

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: P245447

Luminaire Tested: **LSR8B50D010 EC8B50927 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245447  
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: LSR8B50D010 EC8B50927 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4396.5 lumens  
Efficiency: N/A  
Efficacy: 83.0 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

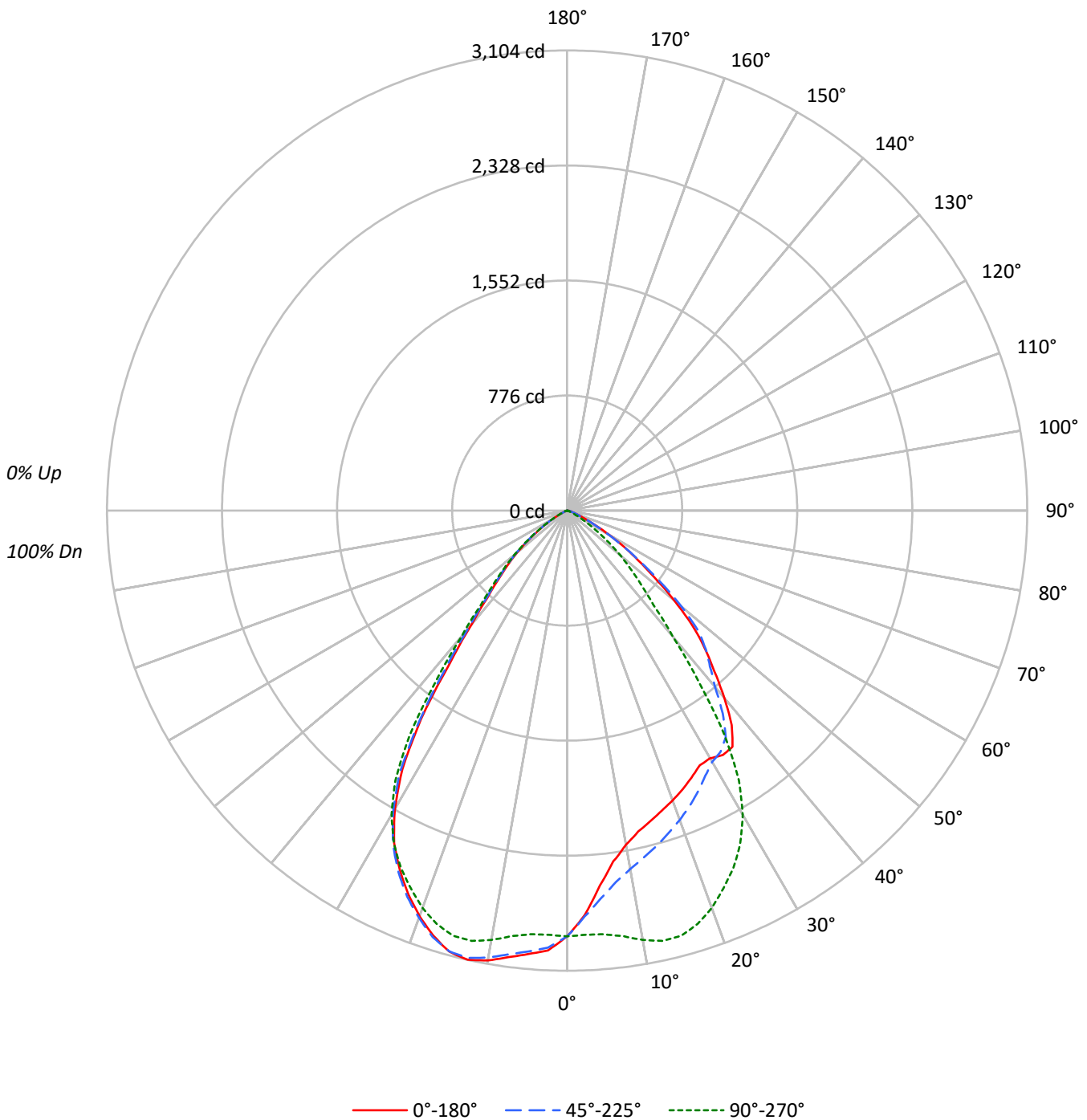
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	267.7	6.1
10°-20°	773.2	17.6
20°-30°	1122.2	25.5
30°-40°	1105.3	25.1
40°-50°	692.8	15.8
50°-60°	334.3	7.6
60°-70°	80.9	1.8
70°-80°	16.4	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°	2163.1	49.2
0°-40°	3268.3	74.3
0°-60°	4295.5	97.7
0°-90°	4396.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4396.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2872	2872	2872	2872	2872	
5°	2539	2625	2868	2985	3003	235
15°	2169	2339	2969	3077	3080	613
25°	1986	2090	2656	2693	2673	919
35°	1945	1866	1854	1748	1720	1177
45°	1313	1322	701	672	653	1004
55°	583	602	255	252	240	537
65°	137	135	38	32	29	156
75°	33	29	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°	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1
2.5°	2730.3	2712.9	2680.4	2719.7	2719.7	2697.9	2741.6	2715.2	2736.3	2769.5	2740.0
5°	2538.6	2524.3	2497.0	2538.6	2543.8	2523.5	2576.4	2556.7	2587.6	2628.5	2624.6
7.5°	2386.9	2368.8	2343.9	2386.9	2395.2	2381.6	2432.1	2423.1	2463.9	2516.7	2525.7
10°	2288.0	2269.2	2247.3	2286.6	2292.6	2283.5	2334.8	2329.5	2369.6	2430.7	2454.9
12.5°	2217.8	2202.1	2177.9	2219.4	2226.2	2213.3	2261.7	2259.3	2300.8	2365.0	2395.2
15°	2168.8	2150.0	2128.0	2163.5	2172.6	2158.3	2204.3	2199.7	2242.0	2305.5	2339.3
17.5°	2122.8	2105.4	2082.8	2116.0	2125.0	2109.9	2155.3	2147.7	2184.0	2244.3	2279.0
20°	2079.8	2060.9	2040.5	2074.5	2079.8	2062.5	2107.7	2097.9	2130.3	2186.2	2220.2
22.5°	2035.2	2015.7	1994.5	2027.7	2033.0	2015.7	2057.2	2045.8	2076.0	2126.6	2157.5
25°	1986.2	1968.1	1946.9	1977.9	1982.5	1963.6	2007.3	1992.9	2019.4	2063.9	2089.6
27.5°	1937.1	1919.8	1896.4	1928.1	1930.4	1912.3	1952.2	1932.6	1954.5	1995.3	2017.1
