

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: P837889

Luminaire Tested: **ORLG-24-2-INS-ASY2R-LD4-5HI-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: P837889
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-2-INS-ASY2R-LD4-5HI-35-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and RFI grid
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

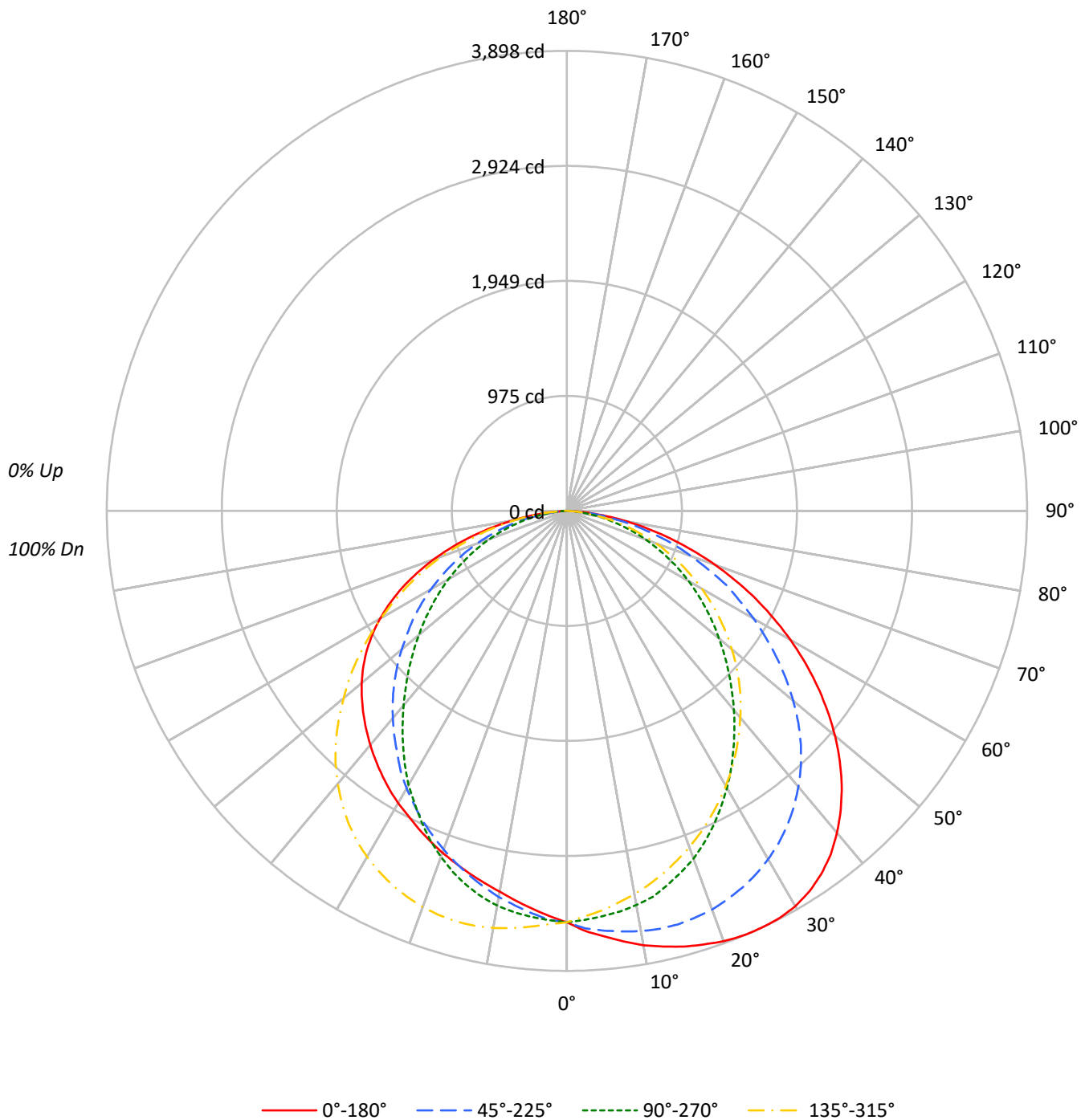
Lumens per Lamp: N/A
Luminaire Lumens: 10227.3 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 110
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°	9380	9380	9380	9380
5°	9777	9313	9138	9329
10°	10212	9265	8952	9279
15°	10649	9148	8864	9150
20°	11114	8981	8825	8930
25°	11574	8730	8824	8641
30°	12022	8426	8884	8333
35°	12341	8081	8973	7952
40°	12505	7732	9098	7558
45°	12530	7380	9274	7195
50°	12411	7043	9501	6856
55°	12154	6730	9713	6542
60°	11772	6402	9843	6236
65°	11245	6027	9791	5887
70°	10505	5585	9443	5483
75°	9452	4979	8666	4954
80°	8015	4172	7283	4234
85°	5573	2760	4619	2837

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.0	3.2
10°-20°	958.4	9.4
20°-30°	1468.8	14.4
30°-40°	1786.0	17.5
40°-50°	1856.6	18.2
50°-60°	1677.1	16.4
60°-70°	1275.0	12.5
70°-80°	710.8	7.0
80°-90°	163.7	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°	2758.2	27.0
0°-40°	4544.1	44.4
0°-60°	8077.8	79.0
0°-90°	10227.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10227.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3486	3486	3486	3486	3486	
5°	3619	3448	3383	3453	3619	349
15°	3823	3284	3182	3284	3823	1084
25°	3898	2940	2972	2910	3898	1800
35°	3757	2460	2731	2421	3757	2346
45°	3292	1939	2437	1891	3292	2535
55°	2591	1434	2070	1394	2591	2313
65°	1766	946	1538	924	1766	1745
75°	909	479	834	476	909	966
85°	180	89	150	92	180	227
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°	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9
2.5°	3563.2	3511.2	3512.0	3557.5	3522.5	3539.6	3490.8	3509.5	3503.8	3507.9	3468.1
5°	3619.3	3563.2	3562.4	3601.4	3562.4	3569.7	3507.9	3520.1	3502.2	3490.8	3447.7
7.5°	3678.7	3622.6	3616.9	3651.0	3599.8	3594.1	3525.8	3525.8	3493.3	3464.8	3424.1
