

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: PORTFOLIO

Report Number: P245410

Luminaire Tested: **LD8B40D010 ER8B40850 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245410  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B40D010 ER8B40850 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4543.0 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

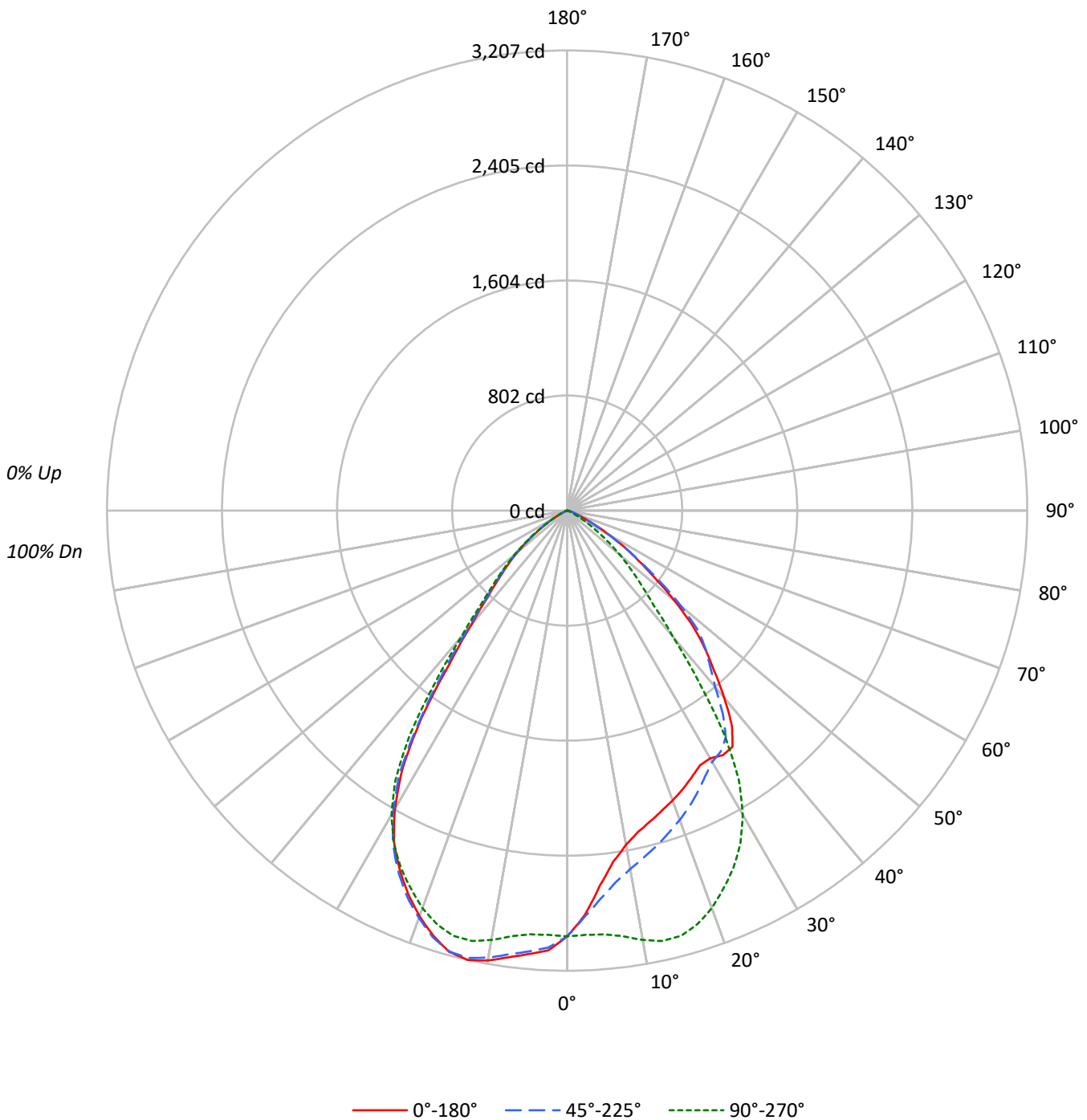
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82					82			
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67					67			
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39					39			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	91516	91516	91516
5°	81199	91748	96044
10°	74031	95151	99691
15°	71545	97934	101592
20°	70523	96726	98722
25°	69831	93389	93975
30°	70968	87155	85545
35°	75646	72123	66897
40°	68552	46175	41812
45°	59169	31590	29414
50°	46687	23041	21698
55°	32407	14172	13333
60°	20629	7166	6395
65°	10295	2846	2160
70°	5698	1406	775
75°	4087	1025	369
80°	3321	693	142
85°	3573	566	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.6	6.1
10°-20°	798.9	17.6
20°-30°	1159.6	25.5
30°-40°	1142.1	25.1
40°-50°	715.9	15.8
50°-60°	345.5	7.6
60°-70°	83.6	1.8
70°-80°	16.9	0.4
80°-90°	3.9	0.1
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°	2235.2	49.2
0°-40°	3377.2	74.3
0°-60°	4438.6	97.7
0°-90°	4543.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4543.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2968	2968	2968	2968	2968	
5°	2623	2712	2964	3084	3103	243
15°	2241	2417	3068	3180	3182	634
25°	2052	2159	2745	2782	2762	950
35°	2010	1928	1916	1807	1777	1216
45°	1357	1366	724	694	674	1037
55°	603	622	264	260	248	555
65°	141	140	39	34	30	161
75°	34	30	9	4	3	39
85°	10	8	2	0	0	10
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8
2.5°	2821.3	2803.3	2769.8	2810.3	2810.3	2787.7	2832.9	2805.7	2827.5	2861.8	2831.4
5°	2623.2	2608.4	2580.3	2623.2	2628.6	2607.6	2662.2	2641.9	2673.9	2716.0	2712.1
7.5°	2466.5	2447.7	2422.0	2466.5	2475.0	2461.0	2513.2	2503.9	2546.0	2600.6	2609.9
10°	2364.3	2344.8	2322.2	2362.7	2369.0	2359.6	2412.6	2407.2	2448.5	2511.7	2536.6
12.5°	2291.8	2275.4	2250.5	2293.3	2300.4	2287.1	2337.0	2334.7	2377.6	2443.8	2475.0
15°	2241.1	2221.6	2199.0	2235.6	2245.0	2230.2	2277.7	2273.1	2316.7	2382.2	2417.3
