

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: P837747

Luminaire Tested: **ORLG-12-4-INS-ASY2R-LD4-3STD-35-120-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: P837747
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-12-4-INS-ASY2R-LD4-3STD-35-120-EDD
Description: 1FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

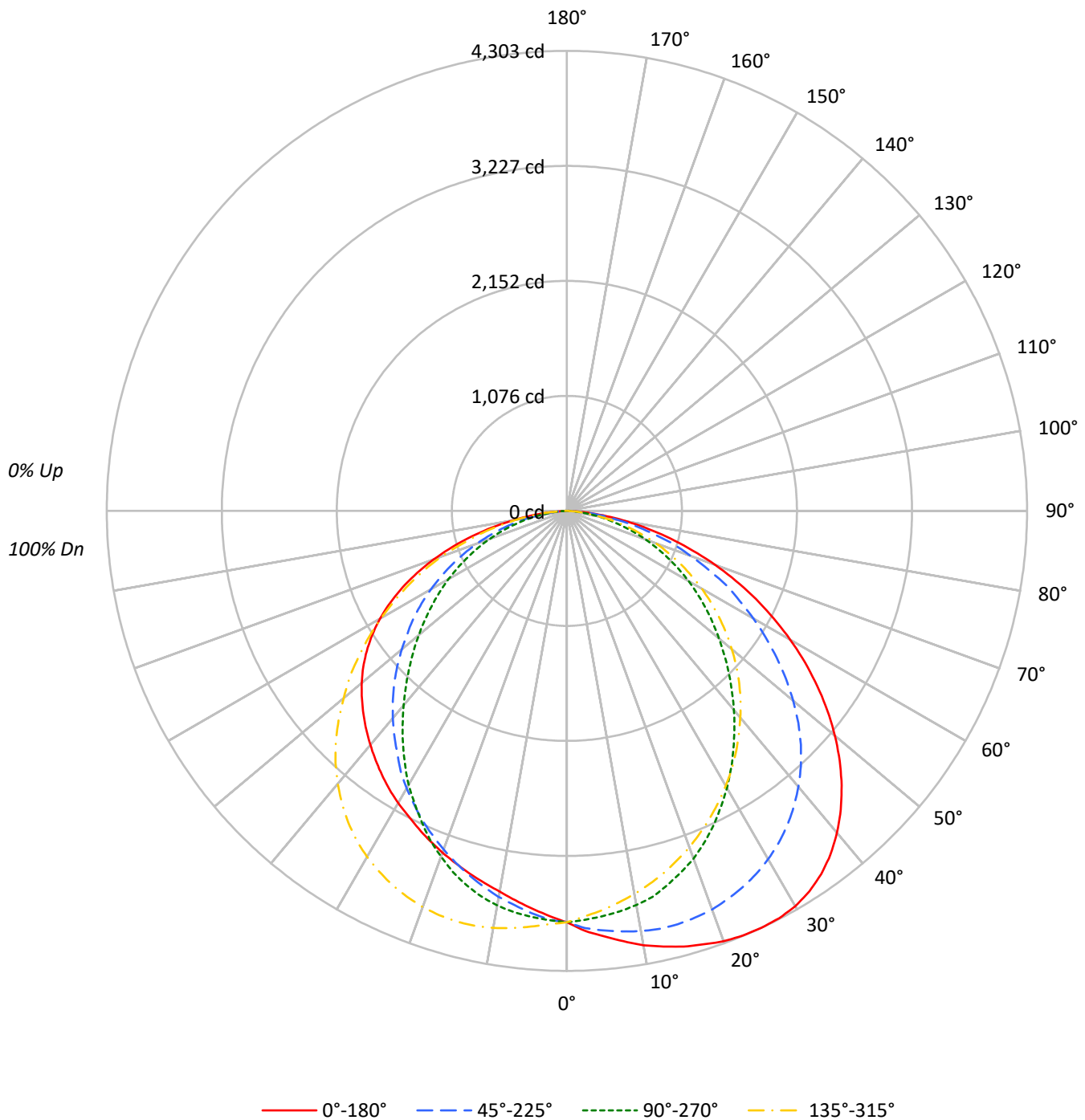
Lumens per Lamp: N/A
Luminaire Lumens: 11288.5 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	86	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	72	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	66	62	69	65	61	61	61	59
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	52	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	45	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	40	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	35	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	31	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	28	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10354	10354	10354	10354
5°	10791	10280	10086	10296
10°	11272	10227	9881	10241
15°	11754	10097	9784	10099
20°	12267	9913	9741	9857
25°	12775	9636	9740	9538
30°	13269	9301	9806	9198
35°	13622	8919	9904	8777
40°	13803	8535	10042	8342
45°	13830	8146	10237	7941
50°	13699	7774	10487	7567
55°	13416	7428	10721	7221
60°	12994	7067	10863	6884
65°	12413	6652	10807	6498
70°	11595	6164	10423	6052
75°	10432	5496	9565	5468
80°	8846	4604	8040	4674
85°	6150	3047	5098	3131



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	365.3	3.2
10°-20°	1057.8	9.4
20°-30°	1621.2	14.4
30°-40°	1971.3	17.5
40°-50°	2049.3	18.2
50°-60°	1851.1	16.4
60°-70°	1407.3	12.5
70°-80°	784.6	7.0
80°-90°	180.6	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°	3044.3	27.0
0°-40°	5015.6	44.4
0°-60°	8916.0	79.0
0°-90°	11288.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11288.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3848	3848	3848	3848	3848	
5°	3995	3806	3734	3812	3995	385
15°	4219	3624	3512	3625	4219	1196
25°	4303	3245	3280	3212	4303	1987
35°	4146	2715	3015	2672	4146	2590
45°	3634	2141	2690	2087	3634	2798
55°	2860	1583	2285	1539	2860	2553
65°	1949	1045	1697	1020	1949	1926
