

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: P244144

Luminaire Tested: **LSR8B40D010 EC8B40950 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244144
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 EC8B40950 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4289.0 lumens
Efficiency: N/A
Efficacy: 104.9 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

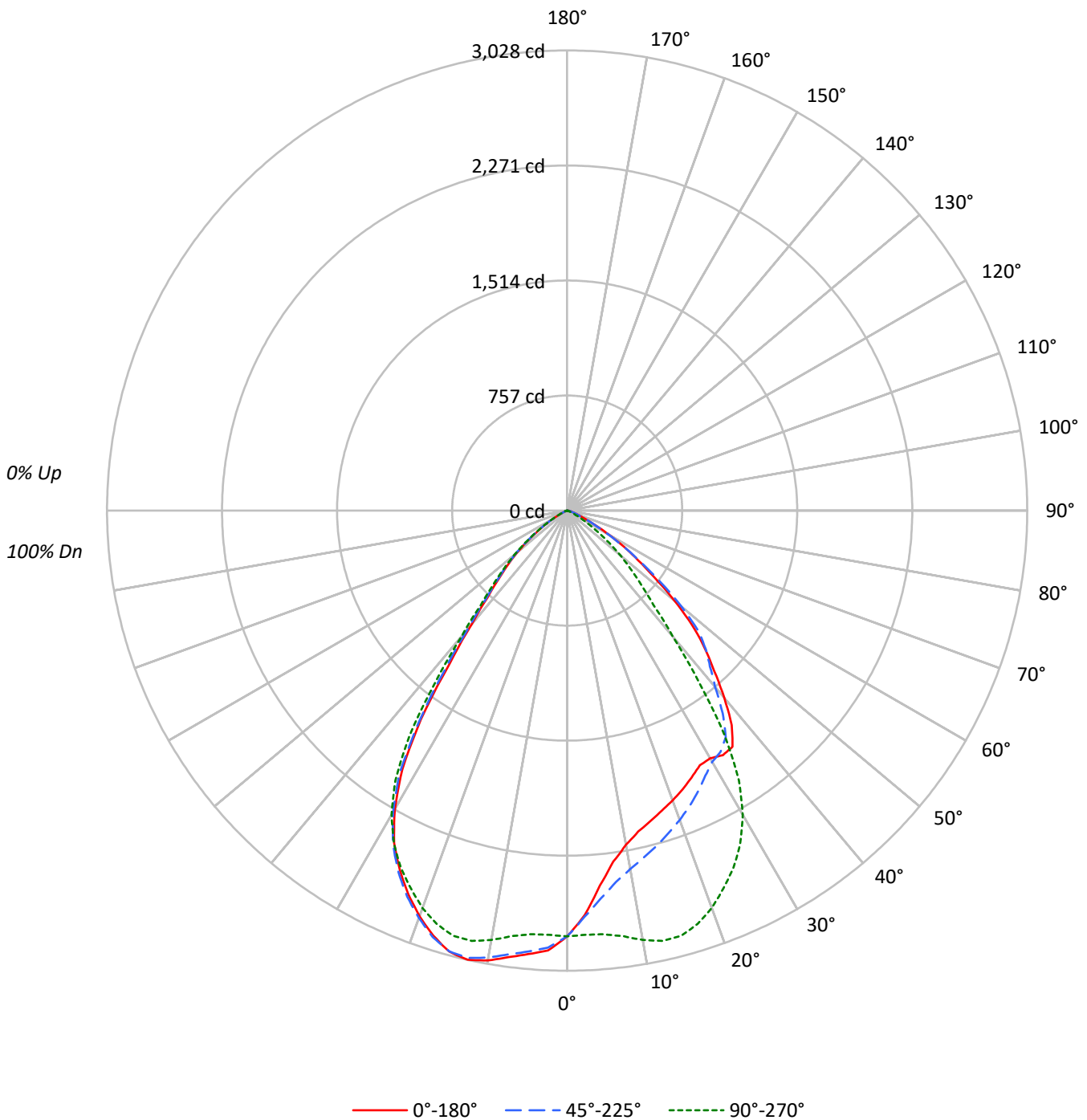
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	86400	86400	86400
5°	76658	86616	90674
10°	69892	89831	94118
15°	67545	92455	95913
20°	66579	91318	93202
25°	65925	88170	88721
30°	67001	82284	80763
35°	71415	68091	63159
40°	64720	43591	39473
45°	55863	29824	27770
50°	44077	21756	20484
55°	30596	13376	12586
60°	19476	6765	6038
65°	9719	2685	2043
70°	5373	1325	730
75°	3860	965	346
80°	3143	657	124
85°	3397	531	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.1	6.1
10°-20°	754.3	17.6
20°-30°	1094.8	25.5
30°-40°	1078.2	25.1
40°-50°	675.9	15.8
50°-60°	326.1	7.6
60°-70°	78.9	1.8
70°-80°	15.9	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°	2110.2	49.2
0°-40°	3188.4	74.3
0°-60°	4190.5	97.7
0°-90°	4289.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4289.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2802	2802	2802	2802	2802	
5°	2476	2560	2798	2912	2929	229
15°	2116	2282	2896	3002	3004	598
25°	1938	2038	2591	2627	2608	897
35°	1897	1820	1809	1706	1678	1148
45°	1281	1290	684	655	637	979
55°	569	588	249	246	234	524
65°	133	132	37	32	28	152
75°	32	28	8	4	3	36
85°	10	7	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°	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9
2.5°	2663.5	2646.6	2614.9	2653.2	2653.2	2631.9	2674.6	2648.8	2669.4	2701.8	2673.1
5°	2476.5	2462.5	2436.0	2476.5	2481.7	2461.8	2513.3	2494.2	2524.4	2564.1	2560.4
7.5°	2328.6	2310.9	2286.6	2328.6	2336.6	2323.4	2372.7	2363.9	2403.6	2455.2	2464.0
10°	2232.1	2213.7	2192.4	2230.6	2236.5	2227.7	2277.8	2272.6	2311.6	2371.2	2394.8
12.5°	2163.6	2148.2	2124.6	2165.1	2171.7	2159.2	2206.3	2204.1	2244.6	2307.2	2336.6
15°	2115.8	2097.4	2076.0	2110.6	2119.5	2105.5	2150.4	2146.0	2187.2	2249.0	2282.2
17.5°	2070.9	2054.0	2031.9	2064.3	2073.1	2058.4	2102.5	2095.2	2130.5	2189.4	2223.3
