

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: P244133

Luminaire Tested: **LSR8B50D010 EC8B50935 8LBSW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244133  
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 EC8B50935 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 3500 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4963.0 lumens  
Efficiency: N/A  
Efficacy: 93.6 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

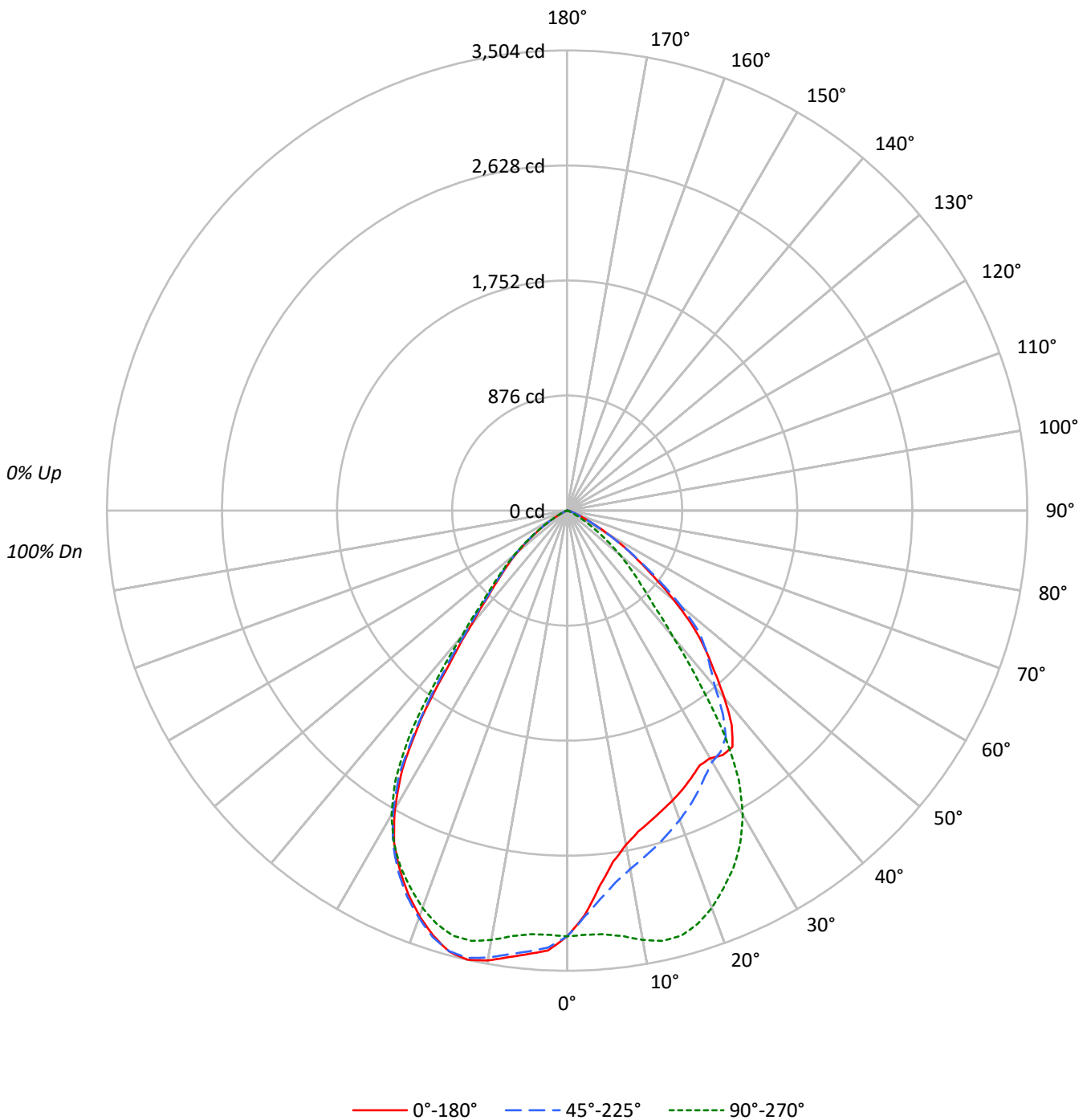
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	99977	99977	99977
5°	88705	100229	104922
10°	80876	103946	108909
15°	78160	106987	110984
20°	77044	105669	107848
25°	76285	102025	102661
30°	77530	95212	93453
35°	82640	78793	73082
40°	74892	50442	45676
45°	64642	34512	32136
50°	51000	25176	23703
55°	35402	15478	14564
60°	22541	7826	6988
65°	11251	3108	2364
70°	6221	1533	847
75°	4468	1120	405
80°	3623	764	160
85°	3927	601	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	302.2	6.1
10°-20°	872.8	17.6
20°-30°	1266.8	25.5
30°-40°	1247.7	25.1
40°-50°	782.1	15.8
50°-60°	377.4	7.6
60°-70°	91.3	1.8
70°-80°	18.5	0.4
80°-90°	4.3	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°	2441.8	49.2
0°-40°	3689.5	74.3
0°-60°	4849.0	97.7
0°-90°	4963.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4963.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3242	3242	3242	3242	3242	
5°	2866	2963	3238	3369	3390	265
15°	2448	2641	3351	3474	3476	692
25°	2242	2359	2999	3040	3017	1038
35°	2195	2106	2093	1974	1941	1328
45°	1482	1492	791	758	737	1133
55°	658	680	288	284	271	606
65°	154	152	43	37	32	176
75°	38	32	9	4	3	42
85°	11	8	2	0	0	11
90°	0	0	0	0	0	



TEST NUMBER: P244133

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2
2.5°	3082.1	3062.5	3025.9	3070.1	3070.1	3045.4	3094.9	3065.0	3088.9	3126.4	3093.1
5°	2865.7	2849.5	2818.8	2865.7	2871.7	2848.7	2908.3	2886.1	2921.1	2967.1	2962.8
7.5°	2694.5	2674.0	2645.9	2694.5	2703.8	2688.5	2745.6	2735.4	2781.4	2841.0	2851.2
10°	2582.9	2561.6	2536.9	2581.2	2588.0	2577.8	2635.7	2629.7	2674.9	2743.9	2771.1
12.5°	2503.7	2485.8	2458.5	2505.4	2513.0	2498.5	2553.1	2550.5	2597.4	2669.8	2703.8
15°	2448.3	2427.0	2402.3	2442.3	2452.5	2436.4	2488.3	2483.2	2530.9	2602.5	2640.8
17.5°	2396.3	2376.7	2351.2	2388.7	2398.9	2381.8	2432.9	2424.4	2465.3	2533.5	2572.7