75°	1003	529	920	526	1003	1066
85°	199	99	165	101	199	251
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°	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6
2.5°	3932.9	3875.5	3876.4	3926.6	3888.0	3906.9	3853.0	3873.7	3867.4	3871.9	3827.9
5°	3994.8	3932.9	3932.0	3975.1	3932.0	3940.1	3871.9	3885.3	3865.6	3853.0	3805.5
7.5°	4060.4	3998.4	3992.1	4029.8	3973.3	3967.0	3891.6	3891.6	3855.7	3824.3	3779.4
10°	4125.0	4061.3	4053.2	4081.9	4011.9	3991.3	3899.7	3885.3	3837.8	3791.1	3742.6
12.5°	4173.4	4108.8	4102.5	4120.5	4041.5	4003.8	3899.7	3871.9	3801.9	3736.4	3698.7
15°	4219.2	4152.8	4135.8	4144.7	4054.1	4003.8	3887.1	3844.1	3754.3	3668.1	3624.2
17.5°	4251.5	4187.8	4170.8	4169.9	4060.4	3988.6	3860.2	3801.0	3693.3	3589.2	3545.2
20°	4283.8	4220.1	4198.6	4182.4	4058.6	3967.9	3820.7	3740.8	3615.2	3498.5	3461.7
22.5°	4300.0	4234.5	4211.1	4186.9	4046.9	3930.2	3772.3	3670.8	3527.2	3388.1	3357.6
25°	4302.7	4235.4	4210.2	4175.2	4023.6	3885.3	3709.4	3586.5	3425.8	3271.4	3245.4
27.5°	4295.5	4221.9	4196.8	4154.6	3988.6	3830.6	3634.9	3490.4	3318.1	3147.6	3119.8
30°	4270.4	4195.9	4171.7	4116.9	3939.2	3763.3	3553.3	3383.6	3198.7	3017.4	2993.2
32.5°	4220.1	4147.4	4127.7	4072.9	3885.3	3685.2	3458.1	3268.8	3066.8	2893.6	2857.7
35°	4146.5	4073.8	4061.3	4003.8	3810.0	3591.9	3354.0	3143.1	2926.8	2750.0	2715.0
37.5°	4050.5	3989.5	3970.6	3914.1	3721.1	3485.9	3234.6	3006.7	2784.1	2593.8	2572.3
40°	3929.3	3871.9	3857.5	3807.3	3617.9	3368.4	3105.4	2865.8	2636.9	2460.1	2429.6
42.5°	3791.1	3737.3	3729.2	3677.1	3490.4	3238.2	2965.4	2719.5	2483.4	2312.9	2282.4
45°	3634.0	3582.0	3580.2	3530.8	3351.3	3093.7	2818.2	2571.4	2333.5	2156.7	2140.6
47.5°	3460.8	3414.1	3414.1	3368.4	3196.1	2934.9	2666.5	2417.0	2182.8	2026.6	1997.9
50°	3272.3	3228.4	3214.9	3192.5	3024.6	2761.7	2506.8	2266.2	2033.8	1884.8	1857.0
52.5°	3071.3	3033.6	3042.6	3001.3	2838.8	2581.3	2345.2	2096.6	1883.9	1748.4	1720.5
55°	2859.5	2805.6	2813.7	2798.5	2645.0	2395.5	2163.9	1956.6	1736.7	1609.2	1583.2
57.5°	2639.6	2569.6	2598.3	2589.3	2438.5	2205.2	1997.9	1797.7	1590.4	1472.8	1447.7
60°	2414.3	2347.0	2376.6	2368.5	2226.7	2014.9	1826.4	1640.7	1445.0	1338.2	1313.1
62.5°	2182.8	2120.8	2147.8	2141.5	2011.3	1820.2	1655.9	1485.4	1298.7	1202.7	1179.3
