

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: P244096

Luminaire Tested: **LSR8B40D010 EC8B40830 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244096
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 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4473.0 lumens
Efficiency: N/A
Efficacy: 109.4 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

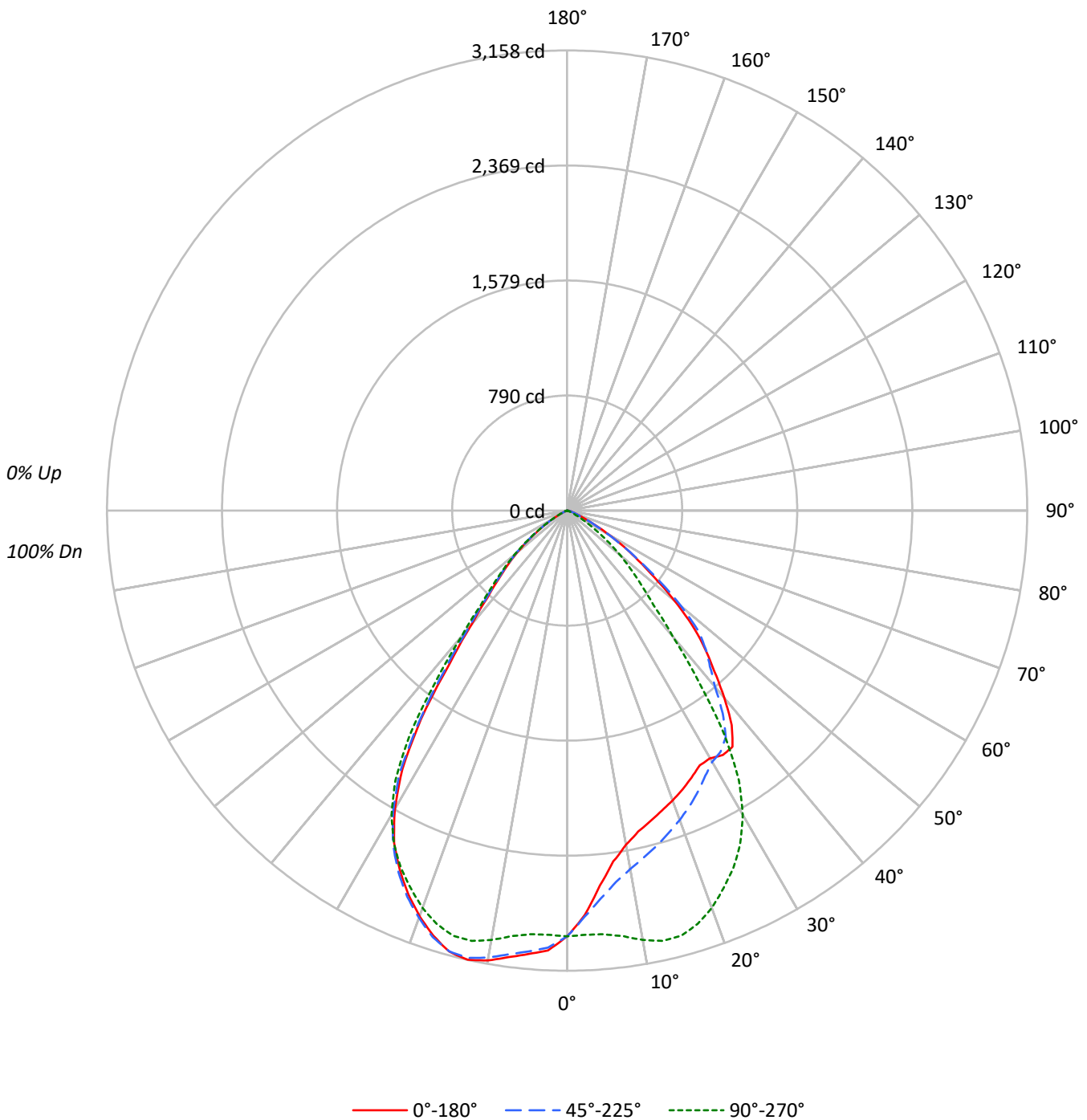
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	90107	90107	90107
5°	79948	90333	94562
10°	72891	93686	98157
15°	70444	96424	100028
20°	69437	95237	97199
25°	68756	91950	92525
30°	69875	85812	84228
35°	74479	71012	65866
40°	67498	45463	41168
45°	58257	31106	28961
50°	45968	22686	21362
55°	31907	13951	13123
60°	20315	7055	6297
65°	10142	2802	2131
70°	5608	1388	757
75°	4027	1001	369
80°	3267	675	142
85°	3538	531	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.3	6.1
10°-20°	786.6	17.6
20°-30°	1141.7	25.5
30°-40°	1124.5	25.1
40°-50°	704.9	15.8
50°-60°	340.1	7.6
60°-70°	82.3	1.8
70°-80°	16.6	0.4
80°-90°	3.8	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°	2200.7	49.2
0°-40°	3325.2	74.3
0°-60°	4370.2	97.7
0°-90°	4473.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4473.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2922	2922	2922	2922	2922	
5°	2583	2670	2918	3036	3055	239
15°	2207	2380	3020	3131	3133	624
25°	2021	2126	2702	2739	2719	935
35°	1978	1898	1886	1779	1750	1197
45°	1336	1345	713	683	664	1021
55°	594	613	260	256	244	546
65°	139	137	38	33	29	159
75°	34	29	8	4	3	38
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°	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1
2.5°	2777.8	2760.1	2727.1	2767.0	2767.0	2744.8	2789.3	2762.4	2783.9	2817.7	2787.8
5°	2582.8	2568.2	2540.5	2582.8	2588.1	2567.4	2621.2	2601.2	2632.7	2674.1	2670.3
7.5°	2428.4	2410.0	2384.7	2428.4	2436.9	2423.1	2474.5	2465.3	2506.8	2560.5	2569.7
10°	2327.9	2308.7	2286.4	2326.3	2332.5	2323.3	2375.5	2370.1	2410.8	2473.0	2497.5
12.5°	2256.5	2240.3	2215.8	2258.0	2264.9	2251.9	2301.0	2298.7	2340.9	2406.2	2436.9
15°	2206.6	2187.4	2165.1	2201.2	2210.4	2195.8	2242.6	2238.0	2281.0	2345.5	2380.1
17.5°	2159.7	2142.1	2119.0	2152.8	2162.0	2146.7	2192.7	2185.1	2221.9	2283.3	2318.7
