

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: P245386

Luminaire Tested: **LD8B40D010 ER8B40827 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245386  
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 ER8B40827 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4208.0 lumens  
Efficiency: N/A  
Efficacy: 102.9 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

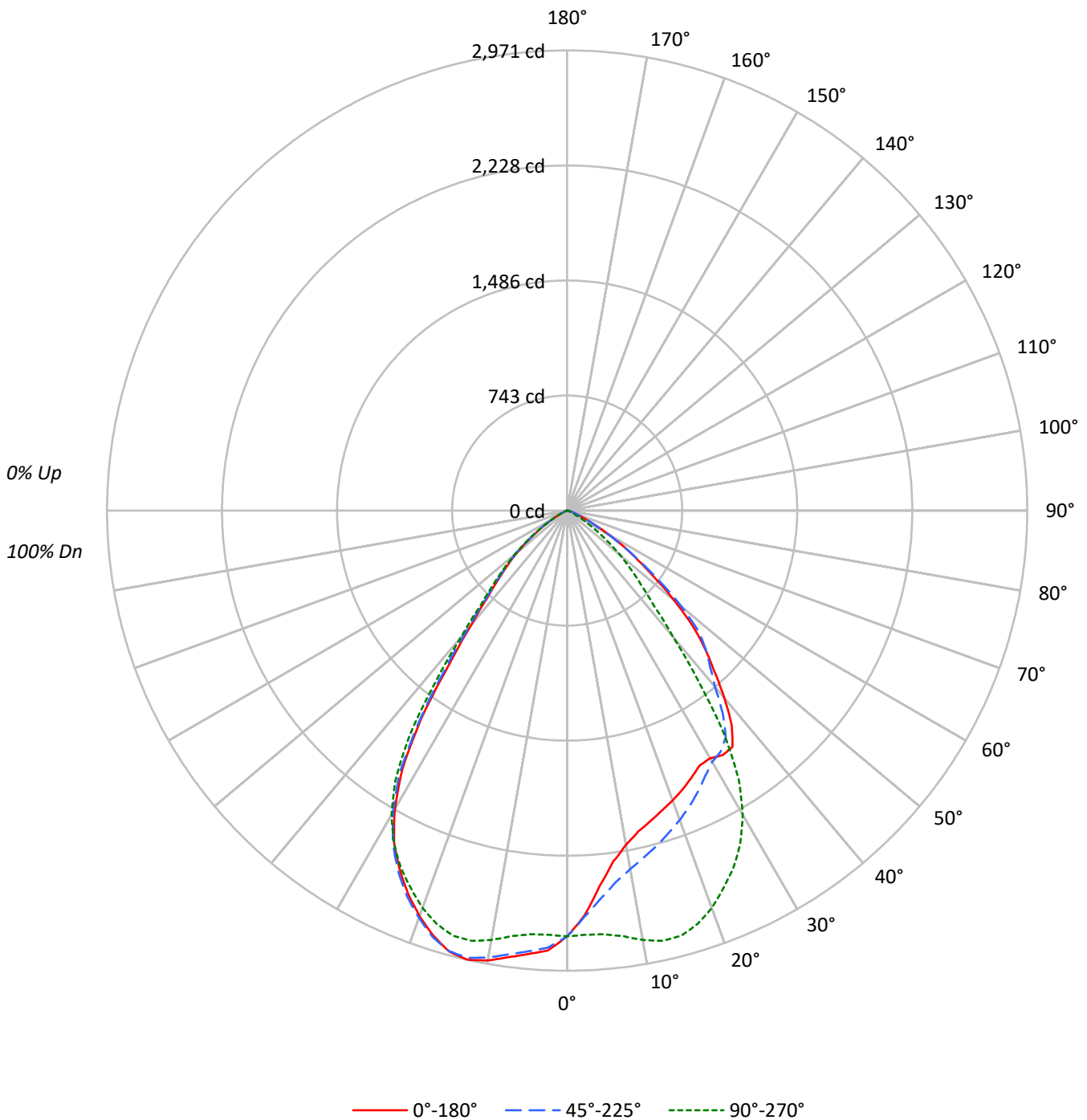
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	84769	84769	84769
5°	75212	84981	88962
10°	68573	88134	92342
15°	66268	90712	94099
20°	65322	89592	91443
25°	64680	86503	87044
30°	65734	80728	79236
35°	70067	66803	61966
40°	63501	42770	38728
45°	54808	29262	27247
50°	43243	21343	20096
55°	30015	13123	12349
60°	19112	6636	5927
65°	9537	2634	1999
70°	5274	1298	712
75°	3789	941	346
80°	3072	639	124
85°	3326	495	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	256.2	6.1
10°-20°	740.0	17.6
20°-30°	1074.1	25.5
30°-40°	1057.9	25.1
40°-50°	663.1	15.8
50°-60°	320.0	7.6
60°-70°	77.4	1.8
70°-80°	15.6	0.4
80°-90°	3.6	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°	2070.3	49.2
0°-40°	3128.2	74.3
0°-60°	4111.3	97.7
0°-90°	4208.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4208.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2749	2749	2749	2749	2749	
5°	2430	2512	2745	2857	2874	225
15°	2076	2239	2842	2946	2948	587
25°	1901	2000	2542	2577	2558	880
35°	1861	1786	1775	1674	1646	1126
45°	1257	1265	671	643	625	961
55°	558	576	244	241	230	514
65°	131	129	36	31	27	149
75°	32	27	8	4	3	36
85°	9	7	1	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°	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0
2.5°	2613.2	2596.6	2565.5	2603.1	2603.1	2582.2	2624.0	2598.8	2619.0	2650.8	2622.6
5°	2429.8	2416.0	2390.0	2429.8	2434.8	2415.3	2465.9	2447.1	2476.7	2515.7	2512.1
7.5°	2284.6	2267.2	2243.4	2284.6	2292.5	2279.5	2327.9	2319.2	2358.2	2408.8	2417.5
10°	2190.0	2171.9	2151.0	2188.5	2194.3	2185.6	2234.7	2229.7	2268.0	2326.5	2349.6
12.5°	2122.8	2107.6	2084.5	2124.2	2130.7	2118.4	2164.7	2162.5	2202.2	2263.6	2292.5
15°	2075.8	2057.8	2036.8	2070.8	2079.4	2065.7	2109.8	2105.4	2145.9	2206.6	2239.1
17.5°	2031.8	2015.2	1993.5	2025.3	2033.9	2019.5	2062.8	2055.6	2090.3	2148.1	2181.3
