

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: P245440

Luminaire Tested: **LD8B40D010 ER8B40950 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245440  
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 ER8B40950 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
90 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4136.0 lumens  
Efficiency: N/A  
Efficacy: 101.1 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

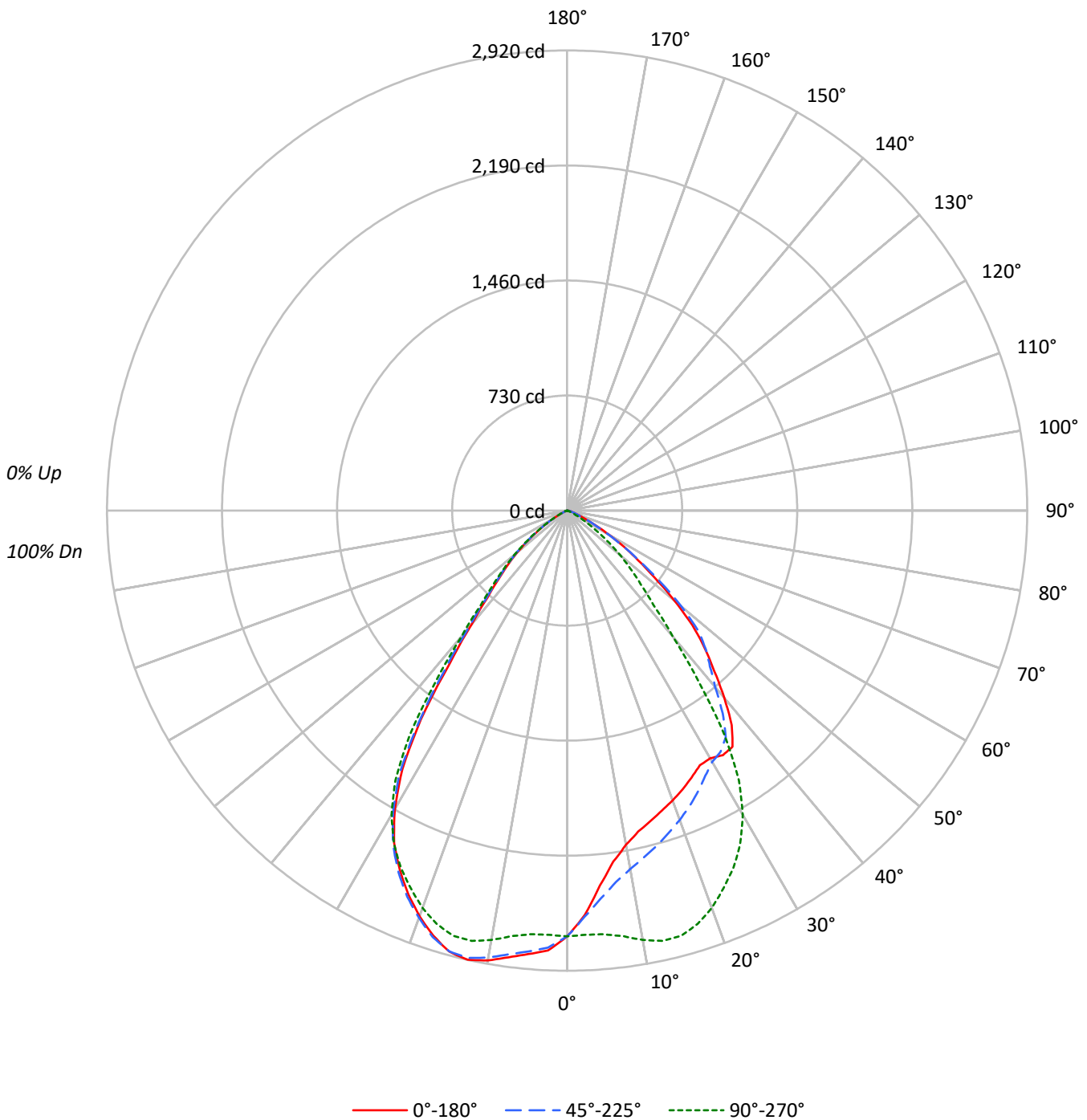
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	83320	83320	83320
5°	73925	83527	87439
10°	67399	86628	90761
15°	65135	89158	92491
20°	64203	88060	89878
25°	63574	85023	85554
30°	64612	79346	77883
35°	68870	65663	60905
40°	62414	42037	38064
45°	53870	28760	26780
50°	42504	20979	19755
55°	29504	12903	12139
60°	18785	6525	5822
65°	9376	2590	1970
70°	5184	1280	703
75°	3717	929	334
80°	3019	622	124
85°	3255	495	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	251.8	6.1
10°-20°	727.4	17.6
20°-30°	1055.7	25.5
30°-40°	1039.8	25.1
40°-50°	651.8	15.8
50°-60°	314.5	7.6
60°-70°	76.1	1.8
70°-80°	15.4	0.4
80°-90°	3.5	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°	2034.9	49.2
0°-40°	3074.7	74.3
0°-60°	4041.0	97.7
0°-90°	4136.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4136.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2702	2702	2702	2702	2702	
5°	2388	2469	2698	2808	2825	221
15°	2040	2201	2793	2895	2897	577
25°	1868	1966	2499	2533	2514	865
35°	1830	1755	1744	1645	1618	1107
45°	1235	1244	660	632	614	944
55°	549	566	240	237	226	505
65°	128	127	36	30	27	147
75°	31	27	8	4	3	35
85°	9	7	1	0	0	9
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°	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0
2.5°	2568.5	2552.2	2521.6	2558.6	2558.6	2538.0	2579.1	2554.3	2574.2	2605.4	2577.7
5°	2388.2	2374.7	2349.1	2388.2	2393.1	2374.0	2423.7	2405.2	2434.3	2472.7	2469.1
7.5°	2245.5	2228.4	2205.0	2245.5	2253.3	2240.5	2288.1	2279.6	2317.9	2367.6	2376.1
10°	2152.5	2134.7	2114.1	2151.1	2156.7	2148.2	2196.5	2191.5	2229.2	2286.7	2309.4
12.5°	2086.5	2071.6	2048.8	2087.9	2094.3	2082.2	2127.6	2125.5	2164.6	2224.9	2253.3
15°	2040.3	2022.6	2002.0	2035.3	2043.9	2030.4	2073.7	2069.4	2109.2	2168.8	2200.8
