

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: P245387

Luminaire Tested: **LSR8B50D010 EC8B50827 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245387  
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 EC8B50827 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5265.0 lumens  
Efficiency: N/A  
Efficacy: 99.3 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

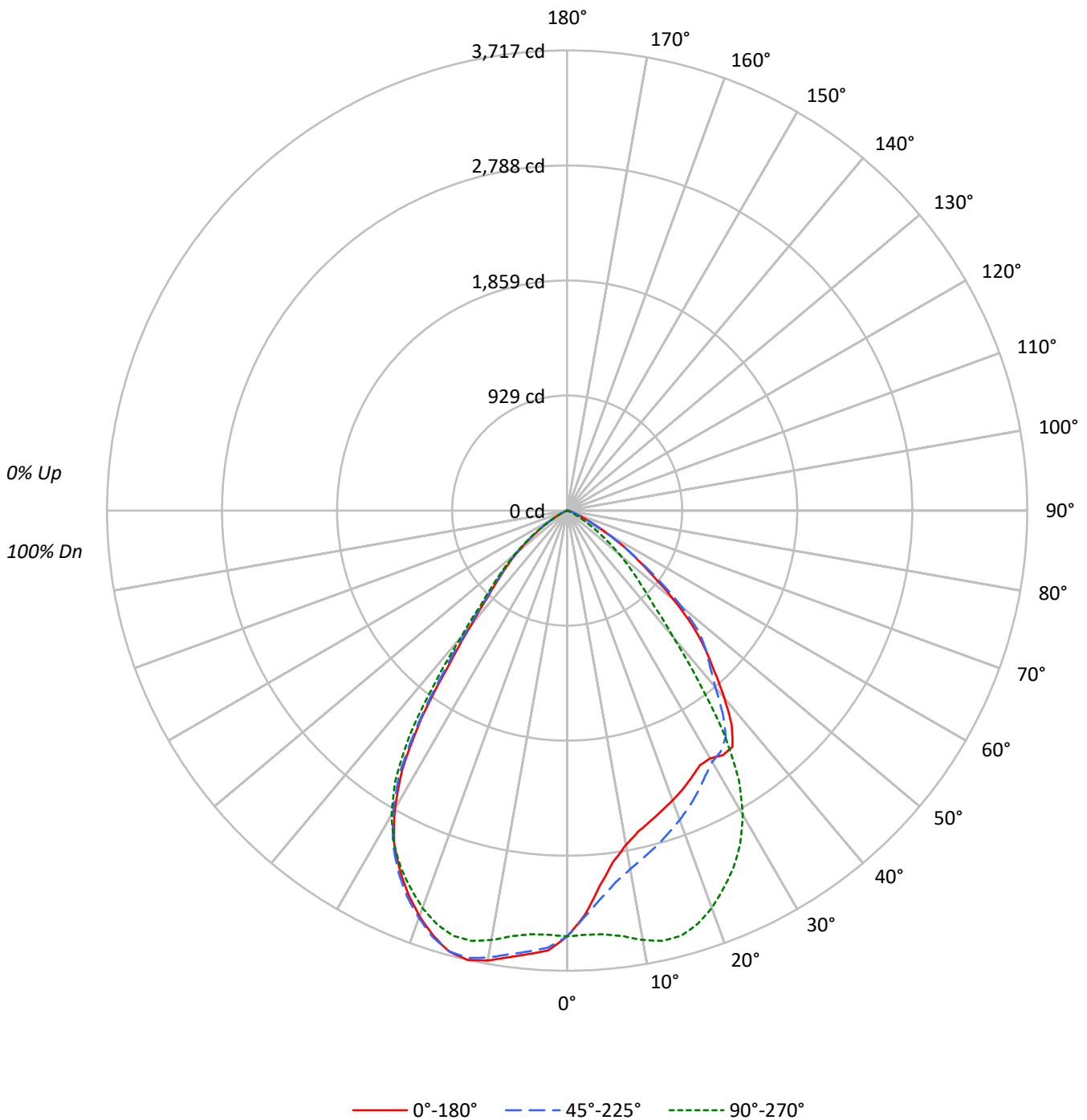
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	106062	106062	106062
5°	94104	106327	111308
10°	85795	110275	115535
15°	82916	113497	117736
20°	81730	112097	114411
25°	80930	108234	108908
30°	82248	101006	99140
35°	87670	83585	77532
40°	79449	53514	48454
45°	68575	36610	34089
50°	54104	26706	25147
55°	37558	16424	15451
60°	23910	8307	7413
65°	11937	3298	2503
70°	6600	1632	893
75°	4742	1180	429
80°	3853	799	160
85°	4140	637	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	320.6	6.1
10°-20°	925.9	17.6
20°-30°	1343.9	25.5
30°-40°	1323.6	25.1
40°-50°	829.7	15.8
50°-60°	400.4	7.6
60°-70°	96.9	1.8
70°-80°	19.6	0.4
80°-90°	4.5	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°	2590.4	49.2
0°-40°	3914.0	74.3
0°-60°	5144.0	97.7
0°-90°	5265.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5265.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3440	3440	3440	3440	3440	
5°	3040	3143	3435	3574	3596	281
15°	2597	2802	3555	3685	3688	734
25°	2379	2502	3181	3224	3201	1101
35°	2329	2234	2220	2094	2060	1409
45°	1572	1583	840	804	782	1202
55°	699	721	306	302	287	643
65°	164	162	45	39	34	187
75°	40	34	10	4	4	45
85°	12	9	2	0	0	12
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°	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5
2.5°	3269.6	3248.8	3210.0	3257.0	3257.0	3230.8	3283.2	3251.5	3276.9	3316.6	3281.4
5°	3040.1	3022.9	2990.4	3040.1	3046.4	3022.0	3085.3	3061.8	3098.8	3147.6	3143.1
7.5°	2858.4	2836.7	2806.9	2858.4	2868.4	2852.1	2912.7	2901.8	2950.6	3013.9	3024.7
10°	2740.0	2717.5	2691.2	2738.2	2745.5	2734.6	2796.1	2789.8	2837.6	2910.8	2939.8
12.5°	2656.0	2637.0	2608.1	2657.8	2665.9	2650.6	2708.4	2705.7	2755.4	2832.2	2868.4
15°	2597.3	2574.7	2548.5	2590.9	2601.8	2584.6	2639.7	2634.3	2684.9	2760.8	2801.5
17.5°	2542.1	2521.3	2494.2	2534.0	2544.8	2526.8	2581.0	2572.0	2615.3	2687.6	2729.2
