

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: P245411

Luminaire Tested: **LSR8B50D010 EC8B50850 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245411
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 EC8B50850 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5684.0 lumens
Efficiency: N/A
Efficacy: 107.2 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

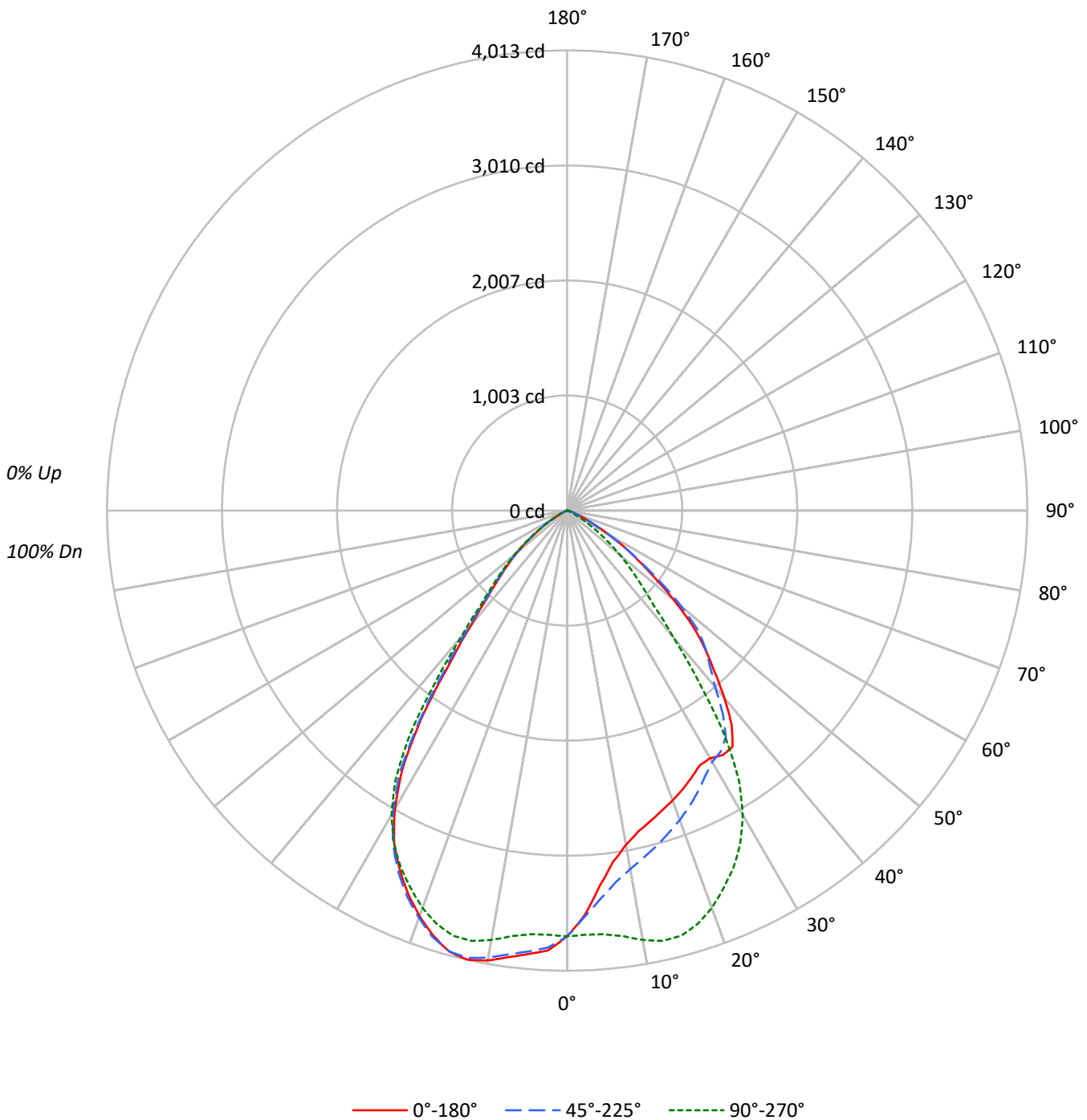
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	114501	114501	114501
5°	101591	114790	120164
10°	92624	119048	124731
15°	89515	122528	127106
20°	88234	121020	123517
25°	87371	116846	117577
30°	88792	109046	107030
35°	94645	90237	83702
40°	85773	57768	52310
45°	74031	39527	36802
50°	58412	28832	27148
55°	40547	17731	16677
60°	25810	8967	8005
65°	12886	3561	2707
70°	7123	1758	965
75°	5111	1275	465
80°	4155	870	178
85°	4493	708	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.1	6.1
10°-20°	999.6	17.6
20°-30°	1450.8	25.5
30°-40°	1428.9	25.1
40°-50°	895.7	15.8
50°-60°	432.2	7.6
60°-70°	104.6	1.8
70°-80°	21.1	0.4
80°-90°	4.9	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°	2796.5	49.2
0°-40°	4225.5	74.3
0°-60°	5553.4	97.7
0°-90°	5684.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5684.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3713	3713	3713	3713	3713	
5°	3282	3393	3708	3859	3882	304
15°	2804	3024	3838	3979	3982	793
25°	2568	2702	3434	3481	3456	1188
35°	2514	2412	2397	2260	2224	1521
45°	1698	1709	906	868	844	1298
55°	754	779	330	326	310	694
65°	177	175	49	42	37	202
75°	43	37	11	5	4	48
85°	13	10	2	0	0	13
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°	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2
2.5°	3529.8	3507.4	3465.4	3516.2	3516.2	3487.9	3544.5	3510.3	3537.6	3580.6	3542.5
5°	3282.0	3263.5	3228.4	3282.0	3288.8	3262.5	3330.8	3305.4	3345.4	3398.1	3393.2
7.5°	3085.9	3062.5	3030.3	3085.9	3096.6	3079.1	3144.5	3132.7	3185.4	3253.7	3265.4
10°	2958.1	2933.7	2905.4	2956.2	2964.0	2952.3	3018.6	3011.8	3063.5	3142.5	3173.7
12.5°	2867.4	2846.9	2815.7	2869.3	2878.1	2861.5	2924.0	2921.0	2974.7	3057.6	3096.6
15°	2804.0	2779.6	2751.3	2797.1	2808.8	2790.3	2849.8	2844.0	2898.6	2980.5	3024.4
17.5°	2744.4	2722.0	2692.7	2735.7	2747.4	2727.9	2786.4	2776.6	2823.5	2901.5	2946.4