20°	1990.6	1972.5	1953.0	1985.6	1990.6	1974.0	2017.3	2007.9	2039.0	2092.4	2125.0
22.5°	1948.0	1929.2	1909.0	1940.8	1945.8	1929.2	1968.9	1958.1	1987.0	2035.4	2065.0
25°	1901.0	1883.7	1863.5	1893.1	1897.4	1879.4	1921.3	1907.5	1932.8	1975.4	2000.0
27.5°	1854.1	1837.5	1815.1	1845.4	1847.6	1830.3	1868.5	1849.8	1870.7	1909.7	1930.7
30°	1846.1	1827.4	1804.3	1828.8	1829.5	1807.1	1843.3	1820.9	1832.4	1861.3	1873.6
32.5°	1871.4	1852.7	1828.8	1849.0	1846.9	1822.3	1857.0	1829.5	1833.1	1848.3	1845.4
35°	1861.3	1838.9	1810.8	1832.4	1832.4	1802.8	1837.5	1805.0	1801.4	1803.5	1785.5
37.5°	1746.5	1729.1	1702.4	1723.4	1721.2	1698.8	1725.5	1698.8	1686.5	1681.5	1649.0
40°	1577.5	1556.5	1536.3	1558.7	1560.8	1537.0	1571.7	1541.3	1537.7	1523.3	1485.0
42.5°	1406.3	1399.1	1379.6	1398.3	1408.4	1388.2	1417.1	1402.7	1404.8	1401.2	1365.1
45°	1256.8	1244.5	1230.0	1251.7	1258.2	1248.1	1277.0	1268.3	1277.0	1295.0	1265.4
47.5°	1095.7	1083.4	1067.5	1090.6	1102.2	1083.4	1108.0	1105.1	1118.1	1149.1	1146.3
50°	901.4	892.7	889.9	892.7	900.0	891.3	908.6	909.4	918.0	960.6	963.5
52.5°	713.6	711.4	701.3	710.7	710.7	697.0	714.3	706.4	715.1	743.9	762.7
55°	558.3	556.2	549.7	558.3	548.9	543.9	548.9	541.0	534.5	556.9	576.4
57.5°	434.8	427.6	419.6	423.3	422.5	411.7	417.5	408.1	403.0	411.0	428.3
60°	309.9	307.7	300.5	304.1	307.0	299.0	304.8	300.5	291.8	298.3	299.0
62.5°	205.9	207.3	203.0	203.7	201.5	200.1	203.7	205.9	203.7	200.8	201.5
65°	130.7	130.0	129.3	130.0	131.5	128.6	130.7	132.2	130.0	130.0	129.3
67.5°	86.7	84.5	82.3	83.8	85.2	83.1	85.2	84.5	85.2	84.5	82.3
70°	58.5	57.8	57.1	57.8	57.8	56.3	57.8	57.1	57.8	57.1	54.9
72.5°	42.6	42.6	41.9	42.6	42.6	41.2	41.9	40.4	41.2	40.4	39.0
75°	31.8	31.8	31.1	31.8	31.1	30.3	31.1	30.3	28.9	28.9	27.4
77.5°	23.1	23.1	23.1	23.1	23.1	22.4	22.4	21.7	20.9	20.2	20.2
80°	17.3	16.6	16.6	16.6	16.6	15.9	16.6	15.9	15.2	14.4	13.7
82.5°	12.3	13.0	12.3	12.3	12.3	11.6	12.3	11.6	11.6	10.8	9.4
85°	9.4	9.4	9.4	9.4	9.4	8.7	8.7	8.7	7.9	7.9	7.2
87.5°	5.1	5.1	5.1	5.8	5.1	5.1	5.1	4.3	4.3	3.6	3.6
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°	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0
2.5°	2660.2	2663.8	2655.8	2668.1	2715.8	2677.5	2693.4	2698.4	2734.6	2741.1	2736.7
