

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: P838052

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-6LO-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: P838052
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-LD4-6LO-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

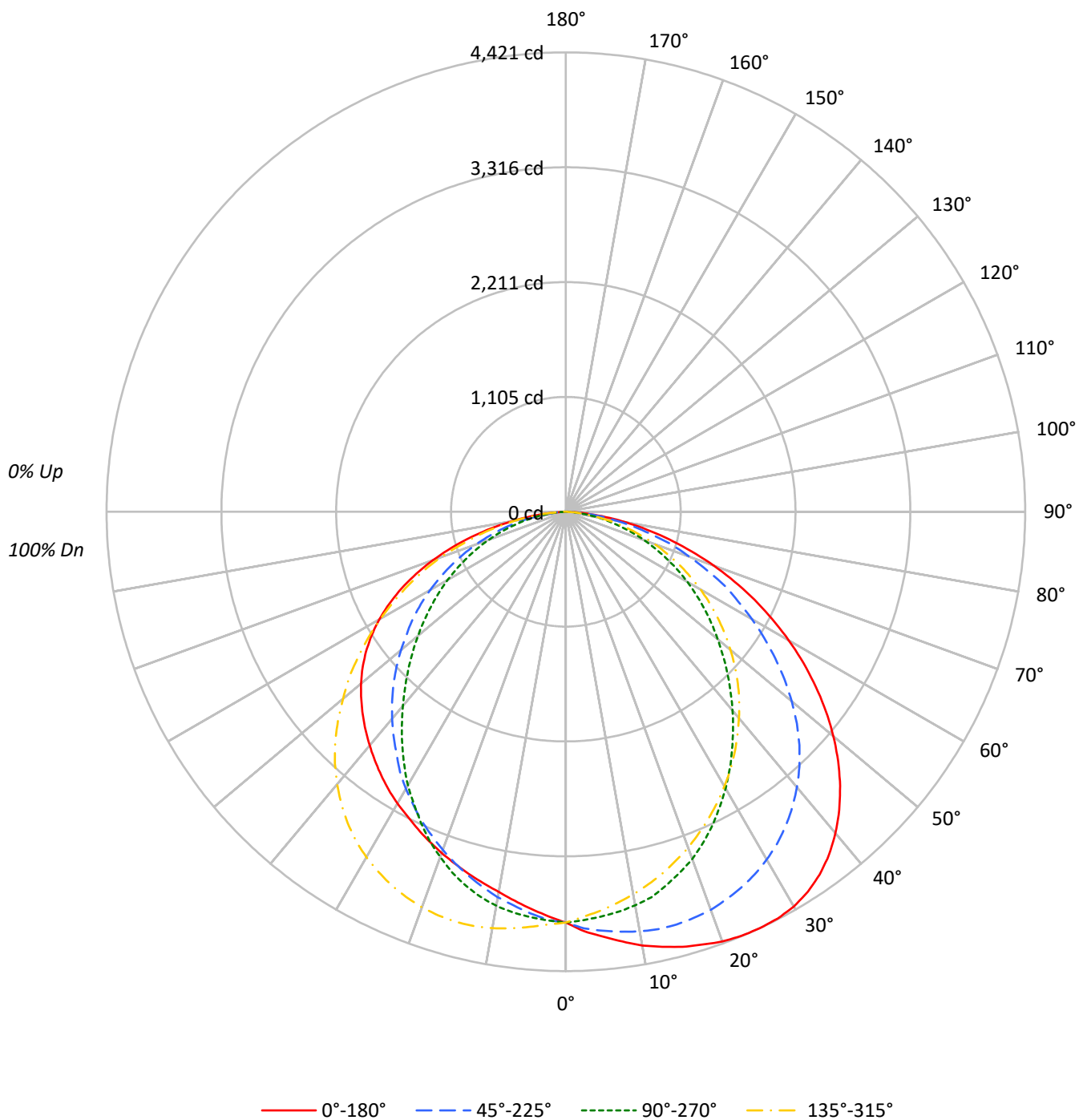
Lumens per Lamp: N/A
Luminaire Lumens: 11598.3 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 140.4
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	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°	5319	5319	5319	5319
5°	5544	5281	5181	5290
10°	5790	5254	5076	5261
15°	6038	5187	5026	5188
20°	6302	5093	5004	5064
25°	6563	4950	5004	4900
30°	6817	4778	5037	4725
35°	6998	4582	5088	4509
40°	7091	4384	5159	4286
45°	7105	4185	5259	4080
50°	7038	3994	5387	3888
55°	6892	3816	5507	3710
60°	6675	3630	5581	3536
65°	6377	3417	5552	3338
70°	5957	3167	5354	3109
75°	5360	2823	4914	2809
80°	4544	2365	4130	2400
85°	3160	1565	2620	1609

Classified

Scaled Data Report

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Peachtree City, GA 30269



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	375.3	3.2
10°-20°	1086.9	9.4
20°-30°	1665.7	14.4
30°-40°	2025.4	17.5
40°-50°	2105.5	18.2
50°-60°	1901.9	16.4
60°-70°	1445.9	12.5
70°-80°	806.1	7.0
80°-90°	185.6	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°	3127.9	27.0
0°-40°	5153.3	44.4
0°-60°	9160.6	79.0
0°-90°	11598.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11598.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3953	3953	3953	3953	3953	
5°	4104	3910	3836	3916	4104	396
15°	4335	3724	3608	3724	4335	1229
25°	4421	3334	3370	3300	4421	2042
35°	4260	2790	3098	2745	4260	2661
45°	3734	2199	2764	2144	3734	2875
55°	2938	1627	2348	1582	2938	2623
65°	2003	1073	1744	1048	2003	1979
75°	1031	543	945	540	1031	1095
85°	205	101	170	104	205	258
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°	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2
2.5°	4040.8	3981.8	3982.7	4034.4	3994.7	4014.1	3958.8	3980.0	3973.5	3978.1	3933.0
5°	4104.5	4040.8	4039.9	4084.2	4039.9	4048.2	3978.1	3992.0	3971.7	3958.8	3909.9
