

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: P245441

Luminaire Tested: **LSR8B50D010 EC8B50950 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245441
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 EC8B50950 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5175.0 lumens
Efficiency: N/A
Efficacy: 97.6 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

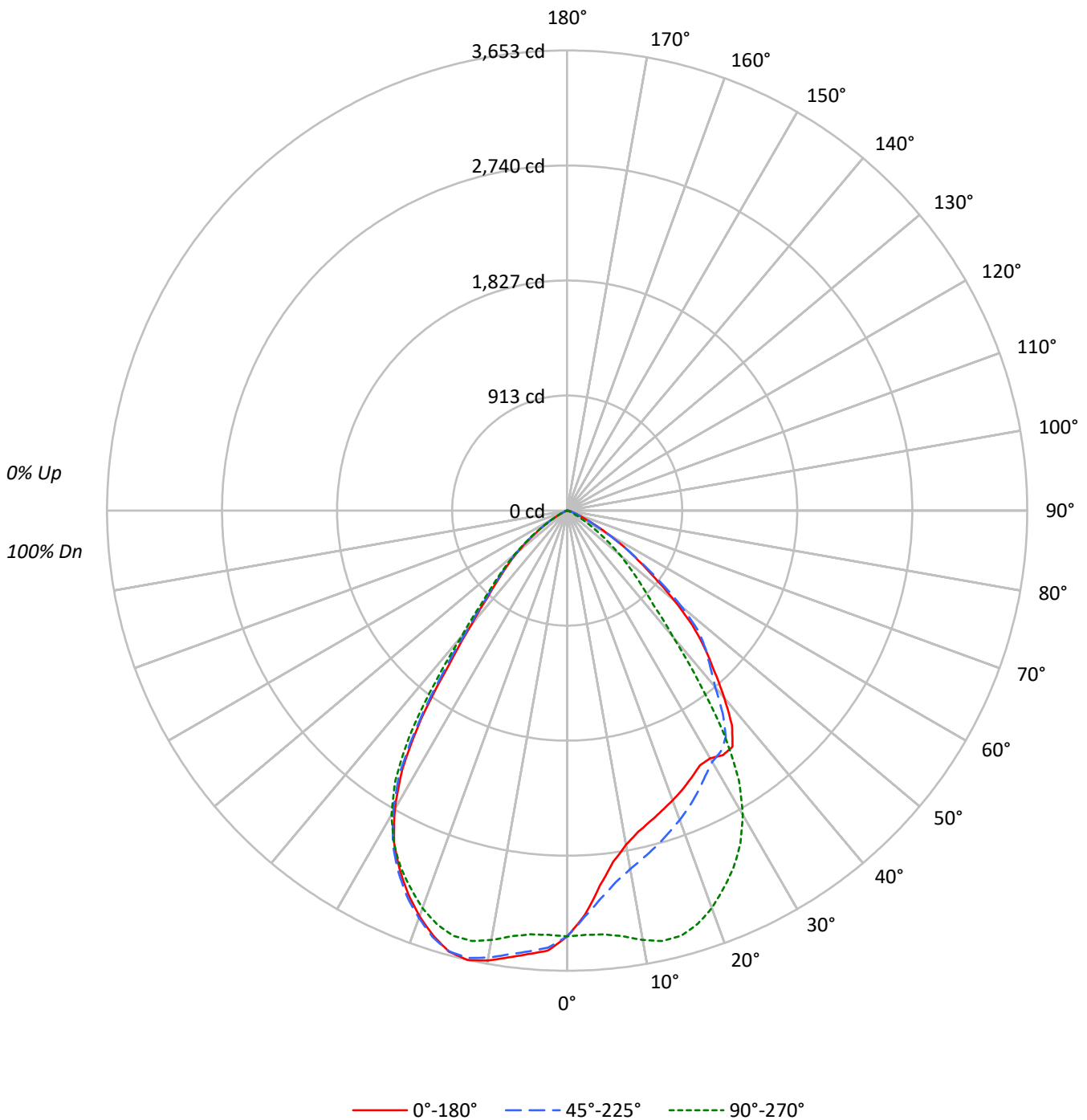
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	104248	104248	104248
5°	92494	104510	109404
10°	84330	108390	113562
15°	81499	111556	115725
20°	80332	110181	112455
25°	79545	106383	107047
30°	80841	99282	97445
35°	86168	82158	76203
40°	78093	52596	47628
45°	67402	35986	33505
50°	53183	26251	24716
55°	36913	16139	15188
60°	23503	8165	7284
65°	11733	3240	2466
70°	6482	1605	884
75°	4658	1168	429
80°	3782	781	160
85°	4069	637	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	315.1	6.1
10°-20°	910.1	17.6
20°-30°	1320.9	25.5
30°-40°	1301.0	25.1
40°-50°	815.5	15.8
50°-60°	393.5	7.6
60°-70°	95.2	1.8
70°-80°	19.2	0.4
80°-90°	4.4	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°	2546.1	49.2
0°-40°	3847.1	74.3
0°-60°	5056.1	97.7
0°-90°	5175.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5175.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3381	3381	3381	3381	3381	
5°	2988	3089	3376	3513	3534	277
15°	2553	2754	3494	3622	3625	722
25°	2338	2460	3127	3169	3146	1082
35°	2289	2196	2182	2058	2024	1385
45°	1546	1556	825	791	768	1182
55°	687	709	300	297	282	632
65°	161	159	44	38	34	183
75°	39	34	10	4	4	44
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°	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7
2.5°	3213.7	3193.3	3155.1	3201.3	3201.3	3175.5	3227.1	3196.0	3220.8	3259.9	3225.3
5°	2988.1	2971.2	2939.3	2988.1	2994.3	2970.3	3032.5	3009.4	3045.8	3093.8	3089.4
7.5°	2809.6	2788.3	2758.9	2809.6	2819.3	2803.4	2862.9	2852.2	2900.2	2962.4	2973.0
10°	2693.2	2671.0	2645.2	2691.4	2698.5	2687.9	2748.3	2742.1	2789.1	2861.1	2889.5
12.5°	2610.6	2591.9	2563.5	2612.4	2620.4	2605.3	2662.1	2659.5	2708.3	2783.8	2819.3
15°	2552.9	2530.7	2504.9	2546.6	2557.3	2540.4	2594.6	2589.3	2639.0	2713.6	2753.6
17.5°	2498.7	2478.2	2451.6	2490.7	2501.3	2483.6	2536.9	2528.0	2570.6	2641.7	2682.5