20°	2490.6	2468.0	2443.6	2484.3	2490.6	2469.8	2524.1	2512.3	2551.2	2618.0	2658.7
22.5°	2437.3	2413.8	2388.5	2428.3	2434.6	2413.8	2463.5	2450.0	2486.1	2546.7	2583.7
25°	2378.6	2356.9	2331.6	2368.6	2374.0	2351.5	2403.9	2386.7	2418.3	2471.6	2502.4
27.5°	2319.8	2299.0	2271.0	2309.0	2311.7	2290.0	2337.9	2314.4	2340.6	2389.4	2415.6
30°	2309.9	2286.4	2257.5	2288.2	2289.1	2261.1	2306.3	2278.3	2292.7	2328.9	2344.2
32.5°	2341.5	2318.0	2288.2	2313.5	2310.8	2280.1	2323.4	2289.1	2293.6	2312.6	2309.0
35°	2328.9	2300.8	2265.6	2292.7	2292.7	2255.7	2299.0	2258.4	2253.9	2256.6	2234.0
37.5°	2185.2	2163.5	2130.0	2156.3	2153.5	2125.5	2159.0	2125.5	2110.2	2103.8	2063.2
40°	1973.7	1947.5	1922.2	1950.2	1952.9	1923.1	1966.5	1928.5	1924.0	1905.9	1858.0
42.5°	1759.5	1750.5	1726.1	1749.6	1762.2	1736.9	1773.1	1755.0	1757.7	1753.2	1708.0
45°	1572.5	1557.1	1539.0	1566.1	1574.3	1561.6	1597.8	1586.9	1597.8	1620.4	1583.3
47.5°	1370.9	1355.6	1335.7	1364.6	1379.1	1355.6	1386.3	1382.7	1398.9	1437.8	1434.2
50°	1127.8	1117.0	1113.4	1117.0	1126.0	1115.2	1136.9	1137.8	1148.6	1201.9	1205.5
52.5°	892.9	890.2	877.5	889.2	889.2	872.1	893.8	883.8	894.7	930.8	954.3
55°	698.6	695.9	687.7	698.6	686.8	680.5	686.8	676.9	668.7	696.8	721.2
57.5°	544.0	535.0	525.1	529.6	528.7	515.1	522.3	510.6	504.3	514.2	535.9
60°	387.7	385.0	375.9	380.5	384.1	374.1	381.4	375.9	365.1	373.2	374.1
62.5°	257.6	259.4	253.9	254.8	252.1	250.3	254.8	257.6	254.8	251.2	252.1
65°	163.6	162.7	161.8	162.7	164.5	160.9	163.6	165.4	162.7	162.7	161.8
67.5°	108.4	105.7	103.0	104.8	106.6	103.9	106.6	105.7	106.6	105.7	103.0
70°	73.2	72.3	71.4	72.3	72.3	70.5	72.3	71.4	72.3	71.4	68.7
72.5°	53.3	53.3	52.4	53.3	53.3	51.5	52.4	50.6	51.5	50.6	48.8
75°	39.8	39.8	38.9	39.8	38.9	38.0	38.9	38.0	36.1	36.1	34.3
77.5°	28.9	28.9	28.9	28.9	28.9	28.0	28.0	27.1	26.2	25.3	25.3
80°	21.7	20.8	20.8	20.8	20.8	19.9	20.8	19.9	19.0	18.1	17.2
82.5°	15.4	16.3	15.4	15.4	15.4	14.5	15.4	14.5	14.5	13.6	11.7
85°	11.7	11.7	11.7	11.7	11.7	10.8	10.8	10.8	9.9	9.9	9.0
87.5°	6.3	6.3	6.3	7.2	6.3	6.3	6.3	5.4	5.4	4.5	4.5
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°	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5
2.5°	3328.4	3332.9	3322.9	3338.3	3397.9	3350.1	3369.9	3376.3	3421.4	3429.6	3424.2
5°	3201.8	3221.7	3234.4	3268.7	3334.7	3300.3	3335.6	3358.2	3416.0	3435.0	3439.5