17.5°	1997.0	1980.7	1959.4	1990.6	1999.1	1984.9	2027.5	2020.4	2054.5	2111.3	2144.0
20°	1956.5	1938.8	1919.6	1951.6	1956.5	1940.2	1982.8	1973.6	2004.1	2056.6	2088.6
22.5°	1914.7	1896.2	1876.3	1907.6	1912.5	1896.2	1935.2	1924.6	1953.0	2000.6	2029.7
25°	1868.5	1851.5	1831.6	1860.7	1865.0	1847.2	1888.4	1874.9	1899.8	1941.6	1965.8
27.5°	1822.4	1806.0	1784.0	1813.9	1816.0	1798.9	1836.6	1818.1	1838.7	1877.0	1897.6
30°	1814.6	1796.1	1773.4	1797.5	1798.2	1776.2	1811.7	1789.7	1801.1	1829.5	1841.5
32.5°	1839.4	1821.0	1797.5	1817.4	1815.3	1791.1	1825.2	1798.2	1801.8	1816.7	1813.9
35°	1829.5	1807.5	1779.8	1801.1	1801.1	1772.0	1806.0	1774.1	1770.5	1772.7	1754.9
37.5°	1716.6	1699.6	1673.3	1693.9	1691.7	1669.7	1696.0	1669.7	1657.7	1652.7	1620.8
40°	1550.5	1529.9	1510.0	1532.0	1534.1	1510.7	1544.8	1515.0	1511.4	1497.2	1459.6
42.5°	1382.2	1375.1	1356.0	1374.4	1384.3	1364.5	1392.9	1378.7	1380.8	1377.2	1341.8
45°	1235.3	1223.2	1209.0	1230.3	1236.7	1226.7	1255.1	1246.6	1255.1	1272.9	1243.8
47.5°	1077.0	1064.9	1049.3	1072.0	1083.3	1064.9	1089.0	1086.2	1099.0	1129.5	1126.6
50°	886.0	877.5	874.6	877.5	884.6	876.0	893.1	893.8	902.3	944.2	947.0
52.5°	701.4	699.3	689.3	698.6	698.6	685.1	702.1	694.3	702.8	731.2	749.7
55°	548.8	546.6	540.3	548.8	539.5	534.6	539.5	531.7	525.3	547.4	566.5
57.5°	427.4	420.3	412.5	416.0	415.3	404.7	410.3	401.1	396.1	403.9	421.0
60°	304.6	302.4	295.3	298.9	301.7	293.9	299.6	295.3	286.8	293.2	293.9
62.5°	202.3	203.7	199.5	200.2	198.1	196.6	200.2	202.3	200.2	197.4	198.1
65°	128.5	127.8	127.1	127.8	129.2	126.4	128.5	129.9	127.8	127.8	127.1
67.5°	85.2	83.1	80.9	82.4	83.8	81.6	83.8	83.1	83.8	83.1	80.9
70°	57.5	56.8	56.1	56.8	56.8	55.4	56.8	56.1	56.8	56.1	54.0
72.5°	41.9	41.9	41.2	41.9	41.9	40.5	41.2	39.8	40.5	39.8	38.3
75°	31.2	31.2	30.5	31.2	30.5	29.8	30.5	29.8	28.4	28.4	27.0
77.5°	22.7	22.7	22.7	22.7	22.7	22.0	22.0	21.3	20.6	19.9	19.9
80°	17.0	16.3	16.3	16.3	16.3	15.6	16.3	15.6	14.9	14.2	13.5
82.5°	12.1	12.8	12.1	12.1	12.1	11.4	12.1	11.4	11.4	10.6	9.2
85°	9.2	9.2	9.2	9.2	9.2	8.5	8.5	8.5	7.8	7.8	7.1
87.5°	5.0	5.0	5.0	5.7	5.0	5.0	5.0	4.3	4.3	3.5	3.5
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0
2.5°	2614.6	2618.2	2610.4	2622.5	2669.3	2631.7	2647.3	2652.3	2687.8	2694.2	2689.9
5°	2515.3	2530.9	2540.8	2567.8	2619.6	2592.6	2620.3	2638.1	2683.5	2698.4	2702.0