20°	2347.8	2326.5	2303.5	2341.8	2347.8	2328.2	2379.3	2368.2	2404.8	2467.9	2506.2
22.5°	2297.5	2275.4	2251.5	2289.0	2294.9	2275.4	2322.2	2309.4	2343.5	2400.6	2435.5
25°	2242.1	2221.7	2197.8	2232.8	2237.9	2216.6	2266.0	2249.8	2279.6	2329.9	2358.8
27.5°	2186.8	2167.2	2140.8	2176.5	2179.1	2158.6	2203.8	2181.6	2206.4	2252.4	2277.1
30°	2177.4	2155.2	2128.0	2156.9	2157.8	2131.4	2174.0	2147.6	2161.2	2195.3	2209.8
32.5°	2207.2	2185.1	2156.9	2180.8	2178.2	2149.3	2190.2	2157.8	2162.1	2179.9	2176.5
35°	2195.3	2168.9	2135.6	2161.2	2161.2	2126.3	2167.2	2128.8	2124.6	2127.1	2105.8
37.5°	2059.8	2039.4	2007.9	2032.6	2030.0	2003.6	2035.1	2003.6	1989.1	1983.2	1944.8
40°	1860.5	1835.8	1811.9	1838.3	1840.9	1812.8	1853.7	1817.9	1813.6	1796.6	1751.5
42.5°	1658.6	1650.1	1627.1	1649.2	1661.2	1637.3	1671.4	1654.3	1656.9	1652.6	1610.0
45°	1482.3	1467.8	1450.7	1476.3	1484.0	1472.0	1506.1	1495.9	1506.1	1527.4	1492.5
47.5°	1292.3	1277.8	1259.1	1286.3	1300.0	1277.8	1306.8	1303.4	1318.7	1355.3	1351.9
50°	1063.1	1052.9	1049.5	1052.9	1061.4	1051.2	1071.7	1072.5	1082.7	1133.0	1136.4
52.5°	841.7	839.1	827.2	838.2	838.2	822.1	842.5	833.1	843.4	877.4	899.6
55°	658.5	655.9	648.3	658.5	647.4	641.5	647.4	638.1	630.4	656.8	679.8
57.5°	512.8	504.3	494.9	499.2	498.3	485.6	492.4	481.3	475.3	484.7	505.2
60°	365.5	362.9	354.4	358.6	362.0	352.7	359.5	354.4	344.2	351.8	352.7
62.5°	242.8	244.5	239.4	240.2	237.7	236.0	240.2	242.8	240.2	236.8	237.7
65°	154.2	153.3	152.5	153.3	155.0	151.6	154.2	155.9	153.3	153.3	152.5
67.5°	102.2	99.7	97.1	98.8	100.5	98.0	100.5	99.7	100.5	99.7	97.1
70°	69.0	68.1	67.3	68.1	68.1	66.4	68.1	67.3	68.1	67.3	64.7
72.5°	50.3	50.3	49.4	50.3	50.3	48.6	49.4	47.7	48.6	47.7	46.0
75°	37.5	37.5	36.6	37.5	36.6	35.8	36.6	35.8	34.1	34.1	32.4
77.5°	27.3	27.3	27.3	27.3	27.3	26.4	26.4	25.6	24.7	23.9	23.9
80°	20.4	19.6	19.6	19.6	19.6	18.7	19.6	18.7	17.9	17.0	16.2
82.5°	14.5	15.3	14.5	14.5	14.5	13.6	14.5	13.6	13.6	12.8	11.1
85°	11.1	11.1	11.1	11.1	11.1	10.2	10.2	10.2	9.4	9.4	8.5
87.5°	6.0	6.0	6.0	6.8	6.0	6.0	6.0	5.1	5.1	4.3	4.3
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°	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2
2.5°	3137.4	3141.7	3132.3	3146.8	3203.0	3157.9	3176.6	3182.6	3225.2	3232.9	3227.7
5°	3018.2	3036.9	3048.9	3081.2	3143.4	3111.0	3144.3	3165.6	3220.1	3238.0	3242.2