30°	1928.8	1909.2	1885.0	1910.7	1911.5	1888.1	1925.8	1902.5	1914.5	1944.7	1957.5
32.5°	1955.2	1935.7	1910.7	1931.8	1929.6	1904.0	1940.2	1911.5	1915.3	1931.1	1928.1
35°	1944.7	1921.3	1891.9	1914.5	1914.5	1883.6	1919.8	1885.8	1882.0	1884.4	1865.5
37.5°	1824.8	1806.6	1778.6	1800.6	1798.3	1774.9	1802.8	1774.9	1762.1	1756.8	1722.8
40°	1648.1	1626.2	1605.1	1628.6	1630.8	1605.8	1642.0	1610.4	1606.6	1591.5	1551.5
42.5°	1469.2	1461.7	1441.4	1460.9	1471.5	1450.5	1480.6	1465.5	1467.8	1464.0	1426.3
45°	1313.1	1300.3	1285.2	1307.8	1314.6	1304.0	1334.2	1325.1	1334.2	1353.0	1322.1
47.5°	1144.8	1132.0	1115.3	1139.5	1151.6	1132.0	1157.6	1154.6	1168.2	1200.6	1197.6
50°	941.7	932.7	929.7	932.7	940.3	931.3	949.4	950.1	959.2	1003.6	1006.6
52.5°	745.5	743.3	732.7	742.6	742.6	728.2	746.3	738.0	747.1	777.3	796.9
55°	583.3	581.1	574.3	583.3	573.5	568.2	573.5	565.2	558.4	581.8	602.2
57.5°	454.3	446.7	438.4	442.2	441.4	430.1	436.2	426.4	421.1	429.4	447.5
60°	323.8	321.5	313.9	317.7	320.7	312.4	318.5	313.9	304.9	311.6	312.4
62.5°	215.1	216.6	212.1	212.8	210.5	209.0	212.8	215.1	212.8	209.8	210.5
65°	136.6	135.8	135.1	135.8	137.4	134.3	136.6	138.2	135.8	135.8	135.1
67.5°	90.6	88.3	86.1	87.5	89.1	86.7	89.1	88.3	89.1	88.3	86.1
70°	61.1	60.4	59.6	60.4	60.4	58.8	60.4	59.6	60.4	59.6	57.4
72.5°	44.6	44.6	43.8	44.6	44.6	43.0	43.8	42.3	43.0	42.3	40.7
75°	33.2	33.2	32.4	33.2	32.4	31.7	32.4	31.7	30.2	30.2	28.7
77.5°	24.2	24.2	24.2	24.2	24.2	23.4	23.4	22.6	21.9	21.2	21.2
80°	18.1	17.3	17.3	17.3	17.3	16.7	17.3	16.7	15.9	15.1	14.3
82.5°	12.8	13.6	12.8	12.8	12.8	12.0	12.8	12.0	12.0	11.4	9.8
85°	9.8	9.8	9.8	9.8	9.8	9.0	9.0	9.0	8.3	8.3	7.5
87.5°	5.3	5.3	5.3	6.1	5.3	5.3	5.3	4.5	4.5	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°	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1
2.5°	2779.3	2783.1	2774.8	2787.6	2837.5	2797.4	2814.1	2819.4	2857.0	2863.8	2859.3
5°	2673.7	2690.3	2700.8	2729.5	2784.6	2755.9	2785.4	2804.2	2852.5	2868.4	2872.1
7.5°	2590.6	2625.4	2651.1	2697.9	2762.8	2740.8	2785.4	2816.3	2875.2	2895.5	2905.3
10°	2528.8	2581.6	2626.1	2690.3	2763.5	2749.2	2807.2	2851.0	2916.7	2940.9	2952.9
