

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: P245392

Luminaire Tested: **LSR8B40D010 EC8B40830 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245392
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: LSR8B40D010 EC8B40830 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4313.0 lumens
Efficiency: N/A
Efficacy: 105.5 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

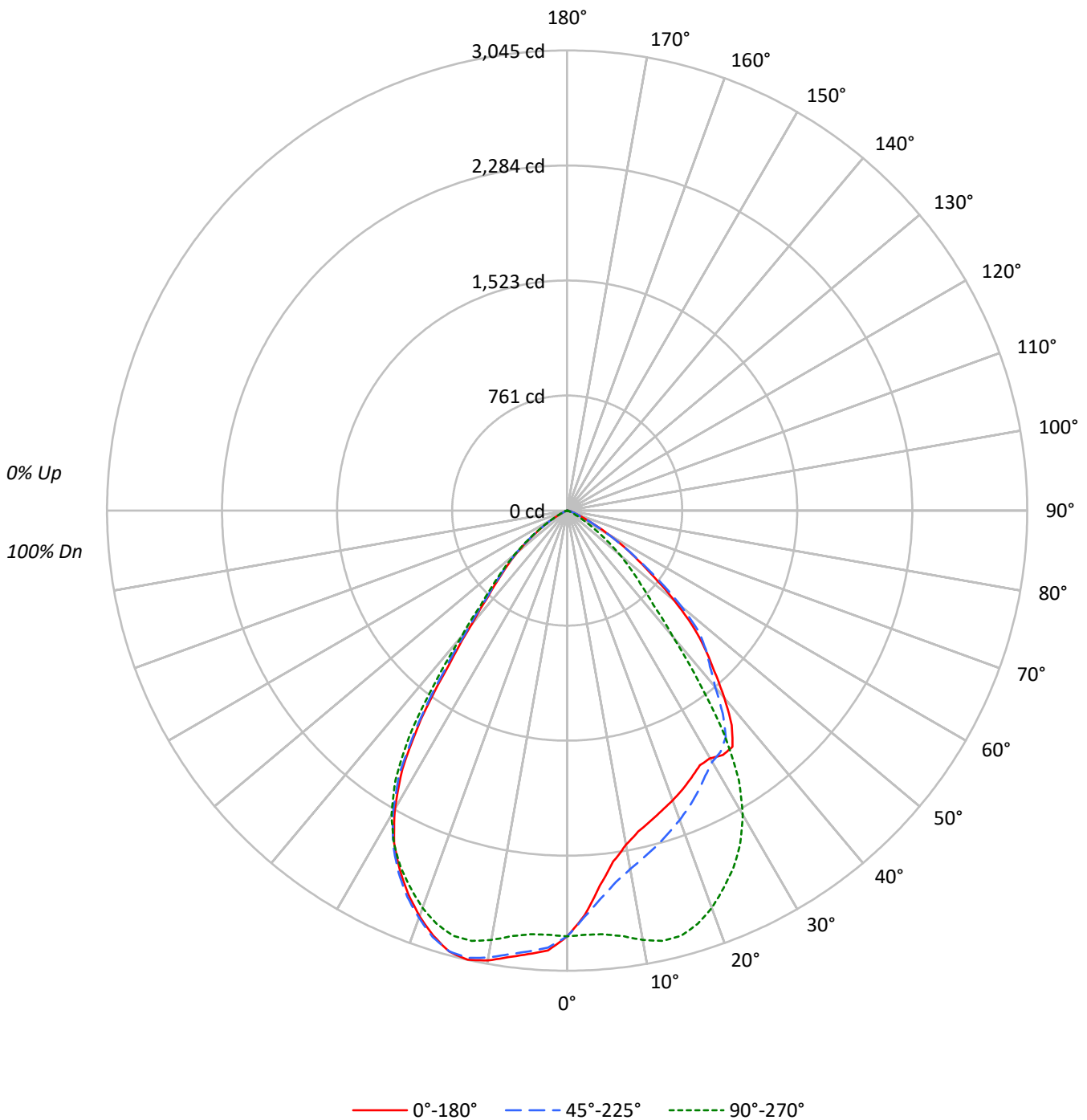
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P245392

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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°	86884	86884	86884
5°	77088	87102	91182
10°	70283	90335	94647
15°	67922	92976	96449
20°	66953	91827	93724
25°	66296	88663	89218
30°	67375	82743	81215
35°	71818	68471	63513
40°	65083	43837	39694
45°	56173	29990	27927
50°	44322	21876	20600
55°	30768	13451	12655
60°	19587	6802	6075
65°	9777	2700	2050
70°	5410	1334	730
75°	3884	965	357
80°	3161	657	124
85°	3397	531	0