65°	1949.4	1890.2	1914.4	1909.9	1789.6	1644.2	1480.9	1324.7	1151.5	1068.0	1044.7
67.5°	1710.7	1655.9	1678.4	1678.4	1568.0	1428.8	1305.0	1162.3	1007.0	935.2	913.7
70°	1473.7	1422.6	1442.3	1440.5	1347.2	1234.1	1127.3	999.8	860.7	801.5	783.5
72.5°	1235.0	1190.1	1208.1	1206.3	1128.2	1055.5	949.6	839.2	718.0	670.4	654.3
75°	1003.4	961.2	978.3	976.5	912.8	844.6	773.7	682.1	578.0	544.8	528.6
77.5°	782.6	739.6	753.9	753.9	707.2	657.9	601.3	530.4	456.8	420.9	409.3
80°	570.8	550.2	543.0	543.9	512.5	480.2	451.5	383.2	329.4	305.2	297.1
82.5°	375.2	358.1	350.9	352.7	334.8	315.0	297.1	249.5	213.6	199.2	194.8
85°	199.2	186.7	180.4	184.9	181.3	170.5	161.6	129.2	106.8	101.4	98.7
87.5°	62.8	54.7	50.3	66.4	56.5	50.3	48.5	38.6	29.6	29.6	28.7
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6
2.5°	3842.3	3842.3	3807.3	3799.2	3795.6	3800.1	3765.1	3758.8	3809.1	3792.0	3753.4
5°	3811.7	3810.0	3760.6	3751.6	3751.6	3746.2	3706.7	3697.8	3748.0	3733.7	3691.5
7.5°	3774.1	3768.7	3710.3	3704.0	3695.1	3691.5	3647.5	3641.2	3684.3	3675.3	3635.8
10°	3728.3	3722.9	3653.8	3649.3	3639.4	3632.2	3591.0	3586.5	3630.4	3616.1	3584.7
12.5°	3668.1	3658.3	3587.4	3582.9	3574.8	3572.1	3531.7	3529.9	3578.4	3564.0	3530.8
15°	3589.2	3581.1	3502.1	3503.9	3504.8	3504.8	3472.5	3470.7	3518.3	3512.0	3476.1
17.5°	3502.1	3491.3	3415.9	3421.3	3427.6	3434.8	3409.7	3414.1	3464.4	3456.3	3424.0
20°	3403.4	3392.6	3319.0	3334.3	3347.7	3362.1	3345.9	3358.5	3405.2	3401.6	3377.4
22.5°	3293.0	3282.2	3214.0	3237.3	3259.8	3286.7	3279.5	3293.9	3343.2	3342.3	3320.8
25°	3158.4	3161.0	3100.9	3129.6	3167.3	3205.0	3207.7	3231.1	3285.8	3280.4	3260.7
27.5°	3032.7	3036.3	2972.6	3021.0	3071.3	3119.8	3131.4	3163.7	3219.4	3214.9	3197.8
30°	2900.8	2905.3	2843.3	2909.7	2970.8	3030.0	3055.1	3099.1	3155.7	3155.7	3137.7
32.5°	2763.4	2771.5	2706.9	2795.8	2866.7	2935.8	2979.8	3025.5	3090.1	3088.4	3073.1
35°	2622.5	2631.5	2572.3	2685.4	2756.3	2840.6	2895.4	2956.4	3013.9	3014.8	3003.1
37.5°	2478.9	2489.7	2435.9	2559.7	2640.5	2740.1	2810.1	2871.2	2934.9	2938.5	2927.7
40°	2336.2	2347.9	2301.2	2420.6	2522.9	2634.2	2715.0	2786.8	2856.8	2858.6	2851.4
42.5°	2193.5	2206.1	2171.1	2287.8	2403.5	2522.9	2618.1	2699.7	2771.5	2776.0	2767.9