12.5°	2482.0	2546.1	2605.7	2687.3	2766.5	2759.7	2829.9	2879.7	2949.1	2973.3	2987.5
15°	2430.7	2504.6	2574.1	2665.4	2750.6	2749.2	2824.6	2877.4	2948.4	2968.8	2982.4
17.5°	2369.6	2448.8	2525.1	2623.8	2708.4	2709.9	2786.1	2838.2	2907.6	2924.2	2933.3
20°	2307.7	2386.1	2462.4	2564.2	2647.2	2649.5	2724.2	2772.6	2838.9	2852.5	2854.8
22.5°	2242.0	2315.2	2391.4	2492.5	2572.5	2574.1	2648.0	2693.2	2749.8	2756.7	2762.8
25°	2167.3	2239.0	2310.8	2411.1	2487.3	2491.8	2558.9	2599.0	2651.1	2656.4	2658.6
27.5°	2089.6	2148.4	2217.2	2303.1	2380.2	2377.1	2440.5	2485.8	2532.6	2529.6	2528.8
30°	2011.0	2060.1	2102.4	2185.4	2242.0	2244.3	2303.9	2325.8	2374.9	2368.8	2368.0
32.5°	1956.0	1968.9	1980.1	2022.4	2076.0	2057.2	2097.9	2125.0	2159.0	2156.7	2157.5
35°	1854.9	1831.5	1797.5	1803.6	1836.0	1806.6	1828.5	1827.7	1862.4	1854.1	1863.9
37.5°	1682.1	1615.7	1540.2	1497.1	1503.2	1466.2	1458.7	1476.8	1488.9	1465.5	1473.8
40°	1497.9	1399.8	1282.2	1184.1	1178.8	1132.8	1124.4	1106.3	1129.7	1110.0	1116.1
42.5°	1362.1	1232.3	1077.6	958.4	932.7	894.3	871.6	868.6	875.4	861.8	858.0
45°	1258.0	1119.8	942.5	805.9	777.3	735.8	713.1	704.8	705.6	701.1	697.3
47.5°	1135.7	996.9	817.3	677.7	645.2	605.9	583.3	578.0	581.1	575.0	570.5
50°	966.7	842.2	678.4	550.9	522.2	493.5	475.4	470.1	469.4	464.8	461.8
52.5°	784.8	681.4	539.6	433.1	407.5	379.6	366.8	360.0	360.7	356.2	351.7
55°	607.5	543.4	418.0	327.5	304.1	282.3	270.1	261.9	259.7	255.0	252.8
57.5°	452.0	409.0	313.2	236.2	222.6	201.5	189.5	179.5	178.1	175.8	175.0
60°	316.9	286.0	220.4	168.3	152.4	139.6	127.6	117.7	113.2	112.4	110.1
62.5°	205.3	186.4	144.9	112.4	100.4	91.4	79.2	72.4	69.4	66.4	67.2
65°	127.6	113.2	90.6	72.4	65.7	58.8	49.8	43.8	40.7	37.7	38.5
67.5°	79.2	71.0	57.4	46.8	42.3	37.0	30.2	25.6	23.4	21.2	19.6
70°	53.6	46.0	39.3	33.2	30.2	26.4	21.9	18.1	16.7	15.1	13.6
72.5°	37.7	34.0	28.7	24.9	22.6	19.6	16.7	14.3	12.8	11.4	9.8
75°	27.1	24.2	21.2	18.1	16.7	15.1	12.8	11.4	9.8	8.3	6.8
77.5°	19.6	17.3	15.1	13.6	12.8	10.6	9.0	8.3	7.5	6.1	4.5
80°	13.6	12.0	9.8	9.0	9.0	7.5	6.8	6.1	5.3	3.8	3.0
82.5°	9.0	8.3	7.5	6.8	6.1	5.3	5.3	3.8	3.0	2.2	1.5
85°	6.8	6.1	5.3	4.5	4.5	3.8	3.0	2.2	2.2	1.5	0.8