20°	2688.8	2664.4	2638.1	2682.0	2688.8	2666.4	2724.9	2712.2	2754.2	2826.4	2870.3
22.5°	2631.3	2605.9	2578.6	2621.5	2628.3	2605.9	2659.6	2644.9	2684.0	2749.3	2789.3
25°	2567.9	2544.4	2517.1	2557.1	2563.0	2538.6	2595.2	2576.6	2610.8	2668.3	2701.5
27.5°	2504.4	2482.0	2451.8	2492.7	2495.7	2472.2	2524.0	2498.6	2526.9	2579.6	2607.9
30°	2493.7	2468.3	2437.1	2470.3	2471.3	2441.0	2489.8	2459.6	2475.2	2514.2	2530.8
32.5°	2527.9	2502.5	2470.3	2497.6	2494.7	2461.5	2508.3	2471.3	2476.1	2496.6	2492.7
35°	2514.2	2484.0	2445.9	2475.2	2475.2	2435.2	2482.0	2438.1	2433.2	2436.1	2411.8
37.5°	2359.1	2335.7	2299.6	2327.8	2324.9	2294.7	2330.8	2294.7	2278.1	2271.3	2227.4
40°	2130.8	2102.5	2075.2	2105.4	2108.3	2076.1	2123.0	2082.0	2077.1	2057.6	2005.9
42.5°	1899.5	1889.8	1863.5	1888.8	1902.5	1875.2	1914.2	1894.7	1897.6	1892.7	1843.9
45°	1697.6	1681.0	1661.5	1690.8	1699.5	1685.9	1724.9	1713.2	1724.9	1749.3	1709.3
47.5°	1480.0	1463.4	1442.0	1473.2	1488.8	1463.4	1496.6	1492.7	1510.3	1552.2	1548.3
50°	1217.6	1205.9	1202.0	1205.9	1215.6	1203.9	1227.3	1228.3	1240.0	1297.6	1301.5
52.5°	963.9	961.0	947.3	960.0	960.0	941.5	964.9	954.2	965.9	1004.9	1030.3
55°	754.2	751.2	742.5	754.2	741.5	734.6	741.5	730.7	722.0	752.2	778.6
57.5°	587.3	577.6	566.8	571.7	570.7	556.1	563.9	551.2	544.4	555.1	578.5
60°	418.5	415.6	405.9	410.7	414.6	403.9	411.7	405.9	394.2	402.9	403.9
62.5°	278.1	280.0	274.2	275.1	272.2	270.2	275.1	278.1	275.1	271.2	272.2
65°	176.6	175.6	174.6	175.6	177.6	173.7	176.6	178.5	175.6	175.6	174.6
67.5°	117.1	114.1	111.2	113.2	115.1	112.2	115.1	114.1	115.1	114.1	111.2
70°	79.0	78.1	77.1	78.1	78.1	76.1	78.1	77.1	78.1	77.1	74.1
72.5°	57.6	57.6	56.6	57.6	57.6	55.6	56.6	54.6	55.6	54.6	52.7
75°	42.9	42.9	42.0	42.9	42.0	41.0	42.0	41.0	39.0	39.0	37.1
77.5°	31.2	31.2	31.2	31.2	31.2	30.2	30.2	29.3	28.3	27.3	27.3
80°	23.4	22.4	22.4	22.4	22.4	21.5	22.4	21.5	20.5	19.5	18.5
82.5°	16.6	17.6	16.6	16.6	16.6	15.6	16.6	15.6	15.6	14.6	12.7
85°	12.7	12.7	12.7	12.7	12.7	11.7	11.7	11.7	10.7	10.7	9.8
87.5°	6.8	6.8	6.8	7.8	6.8	6.8	6.8	5.9	5.9	4.9	4.9
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2
2.5°	3593.2	3598.1	3587.4	3604.0	3668.4	3616.7	3638.1	3644.9	3693.7	3702.5	3696.7
5°	3456.7	3478.1	3491.8	3528.8	3600.1	3563.0	3601.0	3625.4	3687.9	3708.4	3713.2
7.5°	3349.3	3394.2	3427.4	3487.9	3571.8	3543.5	3601.0	3641.0	3717.1	3743.5	3756.2