20°	2028.9	2010.5	1990.6	2023.8	2028.9	2012.0	2056.2	2046.6	2078.2	2132.7	2165.9
22.5°	1985.5	1966.3	1945.7	1978.1	1983.3	1966.3	2006.8	1995.8	2025.2	2074.6	2104.8
25°	1937.6	1920.0	1899.4	1929.5	1934.0	1915.6	1958.2	1944.3	1970.0	2013.5	2038.5
27.5°	1889.8	1872.9	1850.0	1881.0	1883.2	1865.5	1904.5	1885.4	1906.7	1946.5	1967.8
30°	1881.7	1862.5	1839.0	1864.0	1864.8	1841.9	1878.7	1855.9	1867.7	1897.1	1909.7
32.5°	1907.5	1888.3	1864.0	1884.6	1882.4	1857.4	1892.7	1864.8	1868.4	1883.9	1881.0
35°	1897.1	1874.3	1845.6	1867.7	1867.7	1837.5	1872.9	1839.7	1836.0	1838.3	1819.8
37.5°	1780.1	1762.4	1735.2	1756.5	1754.3	1731.5	1758.7	1731.5	1719.0	1713.8	1680.7
40°	1607.8	1586.5	1565.9	1588.7	1590.9	1566.6	1601.9	1571.0	1567.3	1552.6	1513.6
42.5°	1433.4	1426.0	1406.1	1425.3	1435.6	1414.9	1444.4	1429.7	1431.9	1428.2	1391.4
45°	1281.0	1268.4	1253.7	1275.8	1282.4	1272.1	1301.6	1292.7	1301.6	1320.0	1289.8
47.5°	1116.8	1104.3	1088.1	1111.6	1123.4	1104.3	1129.3	1126.4	1139.6	1171.3	1168.3
50°	918.8	909.9	907.0	909.9	917.3	908.5	926.1	926.9	935.7	979.1	982.1
52.5°	727.3	725.1	714.8	724.4	724.4	710.4	728.1	720.0	728.8	758.3	777.4
55°	569.1	566.9	560.2	569.1	559.5	554.3	559.5	551.4	544.8	567.6	587.5
57.5°	443.2	435.8	427.7	431.4	430.7	419.6	425.5	415.9	410.8	418.9	436.6
60°	315.8	313.6	306.3	309.9	312.9	304.8	310.7	306.3	297.4	304.0	304.8
62.5°	209.8	211.3	206.9	207.6	205.4	203.9	207.6	209.8	207.6	204.7	205.4
65°	133.2	132.5	131.8	132.5	134.0	131.0	133.2	134.7	132.5	132.5	131.8
67.5°	88.3	86.1	83.9	85.4	86.9	84.7	86.9	86.1	86.9	86.1	83.9
70°	59.6	58.9	58.2	58.9	58.9	57.4	58.9	58.2	58.9	58.2	55.9
72.5°	43.4	43.4	42.7	43.4	43.4	42.0	42.7	41.2	42.0	41.2	39.8
75°	32.4	32.4	31.7	32.4	31.7	30.9	31.7	30.9	29.4	29.4	28.0
77.5°	23.6	23.6	23.6	23.6	23.6	22.8	22.8	22.1	21.3	20.6	20.6
80°	17.7	16.9	16.9	16.9	16.9	16.2	16.9	16.2	15.5	14.7	14.0
82.5°	12.5	13.3	12.5	12.5	12.5	11.8	12.5	11.8	11.8	11.0	9.6
85°	9.6	9.6	9.6	9.6	9.6	8.8	8.8	8.8	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9
2.5°	2711.4	2715.0	2706.9	2719.5	2768.1	2729.0	2745.2	2750.4	2787.2	2793.8	2789.4
5°	2608.3	2624.5	2634.8	2662.8	2716.5	2688.5	2717.3	2735.7	2782.8	2798.2	2801.9
