

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: P838159

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-5HI-20-120-EDD-90**

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-08
Report Number: P838159
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-20-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 2000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

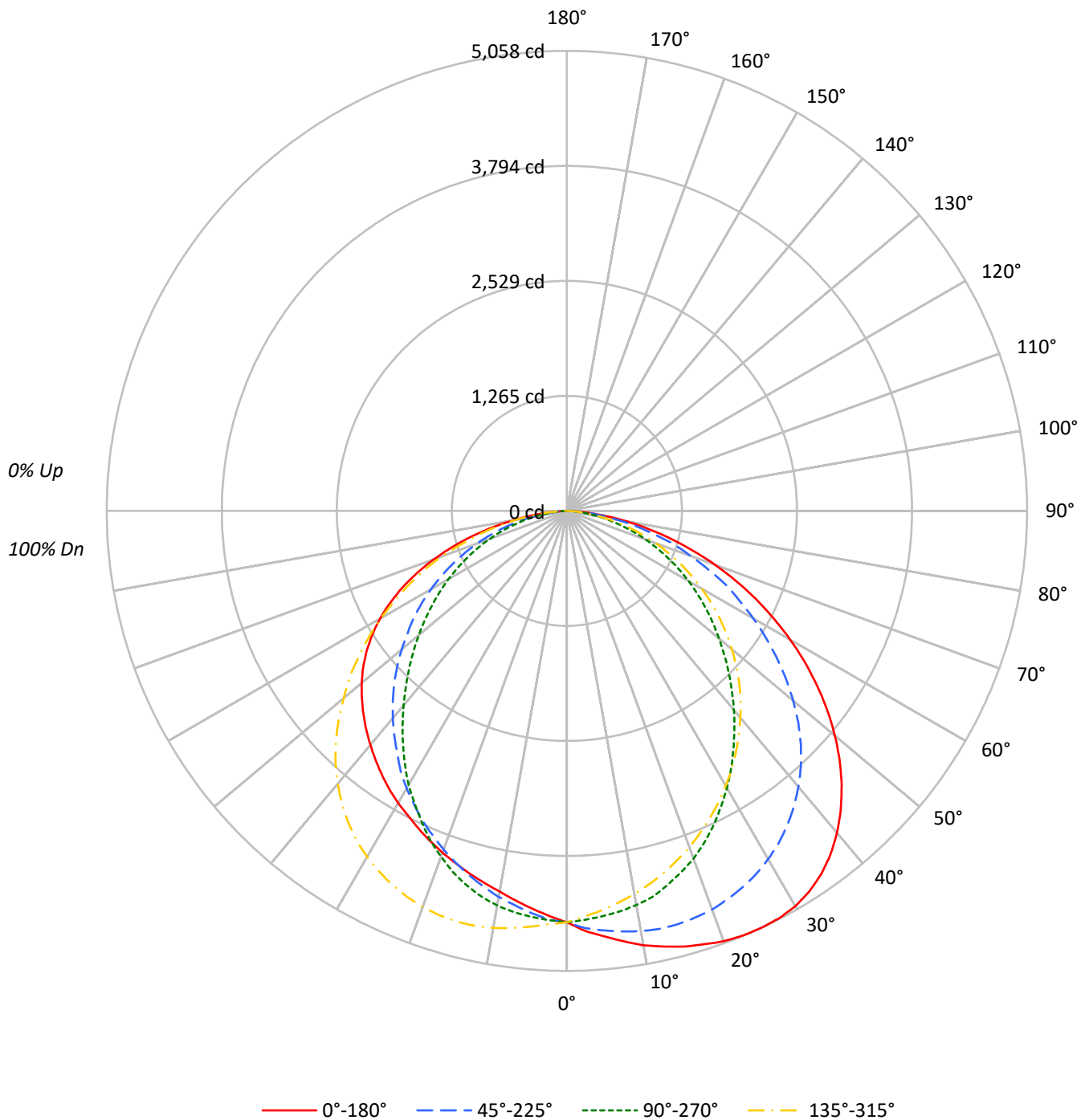
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13269.5 lumens
Efficiency: N/A
Efficacy: 60.3 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

TEST NUMBER: P838159
CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-20-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838159