10°	3269.3	3337.6	3395.2	3478.1	3572.8	3554.2	3629.3	3685.9	3770.8	3802.0	3817.6
12.5°	3208.8	3291.8	3368.8	3474.2	3576.7	3567.9	3658.6	3723.0	3812.8	3844.0	3862.5
15°	3142.5	3238.1	3327.9	3445.9	3556.2	3554.2	3651.8	3720.1	3811.8	3838.1	3855.7
17.5°	3063.5	3165.9	3264.5	3392.3	3501.5	3503.5	3602.0	3669.3	3759.1	3780.6	3792.3
20°	2983.5	3084.9	3183.5	3315.2	3422.5	3425.4	3522.0	3584.5	3670.3	3687.9	3690.8
22.5°	2898.6	2993.2	3091.8	3222.5	3325.9	3327.9	3423.5	3482.0	3555.2	3564.0	3571.8
25°	2802.0	2894.7	2987.4	3117.1	3215.7	3221.5	3308.4	3360.1	3427.4	3434.2	3437.1
27.5°	2701.5	2777.6	2866.4	2977.6	3077.1	3073.2	3155.2	3213.7	3274.2	3270.3	3269.3
30°	2600.0	2663.5	2718.1	2825.4	2898.6	2901.5	2978.6	3006.9	3070.3	3062.5	3061.5
32.5°	2528.8	2545.4	2560.0	2614.7	2684.0	2659.6	2712.2	2747.4	2791.3	2788.3	2789.3
35°	2398.1	2367.9	2323.9	2331.8	2373.7	2335.7	2363.9	2363.0	2407.9	2397.1	2409.8
37.5°	2174.7	2088.8	1991.3	1935.6	1943.5	1895.6	1885.9	1909.3	1924.9	1894.7	1905.4
40°	1936.6	1809.8	1657.6	1530.8	1523.9	1464.4	1453.7	1430.3	1460.5	1435.1	1443.0
42.5°	1761.0	1593.2	1393.2	1239.0	1205.9	1156.1	1126.9	1122.9	1131.7	1114.2	1109.3
45°	1626.4	1447.8	1218.6	1042.0	1004.9	951.2	922.0	911.2	912.2	906.4	901.5
47.5°	1468.3	1288.8	1056.6	876.1	834.2	783.4	754.2	747.3	751.2	743.4	737.6
50°	1249.8	1088.8	877.1	712.2	675.1	638.1	614.6	607.8	606.8	601.0	597.1
52.5°	1014.7	881.0	697.6	560.0	526.8	490.7	474.2	465.4	466.4	460.5	454.6
55°	785.4	702.5	540.5	423.4	393.2	364.9	349.3	338.5	335.6	329.8	326.8
57.5°	584.4	528.8	404.9	305.4	287.8	260.5	244.9	232.2	230.2	227.3	226.3
60°	409.8	369.8	284.9	217.6	197.1	180.5	164.9	152.2	146.3	145.4	142.4
62.5°	265.4	241.0	187.3	145.4	129.8	118.1	102.4	93.7	89.8	85.9	86.8
65°	164.9	146.3	117.1	93.7	84.9	76.1	64.4	56.6	52.7	48.8	49.8
67.5°	102.4	91.7	74.1	60.5	54.6	47.8	39.0	33.2	30.2	27.3	25.4
70°	69.3	59.5	50.7	42.9	39.0	34.1	28.3	23.4	21.5	19.5	17.6
72.5°	48.8	43.9	37.1	32.2	29.3	25.4	21.5	18.5	16.6	14.6	12.7
75°	35.1	31.2	27.3	23.4	21.5	19.5	16.6	14.6	12.7	10.7	8.8
77.5°	25.4	22.4	19.5	17.6	16.6	13.7	11.7	10.7	9.8	7.8	5.9
80°	17.6	15.6	12.7	11.7	11.7	9.8	8.8	7.8	6.8	4.9	3.9
82.5°	11.7	10.7	9.8	8.8	7.8	6.8	6.8	4.9	3.9	2.9	2.0
85°	8.8	7.8	6.8	5.9	5.9	4.9	3.9	2.9	2.9	2.0	1.0