87.5°	3.8	3.8	3.0	2.2	2.2	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°	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1
2.5°	2897.8	2900.0	2912.8	2903.1	2928.0	2946.2	2937.0	2957.4	2950.6	2949.1	2972.5
5°	2917.5	2922.8	2940.1	2931.0	2958.2	2977.8	2968.8	2991.4	2984.6	2983.0	3007.2
7.5°	2955.2	2960.4	2975.5	2968.0	2996.7	3014.0	3002.7	3027.6	3018.5	3017.8	3041.2
10°	3002.7	3010.3	3023.1	3015.6	3041.9	3057.1	3045.7	3069.9	3061.6	3057.8	3083.4
12.5°	3038.2	3043.5	3056.3	3050.2	3075.9	3087.2	3077.4	3100.8	3090.3	3087.2	3109.8
15°	3029.8	3035.1	3045.7	3040.4	3064.6	3075.2	3062.4	3088.0	3077.4	3071.4	3091.7
17.5°	2977.1	2980.0	2987.5	2982.4	3008.0	3014.8	3000.5	3026.1	3016.2	3005.7	3025.4
20°	2899.4	2897.8	2902.3	2900.0	2921.2	2925.0	2915.9	2934.8	2923.4	2917.5	2928.7
22.5°	2802.7	2801.2	2804.2	2798.2	2819.4	2821.6	2808.0	2830.6	2819.4	2808.0	2826.9
25°	2695.6	2687.3	2685.7	2688.0	2702.4	2704.6	2690.3	2706.9	2692.6	2683.5	2701.6
27.5°	2563.5	2553.0	2550.7	2553.0	2567.2	2556.7	2544.6	2556.7	2542.4	2534.1	2545.4
30°	2400.5	2385.5	2378.6	2374.1	2389.2	2385.5	2357.4	2371.0	2348.4	2336.4	2344.6
32.5°	2180.9	2172.6	2154.5	2143.9	2158.3	2129.6	2112.2	2112.2	2103.2	2082.8	2087.3
35°	1876.0	1863.2	1846.6	1837.6	1839.8	1801.4	1772.7	1778.6	1748.5	1743.2	1745.4
37.5°	1490.4	1469.2	1463.3	1444.4	1448.9	1414.9	1375.6	1376.4	1360.6	1344.0	1338.8
40°	1119.8	1116.1	1110.0	1094.2	1100.2	1063.2	1048.2	1049.0	1038.4	1026.3	1032.3
42.5°	865.6	853.5	849.7	844.4	846.0	839.9	820.2	822.6	813.5	810.4	807.4
45°	703.4	690.5	681.4	685.9	685.9	679.2	671.6	676.1	671.6	665.6	668.6
47.5°	579.6	567.4	562.9	562.2	567.4	562.9	555.4	556.9	556.2	553.9	552.4
50°	462.6	459.6	455.8	453.5	455.8	454.3	447.5	451.2	453.5	446.0	448.2
52.5°	352.5	352.5	351.7	346.4	350.9	346.4	345.6	347.2	344.8	341.9	341.1
55°	258.1	255.8	252.0	251.3	252.8	251.3	249.8	250.5	252.0	244.5	244.5
57.5°	176.6	175.0	172.8	172.8	175.8	172.0	169.8	172.8	169.8	166.7	166.7
60°	113.2	112.4	110.1	110.1	110.1	109.5	107.2	107.9	109.5	104.8	105.6
62.5°	68.0	65.7	64.9	64.1	64.9	64.1	64.1	63.3	62.7	62.7	60.4
65°	37.0	35.4	34.0	34.8	34.8	34.0	34.0	34.0	32.4	31.7	30.9