45°	2054.4	2065.2	2040.1	2167.5	2278.8	2408.9	2518.4	2610.9	2683.6	2689.9	2687.2
47.5°	1916.2	1926.1	1903.6	2020.3	2148.7	2286.9	2413.4	2515.7	2592.9	2600.1	2598.3
50°	1780.7	1788.7	1764.5	1886.6	2014.0	2161.2	2293.2	2411.6	2497.8	2505.0	2504.1
52.5°	1646.0	1654.1	1633.5	1761.8	1877.6	2032.9	2176.5	2304.8	2390.1	2400.9	2402.6
55°	1515.9	1519.5	1503.3	1626.3	1738.5	1900.9	2066.1	2190.8	2276.1	2285.1	2290.5
57.5°	1385.8	1386.7	1373.2	1490.8	1598.5	1764.5	1937.7	2068.8	2149.5	2158.5	2166.6
60°	1256.5	1255.6	1240.4	1354.4	1457.6	1621.8	1802.2	1932.4	2010.4	2018.5	2029.3
62.5°	1128.2	1125.5	1112.0	1217.0	1314.0	1476.4	1657.7	1783.4	1857.9	1863.2	1877.6
65°	1000.7	998.0	985.5	1082.4	1170.4	1325.6	1503.3	1622.7	1690.0	1697.2	1694.5
67.5°	875.1	869.7	859.8	946.9	1026.8	1170.4	1340.9	1454.9	1510.5	1516.8	1533.9
70°	749.4	743.1	720.7	813.1	883.2	1011.5	1170.4	1271.8	1318.5	1324.7	1322.0
72.5°	625.6	619.3	595.1	680.3	739.6	851.7	993.5	1077.9	1118.3	1123.7	1123.7
75°	505.3	501.7	486.5	551.1	600.4	692.0	812.3	882.3	913.7	920.0	918.2
77.5°	389.5	386.8	371.6	427.2	465.8	534.0	631.0	685.7	709.0	716.2	731.5
80°	279.1	278.2	254.0	308.7	325.8	383.2	454.1	496.3	508.9	518.8	529.5
82.5°	178.6	179.5	155.3	201.9	209.1	245.9	289.9	315.9	324.9	333.0	341.1
85°	87.1	90.6	77.2	106.8	107.7	126.5	145.4	155.3	158.9	165.1	172.3
87.5°	22.4	26.0	14.4	30.5	26.9	35.0	40.4	43.1	42.2	46.7	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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6
2.5°	3766.0	3794.7	3780.3	3827.0	3845.0	3816.2	3866.5	3867.4	3831.5	3873.7	3897.0
5°	3707.6	3737.3	3728.3	3776.7	3799.2	3774.1	3835.1	3846.8	3811.7	3859.3	3897.0
7.5°	3648.4	3683.4	3671.7	3721.1	3748.0	3728.3	3793.8	3812.6	3785.7	3837.8	3888.0
10°	3597.2	3626.9	3614.3	3666.4	3689.7	3673.5	3738.2	3773.2	3748.0	3811.7	3871.9
12.5°	3547.0	3571.2	3556.9	3599.9	3622.4	3601.7	3680.7	3713.0	3695.1	3761.5	3838.7
15°	3482.4	3509.3	3489.5	3528.1	3545.2	3527.2	3591.9	3647.5	3625.1	3697.8	3783.0
17.5°	3433.0	3448.3	3421.3	3451.8	3461.7	3437.5	3503.0	3557.8	3541.6	3620.6	3719.3
20°	3378.2	3390.8	3353.1	3370.2	3369.3	3338.8	3398.9	3452.7	3442.0	3529.0	3641.2