7.5°	4171.8	4108.2	4101.7	4140.4	4082.3	4075.9	3998.4	3998.4	3961.5	3929.3	3883.2
10°	4238.2	4172.7	4164.4	4193.9	4122.0	4100.8	4006.7	3992.0	3943.1	3895.1	3845.3
12.5°	4288.0	4221.6	4215.1	4233.6	4152.4	4113.7	4006.7	3978.1	3906.2	3838.9	3800.2
15°	4335.0	4266.8	4249.2	4258.5	4165.3	4113.7	3993.8	3949.6	3857.3	3768.8	3723.6
17.5°	4368.2	4302.7	4285.2	4284.3	4171.8	4098.0	3966.2	3905.3	3794.6	3687.7	3642.5
20°	4401.4	4335.9	4313.8	4297.2	4169.9	4076.8	3925.6	3843.5	3714.4	3594.5	3556.7
22.5°	4418.0	4350.7	4326.7	4301.8	4158.0	4038.1	3875.8	3771.6	3624.0	3481.1	3449.7
25°	4420.8	4351.6	4325.8	4289.8	4134.0	3992.0	3811.2	3684.9	3519.8	3361.2	3334.5
27.5°	4413.4	4337.8	4312.0	4268.6	4098.0	3935.7	3734.7	3586.2	3409.2	3234.0	3205.4
30°	4387.6	4311.0	4286.1	4229.9	4047.3	3866.6	3650.8	3476.5	3286.5	3100.3	3075.4
32.5°	4335.9	4261.2	4240.9	4184.7	3992.0	3786.3	3553.0	3358.5	3151.0	2973.0	2936.1
35°	4260.3	4185.6	4172.7	4113.7	3914.5	3690.4	3446.1	3229.4	3007.1	2825.5	2789.5
37.5°	4161.6	4098.9	4079.6	4021.5	3823.2	3581.6	3323.4	3089.2	2860.5	2665.0	2642.9
40°	4037.2	3978.1	3963.4	3911.7	3717.2	3460.8	3190.6	2944.4	2709.3	2527.6	2496.2
42.5°	3895.1	3839.8	3831.5	3778.0	3586.2	3327.1	3046.8	2794.1	2551.6	2376.4	2345.0
45°	3733.8	3680.3	3678.4	3627.7	3443.3	3178.6	2895.5	2641.9	2397.6	2215.9	2199.3
47.5°	3555.8	3507.8	3507.8	3460.8	3283.8	3015.4	2739.7	2483.3	2242.7	2082.2	2052.7
50°	3362.1	3317.0	3303.1	3280.1	3107.6	2837.4	2575.6	2328.4	2089.6	1936.5	1907.9
52.5°	3155.6	3116.9	3126.1	3083.7	2916.7	2652.1	2409.6	2154.1	1935.6	1796.3	1767.8
55°	2938.0	2882.6	2890.9	2875.3	2717.6	2461.2	2223.3	2010.3	1784.4	1653.4	1626.7
57.5°	2712.0	2640.1	2669.6	2660.4	2505.5	2265.7	2052.7	1847.1	1634.0	1513.2	1487.4
60°	2480.6	2411.4	2441.8	2433.5	2287.8	2070.2	1876.6	1685.7	1484.7	1374.9	1349.1
62.5°	2242.7	2179.0	2206.7	2200.2	2066.5	1870.1	1701.4	1526.2	1334.3	1235.7	1211.7
65°	2002.9	1942.0	1966.9	1962.3	1838.8	1689.4	1521.5	1361.1	1183.1	1097.4	1073.4
67.5°	1757.6	1701.4	1724.4	1724.4	1611.0	1468.1	1340.8	1194.2	1034.6	960.9	938.7
70°	1514.2	1461.6	1481.9	1480.0	1384.1	1268.0	1158.2	1027.3	884.3	823.5	805.0