7.5°	2437.2	2469.8	2494.0	2538.0	2599.0	2578.4	2620.3	2649.4	2704.8	2724.0	2733.2
10°	2379.0	2428.6	2470.5	2530.9	2599.7	2586.2	2640.9	2682.1	2743.9	2766.6	2777.9
12.5°	2334.9	2395.3	2451.4	2528.0	2602.6	2596.2	2662.2	2709.1	2774.4	2797.1	2810.6
15°	2286.7	2356.2	2421.5	2507.4	2587.7	2586.2	2657.2	2706.9	2773.7	2792.8	2805.6
17.5°	2229.2	2303.7	2375.4	2468.4	2547.9	2549.3	2621.0	2670.0	2735.3	2750.9	2759.5
20°	2170.9	2244.8	2316.5	2412.3	2490.4	2492.5	2562.8	2608.3	2670.7	2683.5	2685.6
22.5°	2109.2	2178.0	2249.7	2344.9	2420.1	2421.5	2491.1	2533.7	2587.0	2593.3	2599.0
25°	2038.9	2106.3	2173.8	2268.2	2339.9	2344.2	2407.3	2445.0	2494.0	2498.9	2501.1
27.5°	1965.8	2021.1	2085.8	2166.7	2239.1	2236.3	2295.9	2338.5	2382.5	2379.7	2379.0
30°	1891.9	1938.1	1977.8	2055.9	2109.2	2111.3	2167.4	2188.0	2234.1	2228.4	2227.7
32.5°	1840.1	1852.2	1862.8	1902.6	1953.0	1935.2	1973.6	1999.1	2031.1	2029.0	2029.7
35°	1745.0	1723.0	1691.0	1696.7	1727.2	1699.6	1720.1	1719.4	1752.1	1744.3	1753.5
37.5°	1582.4	1519.9	1449.0	1408.5	1414.2	1379.4	1372.3	1389.3	1400.7	1378.7	1386.5
40°	1409.2	1316.9	1206.2	1113.9	1108.9	1065.6	1057.8	1040.7	1062.8	1044.3	1050.0
42.5°	1281.4	1159.3	1013.8	901.6	877.5	841.3	820.0	817.1	823.5	810.7	807.2
45°	1183.4	1053.5	886.7	758.2	731.2	692.2	670.9	663.1	663.8	659.5	656.0
47.5°	1068.4	937.8	768.8	637.5	607.0	570.1	548.8	543.8	546.6	541.0	536.7
50°	909.4	792.3	638.2	518.2	491.3	464.3	447.3	442.3	441.6	437.3	434.5
52.5°	738.3	641.1	507.6	407.5	383.4	357.1	345.0	338.6	339.3	335.1	330.8
55°	571.5	511.1	393.3	308.1	286.1	265.5	254.2	246.3	244.2	240.0	237.8
57.5°	425.2	384.8	294.6	222.2	209.4	189.5	178.2	169.0	167.5	165.4	164.7
60°	298.2	269.1	207.3	158.3	143.4	131.3	120.0	110.7	106.5	105.8	103.6
62.5°	193.1	175.4	136.3	105.8	94.4	85.9	74.5	68.2	65.3	62.5	63.2
65°	120.0	106.5	85.2	68.2	61.8	55.4	46.9	41.2	38.3	35.5	36.2
67.5°	74.5	66.7	54.0	44.0	39.8	34.8	28.4	24.1	22.0	19.9	18.5
70°	50.4	43.3	36.9	31.2	28.4	24.8	20.6	17.0	15.6	14.2	12.8
72.5°	35.5	31.9	27.0	23.4	21.3	18.5	15.6	13.5	12.1	10.6	9.2
75°	25.6	22.7	19.9	17.0	15.6	14.2	12.1	10.6	9.2	7.8	6.4
77.5°	18.5	16.3	14.2	12.8	12.1	9.9	8.5	7.8	7.1	5.7	4.3
80°	12.8	11.4	9.2	8.5	8.5	7.1	6.4	5.7	5.0	3.5	2.8
