.1	2094.8	2261.7	2541.3	2853.3	3069.6	3197.8	3207.1	3231.8
65°	1722.5	1717.9	1696.2	1863.1	2014.5	2281.7	2587.6	2793.1	2908.9	2921.3	2916.7
67.5°	1506.2	1497.0	1480.0	1629.8	1767.3	2014.5	2308.0	2504.2	2600.0	2610.8	2640.1
70°	1289.9	1279.1	1240.5	1399.6	1520.1	1741.0	2014.5	2189.0	2269.4	2280.2	2275.6
72.5°	1076.8	1065.9	1024.2	1171.0	1273.0	1466.1	1710.1	1855.4	1924.9	1934.1	1934.1
75°	869.7	863.6	837.3	948.5	1033.5	1191.1	1398.1	1518.6	1572.7	1583.5	1580.4
77.5°	670.5	665.8	639.6	735.3	801.8	919.2	1086.0	1180.3	1220.4	1232.8	1259.1
80°	480.4	478.9	437.2	531.4	560.8	659.6	781.7	854.3	875.9	892.9	911.5
82.5°	307.4	309.0	267.3	347.6	359.9	423.3	499.0	543.8	559.2	573.1	587.0
85°	149.9	156.0	132.9	183.8	185.4	217.8	250.3	267.3	273.4	284.3	296.6
87.5°	38.6	44.8	24.7	52.5	46.3	60.2	69.5	74.2	72.6	80.3	85.0
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°	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8
2.5°	6482.2	6531.6	6506.9	6587.2	6618.1	6568.7	6655.2	6656.7	6595.0	6667.6	6707.7
5°	6381.8	6432.7	6417.3	6500.7	6539.3	6496.1	6601.1	6621.2	6561.0	6642.8	6707.7
7.5°	6279.8	6340.1	6320.0	6404.9	6451.3	6417.3	6530.1	6562.5	6516.2	6605.8	6692.3
10°	6191.7	6242.7	6221.1	6310.7	6350.9	6323.1	6434.3	6494.5	6451.3	6561.0	6664.5
12.5°	6105.2	6146.9	6122.2	6196.4	6235.0	6199.5	6335.4	6391.0	6360.1	6474.5	6607.3
15°	5994.0	6040.4	6006.4	6072.8	6102.1	6071.3	6182.5	6278.3	6239.6	6364.8	6511.5
17.5°	5909.0	5935.3	5889.0	5941.5	5958.5	5916.8	6029.5	6123.8	6096.0	6231.9	6401.8
20°	5814.8	5836.4	5771.5	5800.9	5799.4	5746.8	5850.3	5943.0	5924.5	6074.3	6267.4
22.5°	5709.8	5720.6	5644.9	5651.1	5648.0	5561.5	5654.1	5748.4	5740.7	5892.0	6108.3
25°	5598.5	5600.1	5502.7	5499.7	5465.7	5363.7	5445.6	5552.2	5529.0	5692.8	5919.9
27.5°	5488.8	5473.4	5356.0	5328.2	5274.1	5152.1	5224.7	5320.5	5306.6	5467.2	5719.0
30°	5371.4	5351.4	5207.7	5156.7	5077.9	4937.3	4997.6	5087.2	5094.9	5235.5	5499.7
32.5°	5260.2	5209.2	5050.1	4976.0	4877.1	4713.3	4745.8	4836.9	4849.3	4991.4	5263.3
35°	5116.5	5082.5	4886.4	4759.7	4662.3	4483.1	4517.1	4580.5	4599.0	4738.0	5014.6
37.5°	4980.6	4926.5	4718.0	4563.5	4438.3	4249.9	4259.1	4324.0	4342.6	4483.1	4756.6
40°	4840.0	4762.8	4538.8	4358.0	4214.3	4016.6	4005.8	4073.8	4087.7	4225.2	4472.3
42.5°	4690.2	4597.5	4345.7	4147.9	3982.6	3781.8	3760.2	3818.9	3834.3	3968.7	4211.3
45°	4538.8	4427.5	4147.9	3931.6	3750.9	3545.4	3523.8	3568.6	3591.8	3718.4	3951.7
47.5°	4378.1	4248.3	3944.0	3703.0	3516.1	3310.6	3284.3	3329.1	3347.7	3472.8	3693.7
50°	4209.7	4052.1	3733.9	3468.2	3282.8	3080.4	3041.8	3094.3	3111.3	3228.7	3445.0
52.5°	4024.3	3849.8	3509.9	3231.8	3046.4	2853.3	2807.0	2858.0	2878.1	2992.4	3191.7
55°	3828.1	3639.7	3284.3	3014.0	2813.2	2624.7	2586.1	2606.2	2649.4	2757.6	2942.9
57.5°	3607.2	3420.3	3046.4	2771.5	2578.4	2397.6	2365.2	2383.7	2423.9	2528.9	2695.8
60°	3372.4	3174.7	2803.9	2528.9	2342.0	2170.5	2141.2	2158.2	2201.4	2297.2	2451.7
62.5°	3140.7	2918.2	2553.6	2280.2	2110.3	1951.1	1943.4	1937.2	1977.4	2070.1	2206.0
65°	2859.5	2646.3	2292.6	2033.0	1878.5	1734.9	1704.0	1717.9	1756.5	1841.5	1983.6