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-20-120-EDD-90

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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84		
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70		
3	90	79	71	65	88	78	70	64	75	68	63	72	66	62	69	65	61	59		
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43		
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38		
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29		
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	6086	6086	6086	6086
5°	6342	6042	5928	6052
10°	6625	6011	5808	6019
15°	6908	5934	5751	5936
20°	7210	5826	5725	5793
25°	7509	5664	5725	5606
30°	7799	5466	5763	5406
35°	8006	5242	5821	5159
40°	8113	5016	5902	4903
45°	8128	4788	6016	4667
50°	8052	4569	6164	4448
55°	7885	4366	6301	4244
60°	7637	4154	6385	4046
65°	7295	3910	6351	3819
70°	6815	3623	6126	3557
75°	6132	3230	5622	3214
80°	5199	2706	4725	2747
85°	3616	1792	2996	1840

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838159

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-20-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	429.4	3.2
10°-20°	1243.5	9.4
20°-30°	1905.7	14.4
30°-40°	2317.2	17.5
40°-50°	2408.9	18.2
50°-60°	2175.9	16.4
60°-70°	1654.3	12.5
70°-80°	922.2	7.0
80°-90°	212.3	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°	3578.6	27.0
0°-40°	5895.8	44.4
0°-60°	10480.6	79.0
0°-90°	13269.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13269.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4523	4523	4523	4523	4523	
5°	4696	4473	4389	4481	4696	453
15°	4960	4260	4128	4261	4960	1406
25°	5058	3815	3856	3776	5058	2336
35°	4874	3191	3544	3141	4874	3044
45°	4272	2516	3162	2453	4272	3289
55°	3361	1861	2686	1809	3361	3001
65°	2292	1228	1995	1200	2292	2264
75°	1180	621	1081	618	1180	1253
85°	234	116	194	119	234	295
90°	0	0	0	0	0	