7.5°	2527.3	2561.2	2586.2	2631.9	2695.2	2673.8	2717.3	2747.4	2804.9	2824.7	2834.3
10°	2467.0	2518.5	2561.9	2624.5	2695.9	2681.9	2738.6	2781.3	2845.4	2868.9	2880.7
12.5°	2421.3	2483.9	2542.0	2621.6	2698.9	2692.2	2760.7	2809.3	2877.0	2900.6	2914.6
15°	2371.2	2443.4	2511.1	2600.2	2683.4	2681.9	2755.5	2807.1	2876.3	2896.1	2909.4
17.5°	2311.6	2388.9	2463.3	2559.7	2642.2	2643.6	2718.0	2768.8	2836.5	2852.7	2861.5
20°	2251.3	2327.8	2402.2	2501.6	2582.5	2584.7	2657.6	2704.7	2769.5	2782.8	2785.0
22.5°	2187.2	2258.6	2333.0	2431.6	2509.7	2511.1	2583.3	2627.4	2682.7	2689.3	2695.2
25°	2114.3	2184.3	2254.2	2352.1	2426.5	2430.9	2496.4	2535.4	2586.2	2591.4	2593.6
27.5°	2038.5	2095.9	2162.9	2246.8	2321.9	2319.0	2380.8	2425.0	2470.6	2467.7	2467.0
30°	1961.9	2009.8	2051.0	2132.0	2187.2	2189.4	2247.6	2268.9	2316.8	2310.9	2310.1
32.5°	1908.2	1920.7	1931.7	1973.0	2025.2	2006.8	2046.6	2073.1	2106.2	2104.0	2104.8
35°	1809.5	1786.7	1753.6	1759.5	1791.1	1762.4	1783.8	1783.0	1816.9	1808.8	1818.4
37.5°	1641.0	1576.2	1502.6	1460.6	1466.5	1430.4	1423.0	1440.7	1452.5	1429.7	1437.8
40°	1461.3	1365.6	1250.8	1155.1	1149.9	1105.0	1096.9	1079.2	1102.1	1082.9	1088.8
42.5°	1328.8	1202.2	1051.3	935.0	909.9	872.4	850.3	847.3	854.0	840.7	837.0
45°	1227.2	1092.5	919.5	786.2	758.3	717.8	695.7	687.6	688.3	683.9	680.2
47.5°	1108.0	972.5	797.3	661.1	629.4	591.2	569.1	563.9	566.9	561.0	556.6
50°	943.1	821.6	661.8	537.4	509.4	481.5	463.8	458.6	457.9	453.5	450.5
52.5°	765.6	664.8	526.4	422.6	397.5	370.3	357.8	351.2	351.9	347.5	343.1
55°	592.6	530.1	407.8	319.5	296.7	275.3	263.6	255.5	253.2	248.8	246.6
57.5°	441.0	399.0	305.5	230.4	217.2	196.6	184.8	175.2	173.7	171.5	170.8
60°	309.2	279.0	215.0	164.2	148.7	136.2	124.4	114.8	110.4	109.7	107.5
62.5°	200.2	181.8	141.3	109.7	97.9	89.1	77.3	70.7	67.7	64.8	65.5
65°	124.4	110.4	88.3	70.7	64.0	57.4	48.6	42.7	39.8	36.8	37.5
67.5°	77.3	69.2	55.9	45.6	41.2	36.1	29.4	25.0	22.8	20.6	19.1
70°	52.3	44.9	38.3	32.4	29.4	25.8	21.3	17.7	16.2	14.7	13.3
72.5°	36.8	33.1	28.0	24.3	22.1	19.1	16.2	14.0	12.5	11.0	9.6
75°	26.5	23.6	20.6	17.7	16.2	14.7	12.5	11.0	9.6	8.1	6.6
77.5°	19.1	16.9	14.7	13.3	12.5	10.3	8.8	8.1	7.4	5.9	4.4