72.5°	1268.9	1222.8	1241.2	1239.4	1159.1	1084.4	975.6	862.2	737.7	688.8	672.2
75°	1031.0	987.6	1005.1	1003.3	937.8	867.7	794.9	700.8	593.9	559.7	543.1
77.5°	804.1	759.8	774.6	774.6	726.7	675.9	617.8	545.0	469.4	432.5	420.5
80°	586.5	565.3	557.9	558.8	526.5	493.3	463.8	393.8	338.4	313.5	305.2
82.5°	385.5	367.9	360.6	362.4	344.0	323.7	305.2	256.4	219.5	204.7	200.1
85°	204.7	191.8	185.4	190.0	186.3	175.2	166.0	132.8	109.7	104.2	101.4
87.5°	64.6	56.3	51.6	68.2	58.1	51.6	49.8	39.7	30.4	30.4	29.5
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°	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2
2.5°	3947.7	3947.7	3911.7	3903.4	3899.8	3904.4	3868.4	3861.9	3913.6	3896.1	3856.4
5°	3916.4	3914.5	3863.8	3854.6	3854.6	3849.0	3808.5	3799.2	3850.9	3836.1	3792.8
7.5°	3877.6	3872.1	3812.2	3805.7	3796.5	3792.8	3747.6	3741.1	3785.4	3776.2	3735.6
10°	3830.6	3825.1	3754.1	3749.4	3739.3	3731.9	3689.5	3684.9	3730.1	3715.3	3683.1
12.5°	3768.8	3758.7	3685.8	3681.2	3672.9	3670.1	3628.6	3626.8	3676.6	3661.8	3627.7
15°	3687.7	3679.4	3598.2	3600.1	3601.0	3601.0	3567.8	3565.9	3614.8	3608.4	3571.5
17.5°	3598.2	3587.1	3509.7	3515.2	3521.7	3529.1	3503.2	3507.8	3559.5	3551.2	3518.0
20°	3496.8	3485.7	3410.1	3425.8	3439.6	3454.4	3437.8	3450.7	3498.6	3494.9	3470.0
22.5°	3383.4	3372.3	3302.2	3326.2	3349.2	3376.9	3369.5	3384.3	3435.0	3434.1	3411.9
25°	3245.0	3247.8	3186.0	3215.5	3254.3	3293.0	3295.7	3319.7	3376.0	3370.4	3350.2
27.5°	3115.9	3119.6	3054.1	3103.9	3155.6	3205.4	3217.4	3250.6	3307.7	3303.1	3285.6
30°	2980.4	2985.0	2921.4	2989.6	3052.3	3113.2	3139.0	3184.2	3242.3	3242.3	3223.8
32.5°	2839.3	2847.6	2781.2	2872.5	2945.3	3016.3	3061.5	3108.6	3174.9	3173.1	3157.4
35°	2694.5	2703.7	2642.9	2759.1	2831.9	2918.6	2974.8	3037.5	3096.6	3097.5	3085.5
37.5°	2547.0	2558.0	2502.7	2630.0	2713.0	2815.3	2887.2	2949.9	3015.4	3019.1	3008.0
40°	2400.3	2412.3	2364.4	2487.0	2592.2	2706.5	2789.5	2863.3	2935.2	2937.0	2929.7
42.5°	2253.7	2266.6	2230.7	2350.6	2469.5	2592.2	2689.9	2773.8	2847.6	2852.2	2843.9
45°	2110.8	2121.9	2096.0	2227.0	2341.3	2475.0	2587.5	2682.5	2757.2	2763.7	2760.9
47.5°	1968.8	1978.9	1955.9	2075.8	2207.6	2349.6	2479.7	2584.8	2664.1	2671.5	2669.6