20°	2448.0	2425.8	2401.9	2441.8	2448.0	2427.6	2480.9	2469.4	2507.6	2573.3	2613.3
22.5°	2395.6	2372.5	2347.7	2386.8	2393.0	2372.5	2421.4	2408.1	2443.6	2503.1	2539.5
25°	2337.9	2316.6	2291.7	2328.1	2333.5	2311.3	2362.8	2345.9	2377.0	2429.4	2459.6
27.5°	2280.2	2259.7	2232.2	2269.5	2272.2	2250.9	2297.9	2274.8	2300.6	2348.6	2374.3
30°	2270.4	2247.3	2218.9	2249.1	2250.0	2222.4	2266.8	2239.3	2253.5	2289.0	2304.1
32.5°	2301.5	2278.4	2249.1	2273.9	2271.3	2241.1	2283.7	2250.0	2254.4	2273.1	2269.5
35°	2289.0	2261.5	2226.9	2253.5	2253.5	2217.1	2259.7	2219.8	2215.3	2218.0	2195.8
37.5°	2147.8	2126.5	2093.6	2119.4	2116.7	2089.2	2122.1	2089.2	2074.1	2067.9	2027.9
40°	1940.0	1914.2	1889.3	1916.9	1919.5	1890.2	1932.9	1895.5	1891.1	1873.3	1826.3
42.5°	1729.4	1720.6	1696.6	1719.7	1732.1	1707.2	1742.8	1725.0	1727.7	1723.2	1678.8
45°	1545.6	1530.5	1512.7	1539.4	1547.4	1534.9	1570.4	1559.8	1570.4	1592.7	1556.2
47.5°	1347.5	1332.4	1312.9	1341.3	1355.5	1332.4	1362.6	1359.0	1375.0	1413.2	1409.7
50°	1108.6	1097.9	1094.3	1097.9	1106.8	1096.1	1117.4	1118.3	1129.0	1181.4	1184.9
52.5°	877.6	874.9	862.5	874.0	874.0	857.2	878.5	868.7	879.4	914.9	938.0
55°	686.6	684.0	676.0	686.6	675.1	668.9	675.1	665.3	657.3	684.8	708.8
57.5°	534.7	525.9	516.1	520.5	519.6	506.3	513.4	501.9	495.6	505.4	526.7
60°	381.1	378.4	369.5	374.0	377.5	367.7	374.8	369.5	358.9	366.9	367.7
62.5°	253.2	254.9	249.6	250.5	247.8	246.0	250.5	253.2	250.5	246.9	247.8
65°	160.8	159.9	159.0	159.9	161.7	158.1	160.8	162.6	159.9	159.9	159.0
67.5°	106.6	103.9	101.3	103.0	104.8	102.2	104.8	103.9	104.8	103.9	101.3
70°	71.9	71.1	70.2	71.1	71.1	69.3	71.1	70.2	71.1	70.2	67.5
72.5°	52.4	52.4	51.5	52.4	52.4	50.6	51.5	49.7	50.6	49.7	48.0
75°	39.1	39.1	38.2	39.1	38.2	37.3	38.2	37.3	35.5	35.5	33.8
77.5°	28.4	28.4	28.4	28.4	28.4	27.5	27.5	26.6	25.8	24.9	24.9
80°	21.3	20.4	20.4	20.4	20.4	19.5	20.4	19.5	18.7	17.8	16.9
82.5°	15.1	16.0	15.1	15.1	15.1	14.2	15.1	14.2	14.2	13.3	11.5
85°	11.5	11.5	11.5	11.5	11.5	10.7	10.7	10.7	9.8	9.8	8.9
87.5°	6.2	6.2	6.2	7.1	6.2	6.2	6.2	5.3	5.3	4.4	4.4
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°	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7
2.5°	3271.5	3275.9	3266.1	3281.2	3339.9	3292.8	3312.3	3318.5	3363.0	3371.0	3365.6
