

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: P245483

Luminaire Tested: **LSR8B50D010 EC8B50850 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B50D010 EC8B50850 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE 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: 5697.0 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

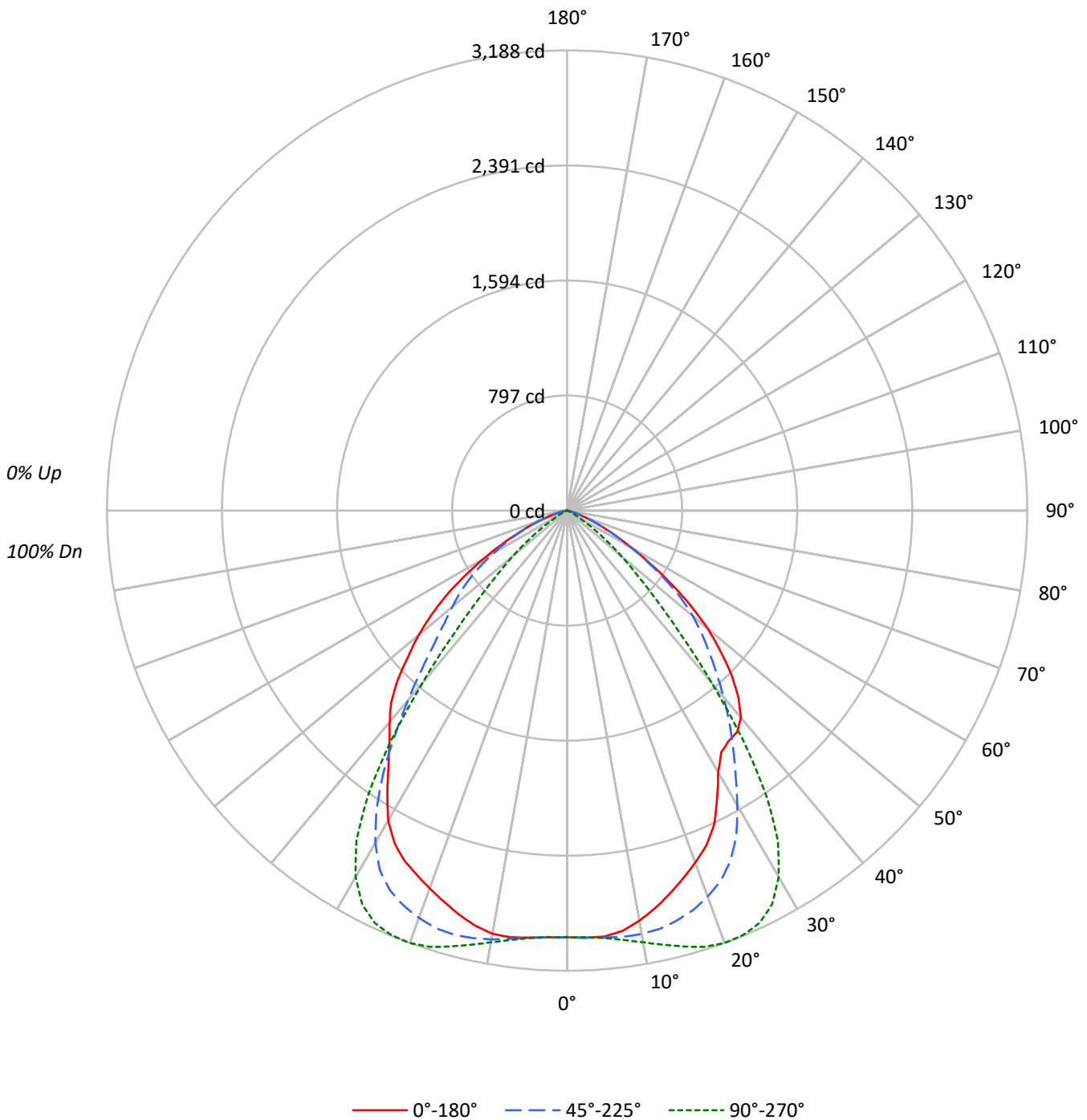
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	91134	91134	91134
5°	91677	92017	91918
10°	90329	95095	93228
15°	87689	99808	92497
20°	85143	104602	91371
25°	81876	107281	90950
30°	74511	104338	88251
35°	73402	90410	81199
40°	75396	62704	76974
45°	70189	37896	72378
50°	60882	23406	64495
55°	46719	12231	54735
60°	31829	4934	41308
65°	19803	2517	28500
70°	10747	1560	17401
75°	5612	751	10282
80°	2504	835	5576
85°	1663	566	4989



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	284.2	5.0
10°-20°	842.0	14.8
20°-30°	1284.5	22.5
30°-40°	1340.4	23.5
40°-50°	1006.8	17.7
50°-60°	619.5	10.9
60°-70°	252.1	4.4
70°-80°	59.4	1.0
80°-90°	8.2	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°	2410.7	42.3
0°-40°	3751.1	65.8
0°-60°	5377.3	94.4
0°-90°	5697.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5697.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2955	2955	2955	2955	2955	
5°	2962	2970	2973	2970	2970	280
15°	2747	2940	3126	3040	2897	774
25°	2406	2676	3153	2904	2673	1094
35°	1950	2005	2402	2220	2157	1231
45°	1610	1393	869	1297	1660	1228
55°	869	825	228	825	1018	781
65°	271	274	34	369	391	283
75°	47	47	6	83	86	57
85°	5	5	2	11	14	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4
2.5°	2963.3	2958.5	2963.3	2963.3	2964.8	2961.7	2963.3	2964.8	2961.7	2961.7	2961.7
5°	2961.7	2958.5	2961.7	2960.1	2963.3	2963.3	2966.4	2966.4	2969.5	2969.5	2974.2
7.5°	2936.6	2930.3	2936.6	2941.3	2944.4	2950.7	2958.5	2964.8	2971.1	2977.4	2985.2
10°	2884.8	2884.8	2889.5	2898.9	2908.3	2919.3	2933.4	2949.1	2964.8	2978.9	2993.1
12.5°	2820.5	2815.8	2825.2	2837.8	2851.9	2869.2	2891.1	2914.6	2939.7	2968.0	2989.9
15°	2746.8	2742.1	2753.0	2765.6	2782.9	2808.0	2834.6	2866.0	2902.1	2939.7	2975.8
17.5°	2671.5	2669.9	2680.9	2698.2	2712.3	2738.9	2773.5	2811.1	2851.9	2902.1	2949.1