50°	1829.5	1837.8	1812.9	1938.4	2069.3	2220.5	2356.1	2477.8	2566.3	2573.7	2572.8
52.5°	1691.2	1699.5	1678.3	1810.2	1929.1	2088.7	2236.2	2368.1	2455.7	2466.7	2468.6
55°	1557.5	1561.2	1544.6	1670.9	1786.2	1953.1	2122.8	2251.0	2338.6	2347.8	2353.3
57.5°	1423.8	1424.7	1410.9	1531.7	1642.3	1812.9	1990.9	2125.5	2208.5	2217.8	2226.1
60°	1291.0	1290.1	1274.4	1391.5	1497.6	1666.3	1851.7	1985.4	2065.6	2073.9	2085.0
62.5°	1159.1	1156.4	1142.5	1250.4	1350.0	1516.9	1703.2	1832.3	1908.8	1914.4	1929.1
65°	1028.2	1025.4	1012.5	1112.1	1202.5	1362.0	1544.6	1667.2	1736.4	1743.8	1741.0
67.5°	899.1	893.6	883.4	972.9	1054.9	1202.5	1377.7	1494.8	1552.0	1558.4	1575.9
70°	770.0	763.5	740.5	835.5	907.4	1039.3	1202.5	1306.7	1354.6	1361.1	1358.3
72.5°	642.7	636.3	611.4	699.0	759.8	875.1	1020.8	1107.5	1149.0	1154.5	1154.5
75°	519.2	515.5	499.8	566.2	616.9	711.0	834.5	906.5	938.7	945.2	943.4
77.5°	400.2	397.4	381.8	438.9	478.6	548.7	648.3	704.5	728.5	735.9	751.5
80°	286.8	285.9	261.0	317.2	334.7	393.8	466.6	509.9	522.9	533.0	544.1
82.5°	183.5	184.4	159.5	207.5	214.9	252.7	297.9	324.6	333.8	342.1	350.4
85°	89.4	93.1	79.3	109.7	110.7	130.0	149.4	159.5	163.2	169.7	177.1
87.5°	23.1	26.7	14.8	31.4	27.7	36.0	41.5	44.3	43.3	48.0	50.7
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°	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2
2.5°	3869.3	3898.8	3884.1	3932.0	3950.5	3921.0	3972.6	3973.5	3936.6	3980.0	4004.0
5°	3809.4	3839.8	3830.6	3880.4	3903.4	3877.6	3940.3	3952.3	3916.4	3965.2	4004.0
7.5°	3748.5	3784.5	3772.5	3823.2	3850.9	3830.6	3897.9	3917.3	3889.6	3943.1	3994.7
10°	3696.0	3726.4	3713.5	3767.0	3790.9	3774.3	3840.7	3876.7	3850.9	3916.4	3978.1
12.5°	3644.3	3669.2	3654.5	3698.7	3721.8	3700.6	3781.7	3814.9	3796.5	3864.7	3944.0
15°	3577.9	3605.6	3585.3	3625.0	3642.5	3624.0	3690.4	3747.6	3724.5	3799.2	3886.8
17.5°	3527.2	3542.9	3515.2	3546.6	3556.7	3531.8	3599.1	3655.4	3638.8	3719.9	3821.4
20°	3471.0	3483.9	3445.1	3462.7	3461.7	3430.4	3492.2	3547.5	3536.4	3625.9	3741.1
22.5°	3408.3	3414.7	3369.5	3373.2	3371.4	3319.7	3375.1	3431.3	3426.7	3517.1	3646.2
25°	3341.9	3342.8	3284.7	3282.8	3262.6	3201.7	3250.6	3314.2	3300.4	3398.1	3533.7
