

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: P245405

Luminaire Tested: **LSR8B50D010 EC8B50840 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245405  
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 EC8B50840 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5575.0 lumens  
Efficiency: N/A  
Efficacy: 105.2 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

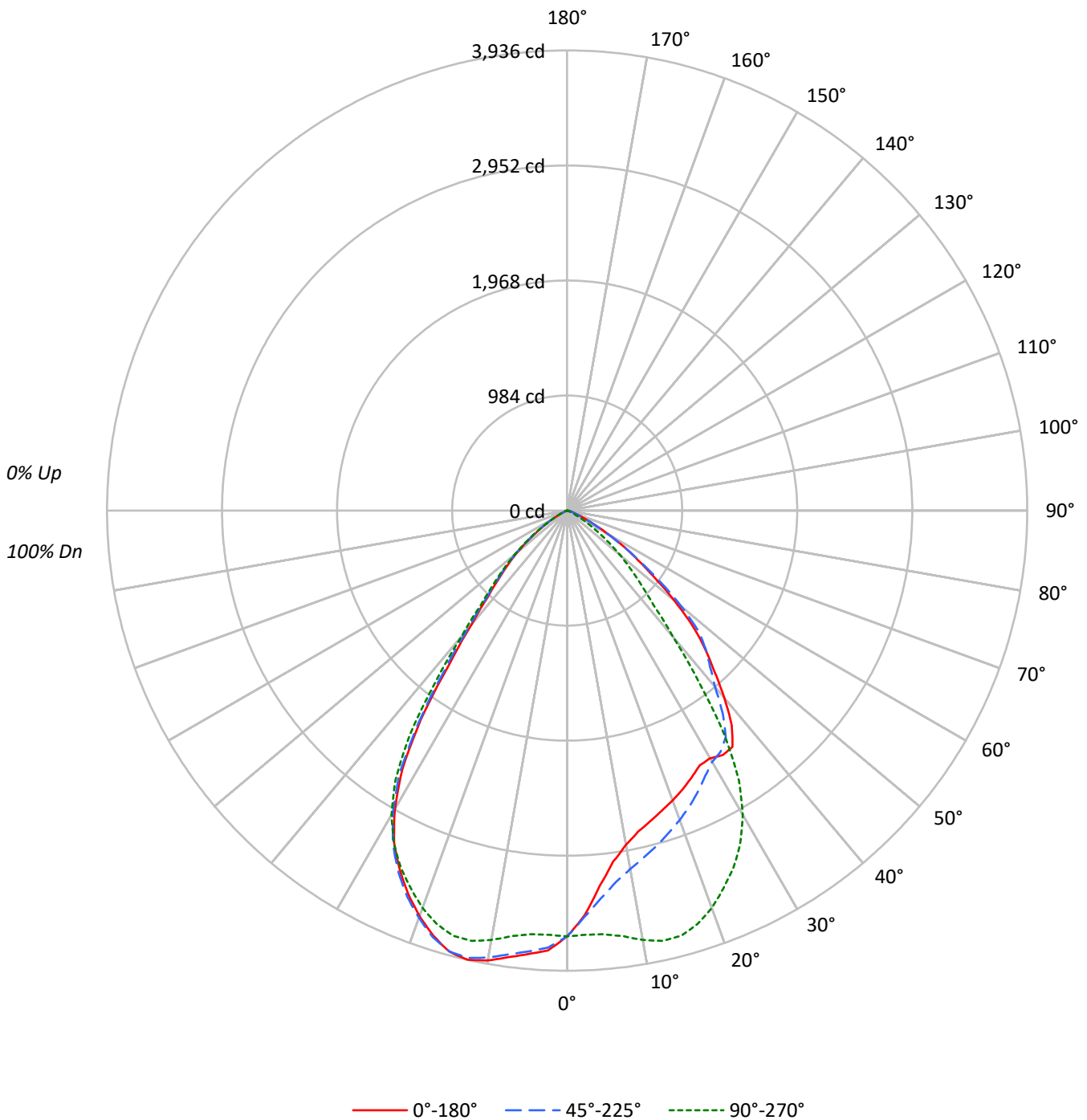
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	112306	112306	112306
5°	99644	112586	117861
10°	90849	116766	122339
15°	87798	120178	124670
20°	86544	118700	121148
25°	85693	114607	115321
30°	87090	106955	104979
35°	92831	88509	82094
40°	84127	56661	51308
45°	72609	38769	36095
50°	57289	28280	26625
55°	39767	17386	16360
60°	25317	8795	7851
65°	12638	3488	2656
70°	6987	1722	947
75°	5016	1251	453
80°	4084	852	178
85°	4387	672	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	339.4	6.1
10°-20°	980.4	17.6
20°-30°	1423.0	25.5
30°-40°	1401.5	25.1
40°-50°	878.5	15.8
50°-60°	423.9	7.6
60°-70°	102.6	1.8
70°-80°	20.7	0.4
80°-90°	4.8	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°	2742.9	49.2
0°-40°	4144.4	74.3
0°-60°	5446.9	97.7
0°-90°	5575.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5575.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3642	3642	3642	3642	3642	
5°	3219	3328	3637	3785	3808	298
15°	2750	2966	3764	3902	3905	778
25°	2519	2650	3368	3414	3389	1166
35°	2466	2366	2351	2217	2181	1492
45°	1665	1676	889	852	828	1273
55°	740	764	323	320	304	681
65°	173	171	48	41	36	198
75°	42	36	10	5	4	47
85°	12	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°	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0
2.5°	3462.1	3440.1	3399.0	3448.7	3448.7	3421.0	3476.5	3443.0	3469.8	3511.9	3474.6
5°	3219.1	3200.9	3166.4	3219.1	3225.8	3199.9	3266.9	3242.0	3281.3	3332.9	3328.2
7.5°	3026.7	3003.8	2972.2	3026.7	3037.3	3020.0	3084.2	3072.7	3124.3	3191.3	3202.8
10°	2901.4	2877.5	2849.7	2899.5	2907.1	2895.6	2960.7	2954.0	3004.7	3082.2	3112.9
12.5°	2812.4	2792.3	2761.7	2814.3	2822.9	2806.6	2867.9	2865.0	2917.6	2999.0	3037.3
15°	2750.2	2726.3	2698.5	2743.5	2755.0	2736.8	2795.2	2789.4	2843.0	2923.4	2966.4
17.5°	2691.8	2669.8	2641.1	2683.2	2694.7	2675.5	2733.0	2723.4	2769.3	2845.9	2889.9