20°	2594.6	2593.1	2604.0	2618.2	2637.0	2662.1	2696.6	2740.5	2789.1	2845.6	2900.5
22.5°	2514.6	2516.2	2525.6	2541.3	2557.0	2583.6	2619.7	2663.7	2717.0	2778.1	2839.3
25°	2406.4	2398.5	2411.1	2426.8	2453.4	2475.4	2509.9	2557.0	2611.9	2676.2	2748.4
27.5°	2249.5	2247.9	2258.9	2273.0	2296.6	2323.2	2360.9	2409.5	2467.6	2538.1	2608.7
30°	2092.6	2095.8	2100.5	2114.6	2130.3	2157.0	2194.6	2235.4	2290.3	2357.7	2433.0
32.5°	1986.0	1986.0	1992.2	2001.7	2012.6	2026.8	2053.4	2083.2	2125.6	2172.7	2227.5
35°	1949.9	1943.6	1949.9	1951.4	1953.0	1956.2	1960.9	1970.3	1984.4	2004.8	2025.2
37.5°	1934.2	1929.5	1929.5	1923.2	1915.4	1906.0	1893.4	1879.3	1863.6	1843.2	1827.5
40°	1873.0	1869.9	1866.7	1860.5	1843.2	1824.4	1804.0	1771.0	1735.0	1684.8	1634.6
42.5°	1755.4	1752.2	1750.7	1738.1	1722.4	1700.5	1676.9	1642.4	1596.9	1532.6	1460.4
45°	1609.5	1603.2	1598.5	1587.5	1576.5	1557.7	1535.8	1504.4	1458.9	1393.0	1306.7
47.5°	1440.1	1436.9	1435.3	1430.7	1419.7	1408.7	1394.6	1369.5	1328.7	1265.9	1176.5
50°	1269.1	1262.8	1265.9	1264.4	1259.7	1251.8	1242.4	1225.2	1193.8	1137.3	1055.7
52.5°	1073.0	1073.0	1071.4	1076.1	1077.7	1076.1	1077.7	1058.9	1032.2	989.8	920.8
55°	869.0	869.0	873.8	880.1	886.3	887.9	886.3	878.5	859.6	825.1	763.9
57.5°	677.7	674.5	684.0	693.4	699.7	705.9	701.2	694.9	684.0	655.7	608.6
60°	516.1	516.1	522.4	528.7	534.9	541.2	539.6	538.1	528.7	509.8	472.2
62.5°	379.6	381.2	381.2	385.9	392.2	398.5	403.1	398.5	393.7	381.2	356.1
65°	271.4	269.8	271.4	276.1	280.8	287.1	290.2	288.6	283.9	274.5	255.7
67.5°	182.0	180.4	186.7	188.2	191.4	197.7	196.1	197.7	196.1	188.2	172.6
70°	119.2	116.1	119.2	117.6	122.4	123.9	127.0	128.6	127.0	122.4	117.6
72.5°	73.7	72.2	73.7	75.3	76.9	78.4	81.6	81.6	80.0	76.9	70.6
75°	47.1	42.3	43.9	40.8	43.9	43.9	47.1	48.6	47.1	47.1	43.9
77.5°	28.2	28.2	28.2	28.2	28.2	28.2	28.2	29.8	31.4	28.2	26.7
80°	14.1	14.1	15.7	15.7	15.7	17.3	15.7	15.7	15.7	17.3	12.6
82.5°	11.0	9.4	9.4	9.4	11.0	9.4	9.4	9.4	9.4	9.4	9.4
85°	4.7	6.3	4.7	3.1	4.7	4.7	6.3	4.7	4.7	4.7	6.3
87.5°	1.6	1.6	0.0	0.0	0.0	1.6	0.0	1.6	1.6	3.1	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4