10°	3737.2	3679.5	3672.2	3698.2	3634.8	3616.1	3533.1	3520.1	3477.0	3434.7	3390.8
12.5°	3781.1	3722.6	3716.9	3733.1	3661.6	3627.4	3533.1	3507.9	3444.5	3385.1	3351.0
15°	3822.6	3762.4	3747.0	3755.1	3673.0	3627.4	3521.7	3482.7	3401.4	3323.3	3283.5
17.5°	3851.9	3794.1	3778.7	3777.9	3678.7	3613.6	3497.3	3443.7	3346.1	3251.8	3211.9
20°	3881.1	3823.4	3803.9	3789.3	3677.0	3594.9	3461.6	3389.2	3275.3	3169.6	3136.3
22.5°	3895.8	3836.4	3815.3	3793.3	3666.5	3560.8	3417.6	3325.8	3195.7	3069.6	3042.0
25°	3898.2	3837.2	3814.5	3782.7	3645.3	3520.1	3360.7	3249.3	3103.8	2963.9	2940.3
27.5°	3891.7	3825.0	3802.3	3764.0	3613.6	3470.5	3293.2	3162.3	3006.2	2851.7	2826.5
30°	3868.9	3801.4	3779.5	3729.9	3568.9	3409.5	3219.2	3065.6	2898.0	2733.8	2711.8
32.5°	3823.4	3757.5	3739.6	3690.0	3520.1	3338.8	3133.0	2961.5	2778.5	2621.6	2589.1
35°	3756.7	3690.9	3679.5	3627.4	3451.8	3254.2	3038.7	2847.6	2651.7	2491.5	2459.8
37.5°	3669.7	3614.4	3597.3	3546.1	3371.3	3158.3	2930.6	2724.0	2522.4	2350.0	2330.5
40°	3559.9	3507.9	3494.9	3449.4	3277.8	3051.7	2813.5	2596.4	2389.0	2228.8	2201.2
42.5°	3434.7	3385.9	3378.6	3331.5	3162.3	2933.8	2686.6	2463.8	2250.0	2095.5	2067.8
45°	3292.4	3245.3	3243.6	3198.9	3036.3	2802.9	2553.3	2329.7	2114.2	1954.0	1939.3
47.5°	3135.5	3093.2	3093.2	3051.7	2895.6	2659.0	2415.9	2189.8	1977.6	1836.1	1810.1
50°	2964.7	2924.9	2912.7	2892.4	2740.3	2502.0	2271.1	2053.2	1842.6	1707.6	1682.4
52.5°	2782.6	2748.4	2756.6	2719.2	2572.0	2338.6	2124.7	1899.5	1706.8	1584.0	1558.8
55°	2590.7	2541.9	2549.2	2535.4	2396.3	2170.3	1960.5	1772.7	1573.4	1458.0	1434.4
57.5°	2391.5	2328.0	2354.1	2345.9	2209.3	1997.9	1810.1	1628.7	1440.9	1334.4	1311.6
60°	2187.4	2126.4	2153.2	2145.9	2017.4	1825.5	1654.7	1486.4	1309.2	1212.4	1189.6
62.5°	1977.6	1921.5	1945.9	1940.2	1822.3	1649.1	1500.3	1345.8	1176.6	1089.6	1068.5
65°	1766.1	1712.5	1734.4	1730.4	1621.4	1489.7	1341.7	1200.2	1043.3	967.6	946.5
67.5°	1549.9	1500.3	1520.6	1520.6	1420.6	1294.5	1182.3	1053.0	912.3	847.3	827.8
70°	1335.2	1288.8	1306.7	1305.1	1220.5	1118.1	1021.3	905.8	779.8	726.1	709.9
72.5°	1118.9	1078.2	1094.5	1092.9	1022.1	956.3	860.3	760.3	650.5	607.4	592.8