5°	2559.0	2574.9	2585.0	2612.5	2665.2	2637.8	2665.9	2684.0	2730.2	2745.4	2749.0
7.5°	2479.6	2512.8	2537.4	2582.2	2644.3	2623.3	2665.9	2695.6	2751.9	2771.4	2780.8
10°	2420.4	2470.9	2513.5	2574.9	2645.0	2631.3	2686.9	2728.8	2791.6	2814.7	2826.3
12.5°	2375.6	2437.0	2494.0	2572.0	2647.9	2641.4	2708.6	2756.2	2822.7	2845.8	2859.5
15°	2326.5	2397.3	2463.7	2551.1	2632.7	2631.3	2703.5	2754.1	2822.0	2841.5	2854.5
17.5°	2268.0	2343.8	2416.8	2511.4	2592.3	2593.7	2666.7	2716.5	2782.9	2798.8	2807.5
20°	2208.7	2283.9	2356.8	2454.3	2533.8	2535.9	2607.4	2653.7	2717.2	2730.2	2732.4
22.5°	2145.9	2216.0	2288.9	2385.7	2462.3	2463.7	2534.5	2577.8	2632.0	2638.5	2644.3
25°	2074.4	2143.0	2211.6	2307.7	2380.6	2385.0	2449.3	2487.5	2537.4	2542.4	2544.6
27.5°	2000.0	2056.3	2122.1	2204.4	2278.1	2275.2	2335.9	2379.2	2424.0	2421.1	2420.4
30°	1924.9	1971.8	2012.3	2091.7	2145.9	2148.1	2205.1	2226.1	2273.0	2267.2	2266.5
32.5°	1872.2	1884.4	1895.3	1935.7	1987.0	1968.9	2007.9	2033.9	2066.4	2064.3	2065.0
35°	1775.4	1753.0	1720.5	1726.3	1757.3	1729.1	1750.1	1749.4	1782.6	1774.6	1784.0
37.5°	1610.0	1546.4	1474.2	1433.0	1438.8	1403.4	1396.2	1413.5	1425.1	1402.7	1410.6
40°	1433.7	1339.8	1227.2	1133.3	1128.2	1084.1	1076.2	1058.9	1081.3	1062.5	1068.3
42.5°	1303.7	1179.5	1031.4	917.3	892.7	855.9	834.2	831.3	837.8	824.8	821.2
45°	1204.0	1071.9	902.1	771.4	743.9	704.2	682.6	674.6	675.3	671.0	667.4
47.5°	1087.0	954.1	782.2	648.6	617.6	580.0	558.3	553.3	556.2	550.4	546.0
50°	925.2	806.1	649.3	527.3	499.8	472.4	455.0	450.0	449.3	444.9	442.0
52.5°	751.2	652.2	516.4	414.6	390.0	363.3	351.0	344.5	345.3	340.9	336.6
55°	581.4	520.0	400.1	313.5	291.1	270.1	258.6	250.6	248.5	244.1	242.0
57.5°	432.6	391.5	299.7	226.1	213.1	192.8	181.3	171.9	170.5	168.3	167.6
60°	303.4	273.7	210.9	161.1	145.9	133.6	122.1	112.7	108.3	107.6	105.5
62.5°	196.5	178.4	138.7	107.6	96.1	87.4	75.8	69.3	66.4	63.6	64.3
65°	122.1	108.3	86.7	69.3	62.8	56.3	47.7	41.9	39.0	36.1	36.8
67.5°	75.8	67.9	54.9	44.8	40.4	35.4	28.9	24.6	22.4	20.2	18.8
70°	51.3	44.1	37.6	31.8	28.9	25.3	20.9	17.3	15.9	14.4	13.0
72.5°	36.1	32.5	27.4	23.8	21.7	18.8	15.9	13.7	12.3	10.8	9.4
75°	26.0	23.1	20.2	17.3	15.9	14.4	12.3	10.8	9.4	7.9	6.5
77.5°	18.8	16.6	14.4	13.0	12.3	10.1	8.7	7.9	7.2	5.8	4.3