TEST NUMBER: P245392

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.6	6.1
10°-20°	758.5	17.6
20°-30°	1100.9	25.5
30°-40°	1084.3	25.1
40°-50°	679.7	15.8
50°-60°	328.0	7.6
60°-70°	79.4	1.8
70°-80°	16.0	0.4
80°-90°	3.7	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°	2122.0	49.2
0°-40°	3206.3	74.3
0°-60°	4213.9	97.7
0°-90°	4313.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4313.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2818	2818	2818	2818	2818	
5°	2490	2575	2814	2928	2946	231
15°	2128	2295	2912	3019	3021	602
25°	1948	2050	2606	2641	2622	902
35°	1908	1830	1819	1715	1687	1154
45°	1288	1297	688	659	640	985
55°	572	591	250	247	235	527
65°	134	132	37	32	28	153
75°	33	28	8	4	3	37
85°	10	7	2	0	0	10
90°	0	0	0	0	0	



TEST NUMBER: P245392

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBSW0WH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6
2.5°	2678.4	2661.4	2629.6	2668.1	2668.1	2646.6	2689.5	2663.6	2684.3	2716.9	2688.0
5°	2490.4	2476.3	2449.7	2490.4	2495.6	2475.6	2527.4	2508.1	2538.5	2578.5	2574.8
7.5°	2341.6	2323.8	2299.4	2341.6	2349.7	2336.4	2386.0	2377.1	2417.1	2468.9	2477.8
10°	2244.6	2226.1	2204.6	2243.1	2249.0	2240.2	2290.5	2285.3	2324.6	2384.5	2408.2
12.5°	2175.8	2160.2	2136.5	2177.2	2183.9	2171.3	2218.7	2216.5	2257.2	2320.1	2349.7
15°	2127.6	2109.1	2087.7	2122.5	2131.3	2117.3	2162.4	2158.0	2199.4	2261.6	2294.9
17.5°	2082.5	2065.4	2043.2	2075.8	2084.7	2069.9	2114.3	2106.9	2142.4	2201.7	2235.7
20°	2040.3	2021.8	2001.8	2035.1	2040.3	2023.2	2067.7	2058.0	2089.9	2144.7	2178.0
22.5°	1996.6	1977.4	1956.6	1989.2	1994.4	1977.4	2018.1	2007.0	2036.6	2086.2	2116.5
25°	1948.5	1930.7	1910.0	1940.3	1944.8	1926.3	1969.2	1955.1	1981.1	2024.7	2049.9
27.5°	1900.4	1883.3	1860.4	1891.5	1893.7	1875.9	1915.2	1895.9	1917.4	1957.4	1978.8
30°	1892.2	1873.0	1849.3	1874.4	1875.2	1852.2	1889.3	1866.3	1878.2	1907.8	1920.3
32.5°	1918.1	1898.9	1874.4	1895.2	1893.0	1867.8	1903.3	1875.2	1878.9	1894.4	1891.5
35°	1907.8	1884.8	1855.9	1878.2	1878.2	1847.8	1883.3	1850.0	1846.3	1848.5	1830.0
37.5°	1790.1	1772.3	1744.9	1766.4	1764.1	1741.2	1768.6	1741.2	1728.6	1723.4	1690.1
40°	1616.8	1595.4	1574.6	1597.6	1599.8	1575.4	1610.9	1579.8	1576.1	1561.3	1522.1
42.5°	1441.4	1434.0	1414.0	1433.2	1443.6	1422.9	1452.5	1437.7	1439.9	1436.2	1399.2
45°	1288.1	1275.5	1260.7	1282.9	1289.6	1279.2	1308.9	1300.0	1308.9	1327.4	1297.0
47.5°	1123.0	1110.5	1094.2	1117.9	1129.7	1110.5	1135.6	1132.7	1146.0	1177.8	1174.9
50°	923.9	915.0	912.1	915.0	922.4	913.5	931.3	932.0	940.9	984.6	987.6
52.5°	731.4	729.2	718.8	728.5	728.5	714.4	732.2	724.0	732.9	762.5	781.8
55°	572.3	570.0	563.4	572.3	562.6	557.4	562.6	554.5	547.8	570.8	590.8
57.5°	445.7	438.3	430.1	433.8	433.1	422.0	427.9	418.3	413.1	421.2	439.0
60°	317.6	315.4	308.0	311.7	314.6	306.5	312.4	308.0	299.1	305.7	306.5
62.5°	211.0	212.5	208.0	208.8	206.5	205.1	208.8	211.0	208.8	205.8	206.5
65°	134.0	133.3	132.5	133.3	134.7	131.8	134.0	135.5	133.3	133.3	132.5
67.5°	88.8	86.6	84.4	85.9	87.4	85.1	87.4	86.6	87.4	86.6	84.4
70°	60.0	59.2	58.5	59.2	59.2	57.7	59.2	58.5	59.2	58.5	56.3
72.5°	43.7	43.7	42.9	43.7	43.7	42.2	42.9	41.5	42.2	41.5	40.0
75°	32.6	32.6	31.8	32.6	31.8	31.1	31.8	31.1	29.6	29.6	28.1
77.5°	23.7	23.7	23.7	23.7	23.7	22.9	22.9	22.2	21.5	20.7	20.7
80°	17.8	17.0	17.0	17.0	17.0	16.3	17.0	16.3	15.5	14.8	14.1
82.5°	12.6	13.3	12.6	12.6	12.6	11.8	12.6	11.8	11.8	11.1	9.6
85°	9.6	9.6	9.6	9.6	9.6	8.9	8.9	8.9	8.1	8.1	7.4
87.5°	5.2	5.2	5.2	5.9	5.2	5.2	5.2	4.4	4.4	3.7	3.7
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: P245392