75°	909.1	870.9	886.3	884.7	827.0	765.2	700.9	618.0	523.7	493.6	478.9
77.5°	709.1	670.0	683.0	683.0	640.8	596.0	544.8	480.6	413.9	381.4	370.8
80°	517.2	498.5	492.0	492.8	464.3	435.0	409.0	347.2	298.4	276.5	269.2
82.5°	339.9	324.4	317.9	319.6	303.3	285.4	269.2	226.1	193.5	180.5	176.5
85°	180.5	169.1	163.4	167.5	164.3	154.5	146.4	117.1	96.8	91.9	89.4
87.5°	56.9	49.6	45.5	60.2	51.2	45.5	43.9	35.0	26.8	26.8	26.0
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9
2.5°	3481.1	3481.1	3449.4	3442.0	3438.8	3442.9	3411.1	3405.4	3451.0	3435.5	3400.6
5°	3453.4	3451.8	3407.1	3398.9	3398.9	3394.1	3358.3	3350.2	3395.7	3382.7	3344.5
7.5°	3419.3	3414.4	3361.5	3355.8	3347.7	3344.5	3304.6	3298.9	3338.0	3329.8	3294.0
10°	3377.8	3372.9	3310.3	3306.2	3297.3	3290.8	3253.4	3249.3	3289.2	3276.2	3247.7
12.5°	3323.3	3314.4	3250.1	3246.1	3238.8	3236.3	3199.7	3198.1	3242.0	3229.0	3198.9
15°	3251.8	3244.4	3172.9	3174.5	3175.3	3175.3	3146.1	3144.4	3187.5	3181.8	3149.3
17.5°	3172.9	3163.1	3094.8	3099.7	3105.4	3111.9	3089.1	3093.2	3138.7	3131.4	3102.1
20°	3083.4	3073.7	3007.0	3020.8	3033.0	3046.0	3031.4	3042.8	3085.1	3081.8	3059.9
22.5°	2983.4	2973.7	2911.9	2933.0	2953.3	2977.7	2971.2	2984.2	3029.0	3028.1	3008.6
25°	2861.5	2863.9	2809.4	2835.4	2869.6	2903.7	2906.2	2927.3	2976.9	2972.0	2954.2
27.5°	2747.6	2750.9	2693.1	2737.0	2782.6	2826.5	2837.1	2866.3	2916.7	2912.7	2897.2
30°	2628.1	2632.1	2576.0	2636.2	2691.5	2745.2	2767.9	2807.8	2859.0	2859.0	2842.8
32.5°	2503.7	2511.0	2452.4	2532.9	2597.2	2659.8	2699.6	2741.1	2799.7	2798.0	2784.2
35°	2376.0	2384.1	2330.5	2432.9	2497.2	2573.6	2623.2	2678.5	2730.5	2731.4	2720.8
37.5°	2245.9	2255.7	2206.9	2319.1	2392.3	2482.5	2546.0	2601.2	2659.0	2662.2	2652.5
40°	2116.6	2127.2	2084.9	2193.0	2285.7	2386.6	2459.8	2524.8	2588.2	2589.9	2583.4
42.5°	1987.3	1998.7	1967.0	2072.7	2177.6	2285.7	2371.9	2445.9	2511.0	2515.1	2507.7
45°	1861.3	1871.0	1848.3	1963.7	2064.6	2182.5	2281.7	2365.4	2431.3	2437.0	2434.6
47.5°	1736.1	1745.0	1724.7	1830.4	1946.7	2071.9	2186.5	2279.2	2349.2	2355.7	2354.1
50°	1613.3	1620.6	1598.6	1709.2	1824.7	1958.1	2077.6	2184.9	2263.0	2269.5	2268.7