67.5°	2558.3	2365.2	2025.3	1785.8	1648.4	1520.1	1493.9	1500.0	1540.2	1614.4	1738.0
70°	2238.5	2068.6	1751.9	1537.1	1421.3	1300.8	1283.8	1285.3	1323.9	1388.8	1497.0
72.5°	1903.3	1750.3	1475.3	1291.5	1195.7	1109.2	1093.8	1075.2	1110.7	1166.4	1259.1
75°	1561.8	1427.4	1200.3	1050.5	974.8	902.2	888.3	869.7	905.3	953.2	1025.8
77.5°	1217.3	1109.2	933.1	817.2	758.5	704.5	692.1	672.0	707.5	743.1	800.2
80°	880.6	801.8	696.7	574.7	554.6	519.1	506.7	485.1	519.1	542.2	585.5
82.5°	568.5	516.0	455.7	370.8	367.7	341.4	335.2	310.5	341.4	355.3	387.8
85°	287.3	262.6	247.2	188.5	194.7	177.7	176.1	149.9	174.6	180.7	199.3
87.5°	81.9	86.5	77.2	46.3	58.7	55.6	55.6	40.2	55.6	55.6	63.3
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: P838195

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-30-120-EDD-90

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8	6622.8
2.5°	6628.9	6655.2	6661.4	6659.8	6676.8	6769.5	6738.6	6769.5
5°	6644.4	6703.1	6718.5	6740.2	6768.0	6873.0	6839.0	6876.1
7.5°	6653.7	6741.7	6775.7	6817.4	6862.2	6979.6	6951.8	6988.9
10°	6653.7	6768.0	6817.4	6886.9	6947.2	7083.1	7056.9	7100.1
12.5°	6625.9	6772.6	6842.1	6939.5	7016.7	7163.5	7152.6	7183.5
15°	6568.7	6749.4	6845.2	6970.4	7066.1	7229.9	7225.3	7262.3
17.5°	6491.4	6709.3	6825.1	6982.7	7103.2	7287.0	7297.9	7317.9
20°	6394.1	6633.6	6785.0	6978.1	7129.5	7331.8	7345.7	7373.6
22.5°	6265.9	6542.4	6724.7	6958.0	7132.6	7350.4	7375.1	7401.4
25°	6114.5	6432.7	6645.9	6919.4	7117.1	7348.8	7382.8	7406.0
27.5°	5941.5	6290.6	6545.5	6857.6	7073.9	7324.1	7365.8	7393.6
30°	5740.7	6139.2	6431.2	6777.2	7015.2	7277.8	7322.6	7350.4
32.5°	5533.6	5972.4	6295.3	6673.7	6930.2	7203.6	7242.2	7263.9
35°	5308.1	5770.0	6131.5	6540.9	6820.5	7084.7	7114.0	7137.2
37.5°	5062.5	5550.6	5944.6	6391.0	6666.0	6919.4	6945.6	6971.9
40°	4809.1	5320.5	5734.5	6207.2	6482.2	6717.0	6744.8	6763.3
42.5°	4554.2	5065.6	5510.5	5990.9	6264.4	6489.9	6506.9	6525.4
45°	4296.2	4801.4	5258.7	5751.5	6021.8	6233.5	6239.6	6255.1
47.5°	4033.6	4527.9	4982.1	5478.0	5745.3	5938.4	5944.6	5956.9
50°	3769.4	4254.5	4687.1	5183.0	5444.0	5648.0	5620.2	5632.5
52.5°	3509.9	3967.2	4409.0	4864.7	5122.7	5303.5	5311.2	5286.5
55°	3255.0	3686.0	4092.3	4531.0	4776.7	4917.2	4912.6	4921.9
57.5°	2997.0	3401.8	3774.1	4175.7	4415.2	4548.0	4575.8	4543.4
60°	2734.4	3114.4	3448.1	3811.1	4042.9	4154.1	4186.5	4155.6
62.5°	2473.3	2822.4	3125.2	3441.9	3656.7	3794.1	3791.1	3757.1
65°	2212.2	2528.9	2799.3	3068.1	3255.0	3392.5	3386.3	3355.4
67.5°	1971.2	2232.3	2474.8	2692.7	2854.9	2949.1	2981.6	2944.5
70°	1705.5	1931.1	2144.2	2318.8	2453.2	2538.2	2569.1	2536.6
72.5°	1439.8	1631.4	1781.2	1949.6	2053.1	2124.2	2156.6	2125.7
75°	1177.2	1334.7	1456.8	1588.1	1660.7	1721.0	1758.0	1727.1
77.5°	922.3	1044.3	1141.6	1237.4	1320.8	1334.7	1367.2	1347.1
80°	679.7	767.8	838.9	902.2	962.4	968.6	994.9	982.5
82.5°	452.6	511.3	529.9	596.3	634.9	628.8	655.0	645.7
85°	239.5	275.0	307.4	327.5	349.1	329.1	352.2	343.0
87.5°	80.3	85.0	74.2	105.0	115.9	98.9	112.8	108.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)