17.5°	2193.5	2175.6	2152.2	2186.5	2195.9	2180.3	2227.1	2219.3	2256.7	2319.1	2354.9
20°	2149.1	2129.6	2108.5	2143.6	2149.1	2131.1	2177.9	2167.8	2201.3	2259.0	2294.1
22.5°	2103.1	2082.8	2061.0	2095.3	2100.7	2082.8	2125.7	2114.0	2145.2	2197.4	2229.4
25°	2052.4	2033.7	2011.8	2043.8	2048.5	2029.0	2074.2	2059.4	2086.7	2132.7	2159.2
27.5°	2001.7	1983.8	1959.6	1992.3	1994.7	1976.0	2017.3	1997.0	2019.6	2061.7	2084.4
30°	1993.1	1972.8	1947.9	1974.4	1975.2	1951.0	1990.0	1965.8	1978.3	2009.5	2022.8
32.5°	2020.4	2000.1	1974.4	1996.2	1993.9	1967.4	2004.8	1975.2	1979.1	1995.5	1992.3
35°	2009.5	1985.3	1954.9	1978.3	1978.3	1946.3	1983.8	1948.7	1944.8	1947.1	1927.6
37.5°	1885.5	1866.8	1837.9	1860.6	1858.2	1834.0	1862.9	1834.0	1820.8	1815.3	1780.2
40°	1703.0	1680.4	1658.6	1682.8	1685.1	1659.4	1696.8	1664.1	1660.2	1644.6	1603.2
42.5°	1518.2	1510.4	1489.4	1509.7	1520.6	1498.7	1529.9	1514.3	1516.7	1512.8	1473.8
45°	1356.8	1343.6	1328.0	1351.4	1358.4	1347.5	1378.7	1369.3	1378.7	1398.1	1366.2
47.5°	1182.9	1169.7	1152.5	1177.5	1189.9	1169.7	1196.2	1193.1	1207.1	1240.6	1237.5
50°	973.2	963.8	960.7	963.8	971.6	962.3	981.0	981.7	991.1	1037.1	1040.2
52.5°	770.4	768.1	757.2	767.3	767.3	752.5	771.2	762.6	772.0	803.2	823.4
55°	602.8	600.4	593.4	602.8	592.6	587.2	592.6	584.1	577.0	601.2	622.3
57.5°	469.4	461.6	453.1	457.0	456.2	444.5	450.7	440.6	435.1	443.7	462.4
60°	334.5	332.2	324.4	328.3	331.4	322.8	329.1	324.4	315.0	322.0	322.8
62.5°	222.2	223.8	219.1	219.9	217.6	216.0	219.9	222.2	219.9	216.8	217.6
65°	141.1	140.4	139.6	140.4	141.9	138.8	141.1	142.7	140.4	140.4	139.6
67.5°	93.6	91.2	88.9	90.5	92.0	89.7	92.0	91.2	92.0	91.2	88.9
70°	63.2	62.4	61.6	62.4	62.4	60.8	62.4	61.6	62.4	61.6	59.3
72.5°	46.0	46.0	45.2	46.0	46.0	44.4	45.2	43.7	44.4	43.7	42.1
75°	34.3	34.3	33.5	34.3	33.5	32.8	33.5	32.8	31.2	31.2	29.6
77.5°	25.0	25.0	25.0	25.0	25.0	24.2	24.2	23.4	22.6	21.8	21.8
80°	18.7	17.9	17.9	17.9	17.9	17.2	17.9	17.2	16.4	15.6	14.8
82.5°	13.3	14.0	13.3	13.3	13.3	12.5	13.3	12.5	12.5	11.7	10.1
85°	10.1	10.1	10.1	10.1	10.1	9.4	9.4	9.4	8.6	8.6	7.8
87.5°	5.5	5.5	5.5	6.2	5.5	5.5	5.5	4.7	4.7	3.9	3.9
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8
2.5°	2871.9	2875.8	2867.3	2880.5	2932.0	2890.7	2907.8	2913.3	2952.3	2959.3	2954.6