TEST NUMBER: P838159

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-20-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9
2.5°	4623.1	4555.6	4556.6	4615.7	4570.3	4592.5	4529.2	4553.5	4546.1	4551.3	4499.7
5°	4695.9	4623.1	4622.0	4672.7	4622.0	4631.5	4551.3	4567.2	4544.0	4529.2	4473.3
7.5°	4772.9	4700.1	4692.7	4737.0	4670.6	4663.2	4574.6	4574.6	4532.4	4495.4	4442.7
10°	4848.9	4774.0	4764.5	4798.2	4715.9	4691.7	4584.1	4567.2	4511.3	4456.4	4399.4
12.5°	4905.8	4829.9	4822.5	4843.6	4750.7	4706.4	4584.1	4551.3	4469.1	4392.0	4347.7
15°	4959.6	4881.6	4861.5	4872.1	4765.5	4706.4	4569.3	4518.6	4413.1	4311.9	4260.2
17.5°	4997.6	4922.7	4902.7	4901.6	4772.9	4688.5	4537.6	4468.0	4341.4	4219.0	4167.3
20°	5035.6	4960.7	4935.4	4916.4	4770.8	4664.2	4491.2	4397.3	4249.6	4112.5	4069.2
22.5°	5054.6	4977.6	4950.1	4921.7	4757.1	4619.9	4434.2	4315.0	4146.2	3982.7	3946.8
25°	5057.8	4978.6	4949.1	4907.9	4729.6	4567.2	4360.4	4215.9	4027.0	3845.5	3814.9
27.5°	5049.3	4962.8	4933.3	4883.7	4688.5	4502.8	4272.8	4103.0	3900.4	3699.9	3667.2
30°	5019.8	4932.2	4903.7	4839.4	4630.5	4423.7	4176.8	3977.4	3760.1	3547.0	3518.5
32.5°	4960.7	4875.2	4852.0	4787.7	4567.2	4331.9	4065.0	3842.4	3605.0	3401.4	3359.2
35°	4874.2	4788.7	4774.0	4706.4	4478.6	4222.2	3942.6	3694.7	3440.4	3232.6	3191.4
37.5°	4761.3	4689.6	4667.4	4600.9	4374.1	4097.7	3802.3	3534.3	3272.7	3049.0	3023.7
40°	4618.9	4551.3	4534.5	4475.4	4252.8	3959.5	3650.4	3368.7	3099.6	2891.8	2855.9
42.5°	4456.4	4393.1	4383.6	4322.4	4103.0	3806.5	3485.8	3196.7	2919.2	2718.8	2682.9
45°	4271.8	4210.6	4208.5	4150.4	3939.4	3636.6	3312.8	3022.6	2743.0	2535.2	2516.2
47.5°	4068.1	4013.3	4013.3	3959.5	3756.9	3449.9	3134.5	2841.2	2565.8	2382.2	2348.5
50°	3846.6	3794.9	3779.1	3752.7	3555.4	3246.3	2946.7	2663.9	2390.7	2215.5	2182.8
52.5°	3610.3	3566.0	3576.5	3528.0	3337.0	3034.2	2756.8	2464.5	2214.5	2055.2	2022.5
55°	3361.3	3298.0	3307.5	3289.5	3109.1	2815.8	2543.6	2299.9	2041.5	1891.6	1861.1
57.5°	3102.8	3020.5	3054.3	3043.7	2866.5	2592.2	2348.5	2113.2	1869.5	1731.3	1701.7
60°	2838.0	2758.9	2793.7	2784.2	2617.5	2368.5	2147.0	1928.6	1698.6	1573.0	1543.5
62.5°	2565.8	2493.0	2524.7	2517.3	2364.3	2139.6	1946.5	1746.1	1526.6	1413.7	1386.3
65°	2291.5	2221.9	2250.4	2245.1	2103.7	1932.8	1740.8	1557.2	1353.6	1255.5	1228.0
67.5°	2010.9	1946.5	1972.9	1972.9	1843.1	1679.6	1534.0	1366.2	1183.7	1099.3	1074.0
70°	1732.3	1672.2	1695.4	1693.3	1583.6	1450.6	1325.1	1175.3	1011.8	942.1	921.0
72.5°	1451.7	1399.0	1420.1	1417.9	1326.2	1240.7	1116.2	986.4	844.0	788.1	769.1
75°	1179.5	1129.9	1150.0	1147.9	1073.0	992.8	909.4	801.8	679.4	640.4	621.4
77.5°	920.0	869.3	886.2	886.2	831.4	773.3	706.9	623.5	537.0	494.8	481.1
80°	671.0	646.7	638.3	639.3	602.4	564.4	530.7	450.5	387.2	358.7	349.2
82.5°	441.0	421.0	412.5	414.6	393.5	370.3	349.2	293.3	251.1	234.2	228.9
85°	234.2	219.4	212.1	217.3	213.1	200.5	189.9	151.9	125.5	119.2	116.1
87.5°	73.9	64.4	59.1	78.1	66.5	59.1	57.0	45.4	34.8	34.8	33.8
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: P838159