27.5°	3276.4	3267.2	3197.1	3180.5	3148.2	3075.4	3118.7	3175.9	3167.6	3263.5	3413.8
30°	3206.3	3194.3	3108.6	3078.1	3031.1	2947.2	2983.1	3036.6	3041.2	3125.2	3282.8
32.5°	3139.9	3109.5	3014.5	2970.2	2911.2	2813.5	2832.8	2887.2	2894.6	2979.5	3141.8
35°	3054.1	3033.9	2916.7	2841.1	2783.0	2676.1	2696.4	2734.2	2745.2	2828.2	2993.3
37.5°	2973.0	2940.7	2816.2	2724.0	2649.3	2536.8	2542.4	2581.1	2592.2	2676.1	2839.3
40°	2889.1	2843.0	2709.3	2601.4	2515.6	2397.6	2391.1	2431.7	2440.0	2522.1	2669.6
42.5°	2799.6	2744.3	2594.0	2476.0	2377.3	2257.4	2244.5	2279.5	2288.8	2369.0	2513.8
45°	2709.3	2642.9	2476.0	2346.9	2239.0	2116.3	2103.4	2130.2	2144.0	2219.6	2358.8
47.5°	2613.4	2535.9	2354.2	2210.4	2098.8	1976.2	1960.5	1987.2	1998.3	2073.0	2204.9
50°	2512.8	2418.8	2228.8	2070.2	1959.6	1838.8	1815.7	1847.1	1857.2	1927.3	2056.4
52.5°	2402.2	2298.0	2095.1	1929.1	1818.5	1703.2	1675.5	1706.0	1718.0	1786.2	1905.2
55°	2285.1	2172.6	1960.5	1799.1	1679.2	1566.7	1543.7	1555.7	1581.5	1646.0	1756.7
57.5°	2153.2	2041.6	1818.5	1654.3	1539.1	1431.2	1411.8	1422.9	1446.8	1509.6	1609.1
60°	2013.0	1895.0	1673.7	1509.6	1398.0	1295.6	1278.1	1288.2	1314.1	1371.2	1463.4
62.5°	1874.7	1741.9	1524.3	1361.1	1259.7	1164.7	1160.1	1156.4	1180.3	1235.7	1316.8
65°	1706.9	1579.6	1368.5	1213.5	1121.3	1035.6	1017.1	1025.4	1048.5	1099.2	1184.0
67.5°	1527.1	1411.8	1208.9	1066.0	983.9	907.4	891.7	895.4	919.4	963.6	1037.4
70°	1336.2	1234.8	1045.7	917.5	848.4	776.4	766.3	767.2	790.3	829.0	893.6
72.5°	1136.1	1044.8	880.6	770.9	713.7	662.1	652.9	641.8	663.0	696.2	751.5
75°	932.3	852.1	716.5	627.1	581.9	538.5	530.2	519.2	540.4	569.0	612.3
77.5°	726.7	662.1	557.0	487.8	452.8	420.5	413.1	401.1	422.3	443.6	477.7
80°	525.6	478.6	415.9	343.0	331.1	309.8	302.5	289.6	309.8	323.7	349.5
82.5°	339.3	308.0	272.0	221.3	219.5	203.8	200.1	185.4	203.8	212.1	231.5
85°	171.5	156.8	147.5	112.5	116.2	106.0	105.1	89.4	104.2	107.9	119.0
87.5°	48.9	51.6	46.1	27.7	35.0	33.2	33.2	24.0	33.2	33.2	37.8
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: P838052

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

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2	3953.2