20°	2637.3	2613.3	2587.5	2630.6	2637.3	2615.3	2672.7	2660.2	2701.4	2772.2	2815.3
22.5°	2580.8	2555.9	2529.1	2571.2	2577.9	2555.9	2608.6	2594.2	2632.5	2696.6	2735.8
25°	2518.6	2495.6	2468.9	2508.1	2513.8	2489.9	2545.4	2527.2	2560.7	2617.2	2649.7
27.5°	2456.4	2434.4	2404.7	2444.9	2447.8	2424.8	2475.5	2450.7	2478.4	2530.1	2557.8
30°	2445.9	2421.0	2390.4	2422.9	2423.9	2394.2	2442.1	2412.4	2427.7	2466.0	2482.2
32.5°	2479.4	2454.5	2422.9	2449.7	2446.8	2414.3	2460.2	2423.9	2428.7	2448.8	2444.9
35°	2466.0	2436.3	2399.0	2427.7	2427.7	2388.5	2434.4	2391.3	2386.6	2389.4	2365.5
37.5°	2313.8	2290.9	2255.5	2283.2	2280.3	2250.7	2286.1	2250.7	2234.4	2227.7	2184.6
40°	2089.9	2062.2	2035.4	2065.0	2067.9	2036.3	2082.3	2042.1	2037.3	2018.1	1967.4
42.5°	1863.1	1853.6	1827.7	1852.6	1866.0	1839.2	1877.5	1858.3	1861.2	1856.4	1808.6
45°	1665.0	1648.8	1629.6	1658.3	1667.0	1653.6	1691.8	1680.4	1691.8	1715.8	1676.5
47.5°	1451.6	1435.4	1414.3	1444.9	1460.3	1435.4	1467.9	1464.1	1481.3	1522.5	1518.6
50°	1194.2	1182.8	1178.9	1182.8	1192.3	1180.8	1203.8	1204.8	1216.2	1272.7	1276.5
52.5°	945.4	942.6	929.2	941.6	941.6	923.4	946.4	935.9	947.3	985.6	1010.5
55°	739.7	736.8	728.2	739.7	727.3	720.6	727.3	716.7	708.1	737.8	763.6
57.5°	576.1	566.5	556.0	560.8	559.8	545.4	553.1	540.7	534.0	544.5	567.5
60°	410.5	407.6	398.1	402.9	406.7	396.2	403.8	398.1	386.6	395.2	396.2
62.5°	272.7	274.6	268.9	269.9	267.0	265.1	269.9	272.7	269.9	266.0	267.0
65°	173.2	172.2	171.3	172.2	174.2	170.3	173.2	175.1	172.2	172.2	171.3
67.5°	114.8	112.0	109.1	111.0	112.9	110.0	112.9	112.0	112.9	112.0	109.1
70°	77.5	76.6	75.6	76.6	76.6	74.6	76.6	75.6	76.6	75.6	72.7
72.5°	56.5	56.5	55.5	56.5	56.5	54.5	55.5	53.6	54.5	53.6	51.7
75°	42.1	42.1	41.1	42.1	41.1	40.2	41.1	40.2	38.3	38.3	36.4
77.5°	30.6	30.6	30.6	30.6	30.6	29.7	29.7	28.7	27.8	26.8	26.8
80°	23.0	22.0	22.0	22.0	22.0	21.1	22.0	21.1	20.1	19.1	18.2
82.5°	16.3	17.2	16.3	16.3	16.3	15.3	16.3	15.3	15.3	14.4	12.4
85°	12.4	12.4	12.4	12.4	12.4	11.5	11.5	11.5	10.5	10.5	9.6
87.5°	6.7	6.7	6.7	7.7	6.7	6.7	6.7	5.7	5.7	4.8	4.8
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°	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0
2.5°	3524.3	3529.1	3518.6	3534.9	3598.0	3547.3	3568.4	3575.1	3622.9	3631.5	3625.8
5°	3390.4	3411.4	3424.8	3461.2	3531.0	3494.7	3532.0	3555.9	3617.2	3637.2	3642.0