20°	2116.0	2096.8	2076.0	2110.6	2116.0	2098.3	2144.4	2134.4	2167.4	2224.2	2258.8
22.5°	2070.7	2050.7	2029.2	2063.0	2068.4	2050.7	2092.9	2081.4	2112.1	2163.6	2195.0
25°	2020.8	2002.3	1980.8	2012.3	2016.9	1997.7	2042.3	2027.7	2054.5	2099.8	2125.9
27.5°	1970.9	1953.2	1929.4	1961.6	1963.9	1945.5	1986.2	1966.3	1988.5	2030.0	2052.2
30°	1962.4	1942.4	1917.9	1944.0	1944.8	1921.0	1959.3	1935.5	1947.8	1978.5	1991.6
32.5°	1989.3	1969.3	1944.0	1965.5	1963.2	1937.1	1973.9	1944.8	1948.6	1964.7	1961.6
35°	1978.5	1954.7	1924.8	1947.8	1947.8	1916.3	1953.2	1918.6	1914.8	1917.1	1897.9
37.5°	1856.5	1838.0	1809.6	1831.9	1829.6	1805.8	1834.2	1805.8	1792.7	1787.4	1752.8
40°	1676.8	1654.5	1633.0	1656.8	1659.1	1633.8	1670.7	1638.4	1634.6	1619.2	1578.5
42.5°	1494.8	1487.2	1466.4	1486.4	1497.1	1475.6	1506.4	1491.0	1493.3	1489.5	1451.1
45°	1335.9	1322.9	1307.5	1330.5	1337.4	1326.7	1357.4	1348.2	1357.4	1376.6	1345.1
47.5°	1164.7	1151.7	1134.8	1159.3	1171.6	1151.7	1177.8	1174.7	1188.5	1221.5	1218.4
50°	958.2	949.0	945.9	949.0	956.6	947.4	965.9	966.6	975.8	1021.1	1024.2
52.5°	758.6	756.3	745.5	755.5	755.5	740.9	759.3	750.9	760.1	790.8	810.8
55°	593.5	591.2	584.3	593.5	583.5	578.1	583.5	575.1	568.1	591.9	612.7
57.5°	462.2	454.5	446.1	449.9	449.1	437.6	443.8	433.8	428.4	436.9	455.3
60°	329.4	327.1	319.4	323.2	326.3	317.9	324.0	319.4	310.2	317.1	317.9
62.5°	218.8	220.3	215.7	216.5	214.2	212.7	216.5	218.8	216.5	213.4	214.2
65°	139.0	138.2	137.4	138.2	139.7	136.7	139.0	140.5	138.2	138.2	137.4
67.5°	92.1	89.8	87.5	89.1	90.6	88.3	90.6	89.8	90.6	89.8	87.5
70°	62.2	61.4	60.7	61.4	61.4	59.9	61.4	60.7	61.4	60.7	58.4
72.5°	45.3	45.3	44.5	45.3	45.3	43.8	44.5	43.0	43.8	43.0	41.5
75°	33.8	33.8	33.0	33.8	33.0	32.2	33.0	32.2	30.7	30.7	29.2
77.5°	24.6	24.6	24.6	24.6	24.6	23.8	23.8	23.0	22.3	21.5	21.5
80°	18.4	17.7	17.7	17.7	17.7	16.9	17.7	16.9	16.1	15.4	14.6
82.5°	13.1	13.8	13.1	13.1	13.1	12.3	13.1	12.3	12.3	11.5	10.0
85°	10.0	10.0	10.0	10.0	10.0	9.2	9.2	9.2	8.4	8.4	7.7
87.5°	5.4	5.4	5.4	6.1	5.4	5.4	5.4	4.6	4.6	3.8	3.8
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1
2.5°	2827.7	2831.5	2823.1	2836.1	2886.8	2846.1	2863.0	2868.4	2906.8	2913.7	2909.1
5°	2720.2	2737.1	2747.8	2777.0	2833.1	2803.9	2833.8	2853.0	2902.2	2918.3	2922.1