2.5°	3956.9	3972.6	3976.3	3975.4	3985.5	4040.8	4022.4	4040.8
5°	3966.2	4001.2	4010.4	4023.3	4039.9	4102.6	4082.3	4104.5
7.5°	3971.7	4024.2	4044.5	4069.4	4096.2	4166.3	4149.7	4171.8
10°	3971.7	4039.9	4069.4	4110.9	4146.9	4228.0	4212.4	4238.2
12.5°	3955.1	4042.7	4084.2	4142.3	4188.4	4276.0	4269.5	4288.0
15°	3921.0	4028.9	4086.0	4160.7	4217.9	4315.6	4312.9	4335.0
17.5°	3874.9	4004.9	4074.0	4168.1	4240.0	4349.8	4356.2	4368.2
20°	3816.8	3959.7	4050.1	4165.3	4255.7	4376.5	4384.8	4401.4
22.5°	3740.2	3905.3	4014.1	4153.3	4257.5	4387.6	4402.3	4418.0
25°	3649.9	3839.8	3967.1	4130.3	4248.3	4386.6	4406.9	4420.8
27.5°	3546.6	3755.0	3907.1	4093.4	4222.5	4371.9	4396.8	4413.4
30°	3426.7	3664.6	3838.9	4045.5	4187.5	4344.2	4371.0	4387.6
32.5°	3303.1	3565.0	3757.7	3983.7	4136.7	4300.0	4323.0	4335.9
35°	3168.5	3444.2	3660.0	3904.4	4071.3	4229.0	4246.5	4260.3
37.5°	3021.9	3313.3	3548.4	3814.9	3979.1	4130.3	4146.0	4161.6
40°	2870.6	3175.9	3423.0	3705.2	3869.3	4009.5	4026.1	4037.2
42.5°	2718.5	3023.7	3289.3	3576.1	3739.3	3873.9	3884.1	3895.1
45°	2564.5	2866.0	3139.0	3433.1	3594.5	3720.9	3724.5	3733.8
47.5°	2407.7	2702.8	2973.9	3269.9	3429.5	3544.7	3548.4	3555.8
50°	2250.0	2539.6	2797.8	3093.8	3249.6	3371.4	3354.8	3362.1
52.5°	2095.1	2368.1	2631.8	2903.8	3057.8	3165.7	3170.3	3155.6
55°	1943.0	2200.2	2442.8	2704.7	2851.3	2935.2	2932.4	2938.0
57.5°	1789.0	2030.6	2252.8	2492.6	2635.5	2714.8	2731.4	2712.0
60°	1632.2	1859.0	2058.2	2274.9	2413.3	2479.7	2499.0	2480.6
62.5°	1476.4	1684.8	1865.5	2054.5	2182.7	2264.8	2262.9	2242.7
65°	1320.5	1509.6	1670.9	1831.4	1943.0	2025.0	2021.3	2002.9
67.5°	1176.7	1332.5	1477.3	1607.3	1704.1	1760.4	1779.7	1757.6
70°	1018.0	1152.7	1279.9	1384.1	1464.4	1515.1	1533.5	1514.2
72.5°	859.4	973.8	1063.2	1163.7	1225.5	1268.0	1287.3	1268.9
75°	702.7	796.7	869.6	948.0	991.3	1027.3	1049.4	1031.0
77.5°	550.5	623.4	681.5	738.6	788.4	796.7	816.1	804.1
80°	405.7	458.3	500.7	538.5	574.5	578.2	593.9	586.5
82.5°	270.2	305.2	316.3	355.9	379.0	375.3	391.0	385.5
85°	142.9	164.1	183.5	195.5	208.4	196.4	210.2	204.7
87.5°	48.0	50.7	44.3	62.7	69.2	59.0	67.3	64.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)