80°	13.3	11.8	9.6	8.8	8.8	7.4	6.6	5.9	5.2	3.7	2.9
82.5°	8.8	8.1	7.4	6.6	5.9	5.2	5.2	3.7	2.9	2.2	1.5
85°	6.6	5.9	5.2	4.4	4.4	3.7	2.9	2.2	2.2	1.5	0.7
87.5°	3.7	3.7	2.9	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°	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9
2.5°	2826.9	2829.2	2841.7	2832.1	2856.4	2874.1	2865.2	2885.1	2878.5	2877.0	2899.8
5°	2846.1	2851.2	2868.2	2859.3	2885.8	2905.0	2896.1	2918.2	2911.6	2910.1	2933.7
7.5°	2882.9	2888.1	2902.8	2895.4	2923.4	2940.3	2929.3	2953.6	2944.7	2944.0	2966.8
10°	2929.3	2936.6	2949.2	2941.8	2967.6	2982.3	2971.2	2994.8	2986.7	2983.0	3008.0
12.5°	2963.9	2969.0	2981.5	2975.7	3000.7	3011.7	3002.2	3025.0	3014.7	3011.7	3033.8
15°	2955.8	2960.9	2971.2	2966.1	2989.6	3000.0	2987.4	3012.5	3002.2	2996.3	3016.1
17.5°	2904.2	2907.2	2914.6	2909.4	2934.4	2941.1	2927.1	2952.1	2942.5	2932.2	2951.4
20°	2828.4	2826.9	2831.4	2829.2	2849.8	2853.4	2844.6	2863.0	2852.0	2846.1	2857.1
22.5°	2734.2	2732.7	2735.7	2729.8	2750.4	2752.6	2739.3	2761.4	2750.4	2739.3	2757.7
25°	2629.6	2621.6	2620.1	2622.3	2636.3	2638.5	2624.5	2640.7	2626.7	2617.9	2635.5
27.5°	2500.8	2490.5	2488.3	2490.5	2504.5	2494.2	2482.4	2494.2	2480.2	2472.1	2483.1
30°	2341.8	2327.1	2320.5	2316.0	2330.8	2327.1	2299.8	2313.1	2291.0	2279.2	2287.3
32.5°	2127.6	2119.5	2101.8	2091.5	2105.5	2077.5	2060.6	2060.6	2051.7	2031.9	2036.3
35°	1830.2	1817.6	1801.4	1792.6	1794.8	1757.3	1729.3	1735.2	1705.7	1700.6	1702.8
37.5°	1454.0	1433.4	1427.5	1409.1	1413.5	1380.3	1342.1	1342.8	1327.3	1311.1	1306.0
40°	1092.5	1088.8	1082.9	1067.5	1073.4	1037.3	1022.6	1023.3	1013.0	1001.2	1007.1
42.5°	844.4	832.6	828.9	823.8	825.3	819.4	800.2	802.4	793.6	790.7	787.7
45°	686.1	673.6	664.8	669.2	669.2	662.6	655.2	659.6	655.2	649.3	652.3
47.5°	565.4	553.6	549.2	548.5	553.6	549.2	541.8	543.3	542.6	540.4	538.9
50°	451.3	448.3	444.7	442.4	444.7	443.2	436.6	440.2	442.4	435.1	437.3
52.5°	343.8	343.8	343.1	337.9	342.3	337.9	337.2	338.6	336.4	333.5	332.8
55°	251.8	249.6	245.9	245.1	246.6	245.1	243.7	244.4	245.9	238.5	238.5
57.5°	172.3	170.8	168.6	168.6	171.5	167.8	165.6	168.6	165.6	162.7	162.7
60°	110.4	109.7	107.5	107.5	107.5	106.7	104.5	105.3	106.7	102.3	103.1