87.5°	4.9	4.9	3.9	2.9	2.9	2.0	2.0	1.0	1.0	1.0	1.0
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°	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2
2.5°	3746.4	3749.3	3765.9	3753.2	3785.4	3808.9	3797.1	3823.5	3814.7	3812.8	3843.0
5°	3771.8	3778.6	3801.0	3789.3	3824.5	3849.8	3838.1	3867.4	3858.6	3856.7	3887.9
7.5°	3820.6	3827.4	3846.9	3837.1	3874.2	3896.7	3882.0	3914.2	3902.5	3901.5	3931.8
10°	3882.0	3891.8	3908.4	3898.6	3932.8	3952.3	3937.6	3968.9	3958.1	3953.2	3986.4
12.5°	3927.9	3934.7	3951.3	3943.5	3976.7	3991.3	3978.6	4008.9	3995.2	3991.3	4020.6
15°	3917.1	3924.0	3937.6	3930.8	3962.0	3975.7	3959.1	3992.3	3978.6	3970.8	3997.1
17.5°	3848.9	3852.8	3862.5	3855.7	3888.9	3897.6	3879.1	3912.3	3899.6	3885.9	3911.3
20°	3748.4	3746.4	3752.3	3749.3	3776.7	3781.5	3769.8	3794.2	3779.6	3771.8	3786.4
22.5°	3623.5	3621.5	3625.4	3617.6	3644.9	3647.9	3630.3	3659.6	3644.9	3630.3	3654.7
25°	3484.9	3474.2	3472.3	3475.2	3493.7	3496.7	3478.1	3499.6	3481.0	3469.3	3492.7
27.5°	3314.2	3300.6	3297.6	3300.6	3319.1	3305.4	3289.8	3305.4	3286.9	3276.2	3290.8
30°	3103.5	3084.0	3075.2	3069.3	3088.8	3084.0	3047.9	3065.4	3036.2	3020.5	3031.3
32.5°	2819.6	2808.8	2785.4	2771.8	2790.3	2753.2	2730.8	2730.8	2719.1	2692.7	2698.6
35°	2425.4	2408.8	2387.4	2375.7	2378.6	2328.8	2291.8	2299.6	2260.5	2253.7	2256.6
37.5°	1926.9	1899.5	1891.7	1867.4	1873.2	1829.3	1778.6	1779.5	1759.1	1737.6	1730.8
40°	1447.8	1443.0	1435.1	1414.7	1422.5	1374.7	1355.1	1356.1	1342.5	1326.9	1334.7
42.5°	1119.0	1103.4	1098.6	1091.7	1093.7	1085.9	1060.5	1063.4	1051.7	1047.8	1043.9
45°	909.3	892.7	881.0	886.8	886.8	878.1	868.3	874.2	868.3	860.5	864.4
47.5°	749.3	733.7	727.8	726.8	733.7	727.8	718.1	720.0	719.0	716.1	714.2
50°	598.1	594.2	589.3	586.4	589.3	587.3	578.5	583.4	586.4	576.6	579.5
52.5°	455.6	455.6	454.6	447.8	453.7	447.8	446.8	448.8	445.9	442.0	441.0
55°	333.7	330.7	325.9	324.9	326.8	324.9	322.9	323.9	325.9	316.1	316.1
57.5°	228.3	226.3	223.4	223.4	227.3	222.4	219.5	223.4	219.5	215.6	215.6
60°	146.3	145.4	142.4	142.4	142.4	141.5	138.5	139.5	141.5	135.6	136.6
62.5°	87.8	84.9	83.9	82.9	83.9	82.9	82.9	82.0	81.0	81.0	78.1
65°	47.8	45.9	43.9	44.9	44.9	43.9	43.9	43.9	42.0	41.0	40.0
67.5°	24.4	22.4	22.4	21.5	21.5	21.5	21.5	20.5	20.5	20.5	19.5
70°	15.6	14.6	13.7	13.7	13.7	12.7	12.7	12.7	12.7	12.7	11.7