82.5°	8.5	7.8	7.1	6.4	5.7	5.0	5.0	3.5	2.8	2.1	1.4
85°	6.4	5.7	5.0	4.3	4.3	3.5	2.8	2.1	2.1	1.4	0.7
87.5°	3.5	3.5	2.8	2.1	2.1	1.4	1.4	0.7	0.7	0.7	0.7
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0
2.5°	2726.1	2728.2	2740.3	2731.1	2754.5	2771.5	2763.0	2782.2	2775.8	2774.4	2796.4
5°	2744.6	2749.5	2765.9	2757.3	2782.9	2801.4	2792.8	2814.1	2807.7	2806.3	2829.0
7.5°	2780.1	2785.0	2799.2	2792.1	2819.1	2835.4	2824.8	2848.2	2839.7	2839.0	2861.0
10°	2824.8	2831.9	2843.9	2836.9	2861.7	2875.9	2865.2	2888.0	2880.2	2876.6	2900.7
12.5°	2858.1	2863.1	2875.2	2869.5	2893.6	2904.3	2895.1	2917.1	2907.1	2904.3	2925.6
15°	2850.3	2855.3	2865.2	2860.3	2883.0	2892.9	2880.9	2905.0	2895.1	2889.4	2908.6
17.5°	2800.6	2803.5	2810.6	2805.6	2829.8	2836.1	2822.7	2846.8	2837.6	2827.6	2846.1
20°	2727.5	2726.1	2730.4	2728.2	2748.1	2751.7	2743.1	2760.9	2750.2	2744.6	2755.2
22.5°	2636.7	2635.2	2638.1	2632.4	2652.3	2654.4	2641.6	2662.9	2652.3	2641.6	2659.4
25°	2535.8	2528.0	2526.6	2528.7	2542.2	2544.4	2530.9	2546.5	2533.0	2524.5	2541.5
27.5°	2411.6	2401.7	2399.5	2401.7	2415.2	2405.2	2393.9	2405.2	2391.7	2383.9	2394.6
30°	2258.3	2244.1	2237.7	2233.4	2247.6	2244.1	2217.8	2230.6	2209.3	2197.9	2205.7
32.5°	2051.7	2043.9	2026.8	2016.9	2030.4	2003.4	1987.1	1987.1	1978.6	1959.4	1963.6
35°	1764.9	1752.8	1737.2	1728.7	1730.8	1694.6	1667.6	1673.3	1644.9	1639.9	1642.1
37.5°	1402.1	1382.2	1376.5	1358.8	1363.1	1331.1	1294.2	1294.9	1280.0	1264.4	1259.4
40°	1053.5	1050.0	1044.3	1029.4	1035.1	1000.3	986.1	986.8	976.9	965.5	971.2
42.5°	814.3	802.9	799.4	794.4	795.8	790.1	771.7	773.8	765.3	762.5	759.6
45°	661.6	649.6	641.1	645.3	645.3	638.9	631.8	636.1	631.8	626.2	629.0
47.5°	545.2	533.9	529.6	528.9	533.9	529.6	522.5	523.9	523.2	521.1	519.7
50°	435.2	432.3	428.8	426.7	428.8	427.4	421.0	424.5	426.7	419.6	421.7
52.5°	331.5	331.5	330.8	325.9	330.1	325.9	325.1	326.6	324.4	321.6	320.9
55°	242.8	240.7	237.1	236.4	237.8	236.4	235.0	235.7	237.1	230.0	230.0
57.5°	166.1	164.7	162.6	162.6	165.4	161.9	159.7	162.6	159.7	156.9	156.9
60°	106.5	105.8	103.6	103.6	103.6	102.9	100.8	101.5	102.9	98.7	99.4
62.5°	63.9	61.8	61.1	60.3	61.1	60.3	60.3	59.6	58.9	58.9	56.8
65°	34.8	33.4	31.9	32.7	32.7	31.9	31.9	31.9	30.5	29.8	29.1
67.5°	17.7	16.3	16.3	15.6	15.6	15.6	15.6	14.9	14.9	14.9	14.2