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6
2.5°	2726.5	2730.2	2722.1	2734.7	2783.5	2744.3	2760.6	2765.8	2802.8	2809.5	2805.0
5°	2622.9	2639.2	2649.5	2677.7	2731.7	2703.6	2732.5	2751.0	2798.3	2813.9	2817.6
7.5°	2541.5	2575.5	2600.7	2646.6	2710.3	2688.8	2732.5	2762.8	2820.6	2840.5	2850.2
10°	2480.8	2532.6	2576.3	2639.2	2711.0	2696.9	2753.9	2796.9	2861.3	2885.0	2896.8
12.5°	2434.9	2497.8	2556.3	2636.2	2714.0	2707.3	2776.1	2825.0	2893.1	2916.8	2930.9
15°	2384.5	2457.1	2525.2	2614.8	2698.4	2696.9	2771.0	2822.8	2892.4	2912.4	2925.7
17.5°	2324.6	2402.3	2477.1	2574.0	2656.9	2658.4	2733.2	2784.3	2852.4	2868.7	2877.6
20°	2263.8	2340.8	2415.6	2515.6	2597.0	2599.2	2672.5	2719.9	2785.0	2798.3	2800.6
22.5°	2199.4	2271.3	2346.0	2445.2	2523.7	2525.2	2597.7	2642.1	2697.7	2704.3	2710.3
25°	2126.2	2196.5	2266.8	2365.3	2440.0	2444.5	2510.4	2549.6	2600.7	2605.9	2608.1
27.5°	2049.9	2107.6	2175.0	2259.4	2334.9	2332.0	2394.1	2438.6	2484.5	2481.5	2480.8
30°	1972.9	2021.0	2062.5	2143.9	2199.4	2201.7	2260.1	2281.6	2329.7	2323.8	2323.1
32.5°	1918.9	1931.5	1942.6	1984.0	2036.6	2018.1	2058.0	2084.7	2118.0	2115.8	2116.5
35°	1819.7	1796.7	1763.4	1769.3	1801.2	1772.3	1793.8	1793.0	1827.1	1818.9	1828.5
37.5°	1650.1	1585.0	1511.0	1468.8	1474.7	1438.4	1431.0	1448.8	1460.6	1437.7	1445.8
40°	1469.5	1373.3	1257.8	1161.5	1156.4	1111.2	1103.1	1085.3	1108.2	1089.0	1094.9
42.5°	1336.2	1208.9	1057.2	940.2	915.0	877.3	855.1	852.1	858.8	845.4	841.7
45°	1234.1	1098.6	924.6	790.6	762.5	721.8	699.6	691.4	692.2	687.7	684.0
47.5°	1114.2	977.9	801.7	664.8	633.0	594.5	572.3	567.1	570.0	564.1	559.7
50°	948.3	826.2	665.5	540.4	512.3	484.2	466.4	461.2	460.5	456.0	453.1
52.5°	769.9	668.5	529.3	424.9	399.8	372.4	359.8	353.1	353.9	349.4	345.0
55°	595.9	533.0	410.1	321.3	298.3	276.9	265.0	256.9	254.7	250.2	248.0
57.5°	443.4	401.2	307.2	231.7	218.4	197.7	185.8	176.2	174.7	172.5	171.8
60°	310.9	280.6	216.2	165.1	149.5	137.0	125.1	115.5	111.0	110.3	108.1
62.5°	201.4	182.9	142.1	110.3	98.5	89.6	77.7	71.1	68.1	65.1	65.9
65°	125.1	111.0	88.8	71.1	64.4	57.7	48.9	42.9	40.0	37.0	37.8
67.5°	77.7	69.6	56.3	45.9	41.5	36.3	29.6	25.2	22.9	20.7	19.2
70°	52.6	45.2	38.5	32.6	29.6	25.9	21.5	17.8	16.3	14.8	13.3
72.5°	37.0	33.3	28.1	24.4	22.2	19.2	16.3	14.1	12.6	11.1	9.6
75°	26.7	23.7	20.7	17.8	16.3	14.8	12.6	11.1	9.6	8.1	6.7
77.5°	19.2	17.0	14.8	13.3	12.6	10.4	8.9	8.1	7.4	5.9	4.4
80°	13.3	11.8	9.6	8.9	8.9	7.4	6.7	5.9	5.2	3.7	3.0
82.5°	8.9	8.1	7.4	6.7	5.9	5.2	5.2	3.7	3.0	2.2	1.5
85°	6.7	5.9	5.2	4.4	4.4	3.7	3.0	2.2	2.2	1.5	0.7
87.5°	3.7	3.7	3.0	2.2	2.2	1.5	1.5	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