52.5°	1491.3	1498.6	1479.9	1596.2	1701.1	1841.8	1971.9	2088.2	2165.4	2175.2	2176.8
55°	1373.4	1376.7	1362.0	1473.4	1575.1	1722.2	1871.9	1984.9	2062.1	2070.3	2075.1
57.5°	1255.5	1256.3	1244.1	1350.6	1448.2	1598.6	1755.6	1874.3	1947.5	1955.6	1962.9
60°	1138.4	1137.6	1123.8	1227.0	1320.5	1469.4	1632.8	1750.7	1821.4	1828.8	1838.5
62.5°	1022.1	1019.7	1007.5	1102.6	1190.4	1337.6	1501.9	1615.7	1683.2	1688.1	1701.1
65°	906.7	904.2	892.8	980.7	1060.3	1201.0	1362.0	1470.2	1531.1	1537.7	1535.2
67.5°	792.8	787.9	779.0	857.9	930.2	1060.3	1214.8	1318.1	1368.5	1374.2	1389.7
70°	679.0	673.3	653.0	736.7	800.1	916.4	1060.3	1152.2	1194.5	1200.2	1197.8
72.5°	566.8	561.1	539.1	616.4	670.0	771.7	900.2	976.6	1013.2	1018.1	1018.1
75°	457.8	454.5	440.7	499.3	544.0	626.9	735.9	799.3	827.8	833.5	831.8
77.5°	352.9	350.5	336.6	387.1	422.0	483.8	571.6	621.2	642.4	648.9	662.7
80°	252.9	252.1	230.1	279.7	295.2	347.2	411.5	449.7	461.1	470.0	479.8
82.5°	161.8	162.6	140.7	183.0	189.5	222.8	262.6	286.2	294.4	301.7	309.0
85°	78.9	82.1	69.9	96.8	97.6	114.7	131.7	140.7	143.9	149.6	156.1
87.5°	20.3	23.6	13.0	27.6	24.4	31.7	36.6	39.0	38.2	42.3	44.7
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°	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9
2.5°	3412.0	3438.0	3425.0	3467.2	3483.5	3457.5	3503.0	3503.8	3471.3	3509.5	3530.7
5°	3359.1	3385.9	3377.8	3421.7	3442.0	3419.3	3474.6	3485.1	3453.4	3496.5	3530.7
7.5°	3305.4	3337.1	3326.6	3371.3	3395.7	3377.8	3437.2	3454.2	3429.8	3477.0	3522.5
10°	3259.1	3285.9	3274.5	3321.7	3342.8	3328.2	3386.7	3418.5	3395.7	3453.4	3507.9
12.5°	3213.5	3235.5	3222.5	3261.5	3281.8	3263.1	3334.7	3364.0	3347.7	3407.9	3477.8
15°	3155.0	3179.4	3161.5	3196.5	3211.9	3195.7	3254.2	3304.6	3284.3	3350.2	3427.4
17.5°	3110.3	3124.1	3099.7	3127.4	3136.3	3114.3	3173.7	3223.3	3208.7	3280.2	3369.7
20°	3060.7	3072.1	3037.9	3053.4	3052.5	3024.9	3079.4	3128.2	3118.4	3197.3	3298.9
22.5°	3005.4	3011.1	2971.2	2974.5	2972.9	2927.3	2976.1	3025.7	3021.6	3101.3	3215.2
25°	2946.8	2947.6	2896.4	2894.8	2876.9	2823.2	2866.3	2922.4	2910.2	2996.4	3116.0