62.5°	66.3	64.0	63.3	62.6	63.3	62.6	62.6	61.8	61.1	61.1	58.9
65°	36.1	34.6	33.1	33.9	33.9	33.1	33.1	33.1	31.7	30.9	30.2
67.5°	18.4	16.9	16.9	16.2	16.2	16.2	16.2	15.5	15.5	15.5	14.7
70°	11.8	11.0	10.3	10.3	10.3	9.6	9.6	9.6	9.6	9.6	8.8
72.5°	8.1	7.4	6.6	6.6	6.6	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	2.9	2.9	2.9	2.9	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: P244144

CATALOG NUMBER: LSR8B40D010 EC8B40950 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9	2801.9
2.5°	2891.7	2885.8	2889.5	2916.8	2905.0	2901.3	2870.4	2897.6
5°	2926.3	2921.9	2921.9	2952.8	2938.8	2935.9	2905.7	2929.3
7.5°	2958.7	2954.3	2955.0	2986.7	2975.7	2971.2	2941.1	2964.6
10°	3000.7	2997.7	2998.5	3028.7	3016.9	3012.5	2981.5	3005.8
12.5°	3025.7	3021.3	3021.3	3053.7	3040.4	3033.8	3004.4	3027.9
15°	3006.6	3000.0	3000.0	3032.3	3017.6	3008.0	2982.3	3004.4
17.5°	2941.1	2934.4	2934.4	2962.4	2951.4	2937.4	2910.9	2931.5
20°	2849.8	2841.7	2839.5	2871.9	2856.4	2843.9	2820.3	2840.2
22.5°	2746.7	2743.0	2736.4	2768.8	2754.8	2741.5	2716.5	2732.0
25°	2623.0	2617.1	2610.5	2642.2	2628.2	2614.9	2595.0	2607.6
27.5°	2469.2	2469.9	2466.2	2491.2	2477.3	2469.9	2445.6	2466.2
30°	2282.9	2274.8	2271.9	2301.3	2288.1	2278.5	2248.3	2268.2
32.5°	2040.0	2028.2	2012.7	2045.9	2023.0	2014.9	1989.2	2017.9
35°	1686.6	1682.9	1668.9	1696.9	1684.4	1669.7	1653.5	1677.8
37.5°	1303.8	1306.7	1305.3	1312.6	1305.3	1295.7	1278.0	1269.2
40°	995.3	988.0	982.1	995.3	979.9	979.9	969.6	980.6
42.5°	780.4	777.4	784.8	787.7	778.9	777.4	775.9	775.2
45°	644.2	644.2	645.6	648.6	645.6	644.2	639.7	636.8
47.5°	530.8	533.7	530.8	540.4	535.2	533.7	524.9	528.6
50°	429.9	426.3	429.9	432.9	433.6	429.2	424.8	427.0
52.5°	333.5	327.6	326.1	330.5	327.6	327.6	324.7	323.9
55°	234.8	237.1	233.4	237.1	235.6	233.4	231.2	234.1
57.5°	159.0	159.8	158.3	160.5	156.8	157.5	156.8	156.1
60°	103.1	100.1	100.1	102.3	98.6	98.6	97.9	97.9
62.5°	58.9	58.2	58.2	57.4	56.7	56.7	56.7	55.2
65°	30.2	29.4	28.7	28.7	28.7	28.7	28.0	28.0
67.5°	14.7	14.0	14.0	14.7	14.0	14.0	14.0	14.0
70°	8.8	8.8	8.1	8.8	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°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
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)