TEST NUMBER: P245392

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6
2.5°	2842.8	2845.0	2857.6	2847.9	2872.4	2890.1	2881.3	2901.2	2894.6	2893.1	2916.1
5°	2862.0	2867.2	2884.2	2875.3	2902.0	2921.2	2912.4	2934.6	2927.9	2926.4	2950.1
7.5°	2899.0	2904.2	2919.0	2911.6	2939.7	2956.8	2945.7	2970.1	2961.2	2960.5	2983.4
10°	2945.7	2953.1	2965.7	2958.3	2984.2	2999.0	2987.9	3011.6	3003.4	2999.7	3024.9
12.5°	2980.5	2985.6	2998.2	2992.3	3017.5	3028.6	3019.0	3041.9	3031.5	3028.6	3050.8
15°	2972.3	2977.5	2987.9	2982.7	3006.4	3016.7	3004.2	3029.3	3019.0	3013.0	3033.0
17.5°	2920.5	2923.5	2930.9	2925.7	2950.9	2957.5	2943.4	2968.6	2959.0	2948.6	2967.9
20°	2844.2	2842.8	2847.2	2845.0	2865.7	2869.4	2860.5	2879.0	2867.9	2862.0	2873.1
22.5°	2749.5	2748.0	2751.0	2745.0	2765.8	2768.0	2754.7	2776.9	2765.8	2754.7	2773.2
25°	2644.4	2636.2	2634.7	2637.0	2651.0	2653.2	2639.2	2655.5	2641.4	2632.5	2650.3
27.5°	2514.8	2504.4	2502.2	2504.4	2518.5	2508.1	2496.3	2508.1	2494.1	2485.9	2497.0
30°	2354.9	2340.1	2333.4	2329.0	2343.8	2340.1	2312.7	2326.0	2303.8	2292.0	2300.1
32.5°	2139.5	2131.3	2113.6	2103.2	2117.3	2089.1	2072.1	2072.1	2063.2	2043.2	2047.7
35°	1840.4	1827.8	1811.5	1802.6	1804.9	1767.1	1739.0	1744.9	1715.3	1710.1	1712.3
37.5°	1462.1	1441.4	1435.4	1416.9	1421.4	1388.1	1349.6	1350.3	1334.8	1318.5	1313.3
40°	1098.6	1094.9	1089.0	1073.4	1079.4	1043.1	1028.3	1029.0	1018.7	1006.8	1012.7
42.5°	849.1	837.3	833.6	828.4	829.9	824.0	804.7	806.9	798.0	795.1	792.1
45°	690.0	677.4	668.5	672.9	672.9	666.3	658.9	663.3	658.9	652.9	655.9
47.5°	568.6	556.7	552.3	551.5	556.7	552.3	544.9	546.3	545.6	543.4	541.9
50°	453.8	450.8	447.1	444.9	447.1	445.7	439.0	442.7	444.9	437.5	439.7
52.5°	345.7	345.7	345.0	339.8	344.2	339.8	339.1	340.5	338.3	335.4	334.6
55°	253.2	251.0	247.3	246.5	248.0	246.5	245.0	245.8	247.3	239.9	239.9
57.5°	173.2	171.8	169.5	169.5	172.5	168.8	166.6	169.5	166.6	163.6	163.6
60°	111.0	110.3	108.1	108.1	108.1	107.3	105.1	105.9	107.3	102.9	103.6
62.5°	66.6	64.4	63.7	62.9	63.7	62.9	62.9	62.2	61.4	61.4	59.2
65°	36.3	34.8	33.3	34.1	34.1	33.3	33.3	33.3	31.8	31.1	30.4
67.5°	18.5	17.0	17.0	16.3	16.3	16.3	16.3	15.5	15.5	15.5	14.8
70°	11.8	11.1	10.4	10.4	10.4	9.6	9.6	9.6	9.6	9.6	8.9
72.5°	8.1	7.4	6.7	6.7	6.7	5.9	5.9	5.9	5.9	5.2	5.2
75°	5.9	5.2	4.4	4.4	4.4	3.7	3.7	3.7	3.7	3.7	3.7
77.5°	3.7	3.0	3.0	3.0	3.0	2.2	2.2	2.2	2.2	2.2	1.5
80°	2.2	2.2	1.5	1.5	1.5	1.5	0.7	0.7	0.7	0.7	0.7
82.5°	1.5	1.5	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: P245392