27.5°	2889.1	2881.0	2819.2	2804.5	2776.1	2711.8	2750.1	2800.5	2793.1	2877.7	3010.3
30°	2827.3	2816.7	2741.1	2714.3	2672.8	2598.8	2630.5	2677.7	2681.7	2755.7	2894.8
32.5°	2768.8	2741.9	2658.2	2619.1	2567.1	2480.9	2498.0	2546.0	2552.5	2627.3	2770.4
35°	2693.1	2675.2	2572.0	2505.3	2454.1	2359.7	2377.6	2411.0	2420.7	2493.9	2639.5
37.5°	2621.6	2593.1	2483.3	2402.0	2336.2	2237.0	2241.8	2276.0	2285.7	2359.7	2503.7
40°	2547.6	2506.9	2389.0	2293.9	2218.3	2114.2	2108.5	2144.3	2151.6	2223.9	2354.1
42.5°	2468.7	2419.9	2287.4	2183.3	2096.3	1990.6	1979.2	2010.1	2018.2	2089.0	2216.6
45°	2389.0	2330.5	2183.3	2069.5	1974.3	1866.2	1854.8	1878.4	1890.6	1957.2	2080.0
47.5°	2304.4	2236.1	2076.0	1949.1	1850.7	1742.6	1728.7	1752.3	1762.1	1827.9	1944.2
50°	2215.8	2132.9	1965.4	1825.5	1727.9	1621.4	1601.1	1628.7	1637.7	1699.5	1813.3
52.5°	2118.2	2026.4	1847.5	1701.1	1603.5	1501.9	1477.5	1504.3	1514.9	1575.1	1680.0
55°	2015.0	1915.8	1728.7	1586.4	1480.7	1381.5	1361.2	1371.8	1394.5	1451.5	1549.0
57.5°	1898.7	1800.3	1603.5	1458.8	1357.1	1262.0	1244.9	1254.7	1275.8	1331.1	1418.9
60°	1775.1	1671.0	1475.9	1331.1	1232.7	1142.5	1127.0	1136.0	1158.7	1209.1	1290.5
62.5°	1653.1	1536.0	1344.1	1200.2	1110.8	1027.0	1022.9	1019.7	1040.8	1089.6	1161.2
65°	1505.1	1392.9	1206.7	1070.1	988.8	913.2	896.9	904.2	924.5	969.3	1044.1
67.5°	1346.6	1244.9	1066.0	940.0	867.6	800.1	786.3	789.6	810.7	849.7	914.8
70°	1178.2	1088.8	922.1	809.1	748.1	684.7	675.7	676.5	696.9	731.0	787.9
72.5°	1001.8	921.3	776.6	679.8	629.4	583.8	575.7	565.9	584.7	613.9	662.7
75°	822.1	751.3	631.8	552.9	513.1	474.9	467.6	457.8	476.5	501.7	539.9
77.5°	640.8	583.8	491.1	430.2	399.3	370.8	364.3	353.7	372.4	391.1	421.2
80°	463.5	422.0	366.7	302.5	291.9	273.2	266.7	255.3	273.2	285.4	308.2
82.5°	299.2	271.6	239.9	195.2	193.5	179.7	176.5	163.4	179.7	187.0	204.1
85°	151.2	138.2	130.1	99.2	102.5	93.5	92.7	78.9	91.9	95.1	104.9
87.5°	43.1	45.5	40.7	24.4	30.9	29.3	29.3	21.1	29.3	29.3	33.3
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: P837889

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-5HI-35-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9	3485.9