7.5°	2924.5	2963.7	2992.6	3045.4	3118.7	3094.0	3144.3	3179.2	3245.6	3268.6	3279.7
10°	2854.6	2914.3	2964.5	3036.9	3119.6	3103.4	3169.0	3218.4	3292.5	3319.7	3333.4
12.5°	2801.8	2874.2	2941.5	3033.5	3123.0	3115.3	3194.5	3250.7	3329.1	3356.4	3372.6
15°	2743.9	2827.4	2905.7	3008.8	3105.1	3103.4	3188.6	3248.2	3328.3	3351.3	3366.6
17.5°	2674.9	2764.3	2850.4	2962.0	3057.4	3059.1	3145.1	3203.9	3282.3	3301.0	3311.2
20°	2605.0	2693.6	2779.7	2894.7	2988.4	2990.9	3075.3	3129.8	3204.7	3220.1	3222.6
22.5°	2530.9	2613.5	2699.6	2813.7	2904.0	2905.7	2989.2	3040.3	3104.2	3111.9	3118.7
25°	2446.6	2527.5	2608.4	2721.7	2807.8	2812.9	2888.7	2933.8	2992.6	2998.6	3001.1
27.5°	2358.8	2425.3	2502.8	2599.9	2686.8	2683.4	2755.0	2806.1	2858.9	2855.5	2854.6
30°	2270.2	2325.6	2373.3	2467.0	2530.9	2533.5	2600.8	2625.5	2680.8	2674.0	2673.2
32.5°	2208.1	2222.5	2235.3	2283.0	2343.5	2322.2	2368.2	2398.9	2437.2	2434.7	2435.5
35°	2093.9	2067.5	2029.2	2036.0	2072.6	2039.4	2064.1	2063.2	2102.4	2093.1	2104.1
37.5°	1898.8	1823.9	1738.7	1690.1	1696.9	1655.2	1646.7	1667.1	1680.7	1654.3	1663.7
40°	1691.0	1580.2	1447.3	1336.6	1330.6	1278.7	1269.3	1248.8	1275.3	1253.1	1259.9
42.5°	1537.6	1391.1	1216.5	1081.9	1052.9	1009.5	983.9	980.5	988.2	972.8	968.6
45°	1420.1	1264.2	1064.0	909.8	877.4	830.6	805.0	795.6	796.5	791.4	787.1
47.5°	1282.1	1125.3	922.6	765.0	728.4	684.1	658.5	652.5	655.9	649.1	644.0
50°	1091.2	950.7	765.8	621.9	589.5	557.1	536.7	530.7	529.9	524.8	521.3
52.5°	885.9	769.2	609.1	489.0	460.0	428.5	414.0	406.3	407.2	402.1	397.0
55°	685.8	613.3	471.9	369.7	343.3	318.6	305.0	295.6	293.0	287.9	285.4
57.5°	510.3	461.7	353.5	266.6	251.3	227.4	213.8	202.7	201.0	198.5	197.6
60°	357.8	322.9	248.7	190.0	172.1	157.6	144.0	132.9	127.8	126.9	124.4
62.5°	231.7	210.4	163.6	126.9	113.3	103.1	89.4	81.8	78.4	75.0	75.8
65°	144.0	127.8	102.2	81.8	74.1	66.4	56.2	49.4	46.0	42.6	43.4
67.5°	89.4	80.1	64.7	52.8	47.7	41.7	34.1	29.0	26.4	23.9	22.1
70°	60.5	52.0	44.3	37.5	34.1	29.8	24.7	20.4	18.7	17.0	15.3
72.5°	42.6	38.3	32.4	28.1	25.6	22.1	18.7	16.2	14.5	12.8	11.1
75°	30.7	27.3	23.9	20.4	18.7	17.0	14.5	12.8	11.1	9.4	7.7
77.5°	22.1	19.6	17.0	15.3	14.5	11.9	10.2	9.4	8.5	6.8	5.1
80°	15.3	13.6	11.1	10.2	10.2	8.5	7.7	6.8	6.0	4.3	3.4
82.5°	10.2	9.4	8.5	7.7	6.8	6.0	6.0	4.3	3.4	2.6	1.7
85°	7.7	6.8	6.0	5.1	5.1	4.3	3.4	2.6	2.6	1.7	0.9