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6
2.5°	2907.9	2902.0	2905.7	2933.1	2921.2	2917.5	2886.4	2913.8
5°	2942.7	2938.3	2938.3	2969.4	2955.3	2952.3	2922.0	2945.7
7.5°	2975.3	2970.8	2971.6	3003.4	2992.3	2987.9	2957.5	2981.2
10°	3017.5	3014.5	3015.3	3045.6	3033.8	3029.3	2998.2	3022.7
12.5°	3042.6	3038.2	3038.2	3070.8	3057.5	3050.8	3021.2	3044.9
15°	3023.4	3016.7	3016.7	3049.3	3034.5	3024.9	2999.0	3021.2
17.5°	2957.5	2950.9	2950.9	2979.0	2967.9	2953.8	2927.2	2947.9
20°	2865.7	2857.6	2855.4	2887.9	2872.4	2859.8	2836.1	2856.1
22.5°	2762.1	2758.4	2751.7	2784.3	2770.2	2756.9	2731.7	2747.3
25°	2637.7	2631.8	2625.1	2656.9	2642.9	2629.6	2609.6	2622.2
27.5°	2483.0	2483.7	2480.0	2505.2	2491.1	2483.7	2459.3	2480.0
30°	2295.7	2287.5	2284.6	2314.2	2300.9	2291.2	2260.9	2280.9
32.5°	2051.4	2039.5	2024.0	2057.3	2034.4	2026.2	2000.3	2029.2
35°	1696.0	1692.3	1678.3	1706.4	1693.8	1679.0	1662.7	1687.2
37.5°	1311.1	1314.0	1312.6	1320.0	1312.6	1302.9	1285.2	1276.3
40°	1000.9	993.5	987.6	1000.9	985.3	985.3	975.0	986.1
42.5°	784.7	781.8	789.2	792.1	783.2	781.8	780.3	779.5
45°	647.8	647.8	649.2	652.2	649.2	647.8	643.3	640.4
47.5°	533.8	536.7	533.8	543.4	538.2	536.7	527.8	531.5
50°	432.3	428.6	432.3	435.3	436.0	431.6	427.2	429.4
52.5°	335.4	329.4	328.0	332.4	329.4	329.4	326.5	325.7
55°	236.2	238.4	234.7	238.4	236.9	234.7	232.5	235.4
57.5°	159.9	160.6	159.2	161.4	157.7	158.4	157.7	156.9
60°	103.6	100.7	100.7	102.9	99.2	99.2	98.5	98.5
62.5°	59.2	58.5	58.5	57.7	57.0	57.0	57.0	55.5
65°	30.4	29.6	28.9	28.9	28.9	28.9	28.1	28.1
67.5°	14.8	14.1	14.1	14.8	14.1	14.1	14.1	14.1
70°	8.9	8.9	8.1	8.9	8.1	8.1	8.1	8.1
72.5°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
75°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
77.5°	2.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)