2.5°	3489.2	3503.0	3506.3	3505.5	3514.4	3563.2	3546.9	3563.2
5°	3497.3	3528.2	3536.4	3547.7	3562.4	3617.7	3599.8	3619.3
7.5°	3502.2	3548.6	3566.4	3588.4	3612.0	3673.8	3659.1	3678.7
10°	3502.2	3562.4	3588.4	3625.0	3656.7	3728.3	3714.4	3737.2
12.5°	3487.6	3564.8	3601.4	3652.6	3693.3	3770.5	3764.9	3781.1
15°	3457.5	3552.6	3603.0	3668.9	3719.3	3805.5	3803.1	3822.6
17.5°	3416.8	3531.5	3592.5	3675.4	3738.8	3835.6	3841.3	3851.9
20°	3365.6	3491.6	3571.3	3673.0	3752.7	3859.2	3866.5	3881.1
22.5°	3298.1	3443.7	3539.6	3662.4	3754.3	3868.9	3881.9	3895.8
25°	3218.4	3385.9	3498.1	3642.1	3746.2	3868.1	3886.0	3898.2
27.5°	3127.4	3311.1	3445.3	3609.5	3723.4	3855.1	3877.1	3891.7
30°	3021.6	3231.4	3385.1	3567.3	3692.5	3830.7	3854.3	3868.9
32.5°	2912.7	3143.6	3313.6	3512.8	3647.8	3791.7	3812.0	3823.4
35°	2794.0	3037.1	3227.4	3442.9	3590.0	3729.1	3744.5	3756.7
37.5°	2664.7	2921.6	3129.0	3364.0	3508.7	3642.1	3655.9	3669.7
40°	2531.3	2800.5	3018.4	3267.2	3412.0	3535.5	3550.2	3559.9
42.5°	2397.1	2666.3	2900.5	3153.4	3297.3	3416.0	3425.0	3434.7
45°	2261.4	2527.3	2767.9	3027.3	3169.6	3281.0	3284.3	3292.4
47.5°	2123.1	2383.3	2622.4	2883.4	3024.1	3125.7	3129.0	3135.5
50°	1984.1	2239.4	2467.1	2728.1	2865.5	2972.9	2958.2	2964.7
52.5°	1847.5	2088.2	2320.7	2560.6	2696.4	2791.5	2795.6	2782.6
55°	1713.3	1940.2	2154.0	2385.0	2514.2	2588.2	2585.8	2590.7
57.5°	1577.5	1790.5	1986.5	2197.9	2324.0	2393.9	2408.5	2391.5
60°	1439.3	1639.3	1814.9	2006.0	2128.0	2186.5	2203.6	2187.4
62.5°	1301.8	1485.6	1645.0	1811.7	1924.7	1997.1	1995.5	1977.6
65°	1164.4	1331.1	1473.4	1614.9	1713.3	1785.7	1782.4	1766.1
67.5°	1037.6	1175.0	1302.7	1417.3	1502.7	1552.3	1569.4	1549.9
70°	897.7	1016.4	1128.6	1220.5	1291.3	1336.0	1352.3	1335.2
72.5°	757.9	858.7	937.6	1026.2	1080.7	1118.1	1135.1	1118.9
75°	619.6	702.6	766.8	835.9	874.1	905.8	925.4	909.1
77.5°	485.4	549.7	600.9	651.3	695.2	702.6	719.6	709.1
80°	357.8	404.1	441.5	474.9	506.6	509.8	523.7	517.2
82.5°	238.3	269.2	278.9	313.9	334.2	330.9	344.8	339.9
85°	126.0	144.7	161.8	172.4	183.8	173.2	185.4	180.5
87.5°	42.3	44.7	39.0	55.3	61.0	52.0	59.4	56.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)