5°	3147.1	3166.7	3179.1	3212.8	3277.7	3243.9	3278.6	3300.8	3357.6	3376.3	3380.7
7.5°	3049.4	3090.3	3120.5	3175.5	3251.9	3226.2	3278.6	3315.0	3384.3	3408.3	3419.8
10°	2976.6	3038.7	3091.1	3166.7	3252.8	3235.9	3304.3	3355.9	3433.1	3461.6	3475.8
12.5°	2921.5	2997.0	3067.2	3163.1	3256.4	3248.4	3331.0	3389.6	3471.3	3499.7	3516.6
15°	2861.1	2948.1	3029.9	3137.3	3237.7	3235.9	3324.8	3386.9	3470.4	3494.4	3510.4
17.5°	2789.1	2882.4	2972.1	3088.5	3188.0	3189.7	3279.5	3340.8	3422.5	3442.0	3452.7
20°	2716.3	2808.7	2898.4	3018.3	3116.0	3118.7	3206.6	3263.5	3341.6	3357.6	3360.3
22.5°	2639.0	2725.2	2814.9	2933.9	3028.1	3029.9	3116.9	3170.2	3236.8	3244.8	3251.9
25°	2551.1	2635.5	2719.9	2838.0	2927.7	2933.0	3012.1	3059.2	3120.5	3126.7	3129.3
27.5°	2459.6	2528.9	2609.7	2711.0	2801.6	2798.0	2872.6	2925.9	2981.0	2977.5	2976.6
30°	2367.2	2425.0	2474.7	2572.4	2639.0	2641.7	2711.9	2737.6	2795.4	2788.3	2787.4
32.5°	2302.4	2317.5	2330.8	2380.5	2443.6	2421.4	2469.4	2501.3	2541.3	2538.7	2539.5
35°	2183.3	2155.8	2115.8	2122.9	2161.1	2126.5	2152.3	2151.4	2192.2	2182.5	2194.0
37.5°	1979.9	1901.8	1812.9	1762.3	1769.4	1725.9	1717.0	1738.3	1752.5	1725.0	1734.8
40°	1763.2	1647.7	1509.2	1393.7	1387.5	1333.3	1323.5	1302.2	1329.7	1306.6	1313.7
42.5°	1603.3	1450.5	1268.4	1128.1	1097.9	1052.6	1025.9	1022.4	1030.4	1014.4	1010.0
45°	1480.7	1318.2	1109.4	948.7	914.9	866.1	839.4	829.6	830.5	825.2	820.8
47.5°	1336.8	1173.4	962.0	797.7	759.5	713.3	686.6	680.4	684.0	676.9	671.5
50°	1137.9	991.3	798.5	648.4	614.7	580.9	559.6	553.4	552.5	547.2	543.6
52.5°	923.8	802.1	635.1	509.9	479.7	446.8	431.7	423.7	424.6	419.3	413.9
55°	715.1	639.5	492.1	385.5	358.0	332.2	318.0	308.2	305.6	300.2	297.6
57.5°	532.1	481.4	368.6	278.0	262.0	237.2	223.0	211.4	209.6	207.0	206.1
60°	373.1	336.7	259.4	198.1	179.4	164.3	150.1	138.6	133.2	132.4	129.7
62.5°	241.6	219.4	170.5	132.4	118.1	107.5	93.3	85.3	81.7	78.2	79.1
65°	150.1	133.2	106.6	85.3	77.3	69.3	58.6	51.5	48.0	44.4	45.3
67.5°	93.3	83.5	67.5	55.1	49.7	43.5	35.5	30.2	27.5	24.9	23.1
70°	63.1	54.2	46.2	39.1	35.5	31.1	25.8	21.3	19.5	17.8	16.0
72.5°	44.4	40.0	33.8	29.3	26.6	23.1	19.5	16.9	15.1	13.3	11.5
75°	32.0	28.4	24.9	21.3	19.5	17.8	15.1	13.3	11.5	9.8	8.0