5°	2762.8	2779.9	2790.8	2820.5	2877.4	2847.8	2878.2	2897.7	2947.6	2964.0	2967.8
7.5°	2677.0	2712.9	2739.4	2787.7	2854.8	2832.2	2878.2	2910.1	2971.0	2992.0	3002.2
10°	2613.0	2667.6	2713.6	2779.9	2855.6	2840.7	2900.8	2946.0	3013.9	3038.8	3051.3
12.5°	2564.7	2631.0	2692.6	2776.8	2858.7	2851.7	2924.2	2975.6	3047.4	3072.3	3087.2
15°	2511.7	2588.1	2659.8	2754.2	2842.3	2840.7	2918.7	2973.3	3046.6	3067.7	3081.7
17.5°	2448.5	2530.4	2609.2	2711.3	2798.6	2800.2	2879.0	2932.8	3004.5	3021.7	3031.0
20°	2384.6	2465.7	2544.4	2649.7	2735.5	2737.8	2815.0	2864.9	2933.5	2947.6	2949.9
22.5°	2316.7	2392.4	2471.1	2575.6	2658.3	2659.8	2736.3	2783.0	2841.5	2848.5	2854.8
25°	2239.5	2313.6	2387.7	2491.4	2570.2	2574.8	2644.2	2685.6	2739.4	2744.8	2747.2
27.5°	2159.2	2220.0	2291.0	2379.9	2459.4	2456.3	2521.8	2568.6	2616.9	2613.8	2613.0
30°	2078.1	2128.8	2172.5	2258.2	2316.7	2319.1	2380.7	2403.3	2454.0	2447.7	2447.0
32.5°	2021.2	2034.5	2046.1	2089.8	2145.2	2125.7	2167.8	2195.9	2231.0	2228.6	2229.4
35°	1916.7	1892.5	1857.4	1863.7	1897.2	1866.8	1889.4	1888.6	1924.5	1915.9	1926.1
37.5°	1738.1	1669.5	1591.5	1547.1	1553.3	1515.1	1507.3	1526.0	1538.5	1514.3	1522.9
40°	1547.9	1446.5	1324.8	1223.5	1218.0	1170.5	1161.9	1143.2	1167.3	1147.1	1153.3
42.5°	1407.5	1273.4	1113.5	990.3	963.8	924.0	900.6	897.5	904.5	890.5	886.6
45°	1299.9	1157.2	973.9	832.8	803.2	760.3	736.9	728.3	729.1	724.4	720.5
47.5°	1173.6	1030.1	844.5	700.2	666.7	626.2	602.8	597.3	600.4	594.2	589.5
50°	998.9	870.2	701.0	569.2	539.6	510.0	491.3	485.8	485.0	480.3	477.2
52.5°	811.0	704.1	557.5	447.6	421.1	392.2	379.0	372.0	372.7	368.1	363.4
55°	627.7	561.4	432.0	338.4	314.3	291.6	279.2	270.6	268.2	263.6	261.2
57.5°	467.1	422.6	323.6	244.1	230.0	208.2	195.7	185.6	184.0	181.7	180.9
60°	327.5	295.5	227.7	173.9	157.5	144.3	131.8	121.6	117.0	116.2	113.8
62.5°	212.1	192.6	149.7	116.2	103.7	94.4	81.9	74.9	71.7	68.6	69.4
65°	131.8	117.0	93.6	74.9	67.8	60.8	51.5	45.2	42.1	39.0	39.8
67.5°	81.9	73.3	59.3	48.3	43.7	38.2	31.2	26.5	24.2	21.8	20.3
70°	55.4	47.6	40.5	34.3	31.2	27.3	22.6	18.7	17.2	15.6	14.0
72.5°	39.0	35.1	29.6	25.7	23.4	20.3	17.2	14.8	13.3	11.7	10.1
75°	28.1	25.0	21.8	18.7	17.2	15.6	13.3	11.7	10.1	8.6	7.0
77.5°	20.3	17.9	15.6	14.0	13.3	10.9	9.4	8.6	7.8	6.2	4.7
80°	14.0	12.5	10.1	9.4	9.4	7.8	7.0	6.2	5.5	3.9	3.1
82.5°	9.4	8.6	7.8	7.0	6.2	5.5	5.5	3.9	3.1	2.3	1.6