7.5°	3285.1	3329.1	3361.7	3421.0	3503.3	3475.5	3532.0	3571.2	3645.9	3671.7	3684.1
10°	3206.6	3273.6	3330.1	3411.4	3504.2	3486.1	3559.7	3615.2	3698.5	3729.1	3744.4
12.5°	3147.3	3228.6	3304.2	3407.6	3508.1	3499.5	3588.4	3651.6	3739.6	3770.3	3788.4
15°	3082.2	3176.0	3264.1	3379.8	3488.0	3486.1	3581.7	3648.7	3738.7	3764.5	3781.7
17.5°	3004.7	3105.2	3201.9	3327.2	3434.4	3436.3	3532.9	3599.0	3687.0	3708.1	3719.5
20°	2926.3	3025.8	3122.4	3251.6	3356.9	3359.7	3454.5	3515.7	3599.9	3617.2	3620.0
22.5°	2843.0	2935.8	3032.5	3160.7	3262.1	3264.1	3357.8	3415.2	3487.0	3495.6	3503.3
25°	2748.3	2839.2	2930.1	3057.4	3154.0	3159.7	3244.9	3295.6	3361.7	3368.4	3371.2
27.5°	2649.7	2724.3	2811.4	2920.5	3018.1	3014.3	3094.7	3152.1	3211.4	3207.6	3206.6
30°	2550.2	2612.4	2666.0	2771.2	2843.0	2845.9	2921.5	2949.2	3011.4	3003.8	3002.8
32.5°	2480.3	2496.6	2511.0	2564.5	2632.5	2608.6	2660.2	2694.7	2737.7	2734.9	2735.8
35°	2352.1	2322.4	2279.4	2287.0	2328.2	2290.9	2318.6	2317.7	2361.7	2351.2	2363.6
37.5°	2133.0	2048.8	1953.1	1898.5	1906.2	1859.3	1849.7	1872.7	1888.0	1858.3	1868.9
40°	1899.5	1775.1	1625.8	1501.4	1494.7	1436.3	1425.8	1402.8	1432.5	1407.6	1415.3
42.5°	1727.2	1562.6	1366.5	1215.3	1182.8	1133.9	1105.2	1101.4	1110.0	1092.8	1088.0
45°	1595.2	1420.1	1195.2	1022.0	985.6	933.0	904.3	893.8	894.7	889.0	884.2
47.5°	1440.2	1264.1	1036.3	859.3	818.2	768.4	739.7	733.0	736.8	729.2	723.4
50°	1225.8	1067.9	860.3	698.6	662.2	625.8	602.9	596.2	595.2	589.5	585.6
52.5°	995.2	864.1	684.2	549.3	516.7	481.3	465.1	456.5	457.4	451.7	445.9
55°	770.3	689.0	530.1	415.3	385.6	357.9	342.6	332.1	329.2	323.4	320.6
57.5°	573.2	518.7	397.1	299.5	282.3	255.5	240.2	227.7	225.8	223.0	222.0
60°	401.9	362.7	279.4	213.4	193.3	177.0	161.7	149.3	143.5	142.6	139.7
62.5°	260.3	236.4	183.7	142.6	127.3	115.8	100.5	91.9	88.0	84.2	85.2
65°	161.7	143.5	114.8	91.9	83.3	74.6	63.2	55.5	51.7	47.8	48.8
67.5°	100.5	90.0	72.7	59.3	53.6	46.9	38.3	32.5	29.7	26.8	24.9
70°	67.9	58.4	49.8	42.1	38.3	33.5	27.8	23.0	21.1	19.1	17.2
72.5°	47.8	43.1	36.4	31.6	28.7	24.9	21.1	18.2	16.3	14.4	12.4
75°	34.4	30.6	26.8	23.0	21.1	19.1	16.3	14.4	12.4	10.5	8.6
77.5°	24.9	22.0	19.1	17.2	16.3	13.4	11.5	10.5	9.6	7.7	5.7
80°	17.2	15.3	12.4	11.5	11.5	9.6	8.6	7.7	6.7	4.8	3.8
82.5°	11.5	10.5	9.6	8.6	7.7	6.7	6.7	4.8	3.8	2.9	1.9