77.5°	23.1	20.4	17.8	16.0	15.1	12.4	10.7	9.8	8.9	7.1	5.3
80°	16.0	14.2	11.5	10.7	10.7	8.9	8.0	7.1	6.2	4.4	3.6
82.5°	10.7	9.8	8.9	8.0	7.1	6.2	6.2	4.4	3.6	2.7	1.8
85°	8.0	7.1	6.2	5.3	5.3	4.4	3.6	2.7	2.7	1.8	0.9
87.5°	4.4	4.4	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°	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7
2.5°	3410.9	3413.6	3428.7	3417.1	3446.5	3467.8	3457.1	3481.1	3473.1	3471.3	3498.9
5°	3434.0	3440.2	3460.7	3450.0	3482.0	3505.1	3494.4	3521.1	3513.1	3511.3	3539.7
7.5°	3478.4	3484.6	3502.4	3493.5	3527.3	3547.7	3534.4	3563.7	3553.0	3552.2	3579.7
10°	3534.4	3543.3	3558.4	3549.5	3580.6	3598.3	3585.0	3613.4	3603.7	3599.2	3629.4
12.5°	3576.1	3582.4	3597.5	3590.4	3620.6	3633.9	3622.3	3649.9	3637.4	3633.9	3660.5
15°	3566.4	3572.6	3585.0	3578.8	3607.2	3619.7	3604.6	3634.8	3622.3	3615.2	3639.2
17.5°	3504.2	3507.7	3516.6	3510.4	3540.6	3548.6	3531.7	3561.9	3550.4	3537.9	3561.0
20°	3412.7	3410.9	3416.3	3413.6	3438.5	3442.9	3432.2	3454.4	3441.1	3434.0	3447.3
22.5°	3299.0	3297.2	3300.8	3293.7	3318.5	3321.2	3305.2	3331.9	3318.5	3305.2	3327.4
25°	3172.9	3163.1	3161.3	3164.0	3180.9	3183.5	3166.7	3186.2	3169.3	3158.7	3180.0
27.5°	3017.4	3005.0	3002.3	3005.0	3021.9	3009.4	2995.2	3009.4	2992.6	2982.8	2996.1
30°	2825.6	2807.8	2799.8	2794.5	2812.2	2807.8	2774.9	2790.9	2764.3	2750.1	2759.8
32.5°	2567.1	2557.3	2536.0	2523.6	2540.4	2506.7	2486.2	2486.2	2475.6	2451.6	2456.9
35°	2208.2	2193.1	2173.6	2162.9	2165.6	2120.3	2086.5	2093.6	2058.1	2051.9	2054.5
37.5°	1754.3	1729.4	1722.3	1700.1	1705.5	1665.5	1619.3	1620.2	1601.5	1582.0	1575.8
40°	1318.2	1313.7	1306.6	1288.0	1295.1	1251.6	1233.8	1234.7	1222.2	1208.0	1215.1
42.5°	1018.8	1004.6	1000.2	994.0	995.7	988.6	965.5	968.2	957.5	954.0	950.4
45°	827.9	812.8	802.1	807.4	807.4	799.4	790.6	795.9	790.6	783.4	787.0
47.5°	682.2	668.0	662.6	661.8	668.0	662.6	653.8	655.5	654.6	652.0	650.2
50°	544.5	541.0	536.5	533.8	536.5	534.7	526.7	531.2	533.8	525.0	527.6
52.5°	414.8	414.8	413.9	407.7	413.0	407.7	406.8	408.6	405.9	402.4	401.5
55°	303.8	301.1	296.7	295.8	297.6	295.8	294.0	294.9	296.7	287.8	287.8
57.5°	207.9	206.1	203.4	203.4	207.0	202.5	199.9	203.4	199.9	196.3	196.3
60°	133.2	132.4	129.7	129.7	129.7	128.8	126.1	127.0	128.8	123.5	124.4