85°	7.0	6.2	5.5	4.7	4.7	3.9	3.1	2.3	2.3	1.6	0.8
87.5°	3.9	3.9	3.1	2.3	2.3	1.6	1.6	0.8	0.8	0.8	0.8
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8
2.5°	2994.4	2996.7	3010.0	2999.8	3025.6	3044.3	3034.9	3056.0	3048.9	3047.4	3071.6
5°	3014.6	3020.1	3038.0	3028.7	3056.7	3077.0	3067.7	3091.1	3084.0	3082.5	3107.4
7.5°	3053.6	3059.1	3074.7	3066.9	3096.5	3114.4	3102.8	3128.5	3119.1	3118.3	3142.5
10°	3102.8	3110.5	3123.8	3116.0	3143.3	3158.9	3147.2	3172.2	3163.6	3159.7	3186.2
12.5°	3139.4	3144.9	3158.1	3151.9	3178.4	3190.1	3180.0	3204.1	3193.2	3190.1	3213.5
15°	3130.8	3136.3	3147.2	3141.7	3166.7	3177.6	3164.4	3190.9	3180.0	3173.7	3194.8
17.5°	3076.2	3079.4	3087.2	3081.7	3108.2	3115.2	3100.4	3126.9	3116.8	3105.9	3126.1
20°	2995.9	2994.4	2999.0	2996.7	3018.5	3022.4	3013.1	3032.6	3020.9	3014.6	3026.3
22.5°	2896.1	2894.6	2897.7	2891.4	2913.3	2915.6	2901.6	2925.0	2913.3	2901.6	2921.1
25°	2785.4	2776.8	2775.2	2777.6	2792.4	2794.7	2779.9	2797.1	2782.3	2772.9	2791.6
27.5°	2648.9	2638.0	2635.7	2638.0	2652.8	2641.9	2629.4	2641.9	2627.1	2618.5	2630.2
30°	2480.5	2464.9	2457.9	2453.2	2468.8	2464.9	2436.0	2450.1	2426.7	2414.2	2422.8
32.5°	2253.6	2245.0	2226.3	2215.4	2230.2	2200.5	2182.6	2182.6	2173.3	2152.2	2156.9
35°	1938.5	1925.3	1908.1	1898.8	1901.1	1861.3	1831.7	1837.9	1806.8	1801.3	1803.6
37.5°	1540.1	1518.2	1512.0	1492.5	1497.2	1462.1	1421.5	1422.3	1405.9	1388.8	1383.3
40°	1157.2	1153.3	1147.1	1130.7	1136.9	1098.7	1083.1	1083.9	1073.0	1060.5	1066.7
42.5°	894.4	881.9	878.0	872.6	874.1	867.9	847.6	850.0	840.6	837.5	834.4
45°	726.8	713.5	704.1	708.8	708.8	701.8	694.0	698.7	694.0	687.8	690.9
47.5°	598.9	586.4	581.7	580.9	586.4	581.7	573.9	575.5	574.7	572.4	570.8
50°	478.0	474.9	471.0	468.6	471.0	469.4	462.4	466.3	468.6	460.9	463.2
52.5°	364.2	364.2	363.4	357.9	362.6	357.9	357.1	358.7	356.4	353.2	352.5
55°	266.7	264.3	260.4	259.7	261.2	259.7	258.1	258.9	260.4	252.6	252.6
57.5°	182.5	180.9	178.6	178.6	181.7	177.8	175.5	178.6	175.5	172.3	172.3
60°	117.0	116.2	113.8	113.8	113.8	113.1	110.7	111.5	113.1	108.4	109.2
62.5°	70.2	67.8	67.1	66.3	67.1	66.3	66.3	65.5	64.7	64.7	62.4
65°	38.2	36.6	35.1	35.9	35.9	35.1	35.1	35.1	33.5	32.8	32.0
67.5°	19.5	17.9	17.9	17.2	17.2	17.2	17.2	16.4	16.4	16.4	15.6
70°	12.5	11.7	10.9	10.9	10.9	10.1	10.1	10.1	10.1	10.1	9.4