67.5°	18.9	17.3	17.3	16.7	16.7	16.7	16.7	15.9	15.9	15.9	15.1
70°	12.0	11.4	10.6	10.6	10.6	9.8	9.8	9.8	9.8	9.8	9.0
72.5°	8.3	7.5	6.8	6.8	6.8	6.1	6.1	6.1	6.1	5.3	5.3
75°	6.1	5.3	4.5	4.5	4.5	3.8	3.8	3.8	3.8	3.8	3.8
77.5°	3.8	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	0.8	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: P245447

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1	2872.1
2.5°	2964.3	2958.2	2961.9	2989.9	2977.8	2974.0	2942.3	2970.2
5°	2999.7	2995.2	2995.2	3026.8	3012.5	3009.5	2978.5	3002.7
7.5°	3032.9	3028.4	3029.1	3061.6	3050.2	3045.7	3014.8	3039.0
10°	3075.9	3072.8	3073.6	3104.5	3092.5	3088.0	3056.3	3081.2
12.5°	3101.5	3097.0	3097.0	3130.2	3116.7	3109.8	3079.7	3103.8
15°	3081.9	3075.2	3075.2	3108.4	3093.3	3083.4	3057.1	3079.7
17.5°	3014.8	3008.0	3008.0	3036.6	3025.4	3011.0	2983.8	3005.0
20°	2921.2	2912.8	2910.6	2943.8	2928.0	2915.2	2891.0	2911.4
22.5°	2815.5	2811.8	2805.0	2838.2	2823.9	2810.2	2784.6	2800.5
25°	2688.8	2682.7	2675.9	2708.4	2694.0	2680.4	2660.1	2672.9
27.5°	2531.0	2531.8	2528.0	2553.6	2539.4	2531.8	2507.0	2528.0
30°	2340.1	2331.8	2328.9	2359.0	2345.4	2335.6	2304.7	2325.0
32.5°	2091.2	2079.0	2063.1	2097.1	2073.7	2065.4	2039.1	2068.4
35°	1728.9	1725.1	1710.8	1739.5	1726.6	1711.5	1694.9	1719.8
37.5°	1336.5	1339.4	1338.0	1345.5	1338.0	1328.2	1310.1	1301.0
40°	1020.3	1012.7	1006.6	1020.3	1004.4	1004.4	993.8	1005.2
42.5°	799.9	796.9	804.5	807.4	798.4	796.9	795.4	794.6
45°	660.3	660.3	661.8	664.9	661.8	660.3	655.8	652.7
47.5°	544.1	547.1	544.1	553.9	548.7	547.1	538.1	541.8
50°	440.7	437.0	440.7	443.7	444.5	440.0	435.4	437.7
52.5°	341.9	335.8	334.3	338.8	335.8	335.8	332.8	332.0
55°	240.8	243.0	239.2	243.0	241.5	239.2	236.9	240.0
57.5°	163.0	163.8	162.2	164.5	160.8	161.4	160.8	160.0
60°	105.6	102.6	102.6	104.8	101.1	101.1	100.4	100.4
62.5°	60.4	59.6	59.6	58.8	58.2	58.2	58.2	56.6
65°	30.9	30.2	29.5	29.5	29.5	29.5	28.7	28.7
67.5°	15.1	14.3	14.3	15.1	14.3	14.3	14.3	14.3
70°	9.0	9.0	8.3	9.0	8.3	8.3	8.3	8.3
72.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
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°	0.8	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)