85°	8.6	7.7	6.7	5.7	5.7	4.8	3.8	2.9	2.9	1.9	1.0
87.5°	4.8	4.8	3.8	2.9	2.9	1.9	1.9	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°	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0
2.5°	3674.6	3677.4	3693.7	3681.3	3712.8	3735.8	3724.3	3750.2	3741.6	3739.6	3769.3
5°	3699.4	3706.1	3728.2	3716.7	3751.1	3776.0	3764.5	3793.2	3784.6	3782.7	3813.3
7.5°	3747.3	3754.0	3773.1	3763.6	3799.9	3821.9	3807.6	3839.2	3827.7	3826.7	3856.4
10°	3807.6	3817.2	3833.4	3823.8	3857.3	3876.5	3862.1	3892.7	3882.2	3877.4	3910.0
12.5°	3852.6	3859.3	3875.5	3867.9	3900.4	3914.8	3902.3	3932.0	3918.6	3914.8	3943.5
15°	3842.0	3848.7	3862.1	3855.4	3886.0	3899.4	3883.2	3915.7	3902.3	3894.7	3920.5
17.5°	3775.0	3778.9	3788.4	3781.7	3814.3	3822.9	3804.7	3837.2	3824.8	3811.4	3836.3
20°	3676.5	3674.6	3680.3	3677.4	3704.2	3709.0	3697.5	3721.5	3707.1	3699.4	3713.8
22.5°	3554.0	3552.1	3555.9	3548.3	3575.1	3577.9	3560.7	3589.4	3575.1	3560.7	3584.6
25°	3418.1	3407.6	3405.7	3408.5	3426.7	3429.6	3411.4	3432.5	3414.3	3402.8	3425.8
27.5°	3250.7	3237.3	3234.4	3237.3	3255.4	3242.0	3226.7	3242.0	3223.9	3213.3	3227.7
30°	3044.0	3024.8	3016.2	3010.5	3029.6	3024.8	2989.4	3006.6	2977.9	2962.6	2973.1
32.5°	2765.5	2755.0	2732.0	2718.6	2736.8	2700.4	2678.4	2678.4	2666.9	2641.1	2646.8
35°	2378.9	2362.6	2341.6	2330.1	2333.0	2284.2	2247.8	2255.5	2217.2	2210.5	2213.4
37.5°	1889.9	1863.1	1855.5	1831.5	1837.3	1794.2	1744.5	1745.4	1725.3	1704.3	1697.6
40°	1420.1	1415.3	1407.6	1387.5	1395.2	1348.3	1329.2	1330.1	1316.7	1301.4	1309.1
42.5°	1097.6	1082.3	1077.5	1070.8	1072.7	1065.1	1040.2	1043.0	1031.6	1027.7	1023.9
45°	891.8	875.6	864.1	869.8	869.8	861.2	851.7	857.4	851.7	844.0	847.8
47.5°	734.9	719.6	713.9	712.9	719.6	713.9	704.3	706.2	705.2	702.4	700.5
50°	586.6	582.8	578.0	575.1	578.0	576.1	567.5	572.2	575.1	565.5	568.4
52.5°	446.9	446.9	445.9	439.2	445.0	439.2	438.3	440.2	437.3	433.5	432.5
55°	327.3	324.4	319.6	318.7	320.6	318.7	316.7	317.7	319.6	310.0	310.0
57.5°	223.9	222.0	219.1	219.1	223.0	218.2	215.3	219.1	215.3	211.5	211.5
60°	143.5	142.6	139.7	139.7	139.7	138.8	135.9	136.8	138.8	133.0	134.0
62.5°	86.1	83.3	82.3	81.3	82.3	81.3	81.3	80.4	79.4	79.4	76.6
65°	46.9	45.0	43.1	44.0	44.0	43.1	43.1	43.1	41.1	40.2	39.2
67.5°	23.9	22.0	22.0	21.1	21.1	21.1	21.1	20.1	20.1	20.1	19.1