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-20-120-EDD-90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9
2.5°	4516.5	4516.5	4475.4	4465.9	4461.7	4466.9	4425.8	4418.4	4477.5	4457.4	4412.1
5°	4480.7	4478.6	4420.5	4410.0	4410.0	4403.6	4357.2	4346.7	4405.8	4388.9	4339.3
7.5°	4436.3	4430.0	4361.4	4354.1	4343.5	4339.3	4287.6	4280.2	4330.8	4320.3	4273.9
10°	4382.5	4376.2	4295.0	4289.7	4278.1	4269.7	4221.1	4215.9	4267.5	4250.7	4213.7
12.5°	4311.9	4300.3	4216.9	4211.6	4202.1	4199.0	4151.5	4149.4	4206.4	4189.5	4150.4
15°	4219.0	4209.5	4116.7	4118.8	4119.8	4119.8	4081.9	4079.8	4135.7	4128.3	4086.1
17.5°	4116.7	4104.0	4015.4	4021.7	4029.1	4037.6	4008.0	4013.3	4072.4	4062.9	4024.9
20°	4000.6	3988.0	3901.5	3919.4	3935.2	3952.1	3933.1	3947.9	4002.7	3998.5	3970.0
22.5°	3870.9	3858.2	3778.0	3805.4	3831.8	3863.5	3855.0	3871.9	3929.9	3928.9	3903.6
25°	3712.6	3715.8	3645.1	3678.8	3723.2	3767.5	3770.6	3798.1	3862.4	3856.1	3832.9
27.5°	3564.9	3569.1	3494.2	3551.2	3610.3	3667.2	3681.0	3718.9	3784.3	3779.1	3759.0
30°	3409.8	3415.1	3342.3	3420.4	3492.1	3561.7	3591.3	3643.0	3709.4	3709.4	3688.3
32.5°	3248.4	3257.9	3181.9	3286.4	3369.7	3451.0	3502.7	3556.5	3632.4	3630.3	3612.4
35°	3082.8	3093.3	3023.7	3156.6	3240.0	3339.1	3403.5	3475.2	3542.7	3543.8	3530.1
37.5°	2914.0	2926.6	2863.3	3008.9	3103.9	3221.0	3303.3	3375.0	3449.9	3454.1	3441.5
40°	2746.2	2759.9	2705.1	2845.4	2965.7	3096.5	3191.4	3275.8	3358.1	3360.2	3351.8
42.5°	2578.5	2593.2	2552.1	2689.2	2825.3	2965.7	3077.5	3173.5	3257.9	3263.2	3253.7
45°	2414.9	2427.6	2398.1	2547.9	2678.7	2831.7	2960.4	3069.0	3154.5	3161.9	3158.7
47.5°	2252.5	2264.1	2237.7	2374.8	2525.7	2688.2	2836.9	2957.2	3047.9	3056.4	3054.3
50°	2093.2	2102.7	2074.2	2217.6	2367.5	2540.5	2695.6	2834.8	2936.1	2944.6	2943.5
52.5°	1934.9	1944.4	1920.1	2071.0	2207.1	2389.6	2558.4	2709.3	2809.5	2822.2	2824.3
55°	1781.9	1786.1	1767.2	1911.7	2043.6	2234.5	2428.7	2575.3	2675.5	2686.1	2692.4
57.5°	1628.9	1630.0	1614.2	1752.4	1879.0	2074.2	2277.8	2431.8	2526.8	2537.3	2546.8
60°	1477.0	1476.0	1458.0	1592.0	1713.3	1906.4	2118.5	2271.5	2363.2	2372.7	2385.4
62.5°	1326.2	1323.0	1307.2	1430.6	1544.5	1735.5	1948.6	2096.3	2183.9	2190.2	2207.1
65°	1176.3	1173.2	1158.4	1272.4	1375.7	1558.3	1767.2	1907.5	1986.6	1995.0	1991.9
67.5°	1028.6	1022.3	1010.7	1113.0	1206.9	1375.7	1576.2	1710.2	1775.6	1783.0	1803.0
70°	880.9	873.6	847.2	955.8	1038.1	1189.0	1375.7	1495.0	1549.8	1557.2	1554.0
72.5°	735.3	728.0	699.5	799.7	869.3	1001.2	1167.9	1267.1	1314.6	1320.9	1320.9
75°	594.0	589.8	571.8	647.8	705.8	813.4	954.8	1037.1	1074.0	1081.4	1079.3
77.5°	457.9	454.7	436.8	502.2	547.6	627.7	741.7	806.0	833.5	841.9	859.8
80°	328.1	327.1	298.6	362.9	383.0	450.5	533.8	583.4	598.2	609.8	622.5
82.5°	209.9	211.0	182.5	237.4	245.8	289.1	340.8	371.4	381.9	391.4	400.9
85°	102.3	106.6	90.7	125.5	126.6	148.8	170.9	182.5	186.7	194.1	202.6
87.5°	26.4	30.6	16.9	35.9	31.7	41.1	47.5	50.6	49.6	54.9	58.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838159