2.5°	2963.3	2960.1	2960.1	2958.5	2961.7	2958.5	2960.1	2958.5	2958.5	2961.7	2958.5
5°	2974.2	2975.8	2972.7	2971.1	2975.8	2975.8	2975.8	2972.7	2972.7	2974.2	2972.7
7.5°	2989.9	2993.1	2994.6	2996.2	2999.4	3000.9	3000.9	2999.4	2997.8	3002.5	2996.2
10°	3007.2	3011.9	3021.3	3026.0	3033.9	3033.9	3037.0	3037.0	3033.9	3037.0	3035.4
12.5°	3000.9	3029.1	3044.8	3055.8	3066.8	3076.2	3079.3	3080.9	3079.3	3085.6	3079.3
15°	3011.9	3035.4	3060.5	3079.3	3099.7	3110.7	3113.8	3126.4	3129.5	3131.1	3121.7
17.5°	2994.6	3037.0	3063.6	3091.9	3121.7	3142.1	3160.9	3168.8	3170.3	3173.5	3160.9
20°	2955.4	3002.5	3043.3	3084.1	3118.6	3149.9	3165.6	3187.6	3181.3	3193.9	3176.6
22.5°	2902.1	2955.4	3007.2	3060.5	3096.6	3134.3	3167.2	3182.9	3190.7	3190.7	3171.9
25°	2817.4	2880.1	2936.6	2991.5	3046.4	3091.9	3129.5	3153.1	3157.8	3156.2	3134.3
27.5°	2685.6	2753.0	2818.9	2881.7	2949.1	3002.5	3046.4	3074.6	3082.5	3082.5	3059.0
30°	2503.6	2575.8	2640.1	2715.4	2784.4	2844.1	2905.2	2930.3	2944.4	2944.4	2917.8
32.5°	2287.1	2348.3	2407.9	2481.7	2557.0	2624.4	2682.5	2717.0	2734.2	2732.7	2709.1
35°	2051.9	2081.6	2127.2	2182.1	2249.5	2312.3	2368.7	2401.7	2431.5	2429.9	2407.9
37.5°	1816.5	1808.7	1813.4	1833.8	1876.1	1920.1	1964.0	1995.4	2020.5	2031.5	2026.8
40°	1586.0	1545.2	1505.9	1491.8	1495.0	1510.7	1534.2	1557.7	1586.0	1600.1	1606.3
42.5°	1378.9	1309.9	1240.8	1189.1	1159.3	1149.8	1160.8	1168.7	1185.9	1206.3	1226.7
45°	1212.6	1120.1	1029.1	949.1	898.9	869.0	862.8	869.0	878.5	898.9	925.5
47.5°	1076.1	967.9	865.9	776.5	702.8	663.6	652.6	649.4	658.9	677.7	713.7
50°	955.3	847.1	734.2	630.6	553.8	509.8	494.1	487.9	498.8	513.0	545.9
52.5°	823.6	716.9	600.8	500.4	420.4	374.9	357.7	348.3	354.5	373.4	406.3
55°	680.8	582.0	476.9	373.4	296.5	254.1	233.7	227.5	233.7	254.1	287.1
57.5°	538.1	454.9	367.1	269.8	200.8	158.4	138.0	131.8	149.0	156.9	191.4
60°	420.4	353.0	277.7	197.7	138.0	105.1	84.7	80.0	87.9	101.9	130.2
62.5°	315.3	272.9	213.3	141.2	101.9	67.4	56.5	51.8	56.5	67.4	89.4
65°	229.0	196.1	149.0	103.5	69.0	50.2	37.7	34.5	39.2	47.1	65.9
67.5°	156.9	131.8	103.5	72.2	47.1	31.4	26.7	26.7	28.2	34.5	48.6
70°	101.9	86.3	65.9	47.1	31.4	23.5	20.4	17.3	20.4	25.1	32.9
72.5°	64.3	54.9	42.3	32.9	23.5	17.3	14.1	12.6	15.7	18.8	25.1
