

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: P244090

Luminaire Tested: **LSR8B40D010 EC8B40827 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244090
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 EC8B40827 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4364.0 lumens
Efficiency: N/A
Efficacy: 106.7 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

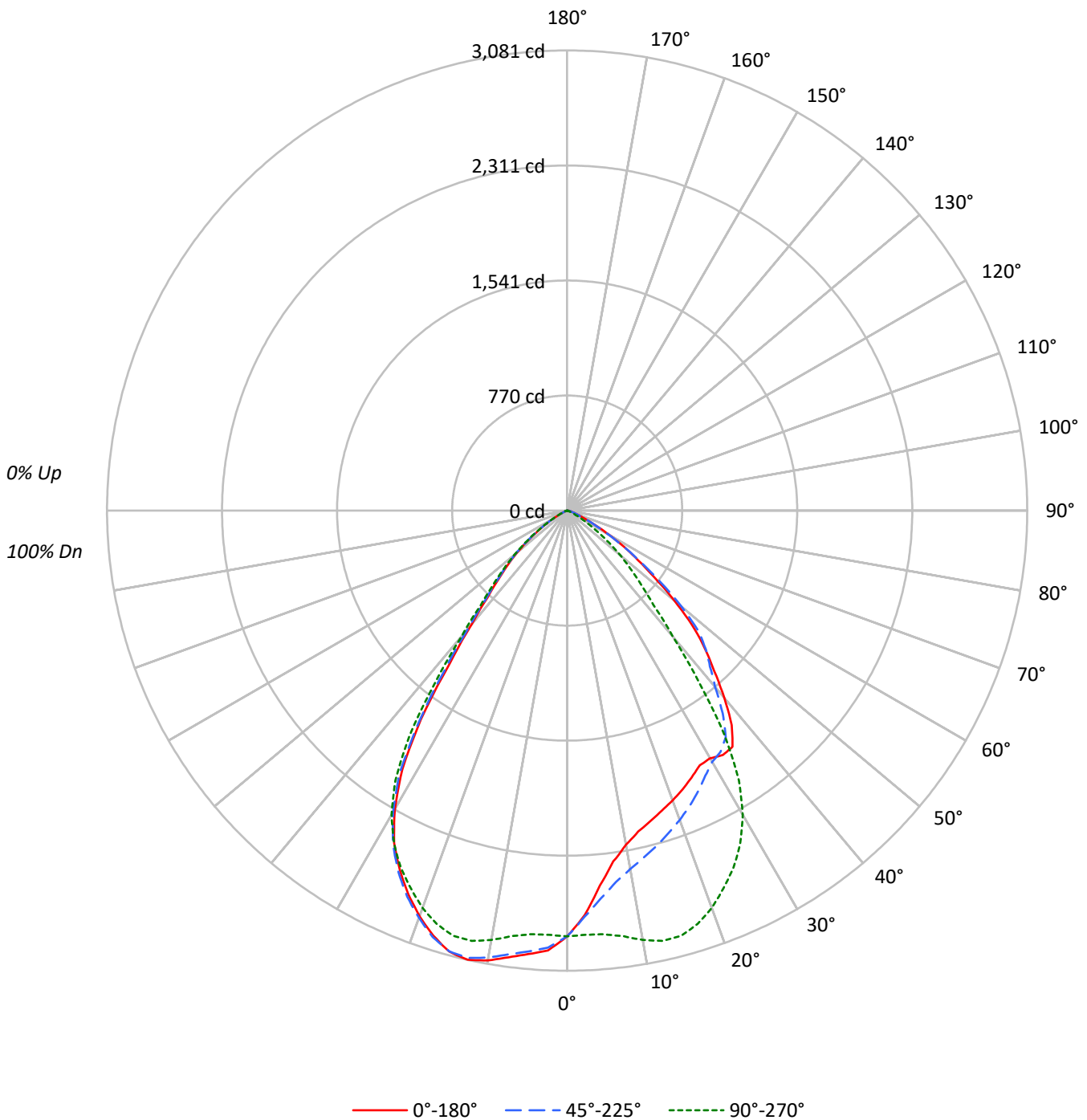
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	87911	87911	87911
5°	77998	88133	92259
10°	71113	91403	95765
15°	68726	94074	97589
20°	67744	92913	94833
25°	67079	89711	90273
30°	68173	83722	82173
35°	72665	69280	64262
40°	65851	44356	40161
45°	56840	30348	28254
50°	44845	22135	20844
55°	31128	13612	12806
60°	19815	6883	6143
65°	9894	2736	2080
70°	5473	1352	739
75°	3932	977	357
80°	3196	657	124
85°	3432	531	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.7	6.1
10°-20°	767.5	17.6
20°-30°	1113.9	25.5
30°-40°	1097.1	25.1
40°-50°	687.7	15.8
50°-60°	331.8	7.6
60°-70°	80.3	1.8
70°-80°	16.2	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°	2147.1	49.2
0°-40°	3244.2	74.3
0°-60°	4263.7	97.7
0°-90°	4364.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4364.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2851	2851	2851	2851	2851	
5°	2520	2605	2847	2962	2980	233
15°	2153	2322	2947	3055	3057	609
25°	1972	2074	2637	2673	2653	912
35°	1930	1852	1840	1736	1707	1168
45°	1303	1312	696	667	648	996
55°	579	598	253	250	238	533
65°	136	134	38	32	28	155
75°	33	28	8	4	3	37
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°	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9
2.5°	2710.1	2692.9	2660.7	2699.6	2699.6	2677.9	2721.3	2695.1	2716.1	2749.0	2719.8
5°	2519.8	2505.6	2478.6	2519.8	2525.1	2504.8	2557.3	2537.8	2568.5	2609.0	2605.2
7.5°	2369.3	2351.3	2326.6	2369.3	2377.5	2364.0	2414.2	2405.2	2445.7	2498.1	2507.1
10°	2271.1	2252.4	2230.7	2269.6	2275.6	2266.6	2317.6	2312.3	2352.0	2412.7	2436.7
12.5°	2201.5	2185.7	2161.8	2203.0	2209.7	2197.0	2244.9	2242.7	2283.9	2347.5	2377.5
15°	2152.8	2134.1	2112.3	2147.5	2156.5	2142.3	2188.0	2183.5	2225.4	2288.4	2322.1