7.5°	3102.4	3144.0	3174.7	3230.8	3308.5	3282.3	3335.6	3372.6	3443.1	3467.5	3479.3
10°	3028.3	3091.6	3144.9	3221.7	3309.4	3292.2	3361.8	3414.2	3492.8	3521.8	3536.2
12.5°	2972.3	3049.1	3120.5	3218.1	3313.0	3304.9	3388.9	3448.6	3531.7	3560.6	3577.8
15°	2910.8	2999.4	3082.6	3191.9	3294.0	3292.2	3382.6	3445.8	3530.8	3555.2	3571.5
17.5°	2837.6	2932.5	3023.8	3142.2	3243.4	3245.2	3336.5	3398.9	3482.0	3501.9	3512.7
20°	2763.5	2857.5	2948.8	3070.8	3170.2	3172.9	3262.4	3320.2	3399.8	3416.0	3418.7
22.5°	2684.9	2772.6	2863.9	2985.0	3080.7	3082.6	3171.1	3225.3	3293.1	3301.3	3308.5
25°	2595.5	2681.3	2767.2	2887.4	2978.6	2984.0	3064.5	3112.4	3174.7	3181.1	3183.8
27.5°	2502.4	2572.9	2655.1	2758.1	2850.3	2846.7	2922.6	2976.8	3032.8	3029.2	3028.3
30°	2408.4	2467.1	2517.7	2617.1	2684.9	2687.6	2759.0	2785.2	2844.0	2836.7	2835.8
32.5°	2342.4	2357.8	2371.3	2421.9	2486.1	2463.5	2512.3	2544.8	2585.5	2582.8	2583.7
35°	2221.3	2193.3	2152.6	2159.9	2198.7	2163.5	2189.7	2188.8	2230.4	2220.4	2232.2
37.5°	2014.4	1934.8	1844.5	1793.0	1800.2	1755.9	1746.9	1768.6	1783.0	1755.0	1764.9
40°	1793.9	1676.4	1535.4	1417.9	1411.6	1356.5	1346.5	1324.8	1352.9	1329.4	1336.6
42.5°	1631.2	1475.8	1290.5	1147.7	1117.0	1070.9	1043.8	1040.2	1048.3	1032.0	1027.5
45°	1506.5	1341.1	1128.7	965.2	930.8	881.1	854.0	844.1	845.0	839.5	835.0
47.5°	1360.1	1193.8	978.7	811.5	772.7	725.7	698.6	692.2	695.9	688.6	683.2
50°	1157.7	1008.5	812.4	659.7	625.4	591.0	569.3	563.0	562.1	556.7	553.1
52.5°	939.9	816.0	646.2	518.7	488.0	454.6	439.2	431.1	432.0	426.6	421.1
55°	727.5	650.7	500.7	392.2	364.2	338.0	323.5	313.6	310.9	305.5	302.7
57.5°	541.3	489.8	375.0	282.9	266.6	241.3	226.8	215.1	213.3	210.6	209.7
60°	379.6	342.5	263.9	201.5	182.5	167.2	152.7	141.0	135.6	134.7	131.9
62.5°	245.8	223.2	173.5	134.7	120.2	109.3	94.9	86.8	83.1	79.5	80.4
65°	152.7	135.6	108.4	86.8	78.6	70.5	59.6	52.4	48.8	45.2	46.1
67.5°	94.9	84.9	68.7	56.0	50.6	44.3	36.1	30.7	28.0	25.3	23.5
70°	64.2	55.1	47.0	39.8	36.1	31.6	26.2	21.7	19.9	18.1	16.3
72.5°	45.2	40.7	34.3	29.8	27.1	23.5	19.9	17.2	15.4	13.6	11.7
75°	32.5	28.9	25.3	21.7	19.9	18.1	15.4	13.6	11.7	9.9	8.1
77.5°	23.5	20.8	18.1	16.3	15.4	12.7	10.8	9.9	9.0	7.2	5.4
80°	16.3	14.5	11.7	10.8	10.8	9.0	8.1	7.2	6.3	4.5	3.6
82.5°	10.8	9.9	9.0	8.1	7.2	6.3	6.3	4.5	3.6	2.7	1.8