70°	15.3	14.4	13.4	13.4	13.4	12.4	12.4	12.4	12.4	12.4	11.5
72.5°	10.5	9.6	8.6	8.6	8.6	7.7	7.7	7.7	7.7	6.7	6.7
75°	7.7	6.7	5.7	5.7	5.7	4.8	4.8	4.8	4.8	4.8	4.8
77.5°	4.8	3.8	3.8	3.8	3.8	2.9	2.9	2.9	2.9	2.9	1.9
80°	2.9	2.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0
82.5°	1.9	1.9	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: P245405

CATALOG NUMBER: LSR8B50D010 EC8B50840 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0	3642.0
2.5°	3758.8	3751.1	3755.9	3791.3	3776.0	3771.2	3731.0	3766.4
5°	3803.8	3798.0	3798.0	3838.2	3820.0	3816.2	3777.0	3807.6
7.5°	3845.9	3840.1	3841.1	3882.2	3867.9	3862.1	3822.9	3853.5
10°	3900.4	3896.6	3897.5	3936.8	3921.5	3915.7	3875.5	3907.1
12.5°	3932.9	3927.2	3927.2	3969.3	3952.1	3943.5	3905.2	3935.8
15°	3908.1	3899.4	3899.4	3941.6	3922.4	3910.0	3876.5	3905.2
17.5°	3822.9	3814.3	3814.3	3850.6	3836.3	3818.1	3783.7	3810.5
20°	3704.2	3693.7	3690.8	3732.9	3712.8	3696.6	3666.0	3691.8
22.5°	3570.3	3565.5	3556.9	3599.0	3580.8	3563.6	3531.0	3551.1
25°	3409.5	3401.8	3393.2	3434.4	3416.2	3399.0	3373.1	3389.4
27.5°	3209.5	3210.5	3205.7	3238.2	3220.0	3210.5	3178.9	3205.7
30°	2967.4	2956.9	2953.1	2991.3	2974.1	2961.7	2922.4	2948.3
32.5°	2651.6	2636.3	2616.2	2659.3	2629.6	2619.1	2585.6	2622.9
35°	2192.3	2187.5	2169.3	2205.7	2189.4	2170.3	2149.2	2180.8
37.5°	1694.7	1698.5	1696.6	1706.2	1696.6	1684.2	1661.2	1649.7
40°	1293.8	1284.2	1276.5	1293.8	1273.7	1273.7	1260.3	1274.6
42.5°	1014.3	1010.5	1020.1	1023.9	1012.4	1010.5	1008.6	1007.6
45°	837.3	837.3	839.2	843.0	839.2	837.3	831.6	827.7
47.5°	689.9	693.8	689.9	702.4	695.7	693.8	682.3	687.1
50°	558.8	554.1	558.8	562.7	563.6	557.9	552.1	555.0
52.5°	433.5	425.8	423.9	429.7	425.8	425.8	422.0	421.0
55°	305.3	308.1	303.3	308.1	306.2	303.3	300.5	304.3
57.5°	206.7	207.7	205.7	208.6	203.8	204.8	203.8	202.9
60°	134.0	130.1	130.1	133.0	128.2	128.2	127.3	127.3
62.5°	76.6	75.6	75.6	74.6	73.7	73.7	73.7	71.8
65°	39.2	38.3	37.3	37.3	37.3	37.3	36.4	36.4
67.5°	19.1	18.2	18.2	19.1	18.2	18.2	18.2	18.2
70°	11.5	11.5	10.5	11.5	10.5	10.5	10.5	10.5
72.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
75°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
77.5°	2.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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)