17.5°	2107.1	2089.9	2067.4	2100.4	2109.3	2094.4	2139.3	2131.8	2167.8	2227.7	2262.2
20°	2064.4	2045.7	2025.5	2059.2	2064.4	2047.2	2092.1	2082.4	2114.6	2170.0	2203.7
22.5°	2020.2	2000.7	1979.8	2012.7	2018.0	2000.7	2041.9	2030.7	2060.7	2110.8	2141.6
25°	1971.5	1953.5	1932.6	1963.3	1967.8	1949.0	1992.5	1978.3	2004.5	2048.7	2074.1
27.5°	1922.8	1905.6	1882.4	1913.8	1916.1	1898.1	1937.8	1918.3	1940.1	1980.5	2002.2
30°	1914.6	1895.1	1871.1	1896.6	1897.4	1874.1	1911.6	1888.4	1900.4	1930.3	1943.1
32.5°	1940.8	1921.3	1896.6	1917.6	1915.3	1889.9	1925.8	1897.4	1901.1	1916.8	1913.8
35°	1930.3	1907.1	1877.9	1900.4	1900.4	1869.6	1905.6	1871.9	1868.1	1870.4	1851.7
37.5°	1811.2	1793.2	1765.5	1787.3	1785.0	1761.8	1789.5	1761.8	1749.0	1743.8	1710.1
40°	1635.9	1614.2	1593.2	1616.5	1618.7	1594.0	1629.9	1598.5	1594.7	1579.8	1540.1
42.5°	1458.4	1450.9	1430.7	1450.2	1460.7	1439.7	1469.7	1454.7	1456.9	1453.2	1415.7
45°	1303.4	1290.6	1275.6	1298.1	1304.9	1294.4	1324.3	1315.3	1324.3	1343.1	1312.3
47.5°	1136.3	1123.6	1107.1	1131.1	1143.1	1123.6	1149.1	1146.1	1159.5	1191.8	1188.8
50°	934.8	925.8	922.8	925.8	933.3	924.3	942.3	943.1	952.1	996.2	999.2
52.5°	740.1	737.8	727.3	737.1	737.1	722.8	740.8	732.6	741.6	771.5	791.0
55°	579.0	576.8	570.0	579.0	569.3	564.0	569.3	561.0	554.3	577.5	597.7
57.5°	450.9	443.4	435.2	438.9	438.2	427.0	433.0	423.2	418.0	426.2	444.2
60°	321.3	319.1	311.6	315.4	318.3	310.1	316.1	311.6	302.6	309.4	310.1
62.5°	213.5	215.0	210.5	211.2	209.0	207.5	211.2	213.5	211.2	208.2	209.0
65°	135.6	134.8	134.1	134.8	136.3	133.3	135.6	137.1	134.8	134.8	134.1
67.5°	89.9	87.6	85.4	86.9	88.4	86.1	88.4	87.6	88.4	87.6	85.4
70°	60.7	59.9	59.2	59.9	59.9	58.4	59.9	59.2	59.9	59.2	56.9
72.5°	44.2	44.2	43.4	44.2	44.2	42.7	43.4	41.9	42.7	41.9	40.4
75°	33.0	33.0	32.2	33.0	32.2	31.5	32.2	31.5	30.0	30.0	28.5
77.5°	24.0	24.0	24.0	24.0	24.0	23.2	23.2	22.5	21.7	21.0	21.0
80°	18.0	17.2	17.2	17.2	17.2	16.5	17.2	16.5	15.7	15.0	14.2
82.5°	12.7	13.5	12.7	12.7	12.7	12.0	12.7	12.0	12.0	11.2	9.7
85°	9.7	9.7	9.7	9.7	9.7	9.0	9.0	9.0	8.2	8.2	7.5
87.5°	5.2	5.2	5.2	6.0	5.2	5.2	5.2	4.5	4.5	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9