72.5°	10.7	9.8	8.8	8.8	8.8	7.8	7.8	7.8	7.8	6.8	6.8
75°	7.8	6.8	5.9	5.9	5.9	4.9	4.9	4.9	4.9	4.9	4.9
77.5°	4.9	3.9	3.9	3.9	3.9	2.9	2.9	2.9	2.9	2.9	2.0
80°	2.9	2.9	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
82.5°	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
87.5°	1.0	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: P245411

CATALOG NUMBER: LSR8B50D010 EC8B50850 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2	3713.2
2.5°	3832.3	3824.5	3829.3	3865.4	3849.8	3845.0	3804.0	3840.1
5°	3878.1	3872.3	3872.3	3913.2	3894.7	3890.8	3850.8	3882.0
7.5°	3921.1	3915.2	3916.2	3958.1	3943.5	3937.6	3897.6	3928.9
10°	3976.7	3972.8	3973.7	4013.7	3998.1	3992.3	3951.3	3983.5
12.5°	4009.8	4004.0	4004.0	4046.9	4029.3	4020.6	3981.5	4012.8
15°	3984.5	3975.7	3975.7	4018.6	3999.1	3986.4	3952.3	3981.5
17.5°	3897.6	3888.9	3888.9	3925.9	3911.3	3892.8	3857.6	3885.0
20°	3776.7	3765.9	3763.0	3805.9	3785.4	3768.9	3737.6	3764.0
22.5°	3640.1	3635.2	3626.4	3669.3	3650.8	3633.2	3600.1	3620.6
25°	3476.2	3468.4	3459.6	3501.5	3483.0	3465.4	3439.1	3455.7
27.5°	3272.3	3273.2	3268.4	3301.5	3283.0	3273.2	3241.0	3268.4
30°	3025.4	3014.7	3010.8	3049.8	3032.3	3019.6	2979.6	3005.9
32.5°	2703.5	2687.9	2667.4	2711.3	2681.0	2670.3	2636.1	2674.2
35°	2235.2	2230.3	2211.7	2248.8	2232.2	2212.7	2191.3	2223.5
37.5°	1727.8	1731.7	1729.8	1739.5	1729.8	1717.1	1693.7	1682.0
40°	1319.0	1309.3	1301.5	1319.0	1298.6	1298.6	1284.9	1299.5
42.5°	1034.2	1030.3	1040.0	1043.9	1032.2	1030.3	1028.3	1027.3
45°	853.7	853.7	855.6	859.5	855.6	853.7	847.8	843.9
47.5°	703.4	707.3	703.4	716.1	709.3	707.3	695.6	700.5
50°	569.8	564.9	569.8	573.7	574.6	568.8	562.9	565.9
52.5°	442.0	434.2	432.2	438.1	434.2	434.2	430.3	429.3
55°	311.2	314.2	309.3	314.2	312.2	309.3	306.3	310.2
57.5°	210.7	211.7	209.8	212.7	207.8	208.8	207.8	206.8
60°	136.6	132.7	132.7	135.6	130.7	130.7	129.8	129.8
62.5°	78.1	77.1	77.1	76.1	75.1	75.1	75.1	73.2
65°	40.0	39.0	38.0	38.0	38.0	38.0	37.1	37.1
67.5°	19.5	18.5	18.5	19.5	18.5	18.5	18.5	18.5
70°	11.7	11.7	10.7	11.7	10.7	10.7	10.7	10.7
72.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
75°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
77.5°	2.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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)