85°	8.1	7.2	6.3	5.4	5.4	4.5	3.6	2.7	2.7	1.8	0.9
87.5°	4.5	4.5	3.6	2.7	2.7	1.8	1.8	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°	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5
2.5°	3470.2	3473.0	3488.3	3476.6	3506.4	3528.1	3517.2	3541.6	3533.5	3531.7	3559.7
5°	3493.7	3500.1	3520.9	3510.0	3542.5	3566.0	3555.2	3582.3	3574.2	3572.4	3601.3
7.5°	3538.9	3545.3	3563.3	3554.3	3588.6	3609.4	3595.9	3625.7	3614.8	3613.9	3641.9
10°	3595.9	3604.9	3620.3	3611.2	3642.9	3660.9	3647.4	3676.3	3666.3	3661.8	3692.6
12.5°	3638.3	3644.7	3660.0	3652.8	3683.5	3697.1	3685.3	3713.3	3700.7	3697.1	3724.2
15°	3628.4	3634.7	3647.4	3641.0	3670.0	3682.6	3667.3	3698.0	3685.3	3678.1	3702.5
17.5°	3565.1	3568.7	3577.8	3571.5	3602.2	3610.3	3593.1	3623.9	3612.1	3599.5	3623.0
20°	3472.1	3470.2	3475.7	3473.0	3498.3	3502.8	3491.9	3514.5	3501.0	3493.7	3507.3
22.5°	3356.4	3354.6	3358.2	3351.0	3376.3	3379.0	3362.7	3389.8	3376.3	3362.7	3385.3
25°	3228.0	3218.1	3216.3	3219.0	3236.2	3238.9	3221.7	3241.6	3224.4	3213.6	3235.3
27.5°	3069.9	3057.2	3054.5	3057.2	3074.4	3061.8	3047.3	3061.8	3044.6	3034.7	3048.2
30°	2874.7	2856.6	2848.5	2843.1	2861.1	2856.6	2823.2	2839.5	2812.3	2797.9	2807.8
32.5°	2611.7	2601.8	2580.1	2567.4	2584.6	2550.3	2529.5	2529.5	2518.6	2494.2	2499.7
35°	2246.6	2231.3	2211.4	2200.5	2203.2	2157.2	2122.8	2130.0	2093.9	2087.6	2090.3
37.5°	1784.8	1759.5	1752.3	1729.7	1735.1	1694.5	1647.5	1648.4	1629.4	1609.5	1603.2
40°	1341.1	1336.6	1329.4	1310.4	1317.6	1273.3	1255.3	1256.2	1243.5	1229.0	1236.3
42.5°	1036.6	1022.1	1017.6	1011.3	1013.1	1005.8	982.3	985.0	974.2	970.6	967.0
45°	842.3	826.9	816.0	821.5	821.5	813.3	804.3	809.7	804.3	797.1	800.7
47.5°	694.0	679.6	674.2	673.3	679.6	674.2	665.1	666.9	666.0	663.3	661.5
50°	554.0	550.4	545.8	543.1	545.8	544.0	535.9	540.4	543.1	534.1	536.8
52.5°	422.0	422.0	421.1	414.8	420.2	414.8	413.9	415.7	413.0	409.4	408.5
55°	309.1	306.4	301.8	300.9	302.7	300.9	299.1	300.0	301.8	292.8	292.8
57.5°	211.5	209.7	206.9	206.9	210.6	206.0	203.3	206.9	203.3	199.7	199.7
60°	135.6	134.7	131.9	131.9	131.9	131.0	128.3	129.2	131.0	125.6	126.5
62.5°	81.3	78.6	77.7	76.8	77.7	76.8	76.8	75.9	75.0	75.0	72.3
65°	44.3	42.5	40.7	41.6	41.6	40.7	40.7	40.7	38.9	38.0	37.1
67.5°	22.6	20.8	20.8	19.9	19.9	19.9	19.9	19.0	19.0	19.0	18.1