87.5°	4.3	4.3	3.4	2.6	2.6	1.7	1.7	0.9	0.9	0.9	0.9
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°	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2
2.5°	3271.2	3273.7	3288.2	3277.2	3305.3	3325.7	3315.5	3338.5	3330.8	3329.1	3355.5
5°	3293.3	3299.3	3318.9	3308.7	3339.3	3361.5	3351.3	3376.8	3369.2	3367.5	3394.7
7.5°	3335.9	3341.9	3358.9	3350.4	3382.8	3402.4	3389.6	3417.7	3407.5	3406.6	3433.0
10°	3389.6	3398.1	3412.6	3404.1	3433.9	3450.9	3438.2	3465.4	3456.0	3451.8	3480.8
12.5°	3429.6	3435.6	3450.1	3443.3	3472.2	3485.0	3473.9	3500.3	3488.4	3485.0	3510.6
15°	3420.3	3426.2	3438.2	3432.2	3459.5	3471.4	3456.9	3485.9	3473.9	3467.1	3490.1
17.5°	3360.6	3364.0	3372.6	3366.6	3395.6	3403.2	3387.0	3416.0	3404.9	3393.0	3415.2
20°	3272.9	3271.2	3276.3	3273.7	3297.6	3301.9	3291.6	3312.9	3300.2	3293.3	3306.1
22.5°	3163.9	3162.2	3165.6	3158.7	3182.6	3185.2	3169.8	3195.4	3182.6	3169.8	3191.1
25°	3042.9	3033.5	3031.8	3034.4	3050.6	3053.1	3036.9	3055.7	3039.5	3029.3	3049.7
27.5°	2893.8	2881.9	2879.3	2881.9	2898.1	2886.1	2872.5	2886.1	2870.0	2860.6	2873.4
30°	2709.8	2692.8	2685.1	2680.0	2697.0	2692.8	2661.3	2676.6	2651.0	2637.4	2646.8
32.5°	2461.9	2452.5	2432.1	2420.2	2436.4	2404.0	2384.4	2384.4	2374.2	2351.2	2356.3
35°	2117.8	2103.3	2084.5	2074.3	2076.9	2033.4	2001.0	2007.9	1973.8	1967.8	1970.4
37.5°	1682.4	1658.6	1651.8	1630.5	1635.6	1597.3	1553.0	1553.8	1535.9	1517.2	1511.2
40°	1264.2	1259.9	1253.1	1235.2	1242.0	1200.3	1183.3	1184.1	1172.2	1158.5	1165.4
42.5°	977.1	963.5	959.2	953.2	954.9	948.1	926.0	928.5	918.3	914.9	911.5
45°	793.9	779.5	769.2	774.4	774.4	766.7	758.2	763.3	758.2	751.4	754.8
47.5°	654.2	640.6	635.5	634.6	640.6	635.5	627.0	628.7	627.8	625.3	623.6
50°	522.2	518.8	514.5	512.0	514.5	512.8	505.2	509.4	512.0	503.5	506.0
52.5°	397.8	397.8	397.0	391.0	396.1	391.0	390.2	391.9	389.3	385.9	385.0
55°	291.3	288.8	284.5	283.7	285.4	283.7	282.0	282.8	284.5	276.0	276.0
57.5°	199.3	197.6	195.1	195.1	198.5	194.2	191.7	195.1	191.7	188.3	188.3
60°	127.8	126.9	124.4	124.4	124.4	123.5	121.0	121.8	123.5	118.4	119.3
62.5°	76.7	74.1	73.3	72.4	73.3	72.4	72.4	71.6	70.7	70.7	68.1
65°	41.7	40.0	38.3	39.2	39.2	38.3	38.3	38.3	36.6	35.8	34.9
67.5°	21.3	19.6	19.6	18.7	18.7	18.7	18.7	17.9	17.9	17.9	17.0
70°	13.6	12.8	11.9	11.9	11.9	11.1	11.1	11.1	11.1	11.1	10.2