75°	39.2	29.8	22.0	17.3	12.6	12.6	12.6	6.3	7.8	12.6	15.7
77.5°	23.5	20.4	17.3	14.1	11.0	6.3	6.3	6.3	7.8	9.4	14.1
80°	12.6	11.0	7.8	7.8	6.3	4.7	6.3	4.7	3.1	7.8	9.4
82.5°	7.8	6.3	6.3	6.3	7.8	3.1	4.7	3.1	4.7	6.3	4.7
85°	4.7	4.7	4.7	3.1	7.8	3.1	3.1	1.6	1.6	3.1	3.1
87.5°	0.0	1.6	1.6	0.0	1.6	0.0	1.6	1.6	1.6	1.6	1.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4	2955.4
2.5°	2960.1	2958.5	2960.1	2958.5	2958.5	2958.5	2960.1	2960.1	2958.5	2958.5	2961.7
5°	2972.7	2972.7	2972.7	2971.1	2969.5	2969.5	2972.7	2972.7	2968.0	2972.7	2972.7
7.5°	2999.4	2994.6	2999.4	2993.1	2989.9	2991.5	2993.1	2989.9	2986.8	2988.4	2988.4
10°	3033.9	3029.1	3029.1	3024.5	3019.7	3016.6	3013.5	3005.6	2997.8	2996.2	2989.9
12.5°	3074.6	3066.8	3062.1	3052.7	3044.8	3033.9	3024.5	3011.9	2996.2	2985.2	2974.2
15°	3115.4	3102.9	3091.9	3076.2	3059.0	3040.1	3019.7	2999.4	2974.2	2952.3	2933.4
17.5°	3148.4	3131.1	3110.7	3085.6	3060.5	3032.3	3002.5	2972.7	2936.6	2908.3	2886.4
20°	3159.3	3134.3	3107.6	3074.6	3041.7	3002.5	2964.8	2925.6	2884.8	2855.0	2829.9
22.5°	3145.2	3115.4	3082.5	3048.0	3004.0	2961.7	2917.8	2872.3	2836.2	2795.4	2771.9
25°	3106.0	3069.9	3033.9	2993.1	2950.7	2903.7	2856.6	2809.5	2765.6	2743.6	2713.9
27.5°	3026.0	2986.8	2947.6	2905.2	2856.6	2809.5	2760.9	2715.4	2677.8	2648.0	2630.7
30°	2884.8	2839.3	2793.8	2748.4	2706.0	2657.4	2611.9	2574.2	2536.6	2513.0	2495.8
32.5°	2668.3	2627.6	2582.1	2538.1	2498.9	2458.1	2420.5	2387.6	2360.9	2345.2	2332.6
35°	2376.6	2335.8	2301.3	2269.9	2236.9	2219.7	2196.2	2177.3	2166.4	2160.1	2158.5
37.5°	2009.5	1986.0	1975.0	1968.7	1962.4	1957.7	1960.9	1968.7	1975.0	1986.0	1998.5
40°	1617.3	1637.7	1644.0	1666.0	1686.3	1713.0	1742.8	1777.3	1805.6	1841.6	1866.7
42.5°	1259.7	1297.3	1341.2	1388.3	1438.5	1487.1	1546.7	1601.6	1651.8	1697.3	1736.5
45°	967.9	1025.9	1091.8	1159.3	1226.7	1297.3	1369.5	1436.9	1496.5	1545.2	1586.0
47.5°	754.5	818.9	903.6	986.7	1068.3	1151.4	1231.4	1302.0	1352.2	1399.3	1435.3
50°	597.7	671.4	763.9	859.6	949.1	1036.9	1121.6	1187.5	1237.7	1275.4	1302.0
52.5°	462.8	550.6	644.7	745.1	840.8	936.5	1014.9	1076.1	1116.9	1149.8	1170.2
55°	345.1	431.4	531.8	635.3	732.6	825.1	898.9	952.2	988.3	1007.1	1018.1