7.5°	2635.7	2671.1	2697.2	2744.8	2810.8	2788.5	2833.8	2865.3	2925.2	2945.9	2955.9
10°	2572.8	2626.5	2671.8	2737.1	2811.6	2797.0	2856.1	2900.6	2967.4	2992.0	3004.3
12.5°	2525.2	2590.4	2651.1	2734.0	2814.6	2807.7	2879.1	2929.8	3000.4	3025.0	3039.6
15°	2473.0	2548.2	2618.9	2711.8	2798.5	2797.0	2873.8	2927.5	2999.7	3020.4	3034.2
17.5°	2410.8	2491.4	2568.9	2669.5	2755.5	2757.1	2834.6	2887.6	2958.2	2975.1	2984.3
20°	2347.8	2427.7	2505.2	2608.9	2693.3	2695.6	2771.6	2820.8	2888.3	2902.2	2904.5
22.5°	2281.0	2355.5	2433.1	2535.9	2617.3	2618.9	2694.1	2740.2	2797.7	2804.7	2810.8
25°	2205.0	2278.0	2350.9	2453.0	2530.6	2535.2	2603.5	2644.2	2697.2	2702.5	2704.8
27.5°	2125.9	2185.8	2255.7	2343.2	2421.5	2418.5	2483.0	2529.0	2576.6	2573.6	2572.8
30°	2046.1	2096.0	2139.0	2223.5	2281.0	2283.3	2344.0	2366.3	2416.2	2410.0	2409.3
32.5°	1990.1	2003.1	2014.6	2057.6	2112.1	2092.9	2134.4	2162.0	2196.6	2194.3	2195.0
35°	1887.2	1863.4	1828.8	1835.0	1868.0	1838.0	1860.3	1859.5	1894.8	1886.4	1896.4
37.5°	1711.4	1643.8	1567.0	1523.2	1529.4	1491.8	1484.1	1502.5	1514.8	1491.0	1499.4
40°	1524.0	1424.2	1304.4	1204.6	1199.3	1152.4	1144.0	1125.5	1149.3	1129.4	1135.5
42.5°	1385.8	1253.8	1096.4	975.1	949.0	909.8	886.8	883.7	890.6	876.8	873.0
45°	1279.9	1139.4	958.9	820.0	790.8	748.6	725.5	717.1	717.9	713.3	709.4
47.5°	1155.5	1014.2	831.5	689.5	656.4	616.5	593.5	588.1	591.2	585.0	580.4
50°	983.5	856.8	690.2	560.5	531.3	502.1	483.7	478.3	477.6	472.9	469.9
52.5°	798.5	693.3	549.0	440.7	414.6	386.2	373.1	366.2	367.0	362.4	357.8
55°	618.1	552.8	425.3	333.2	309.4	287.1	274.9	266.4	264.1	259.5	257.2
57.5°	459.9	416.1	318.6	240.3	226.5	205.0	192.7	182.7	181.2	178.9	178.1
60°	322.5	291.0	224.2	171.2	155.1	142.0	129.8	119.8	115.2	114.4	112.1
62.5°	208.8	189.6	147.4	114.4	102.1	92.9	80.6	73.7	70.6	67.6	68.3
65°	129.8	115.2	92.1	73.7	66.8	59.9	50.7	44.5	41.5	38.4	39.2
67.5°	80.6	72.2	58.4	47.6	43.0	37.6	30.7	26.1	23.8	21.5	20.0
70°	54.5	46.8	39.9	33.8	30.7	26.9	22.3	18.4	16.9	15.4	13.8
72.5°	38.4	34.5	29.2	25.3	23.0	20.0	16.9	14.6	13.1	11.5	10.0
75°	27.6	24.6	21.5	18.4	16.9	15.4	13.1	11.5	10.0	8.4	6.9
77.5°	20.0	17.7	15.4	13.8	13.1	10.7	9.2	8.4	7.7	6.1	4.6
80°	13.8	12.3	10.0	9.2	9.2	7.7	6.9	6.1	5.4	3.8	3.1