70°	11.4	10.6	9.9	9.9	9.9	9.2	9.2	9.2	9.2	9.2	8.5
72.5°	7.8	7.1	6.4	6.4	6.4	5.7	5.7	5.7	5.7	5.0	5.0
75°	5.7	5.0	4.3	4.3	4.3	3.5	3.5	3.5	3.5	3.5	3.5
77.5°	3.5	2.8	2.8	2.8	2.8	2.1	2.1	2.1	2.1	2.1	1.4
80°	2.1	2.1	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7
82.5°	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0
87.5°	0.7	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: P245440

CATALOG NUMBER: LD8B40D010 ER8B40950 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0	2702.0
2.5°	2788.6	2782.9	2786.4	2812.7	2801.4	2797.8	2768.0	2794.3
5°	2821.9	2817.7	2817.7	2847.5	2834.0	2831.2	2802.1	2824.8
7.5°	2853.2	2848.9	2849.6	2880.2	2869.5	2865.2	2836.1	2858.9
10°	2893.6	2890.8	2891.5	2920.6	2909.3	2905.0	2875.2	2898.6
12.5°	2917.8	2913.5	2913.5	2944.8	2932.0	2925.6	2897.2	2919.9
15°	2899.3	2892.9	2892.9	2924.2	2910.0	2900.7	2875.9	2897.2
17.5°	2836.1	2829.8	2829.8	2856.7	2846.1	2832.6	2807.0	2826.9
20°	2748.1	2740.3	2738.2	2769.4	2754.5	2742.4	2719.7	2738.9
22.5°	2648.7	2645.2	2638.8	2670.0	2656.5	2643.8	2619.6	2634.5
25°	2529.5	2523.8	2517.4	2547.9	2534.4	2521.6	2502.5	2514.5
27.5°	2381.1	2381.8	2378.2	2402.4	2388.9	2381.8	2358.4	2378.2
30°	2201.5	2193.7	2190.8	2219.2	2206.4	2197.2	2168.1	2187.3
32.5°	1967.2	1955.8	1940.9	1972.9	1950.9	1943.1	1918.2	1945.9
35°	1626.4	1622.9	1609.4	1636.4	1624.3	1610.1	1594.5	1617.9
37.5°	1257.3	1260.1	1258.7	1265.8	1258.7	1249.5	1232.4	1223.9
40°	959.8	952.7	947.0	959.8	944.9	944.9	935.0	945.6
42.5°	752.5	749.7	756.8	759.6	751.1	749.7	748.3	747.5
45°	621.2	621.2	622.6	625.4	622.6	621.2	616.9	614.1
47.5°	511.9	514.7	511.9	521.1	516.1	514.7	506.2	509.7
50°	414.6	411.0	414.6	417.4	418.1	413.9	409.6	411.8
52.5°	321.6	315.9	314.5	318.8	315.9	315.9	313.1	312.4
55°	226.5	228.6	225.0	228.6	227.2	225.0	222.9	225.8
57.5°	153.3	154.1	152.6	154.8	151.2	151.9	151.2	150.5
60°	99.4	96.5	96.5	98.7	95.1	95.1	94.4	94.4
62.5°	56.8	56.1	56.1	55.4	54.7	54.7	54.7	53.2
65°	29.1	28.4	27.7	27.7	27.7	27.7	27.0	27.0
67.5°	14.2	13.5	13.5	14.2	13.5	13.5	13.5	13.5
70°	8.5	8.5	7.8	8.5	7.8	7.8	7.8	7.8
72.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
75°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
77.5°	2.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)