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-20-120-EDD-90

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9
2.5°	4426.9	4460.6	4443.7	4498.6	4519.7	4485.9	4545.0	4546.1	4503.9	4553.5	4580.9
5°	4358.3	4393.1	4382.5	4439.5	4465.9	4436.3	4508.1	4521.8	4480.7	4536.6	4580.9
7.5°	4288.6	4329.8	4316.1	4374.1	4405.8	4382.5	4459.6	4481.7	4450.1	4511.3	4570.3
10°	4228.5	4263.3	4248.6	4309.7	4337.2	4318.2	4394.1	4435.3	4405.8	4480.7	4551.3
12.5°	4169.4	4197.9	4181.0	4231.7	4258.1	4233.8	4326.6	4364.6	4343.5	4421.6	4512.3
15°	4093.5	4125.1	4101.9	4147.3	4167.3	4146.2	4222.2	4287.6	4261.2	4346.7	4446.9
17.5°	4035.4	4053.4	4021.7	4057.6	4069.2	4040.7	4117.7	4182.1	4163.1	4255.9	4372.0
20°	3971.1	3985.9	3941.5	3961.6	3960.5	3924.7	3995.4	4058.7	4046.0	4148.3	4280.2
22.5°	3899.3	3906.7	3855.0	3859.3	3857.1	3798.1	3861.4	3925.7	3920.4	4023.8	4171.5
25°	3823.4	3824.4	3758.0	3755.9	3732.7	3663.0	3718.9	3791.7	3775.9	3887.7	4042.8
27.5°	3748.5	3737.9	3657.7	3638.8	3601.8	3518.5	3568.1	3633.5	3624.0	3733.7	3905.7
30°	3668.3	3654.6	3556.5	3521.6	3467.8	3371.8	3413.0	3474.2	3479.4	3575.5	3755.9
32.5°	3592.3	3557.5	3448.9	3398.2	3330.7	3218.9	3241.0	3303.3	3311.7	3408.8	3594.4
35°	3494.2	3471.0	3337.0	3250.5	3184.0	3061.7	3084.9	3128.1	3140.8	3235.7	3424.6
37.5°	3401.4	3364.5	3222.0	3116.5	3031.1	2902.4	2908.7	2953.0	2965.7	3061.7	3248.4
40°	3305.4	3252.6	3099.6	2976.2	2878.1	2743.0	2735.7	2782.1	2791.6	2885.5	3054.3
42.5°	3203.0	3139.7	2967.8	2832.7	2719.8	2582.7	2567.9	2608.0	2618.6	2710.3	2876.0
45°	3099.6	3023.7	2832.7	2685.0	2561.6	2421.3	2406.5	2437.1	2452.9	2539.4	2698.7
47.5°	2989.9	2901.3	2693.5	2528.9	2401.2	2260.9	2243.0	2273.6	2286.2	2371.7	2522.5
50°	2874.9	2767.3	2550.0	2368.5	2241.9	2103.7	2077.3	2113.2	2124.8	2205.0	2352.7
52.5°	2748.3	2629.1	2397.0	2207.1	2080.5	1948.6	1917.0	1951.8	1965.5	2043.6	2179.7
55°	2614.3	2485.6	2243.0	2058.3	1921.2	1792.5	1766.1	1779.8	1809.4	1883.2	2009.8
57.5°	2463.5	2335.8	2080.5	1892.7	1760.8	1637.4	1615.2	1627.9	1655.3	1727.1	1841.0
60°	2303.1	2168.1	1914.9	1727.1	1599.4	1482.3	1462.3	1473.9	1503.4	1568.8	1674.3
62.5°	2144.9	1992.9	1743.9	1557.2	1441.2	1332.5	1327.2	1323.0	1350.4	1413.7	1506.6
65°	1952.8	1807.2	1565.6	1388.4	1282.9	1184.8	1163.7	1173.2	1199.6	1257.6	1354.6
67.5°	1747.1	1615.2	1383.1	1219.6	1125.7	1038.1	1020.2	1024.4	1051.9	1102.5	1186.9
70°	1528.7	1412.7	1196.4	1049.7	970.6	888.3	876.7	877.8	904.2	948.5	1022.3
72.5°	1299.8	1195.3	1007.5	882.0	816.6	757.5	747.0	734.3	758.6	796.5	859.8
75°	1066.6	974.8	819.7	717.4	665.7	616.1	606.6	594.0	618.2	650.9	700.5
77.5°	831.4	757.5	637.2	558.1	518.0	481.1	472.6	458.9	483.2	507.5	546.5
80°	601.4	547.6	475.8	392.5	378.8	354.5	346.0	331.3	354.5	370.3	399.9
82.5°	388.2	352.4	311.2	253.2	251.1	233.2	228.9	212.1	233.2	242.7	264.8
85°	196.2	179.4	168.8	128.7	132.9	121.3	120.3	102.3	119.2	123.4	136.1
87.5°	55.9	59.1	52.8	31.7	40.1	38.0	38.0	27.4	38.0	38.0	43.3
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: P838159