2.5°	2758.8	2762.5	2754.3	2767.0	2816.5	2776.8	2793.2	2798.5	2835.9	2842.7	2838.2
5°	2653.9	2670.4	2680.9	2709.3	2764.0	2735.6	2764.8	2783.5	2831.4	2847.2	2850.9
7.5°	2571.5	2606.0	2631.4	2677.9	2742.3	2720.6	2764.8	2795.5	2853.9	2874.1	2883.9
10°	2510.1	2562.5	2606.7	2670.4	2743.0	2728.8	2786.5	2829.9	2895.1	2919.1	2931.1
12.5°	2463.6	2527.3	2586.5	2667.4	2746.0	2739.3	2809.0	2858.4	2927.3	2951.3	2965.5
15°	2412.7	2486.1	2555.0	2645.7	2730.3	2728.8	2803.7	2856.2	2926.6	2946.8	2960.3
17.5°	2352.0	2430.7	2506.3	2604.5	2688.4	2689.9	2765.5	2817.2	2886.1	2902.6	2911.6
20°	2290.6	2368.5	2444.2	2545.3	2627.7	2629.9	2704.1	2752.0	2818.0	2831.4	2833.7
22.5°	2225.4	2298.1	2373.8	2474.1	2553.5	2555.0	2628.4	2673.4	2729.6	2736.3	2742.3
25°	2151.3	2222.5	2293.6	2393.2	2468.9	2473.4	2540.1	2579.8	2631.4	2636.7	2638.9
27.5°	2074.1	2132.6	2200.7	2286.1	2362.5	2359.5	2422.5	2467.4	2513.8	2510.8	2510.1
30°	1996.2	2044.9	2086.9	2169.3	2225.4	2227.7	2286.9	2308.6	2357.3	2351.3	2350.5
32.5°	1941.6	1954.3	1965.5	2007.5	2060.7	2041.9	2082.4	2109.3	2143.1	2140.8	2141.6
35°	1841.2	1818.0	1784.3	1790.2	1822.5	1793.2	1815.0	1814.2	1848.7	1840.4	1850.2
37.5°	1669.6	1603.7	1528.8	1486.1	1492.1	1455.4	1447.9	1465.9	1477.9	1454.7	1462.9
40°	1486.9	1389.5	1272.6	1175.3	1170.0	1124.3	1116.1	1098.1	1121.3	1101.9	1107.9
42.5°	1352.0	1223.2	1069.7	951.3	925.8	887.6	865.2	862.2	868.9	855.4	851.7
45°	1248.7	1111.6	935.6	800.0	771.5	730.3	707.9	699.6	700.4	695.9	692.1
47.5°	1127.3	989.5	811.2	672.7	640.4	601.5	579.0	573.8	576.8	570.8	566.3
50°	959.5	835.9	673.4	546.8	518.3	489.9	471.9	466.7	465.9	461.4	458.4
52.5°	779.0	676.4	535.6	430.0	404.5	376.8	364.0	357.3	358.0	353.6	349.1
55°	603.0	539.3	415.0	325.1	301.9	280.1	268.2	259.9	257.7	253.2	250.9
57.5°	448.7	406.0	310.9	234.5	221.0	200.0	188.0	178.3	176.8	174.5	173.8
60°	314.6	283.9	218.7	167.0	151.3	138.6	126.6	116.9	112.4	111.6	109.4
62.5°	203.7	185.0	143.8	111.6	99.6	90.6	78.7	71.9	68.9	65.9	66.7
65°	126.6	112.4	89.9	71.9	65.2	58.4	49.4	43.4	40.4	37.5	38.2
67.5°	78.7	70.4	56.9	46.4	41.9	36.7	30.0	25.5	23.2	21.0	19.5
70°	53.2	45.7	39.0	33.0	30.0	26.2	21.7	18.0	16.5	15.0	13.5
72.5°	37.5	33.7	28.5	24.7	22.5	19.5	16.5	14.2	12.7	11.2	9.7