22.5°	3317.2	3323.5	3279.5	3283.1	3281.3	3231.1	3284.9	3339.7	3335.2	3423.1	3548.8
25°	3252.6	3253.5	3196.9	3195.2	3175.4	3116.2	3163.7	3225.7	3212.2	3307.3	3439.3
27.5°	3188.9	3179.9	3111.7	3095.5	3064.1	2993.2	3035.4	3091.0	3083.0	3176.3	3322.6
30°	3120.7	3109.0	3025.5	2995.9	2950.1	2868.5	2903.5	2955.5	2960.0	3041.7	3195.2
32.5°	3056.0	3026.4	2934.0	2890.9	2833.5	2738.3	2757.2	2810.1	2817.3	2899.9	3057.8
35°	2972.6	2952.8	2838.8	2765.2	2708.7	2604.6	2624.3	2661.1	2671.9	2752.7	2913.3
37.5°	2893.6	2862.2	2741.0	2651.3	2578.6	2469.1	2474.5	2512.1	2522.9	2604.6	2763.4
40°	2811.9	2767.0	2636.9	2531.9	2448.4	2333.5	2327.3	2366.7	2374.8	2454.7	2598.3
42.5°	2724.9	2671.0	2524.7	2409.8	2313.8	2197.1	2184.6	2218.7	2227.6	2305.7	2446.6
45°	2636.9	2572.3	2409.8	2284.2	2179.2	2059.8	2047.2	2073.3	2086.7	2160.3	2295.8
47.5°	2543.6	2468.2	2291.4	2151.3	2042.7	1923.4	1908.1	1934.1	1944.9	2017.6	2146.0
50°	2445.7	2354.2	2169.3	2014.9	1907.2	1789.6	1767.2	1797.7	1807.6	1875.8	2001.5
52.5°	2338.0	2236.6	2039.2	1877.6	1769.9	1657.7	1630.8	1660.4	1672.1	1738.5	1854.3
55°	2224.0	2114.5	1908.1	1751.1	1634.4	1524.9	1502.4	1514.1	1539.2	1602.1	1709.8
57.5°	2095.7	1987.1	1769.9	1610.1	1498.0	1392.9	1374.1	1384.9	1408.2	1469.2	1566.2
60°	1959.3	1844.4	1629.0	1469.2	1360.6	1261.0	1244.0	1253.8	1279.0	1334.6	1424.4
62.5°	1824.6	1695.4	1483.6	1324.7	1226.0	1133.6	1129.1	1125.5	1148.8	1202.7	1281.7
65°	1661.3	1537.4	1331.9	1181.1	1091.4	1007.9	990.0	998.0	1020.5	1069.8	1152.4
67.5°	1486.3	1374.1	1176.6	1037.5	957.6	883.2	867.9	871.5	894.8	937.9	1009.7
70°	1300.5	1201.8	1017.8	893.0	825.7	755.7	745.8	746.7	769.2	806.9	869.7
72.5°	1105.7	1016.9	857.1	750.3	694.7	644.4	635.4	624.7	645.3	677.6	731.5
75°	907.4	829.3	697.4	610.3	566.3	524.1	516.1	505.3	525.9	553.8	596.0
77.5°	707.2	644.4	542.1	474.8	440.7	409.3	402.1	390.4	411.1	431.7	464.9
80°	511.6	465.8	404.8	333.9	322.2	301.6	294.4	281.8	301.6	315.0	340.2
82.5°	330.3	299.8	264.8	215.4	213.6	198.4	194.8	180.4	198.4	206.4	225.3
85°	166.9	152.6	143.6	109.5	113.1	103.2	102.3	87.1	101.4	105.0	115.8
87.5°	47.6	50.3	44.9	26.9	34.1	32.3	32.3	23.3	32.3	32.3	36.8
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: P837747