72.5°	9.4	8.5	7.7	7.7	7.7	6.8	6.8	6.8	6.8	6.0	6.0
75°	6.8	6.0	5.1	5.1	5.1	4.3	4.3	4.3	4.3	4.3	4.3
77.5°	4.3	3.4	3.4	3.4	3.4	2.6	2.6	2.6	2.6	2.6	1.7
80°	2.6	2.6	1.7	1.7	1.7	1.7	0.9	0.9	0.9	0.9	0.9
82.5°	1.7	1.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0
85°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0
87.5°	0.9	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: P244133

CATALOG NUMBER: LSR8B50D010 EC8B50935 8LBSW0LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2	3242.2
2.5°	3346.2	3339.3	3343.6	3375.1	3361.5	3357.2	3321.5	3353.0
5°	3386.2	3381.1	3381.1	3416.9	3400.7	3397.3	3362.3	3389.6
7.5°	3423.7	3418.6	3419.4	3456.0	3443.3	3438.2	3403.2	3430.5
10°	3472.2	3468.8	3469.7	3504.6	3491.0	3485.9	3450.1	3478.2
12.5°	3501.2	3496.1	3496.1	3533.6	3518.2	3510.6	3476.5	3503.8
15°	3479.0	3471.4	3471.4	3508.9	3491.8	3480.8	3450.9	3476.5
17.5°	3403.2	3395.6	3395.6	3427.9	3415.2	3399.0	3368.3	3392.2
20°	3297.6	3288.2	3285.7	3323.2	3305.3	3290.8	3263.5	3286.5
22.5°	3178.3	3174.1	3166.4	3203.9	3187.7	3172.4	3143.4	3161.3
25°	3035.2	3028.4	3020.7	3057.4	3041.2	3025.9	3002.9	3017.3
27.5°	2857.2	2858.0	2853.8	2882.7	2866.6	2858.0	2829.9	2853.8
30°	2641.7	2632.3	2628.9	2663.0	2647.6	2636.5	2601.6	2624.6
32.5°	2360.5	2346.9	2329.0	2367.4	2340.9	2331.6	2301.8	2335.0
35°	1951.6	1947.4	1931.2	1963.6	1949.1	1932.0	1913.3	1941.4
37.5°	1508.7	1512.1	1510.4	1518.9	1510.4	1499.3	1478.9	1468.6
40°	1151.7	1143.2	1136.4	1151.7	1133.8	1133.8	1121.9	1134.7
42.5°	903.0	899.6	908.1	911.5	901.3	899.6	897.9	897.0
45°	745.4	745.4	747.1	750.5	747.1	745.4	740.3	736.9
47.5°	614.2	617.6	614.2	625.3	619.3	617.6	607.4	611.6
50°	497.5	493.2	497.5	500.9	501.8	496.6	491.5	494.1
52.5°	385.9	379.1	377.4	382.5	379.1	379.1	375.7	374.8
55°	271.7	274.3	270.0	274.3	272.6	270.0	267.5	270.9
57.5°	184.0	184.9	183.2	185.7	181.4	182.3	181.4	180.6
60°	119.3	115.9	115.9	118.4	114.2	114.2	113.3	113.3
62.5°	68.1	67.3	67.3	66.4	65.6	65.6	65.6	63.9
65°	34.9	34.1	33.2	33.2	33.2	33.2	32.4	32.4
67.5°	17.0	16.2	16.2	17.0	16.2	16.2	16.2	16.2
70°	10.2	10.2	9.4	10.2	9.4	9.4	9.4	9.4
72.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
75°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
77.5°	2.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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)