75°	27.0	24.0	21.0	18.0	16.5	15.0	12.7	11.2	9.7	8.2	6.7
77.5°	19.5	17.2	15.0	13.5	12.7	10.5	9.0	8.2	7.5	6.0	4.5
80°	13.5	12.0	9.7	9.0	9.0	7.5	6.7	6.0	5.2	3.7	3.0
82.5°	9.0	8.2	7.5	6.7	6.0	5.2	5.2	3.7	3.0	2.2	1.5
85°	6.7	6.0	5.2	4.5	4.5	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9
2.5°	2876.4	2878.6	2891.4	2881.6	2906.3	2924.3	2915.3	2935.6	2928.8	2927.3	2950.5
5°	2895.9	2901.1	2918.3	2909.3	2936.3	2955.8	2946.8	2969.3	2962.5	2961.0	2985.0
7.5°	2933.3	2938.6	2953.5	2946.0	2974.5	2991.7	2980.5	3005.2	2996.2	2995.5	3018.7
10°	2980.5	2988.0	3000.7	2993.2	3019.5	3034.4	3023.2	3047.2	3038.9	3035.2	3060.6
12.5°	3015.7	3020.9	3033.7	3027.7	3053.2	3064.4	3054.7	3077.9	3067.4	3064.4	3086.9
15°	3007.5	3012.7	3023.2	3018.0	3041.9	3052.4	3039.7	3065.1	3054.7	3048.7	3068.9
17.5°	2955.0	2958.0	2965.5	2960.3	2985.7	2992.5	2978.3	3003.7	2994.0	2983.5	3003.0
20°	2877.9	2876.4	2880.9	2878.6	2899.6	2903.3	2894.4	2913.1	2901.8	2895.9	2907.1
22.5°	2782.0	2780.5	2783.5	2777.5	2798.5	2800.7	2787.2	2809.7	2798.5	2787.2	2806.0
25°	2675.6	2667.4	2665.9	2668.1	2682.4	2684.6	2670.4	2686.9	2672.6	2663.6	2681.6
27.5°	2544.5	2534.1	2531.8	2534.1	2548.3	2537.8	2525.8	2537.8	2523.6	2515.3	2526.6
30°	2382.8	2367.8	2361.0	2356.5	2371.5	2367.8	2340.1	2353.5	2331.1	2319.1	2327.3
32.5°	2164.8	2156.5	2138.6	2128.1	2142.3	2113.8	2096.6	2096.6	2087.6	2067.4	2071.9
35°	1862.2	1849.4	1832.9	1824.0	1826.2	1788.0	1759.5	1765.5	1735.6	1730.3	1732.6
37.5°	1479.4	1458.4	1452.4	1433.7	1438.2	1404.5	1365.5	1366.3	1350.6	1334.1	1328.8
40°	1111.6	1107.9	1101.9	1086.1	1092.1	1055.4	1040.4	1041.2	1030.7	1018.7	1024.7
42.5°	859.2	847.2	843.4	838.2	839.7	833.7	814.2	816.5	807.5	804.5	801.5
45°	698.1	685.4	676.4	680.9	680.9	674.2	666.7	671.2	666.7	660.7	663.7
47.5°	575.3	563.3	558.8	558.0	563.3	558.8	551.3	552.8	552.1	549.8	548.3
50°	459.2	456.2	452.4	450.2	452.4	450.9	444.2	447.9	450.2	442.7	444.9
52.5°	349.8	349.8	349.1	343.8	348.3	343.8	343.1	344.6	342.3	339.3	338.6
55°	256.2	253.9	250.2	249.4	250.9	249.4	247.9	248.7	250.2	242.7	242.7
57.5°	175.3	173.8	171.5	171.5	174.5	170.8	168.5	171.5	168.5	165.5	165.5