57.5°	249.4	327.9	428.2	531.8	619.6	707.5	767.1	815.7	836.1	847.1	851.8
60°	182.0	254.1	343.5	433.0	516.1	586.7	638.5	671.4	687.1	693.4	691.8
62.5°	133.3	196.1	272.9	348.3	415.7	473.7	514.5	536.5	544.4	547.5	542.8
65°	101.9	150.6	216.5	274.5	326.3	368.6	398.5	412.6	417.3	415.7	412.6
67.5°	75.3	113.0	161.6	205.5	243.2	276.1	291.8	304.3	307.5	302.8	298.0
70°	53.4	83.1	117.6	147.5	175.7	194.5	211.8	213.3	213.3	211.8	208.7
72.5°	37.7	58.0	80.0	100.4	117.6	131.8	138.0	142.7	141.2	139.6	136.5
75°	25.1	36.1	58.0	62.8	78.4	83.1	89.4	89.4	91.0	86.3	86.3
77.5°	15.7	25.1	34.5	40.8	47.1	53.4	56.5	56.5	58.0	56.5	56.5
80°	9.4	15.7	18.8	28.2	28.2	32.9	34.5	36.1	32.9	37.7	32.9
82.5°	6.3	9.4	14.1	14.1	17.3	20.4	20.4	22.0	22.0	20.4	20.4
85°	4.7	6.3	7.8	9.4	9.4	11.0	9.4	9.4	11.0	12.6	11.0
87.5°	1.6	3.1	1.6	3.1	3.1	6.3	4.7	4.7	4.7	6.3	6.3
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: P245483

CATALOG NUMBER: LSR8B50D010 EC8B50850 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2955.4	2955.4	2955.4	2955.4
2.5°	2958.5	2960.1	2958.5	2958.5
5°	2972.7	2971.1	2972.7	2969.5
7.5°	2983.7	2983.7	2982.1	2982.1
10°	2983.7	2977.4	2977.4	2977.4
12.5°	2960.1	2952.3	2947.6	2944.4
15°	2919.3	2905.2	2898.9	2897.4
17.5°	2866.0	2853.5	2845.6	2840.9
20°	2804.8	2792.3	2782.9	2784.4
22.5°	2751.5	2737.4	2731.1	2727.9
25°	2698.2	2680.9	2676.2	2673.1
27.5°	2611.9	2602.5	2597.7	2593.1
30°	2480.1	2475.4	2467.6	2478.5
32.5°	2327.9	2320.1	2313.8	2318.5
35°	2160.1	2155.4	2160.1	2157.0
37.5°	2006.4	2011.1	2017.4	2020.5
40°	1885.6	1902.8	1909.1	1912.2
42.5°	1764.8	1785.2	1797.7	1805.6
45°	1615.7	1636.1	1650.3	1659.7
47.5°	1462.0	1479.3	1493.4	1491.8
50°	1322.4	1331.8	1338.1	1344.4
52.5°	1181.2	1181.2	1182.8	1182.8
55°	1021.2	1018.1	1016.5	1018.1
57.5°	845.5	842.4	840.8	836.1
60°	685.5	676.1	669.8	669.8
62.5°	536.5	525.5	520.8	519.2
65°	403.1	401.6	392.2	390.6
67.5°	291.8	285.5	279.2	280.8
70°	205.5	196.1	196.1	193.0
72.5°	133.3	128.6	127.0	127.0
75°	83.1	83.1	80.0	86.3
77.5°	54.9	54.9	53.4	54.9
80°	32.9	32.9	32.9	31.4
82.5°	20.4	22.0	20.4	20.4
85°	11.0	12.6	9.4	14.1
87.5°	6.3	7.8	6.3	7.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)