62.5°	79.9	77.3	76.4	75.5	76.4	75.5	75.5	74.6	73.7	73.7	71.1
65°	43.5	41.7	40.0	40.9	40.9	40.0	40.0	40.0	38.2	37.3	36.4
67.5°	22.2	20.4	20.4	19.5	19.5	19.5	19.5	18.7	18.7	18.7	17.8
70°	14.2	13.3	12.4	12.4	12.4	11.5	11.5	11.5	11.5	11.5	10.7
72.5°	9.8	8.9	8.0	8.0	8.0	7.1	7.1	7.1	7.1	6.2	6.2
75°	7.1	6.2	5.3	5.3	5.3	4.4	4.4	4.4	4.4	4.4	4.4
77.5°	4.4	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: P245441

CATALOG NUMBER: LSR8B50D010 EC8B50950 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7	3380.7
2.5°	3489.1	3482.0	3486.4	3519.3	3505.1	3500.6	3463.3	3496.2
5°	3530.8	3525.5	3525.5	3562.8	3545.9	3542.4	3506.0	3534.4
7.5°	3569.9	3564.6	3565.5	3603.7	3590.4	3585.0	3548.6	3577.0
10°	3620.6	3617.0	3617.9	3654.3	3640.1	3634.8	3597.5	3626.8
12.5°	3650.8	3645.4	3645.4	3684.5	3668.5	3660.5	3625.0	3653.4
15°	3627.7	3619.7	3619.7	3658.7	3641.0	3629.4	3598.3	3625.0
17.5°	3548.6	3540.6	3540.6	3574.4	3561.0	3544.2	3512.2	3537.1
20°	3438.5	3428.7	3426.0	3465.1	3446.5	3431.4	3402.9	3426.9
22.5°	3314.1	3309.7	3301.7	3340.8	3323.9	3307.9	3277.7	3296.3
25°	3164.9	3157.8	3149.8	3188.0	3171.1	3155.1	3131.1	3146.2
27.5°	2979.2	2980.1	2975.7	3005.9	2989.0	2980.1	2950.8	2975.7
30°	2754.5	2744.7	2741.2	2776.7	2760.7	2749.2	2712.8	2736.7
32.5°	2461.4	2447.2	2428.5	2468.5	2440.9	2431.2	2400.1	2434.7
35°	2035.0	2030.6	2013.7	2047.4	2032.3	2014.6	1995.0	2024.3
37.5°	1573.1	1576.7	1574.9	1583.8	1574.9	1563.3	1542.0	1531.4
40°	1200.9	1192.0	1184.9	1200.9	1182.3	1182.3	1169.8	1183.2
42.5°	941.6	938.0	946.9	950.4	939.8	938.0	936.2	935.3
45°	777.2	777.2	779.0	782.6	779.0	777.2	771.9	768.3
47.5°	640.4	644.0	640.4	652.0	645.8	644.0	633.3	637.8
50°	518.7	514.3	518.7	522.3	523.2	517.9	512.5	515.2
52.5°	402.4	395.3	393.5	398.8	395.3	395.3	391.7	390.8
55°	283.4	286.0	281.6	286.0	284.2	281.6	278.9	282.5
57.5°	191.9	192.8	191.0	193.6	189.2	190.1	189.2	188.3
60°	124.4	120.8	120.8	123.5	119.0	119.0	118.1	118.1
62.5°	71.1	70.2	70.2	69.3	68.4	68.4	68.4	66.6
65°	36.4	35.5	34.6	34.6	34.6	34.6	33.8	33.8
67.5°	17.8	16.9	16.9	17.8	16.9	16.9	16.9	16.9
70°	10.7	10.7	9.8	10.7	9.8	9.8	9.8	9.8
72.5°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
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)