80°	13.0	11.6	9.4	8.7	8.7	7.2	6.5	5.8	5.1	3.6	2.9
82.5°	8.7	7.9	7.2	6.5	5.8	5.1	5.1	3.6	2.9	2.2	1.4
85°	6.5	5.8	5.1	4.3	4.3	3.6	2.9	2.2	2.2	1.4	0.7
87.5°	3.6	3.6	2.9	2.2	2.2	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°	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0
2.5°	2773.6	2775.7	2788.0	2778.6	2802.4	2819.8	2811.1	2830.6	2824.1	2822.7	2845.1
5°	2792.3	2797.4	2814.0	2805.3	2831.3	2850.1	2841.5	2863.1	2856.6	2855.2	2878.3
7.5°	2828.5	2833.5	2848.0	2840.7	2868.2	2884.8	2874.0	2897.8	2889.1	2888.4	2910.8
10°	2874.0	2881.2	2893.5	2886.2	2911.5	2926.0	2915.1	2938.2	2930.3	2926.7	2951.2
12.5°	2907.9	2913.0	2925.2	2919.5	2944.0	2954.9	2945.5	2967.9	2957.7	2954.9	2976.5
15°	2900.0	2905.0	2915.1	2910.1	2933.2	2943.3	2931.0	2955.6	2945.5	2939.7	2959.2
17.5°	2849.4	2852.3	2859.5	2854.5	2879.0	2885.5	2871.8	2896.3	2887.0	2876.8	2895.6
20°	2775.0	2773.6	2777.9	2775.7	2795.9	2799.6	2790.9	2809.0	2798.1	2792.3	2803.2
22.5°	2682.6	2681.1	2684.0	2678.2	2698.4	2700.6	2687.6	2709.3	2698.4	2687.6	2705.7
25°	2580.0	2572.0	2570.6	2572.8	2586.5	2588.7	2574.9	2590.8	2577.1	2568.4	2585.8
27.5°	2453.6	2443.5	2441.3	2443.5	2457.2	2447.1	2435.5	2447.1	2433.4	2425.4	2436.3
30°	2297.6	2283.1	2276.6	2272.3	2286.7	2283.1	2256.4	2269.4	2247.7	2236.2	2244.1
32.5°	2087.4	2079.4	2062.1	2052.0	2065.7	2038.3	2021.7	2021.7	2013.0	1993.5	1997.8
35°	1795.6	1783.3	1767.4	1758.8	1760.9	1724.1	1696.6	1702.4	1673.5	1668.5	1670.6
37.5°	1426.5	1406.3	1400.5	1382.4	1386.8	1354.3	1316.7	1317.4	1302.3	1286.4	1281.3
40°	1071.9	1068.3	1062.5	1047.3	1053.1	1017.7	1003.2	1004.0	993.9	982.3	988.1
42.5°	828.5	816.9	813.3	808.2	809.7	803.9	785.1	787.3	778.6	775.7	772.8
45°	673.2	660.9	652.2	656.6	656.6	650.1	642.8	647.2	642.8	637.1	639.9
47.5°	554.7	543.2	538.8	538.1	543.2	538.8	531.6	533.0	532.3	530.2	528.7
50°	442.8	439.9	436.3	434.1	436.3	434.8	428.3	431.9	434.1	426.9	429.0
52.5°	337.3	337.3	336.6	331.5	335.9	331.5	330.8	332.2	330.1	327.2	326.5
55°	247.0	244.9	241.2	240.5	242.0	240.5	239.1	239.8	241.2	234.0	234.0
57.5°	169.0	167.6	165.4	165.4	168.3	164.7	162.5	165.4	162.5	159.6	159.6
60°	108.3	107.6	105.5	105.5	105.5	104.7	102.6	103.3	104.7	100.4	101.1
62.5°	65.0	62.8	62.1	61.4	62.1	61.4	61.4	60.7	59.9	59.9	57.8