72.5°	8.6	7.8	7.0	7.0	7.0	6.2	6.2	6.2	6.2	5.5	5.5
75°	6.2	5.5	4.7	4.7	4.7	3.9	3.9	3.9	3.9	3.9	3.9
77.5°	3.9	3.1	3.1	3.1	3.1	2.3	2.3	2.3	2.3	2.3	1.6
80°	2.3	2.3	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8
82.5°	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0
85°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0
87.5°	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P245410

CATALOG NUMBER: LD8B40D010 ER8B40850 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8	2967.8
2.5°	3063.0	3056.7	3060.6	3089.5	3077.0	3073.1	3040.4	3069.2
5°	3099.6	3095.0	3095.0	3127.7	3112.9	3109.8	3077.8	3102.8
7.5°	3133.9	3129.3	3130.0	3163.6	3151.9	3147.2	3115.2	3140.2
10°	3178.4	3175.3	3176.1	3208.0	3195.5	3190.9	3158.1	3183.8
12.5°	3204.9	3200.2	3200.2	3234.5	3220.5	3213.5	3182.3	3207.2
15°	3184.6	3177.6	3177.6	3211.9	3196.3	3186.2	3158.9	3182.3
17.5°	3115.2	3108.2	3108.2	3137.8	3126.1	3111.3	3083.3	3105.1
20°	3018.5	3010.0	3007.6	3041.9	3025.6	3012.3	2987.3	3008.4
22.5°	2909.4	2905.5	2898.4	2932.8	2917.9	2903.9	2877.4	2893.8
25°	2778.4	2772.1	2765.1	2798.6	2783.8	2769.8	2748.7	2762.0
27.5°	2615.4	2616.2	2612.3	2638.8	2624.0	2616.2	2590.4	2612.3
30°	2418.1	2409.5	2406.4	2437.6	2423.6	2413.4	2381.5	2402.5
32.5°	2160.8	2148.3	2131.9	2167.0	2142.8	2134.3	2107.0	2137.4
35°	1786.5	1782.6	1767.8	1797.4	1784.1	1768.5	1751.4	1777.1
37.5°	1381.0	1384.1	1382.6	1390.4	1382.6	1372.4	1353.7	1344.3
40°	1054.3	1046.5	1040.2	1054.3	1037.9	1037.9	1027.0	1038.7
42.5°	826.6	823.4	831.2	834.4	825.0	823.4	821.9	821.1
45°	682.3	682.3	683.9	687.0	683.9	682.3	677.6	674.5
47.5°	562.2	565.3	562.2	572.4	566.9	565.3	556.0	559.9
50°	455.4	451.5	455.4	458.5	459.3	454.6	449.9	452.3
52.5°	353.2	347.0	345.4	350.1	347.0	347.0	343.9	343.1
55°	248.8	251.1	247.2	251.1	249.5	247.2	244.9	248.0
57.5°	168.4	169.2	167.7	170.0	166.1	166.9	166.1	165.3
60°	109.2	106.1	106.1	108.4	104.5	104.5	103.7	103.7
62.5°	62.4	61.6	61.6	60.8	60.0	60.0	60.0	58.5
65°	32.0	31.2	30.4	30.4	30.4	30.4	29.6	29.6
67.5°	15.6	14.8	14.8	15.6	14.8	14.8	14.8	14.8
70°	9.4	9.4	8.6	9.4	8.6	8.6	8.6	8.6
72.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
75°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
77.5°	2.3	1.6	1.6	1.6	1.6	1.6	1.6	1.6
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)