70°	14.5	13.6	12.7	12.7	12.7	11.7	11.7	11.7	11.7	11.7	10.8
72.5°	9.9	9.0	8.1	8.1	8.1	7.2	7.2	7.2	7.2	6.3	6.3
75°	7.2	6.3	5.4	5.4	5.4	4.5	4.5	4.5	4.5	4.5	4.5
77.5°	4.5	3.6	3.6	3.6	3.6	2.7	2.7	2.7	2.7	2.7	1.8
80°	2.7	2.7	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9
82.5°	1.8	1.8	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: P245387

CATALOG NUMBER: LSR8B50D010 EC8B50827 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5	3439.5
2.5°	3549.8	3542.5	3547.1	3580.5	3566.0	3561.5	3523.6	3557.0
5°	3592.2	3586.8	3586.8	3624.8	3607.6	3604.0	3566.9	3595.9
7.5°	3632.0	3626.6	3627.5	3666.3	3652.8	3647.4	3610.3	3639.2
10°	3683.5	3679.9	3680.8	3717.9	3703.4	3698.0	3660.0	3689.8
12.5°	3714.2	3708.8	3708.8	3748.6	3732.3	3724.2	3688.0	3717.0
15°	3690.7	3682.6	3682.6	3722.4	3704.3	3692.6	3660.9	3688.0
17.5°	3610.3	3602.2	3602.2	3636.5	3623.0	3605.8	3573.3	3598.6
20°	3498.3	3488.3	3485.6	3525.4	3506.4	3491.0	3462.1	3486.5
22.5°	3371.7	3367.2	3359.1	3398.9	3381.7	3365.4	3334.7	3353.7
25°	3219.9	3212.7	3204.6	3243.4	3226.2	3210.0	3185.6	3200.9
27.5°	3031.0	3031.9	3027.4	3058.2	3041.0	3031.9	3002.1	3027.4
30°	2802.4	2792.5	2788.8	2825.0	2808.7	2797.0	2759.9	2784.3
32.5°	2504.2	2489.7	2470.7	2511.4	2483.4	2473.5	2441.8	2477.1
35°	2070.4	2065.9	2048.7	2083.0	2067.7	2049.6	2029.7	2059.6
37.5°	1600.5	1604.1	1602.3	1611.3	1602.3	1590.5	1568.8	1558.0
40°	1221.8	1212.8	1205.5	1221.8	1202.8	1202.8	1190.2	1203.7
42.5°	957.9	954.3	963.4	967.0	956.1	954.3	952.5	951.6
45°	790.7	790.7	792.6	796.2	792.6	790.7	785.3	781.7
47.5°	651.6	655.2	651.6	663.3	657.0	655.2	644.3	648.9
50°	527.8	523.2	527.8	531.4	532.3	526.9	521.4	524.2
52.5°	409.4	402.2	400.3	405.8	402.2	402.2	398.5	397.6
55°	288.3	291.0	286.5	291.0	289.2	286.5	283.8	287.4
57.5°	195.2	196.1	194.3	197.0	192.5	193.4	192.5	191.6
60°	126.5	122.9	122.9	125.6	121.1	121.1	120.2	120.2
62.5°	72.3	71.4	71.4	70.5	69.6	69.6	69.6	67.8
65°	37.1	36.1	35.2	35.2	35.2	35.2	34.3	34.3
67.5°	18.1	17.2	17.2	18.1	17.2	17.2	17.2	17.2
70°	10.8	10.8	9.9	10.8	9.9	9.9	9.9	9.9
72.5°	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
75°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
77.5°	2.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8
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)