65°	35.4	33.9	32.5	33.2	33.2	32.5	32.5	32.5	31.1	30.3	29.6
67.5°	18.1	16.6	16.6	15.9	15.9	15.9	15.9	15.2	15.2	15.2	14.4
70°	11.6	10.8	10.1	10.1	10.1	9.4	9.4	9.4	9.4	9.4	8.7
72.5°	7.9	7.2	6.5	6.5	6.5	5.8	5.8	5.8	5.8	5.1	5.1
75°	5.8	5.1	4.3	4.3	4.3	3.6	3.6	3.6	3.6	3.6	3.6
77.5°	3.6	2.9	2.9	2.9	2.9	2.2	2.2	2.2	2.2	2.2	1.4
80°	2.2	2.2	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: P245386

CATALOG NUMBER: LD8B40D010 ER8B40827 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0	2749.0
2.5°	2837.1	2831.3	2835.0	2861.7	2850.1	2846.5	2816.2	2842.9
5°	2871.1	2866.7	2866.7	2897.1	2883.3	2880.5	2850.8	2874.0
7.5°	2902.8	2898.5	2899.2	2930.3	2919.5	2915.1	2885.5	2908.6
10°	2944.0	2941.1	2941.9	2971.5	2959.9	2955.6	2925.2	2949.1
12.5°	2968.6	2964.2	2964.2	2996.0	2983.0	2976.5	2947.6	2970.7
15°	2949.8	2943.3	2943.3	2975.1	2960.6	2951.2	2926.0	2947.6
17.5°	2885.5	2879.0	2879.0	2906.5	2895.6	2881.9	2855.9	2876.1
20°	2795.9	2788.0	2785.8	2817.6	2802.4	2790.2	2767.1	2786.6
22.5°	2694.8	2691.2	2684.7	2716.5	2702.8	2689.8	2665.2	2680.4
25°	2573.5	2567.7	2561.2	2592.3	2578.5	2565.5	2546.0	2558.3
27.5°	2422.5	2423.3	2419.6	2444.2	2430.5	2423.3	2399.4	2419.6
30°	2239.8	2231.8	2229.0	2257.9	2244.8	2235.5	2205.8	2225.3
32.5°	2001.4	1989.9	1974.7	2007.2	1984.8	1976.9	1951.6	1979.8
35°	1654.7	1651.1	1637.4	1664.9	1652.6	1638.1	1622.2	1646.1
37.5°	1279.2	1282.0	1280.6	1287.8	1280.6	1271.2	1253.9	1245.2
40°	976.5	969.3	963.5	976.5	961.4	961.4	951.2	962.1
42.5°	765.6	762.7	770.0	772.8	764.2	762.7	761.3	760.6
45°	632.0	632.0	633.4	636.3	633.4	632.0	627.7	624.8
47.5°	520.8	523.7	520.8	530.2	525.1	523.7	515.0	518.6
50°	421.8	418.2	421.8	424.7	425.4	421.1	416.8	418.9
52.5°	327.2	321.4	320.0	324.3	321.4	321.4	318.5	317.8
55°	230.4	232.6	229.0	232.6	231.1	229.0	226.8	229.7
57.5°	156.0	156.7	155.3	157.5	153.8	154.6	153.8	153.1
60°	101.1	98.2	98.2	100.4	96.8	96.8	96.1	96.1
62.5°	57.8	57.1	57.1	56.3	55.6	55.6	55.6	54.2
65°	29.6	28.9	28.2	28.2	28.2	28.2	27.4	27.4
67.5°	14.4	13.7	13.7	14.4	13.7	13.7	13.7	13.7
70°	8.7	8.7	7.9	8.7	7.9	7.9	7.9	7.9
72.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
75°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	2.2	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)