82.5°	9.2	8.4	7.7	6.9	6.1	5.4	5.4	3.8	3.1	2.3	1.5
85°	6.9	6.1	5.4	4.6	4.6	3.8	3.1	2.3	2.3	1.5	0.8
87.5°	3.8	3.8	3.1	2.3	2.3	1.5	1.5	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°	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1
2.5°	2948.2	2950.5	2963.6	2953.6	2978.9	2997.4	2988.1	3008.9	3002.0	3000.4	3024.2
5°	2968.2	2973.6	2991.2	2982.0	3009.6	3029.6	3020.4	3043.4	3036.5	3035.0	3059.6
7.5°	3006.6	3011.9	3027.3	3019.6	3048.8	3066.5	3054.9	3080.3	3071.1	3070.3	3094.1
10°	3054.9	3062.6	3075.7	3068.0	3094.9	3110.2	3098.7	3123.3	3114.8	3111.0	3137.1
12.5°	3091.0	3096.4	3109.5	3103.3	3129.4	3140.9	3131.0	3154.8	3144.0	3140.9	3164.0
15°	3082.6	3088.0	3098.7	3093.3	3117.9	3128.6	3115.6	3141.7	3131.0	3124.8	3145.5
17.5°	3028.8	3031.9	3039.6	3034.2	3060.3	3067.2	3052.6	3078.7	3068.8	3058.0	3078.0
20°	2949.8	2948.2	2952.8	2950.5	2972.0	2975.9	2966.7	2985.8	2974.3	2968.2	2979.7
22.5°	2851.5	2850.0	2853.0	2846.9	2868.4	2870.7	2856.9	2879.9	2868.4	2856.9	2876.1
25°	2742.5	2734.0	2732.5	2734.8	2749.4	2751.7	2737.1	2754.0	2739.4	2730.2	2748.6
27.5°	2608.1	2597.4	2595.1	2597.4	2611.9	2601.2	2588.9	2601.2	2586.6	2578.2	2589.7
30°	2442.3	2426.9	2420.0	2415.4	2430.7	2426.9	2398.5	2412.3	2389.3	2377.0	2385.5
32.5°	2218.8	2210.4	2192.0	2181.2	2195.8	2166.6	2149.0	2149.0	2139.8	2119.0	2123.6
35°	1908.7	1895.6	1878.7	1869.5	1871.8	1832.7	1803.5	1809.6	1778.9	1773.5	1775.8
37.5°	1516.3	1494.8	1488.7	1469.5	1474.1	1439.6	1399.6	1400.4	1384.3	1367.4	1362.0
40°	1139.4	1135.5	1129.4	1113.3	1119.4	1081.8	1066.4	1067.2	1056.4	1044.2	1050.3
42.5°	880.6	868.3	864.5	859.1	860.7	854.5	834.6	836.9	827.7	824.6	821.5
45°	715.6	702.5	693.3	697.9	697.9	691.0	683.3	687.9	683.3	677.2	680.2
47.5°	589.6	577.4	572.8	572.0	577.4	572.8	565.1	566.6	565.8	563.5	562.0
50°	470.6	467.6	463.7	461.4	463.7	462.2	455.3	459.1	461.4	453.8	456.1
52.5°	358.5	358.5	357.8	352.4	357.0	352.4	351.6	353.2	350.9	347.8	347.0
55°	262.6	260.3	256.4	255.7	257.2	255.7	254.1	254.9	256.4	248.8	248.8
57.5°	179.7	178.1	175.8	175.8	178.9	175.1	172.7	175.8	172.7	169.7	169.7
60°	115.2	114.4	112.1	112.1	112.1	111.3	109.0	109.8	111.3	106.7	107.5
62.5°	69.1	66.8	66.0	65.3	66.0	65.3	65.3	64.5	63.7	63.7	61.4
65°	37.6	36.1	34.5	35.3	35.3	34.5	34.5	34.5	33.0	32.2	31.5