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-5HI-20-120-EDD-90

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9	4522.9
2.5°	4527.1	4545.0	4549.2	4548.2	4559.8	4623.1	4602.0	4623.1
5°	4537.6	4577.7	4588.3	4603.0	4622.0	4693.8	4670.6	4695.9
7.5°	4544.0	4604.1	4627.3	4655.8	4686.4	4766.6	4747.6	4772.9
10°	4544.0	4622.0	4655.8	4703.3	4744.4	4837.3	4819.3	4848.9
12.5°	4525.0	4625.2	4672.7	4739.1	4791.9	4892.1	4884.7	4905.8
15°	4485.9	4609.4	4674.8	4760.2	4825.7	4937.5	4934.3	4959.6
17.5°	4433.2	4581.9	4661.1	4768.7	4851.0	4976.5	4983.9	4997.6
20°	4366.7	4530.2	4633.6	4765.5	4868.9	5007.1	5016.6	5035.6
22.5°	4279.2	4468.0	4592.5	4751.8	4871.0	5019.8	5036.7	5054.6
25°	4175.8	4393.1	4538.7	4725.4	4860.5	5018.7	5041.9	5057.8
27.5°	4057.6	4296.0	4470.1	4683.2	4830.9	5001.8	5030.3	5049.3
30°	3920.4	4192.6	4392.0	4628.4	4790.8	4970.2	5000.8	5019.8
32.5°	3779.1	4078.7	4299.2	4557.7	4732.8	4919.5	4945.9	4960.7
35°	3625.0	3940.5	4187.4	4466.9	4657.9	4838.3	4858.4	4874.2
37.5°	3457.3	3790.7	4059.7	4364.6	4552.4	4725.4	4743.4	4761.3
40°	3284.3	3633.5	3916.2	4239.1	4426.9	4587.2	4606.2	4618.9
42.5°	3110.2	3459.4	3763.2	4091.4	4278.1	4432.1	4443.7	4456.4
45°	2934.0	3279.0	3591.3	3927.8	4112.5	4257.0	4261.2	4271.8
47.5°	2754.7	3092.3	3402.4	3741.1	3923.6	4055.5	4059.7	4068.1
50°	2574.2	2905.5	3200.9	3539.6	3717.9	3857.1	3838.2	3846.6
52.5°	2397.0	2709.3	3011.0	3322.3	3498.4	3621.9	3627.2	3610.3
55°	2222.9	2517.3	2794.7	3094.4	3262.1	3358.1	3355.0	3361.3
57.5°	2046.7	2323.1	2577.4	2851.7	3015.2	3106.0	3125.0	3102.8
60°	1867.4	2126.9	2354.8	2602.7	2761.0	2836.9	2859.1	2838.0
62.5°	1689.1	1927.5	2134.3	2350.6	2497.2	2591.1	2589.0	2565.8
65°	1510.8	1727.1	1911.7	2095.3	2222.9	2316.8	2312.6	2291.5
67.5°	1346.2	1524.5	1690.1	1838.9	1949.7	2014.0	2036.2	2010.9
70°	1164.7	1318.8	1464.4	1583.6	1675.4	1733.4	1754.5	1732.3
72.5°	983.3	1114.1	1216.4	1331.4	1402.1	1450.6	1472.8	1451.7
75°	803.9	911.5	994.9	1084.6	1134.1	1175.3	1200.6	1179.5
77.5°	629.8	713.2	779.7	845.1	902.0	911.5	933.7	920.0
80°	464.2	524.3	572.9	616.1	657.3	661.5	679.4	671.0
82.5°	309.1	349.2	361.9	407.2	433.6	429.4	447.3	441.0
85°	163.5	187.8	209.9	223.7	238.4	224.7	240.5	234.2
87.5°	54.9	58.0	50.6	71.7	79.1	67.5	77.0	73.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)