60°	112.4	111.6	109.4	109.4	109.4	108.6	106.4	107.1	108.6	104.1	104.9
62.5°	67.4	65.2	64.4	63.7	64.4	63.7	63.7	62.9	62.2	62.2	59.9
65°	36.7	35.2	33.7	34.5	34.5	33.7	33.7	33.7	32.2	31.5	30.7
67.5°	18.7	17.2	17.2	16.5	16.5	16.5	16.5	15.7	15.7	15.7	15.0
70°	12.0	11.2	10.5	10.5	10.5	9.7	9.7	9.7	9.7	9.7	9.0
72.5°	8.2	7.5	6.7	6.7	6.7	6.0	6.0	6.0	6.0	5.2	5.2
75°	6.0	5.2	4.5	4.5	4.5	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: P244090

CATALOG NUMBER: LSR8B40D010 EC8B40827 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9	2850.9
2.5°	2942.3	2936.3	2940.1	2967.8	2955.8	2952.0	2920.6	2948.3
5°	2977.5	2973.0	2973.0	3004.5	2990.2	2987.2	2956.5	2980.5
7.5°	3010.5	3006.0	3006.7	3038.9	3027.7	3023.2	2992.5	3016.5
10°	3053.2	3050.2	3050.9	3081.6	3069.6	3065.1	3033.7	3058.4
12.5°	3078.6	3074.1	3074.1	3107.1	3093.6	3086.9	3056.9	3080.9
15°	3059.2	3052.4	3052.4	3085.4	3070.4	3060.6	3034.4	3056.9
17.5°	2992.5	2985.7	2985.7	3014.2	3003.0	2988.7	2961.8	2982.7
20°	2899.6	2891.4	2889.1	2922.1	2906.3	2893.6	2869.6	2889.9
22.5°	2794.7	2791.0	2784.2	2817.2	2803.0	2789.5	2764.0	2779.8
25°	2668.9	2662.9	2656.2	2688.4	2674.1	2660.7	2640.4	2653.2
27.5°	2512.3	2513.1	2509.3	2534.8	2520.6	2513.1	2488.4	2509.3
30°	2322.8	2314.6	2311.6	2341.6	2328.1	2318.3	2287.6	2307.8
32.5°	2075.6	2063.7	2047.9	2081.6	2058.4	2050.2	2024.0	2053.2
35°	1716.1	1712.3	1698.1	1726.6	1713.8	1698.9	1682.4	1707.1
37.5°	1326.6	1329.6	1328.1	1335.6	1328.1	1318.3	1300.4	1291.4
40°	1012.7	1005.2	999.2	1012.7	997.0	997.0	986.5	997.7
42.5°	794.0	791.0	798.5	801.5	792.5	791.0	789.5	788.8
45°	655.4	655.4	656.9	659.9	656.9	655.4	650.9	647.9
47.5°	540.1	543.1	540.1	549.8	544.6	543.1	534.1	537.8
50°	437.4	433.7	437.4	440.4	441.2	436.7	432.2	434.5
52.5°	339.3	333.3	331.8	336.3	333.3	333.3	330.3	329.6
55°	238.9	241.2	237.5	241.2	239.7	237.5	235.2	238.2
57.5°	161.8	162.5	161.0	163.3	159.5	160.3	159.5	158.8
60°	104.9	101.9	101.9	104.1	100.4	100.4	99.6	99.6
62.5°	59.9	59.2	59.2	58.4	57.7	57.7	57.7	56.2
65°	30.7	30.0	29.2	29.2	29.2	29.2	28.5	28.5
67.5°	15.0	14.2	14.2	15.0	14.2	14.2	14.2	14.2
70°	9.0	9.0	8.2	9.0	8.2	8.2	8.2	8.2
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)