67.5°	19.2	17.7	17.7	16.9	16.9	16.9	16.9	16.1	16.1	16.1	15.4
70°	12.3	11.5	10.7	10.7	10.7	10.0	10.0	10.0	10.0	10.0	9.2
72.5°	8.4	7.7	6.9	6.9	6.9	6.1	6.1	6.1	6.1	5.4	5.4
75°	6.1	5.4	4.6	4.6	4.6	3.8	3.8	3.8	3.8	3.8	3.8
77.5°	3.8	3.1	3.1	3.1	3.1	2.3	2.3	2.3	2.3	2.3	1.5
80°	2.3	2.3	1.5	1.5	1.5	1.5	0.8	0.8	0.8	0.8	0.8
82.5°	1.5	1.5	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: P244096

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1	2922.1
2.5°	3015.8	3009.6	3013.5	3041.9	3029.6	3025.8	2993.5	3021.9
5°	3051.9	3047.3	3047.3	3079.5	3064.9	3061.9	3030.4	3054.9
7.5°	3085.7	3081.0	3081.8	3114.8	3103.3	3098.7	3067.2	3091.8
10°	3129.4	3126.3	3127.1	3158.6	3146.3	3141.7	3109.5	3134.8
12.5°	3155.5	3150.9	3150.9	3184.7	3170.9	3164.0	3133.3	3157.8
15°	3135.6	3128.6	3128.6	3162.4	3147.1	3137.1	3110.2	3133.3
17.5°	3067.2	3060.3	3060.3	3089.5	3078.0	3063.4	3035.7	3057.2
20°	2972.0	2963.6	2961.3	2995.1	2978.9	2965.9	2941.3	2962.0
22.5°	2864.5	2860.7	2853.8	2887.6	2873.0	2859.2	2833.1	2849.2
25°	2735.6	2729.4	2722.5	2755.5	2740.9	2727.1	2706.4	2719.4
27.5°	2575.1	2575.9	2572.0	2598.1	2583.5	2575.9	2550.5	2572.0
30°	2380.8	2372.4	2369.3	2400.0	2386.2	2376.2	2344.8	2365.5
32.5°	2127.5	2115.2	2099.1	2133.6	2109.8	2101.4	2074.5	2104.4
35°	1759.0	1755.1	1740.5	1769.7	1756.7	1741.3	1724.4	1749.7
37.5°	1359.7	1362.8	1361.3	1368.9	1361.3	1351.3	1332.8	1323.6
40°	1038.0	1030.3	1024.2	1038.0	1021.9	1021.9	1011.1	1022.7
42.5°	813.8	810.8	818.4	821.5	812.3	810.8	809.2	808.5
45°	671.8	671.8	673.3	676.4	673.3	671.8	667.2	664.1
47.5°	553.6	556.6	553.6	563.5	558.2	556.6	547.4	551.3
50°	448.4	444.5	448.4	451.4	452.2	447.6	443.0	445.3
52.5°	347.8	341.7	340.1	344.7	341.7	341.7	338.6	337.8
55°	244.9	247.2	243.4	247.2	245.7	243.4	241.1	244.1
57.5°	165.8	166.6	165.1	167.4	163.5	164.3	163.5	162.8
60°	107.5	104.4	104.4	106.7	102.9	102.9	102.1	102.1
62.5°	61.4	60.7	60.7	59.9	59.1	59.1	59.1	57.6
65°	31.5	30.7	29.9	29.9	29.9	29.9	29.2	29.2
67.5°	15.4	14.6	14.6	15.4	14.6	14.6	14.6	14.6
70°	9.2	9.2	8.4	9.2	8.4	8.4	8.4	8.4
72.5°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
75°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
77.5°	2.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)