CATALOG NUMBER: ORLG-12-4-INS-ASY2R-LD4-3STD-35-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6	3847.6
2.5°	3851.2	3866.5	3870.1	3869.2	3879.1	3932.9	3915.0	3932.9
5°	3860.2	3894.3	3903.3	3915.9	3932.0	3993.0	3973.3	3994.8
7.5°	3865.6	3916.8	3936.5	3960.7	3986.8	4055.0	4038.8	4060.4
10°	3865.6	3932.0	3960.7	4001.1	4036.1	4115.1	4099.9	4125.0
12.5°	3849.4	3934.7	3975.1	4031.6	4076.5	4161.8	4155.5	4173.4
15°	3816.2	3921.2	3976.9	4049.6	4105.2	4200.4	4197.7	4219.2
17.5°	3771.4	3897.9	3965.2	4056.8	4126.8	4233.6	4239.9	4251.5
20°	3714.8	3853.9	3941.9	4054.1	4142.0	4259.6	4267.7	4283.8
22.5°	3640.3	3801.0	3906.9	4042.4	4143.8	4270.4	4284.7	4300.0
25°	3552.4	3737.3	3861.1	4020.0	4134.9	4269.5	4289.2	4302.7
27.5°	3451.8	3654.7	3802.8	3984.1	4109.7	4255.1	4279.4	4295.5
30°	3335.2	3566.7	3736.4	3937.4	4075.6	4228.2	4254.2	4270.4
32.5°	3214.9	3469.8	3657.4	3877.3	4026.3	4185.1	4207.6	4220.1
35°	3083.9	3352.2	3562.2	3800.1	3962.5	4116.0	4133.1	4146.5
37.5°	2941.2	3224.8	3453.6	3713.0	3872.8	4020.0	4035.2	4050.5
40°	2794.0	3091.0	3331.6	3606.2	3766.0	3902.4	3918.6	3929.3
42.5°	2645.9	2943.0	3201.4	3480.6	3639.4	3770.5	3780.3	3791.1
45°	2496.0	2789.5	3055.1	3341.4	3498.5	3621.5	3625.1	3634.0
47.5°	2343.4	2630.6	2894.5	3182.6	3337.9	3450.0	3453.6	3460.8
50°	2189.9	2471.8	2723.1	3011.2	3162.8	3281.3	3265.2	3272.3
52.5°	2039.2	2304.8	2561.5	2826.3	2976.2	3081.2	3085.7	3071.3
55°	1891.1	2141.5	2377.5	2632.4	2775.1	2856.8	2854.1	2859.5
57.5°	1741.2	1976.3	2192.6	2426.0	2565.1	2642.3	2658.4	2639.6
60°	1588.6	1809.4	2003.3	2214.2	2348.8	2413.4	2432.3	2414.3
62.5°	1436.9	1639.8	1815.7	1999.7	2124.4	2204.3	2202.5	2182.8
65°	1285.2	1469.2	1626.3	1782.5	1891.1	1970.9	1967.4	1949.4
67.5°	1145.2	1296.9	1437.8	1564.4	1658.6	1713.4	1732.2	1710.7
70°	990.9	1121.9	1245.8	1347.2	1425.3	1474.6	1492.6	1473.7
72.5°	836.5	947.8	1034.8	1132.7	1192.8	1234.1	1252.9	1235.0
75°	683.9	775.5	846.4	922.6	964.8	999.8	1021.4	1003.4
77.5°	535.8	606.7	663.3	718.9	767.4	775.5	794.3	782.6
80°	394.9	446.1	487.4	524.1	559.2	562.7	578.0	570.8
82.5°	263.0	297.1	307.8	346.4	368.9	365.3	380.5	375.2
85°	139.1	159.8	178.6	190.3	202.8	191.2	204.6	199.2
87.5°	46.7	49.4	43.1	61.0	67.3	57.4	65.5	62.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)