

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: P244145

Luminaire Tested: **LSR8B50D010 EC8B50950 8LBSW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244145  
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 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 5000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5367.0 lumens  
Efficiency: N/A  
Efficacy: 101.3 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

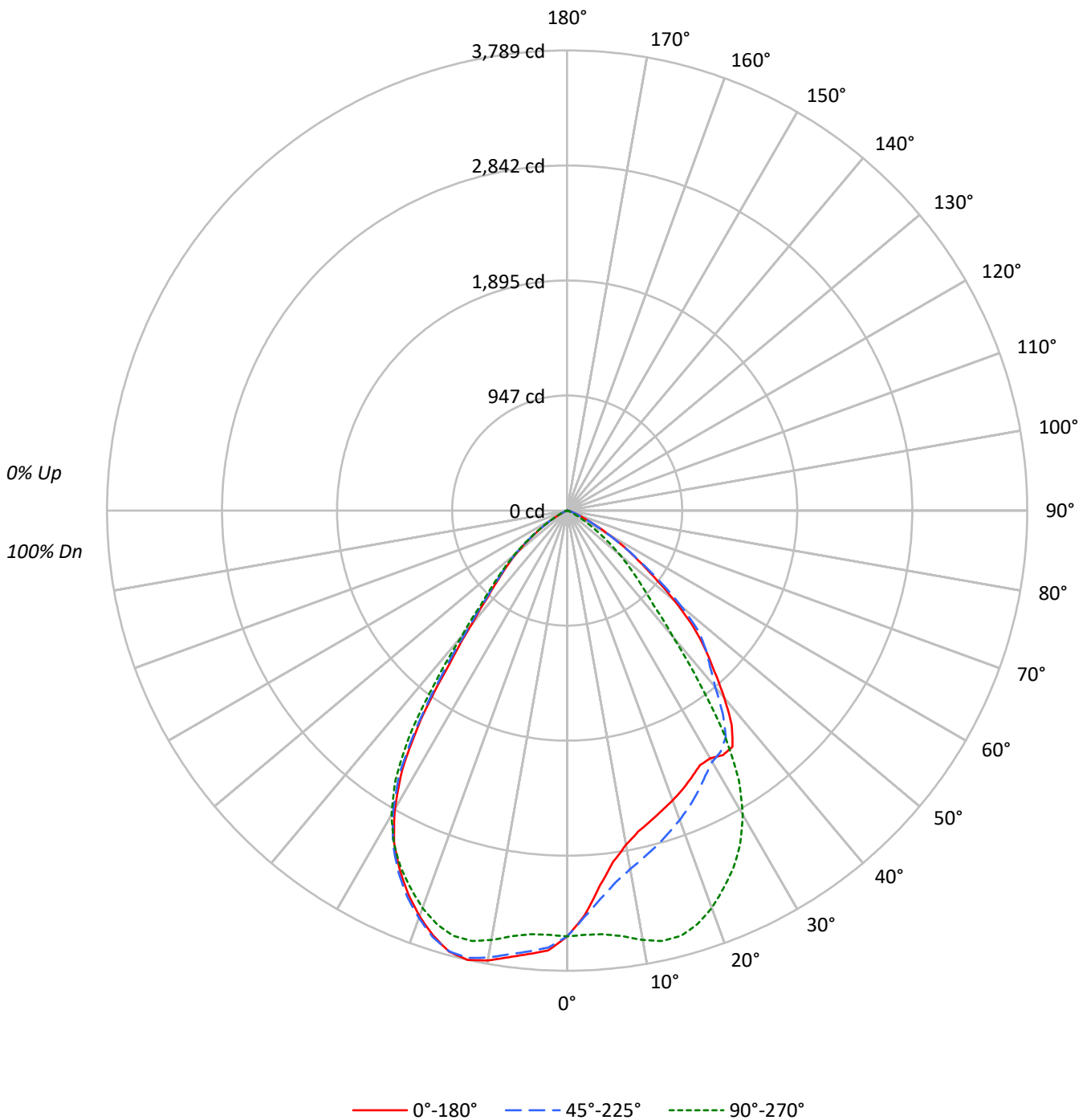
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P244145

CATALOG NUMBER: LSR8B50D010 EC8B50950 8LBSW0LI

### Luminous Intensity Polar Plot





TEST NUMBER: P244145

CATALOG NUMBER: LSR8B50D010 EC8B50950 8LBSW0LI

**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°	108118	108118	108118
5°	95927	108386	113462
10°	87458	112410	117774
15°	84522	115696	120019
20°	83315	114270	116629
25°	82495	110330	111021
30°	83840	102964	101063
35°	89367	85204	79034
40°	80987	54548	49396
45°	69901	37321	34752
50°	55154	27225	25632
55°	38284	16741	15747
60°	24373	8468	7555
65°	12163	3364	2554
70°	6726	1659	911
75°	4825	1203	441
80°	3925	817	160
85°	4246	637	0



TEST NUMBER: P244145

CATALOG NUMBER: LSR8B50D010 EC8B50950 8LBSW0LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	326.8	6.1
10°-20°	943.9	17.6
20°-30°	1369.9	25.5
30°-40°	1349.2	25.1
40°-50°	845.8	15.8
50°-60°	408.1	7.6
60°-70°	98.8	1.8
70°-80°	20.0	0.4
80°-90°	4.6	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°	2640.6	49.2
0°-40°	3989.8	74.3
0°-60°	5243.7	97.7
0°-90°	5367.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5367.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3506	3506	3506	3506	3506	
5°	3099	3204	3502	3643	3666	287
15°	2648	2856	3624	3757	3760	749
25°	2425	2551	3243	3287	3263	1122
35°	2374	2277	2263	2134	2100	1436
45°	1603	1614	856	820	797	1225
55°	712	735	311	308	293	655
65°	167	165	46	40	35	190
75°	40	35	10	5	4	45
85°	12	9	2	0	0	12
90°	0	0	0	0	0	



TEST NUMBER: P244145

CATALOG NUMBER: LSR8B50D010 EC8B50950 8LBSW0LI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2
2.5°	3333.0	3311.8	3272.2	3320.1	3320.1	3293.4	3346.8	3314.5	3340.3	3380.9	3344.9
5°	3099.0	3081.5	3048.3	3099.0	3105.4	3080.5	3145.0	3121.1	3158.9	3208.6	3204.0
7.5°	2913.8	2891.7	2861.3	2913.8	2923.9	2907.4	2969.1	2958.0	3007.8	3072.3	3083.3
10°	2793.1	2770.1	2743.4	2791.3	2798.7	2787.6	2850.2	2843.8	2892.6	2967.2	2996.7
12.5°	2707.5	2688.1	2658.6	2709.3	2717.6	2701.9	2760.9	2758.1	2808.8	2887.1	2923.9
15°	2647.6	2624.5	2597.8	2641.1	2652.2	2634.7	2690.9	2685.3	2736.9	2814.3	2855.8
17.5°	2591.4	2570.2	2542.6	2583.1	2594.1	2575.7	2631.0	2621.8	2666.0	2739.7	2782.1
20°	2538.9	2515.8	2491.0	2532.4	2538.9	2517.7	2573.0	2561.0	2600.6	2668.8	2710.2
22.5°	2484.5	2460.6	2434.8	2475.3	2481.8	2460.6	2511.2	2497.4	2534.3	2596.0	2633.8
25°	2424.6	2402.5	2376.7	2414.5	2420.0	2397.0	2450.4	2432.9	2465.2	2519.5	2550.9
27.5°	2364.8	2343.6	2315.0	2353.7	2356.5	2334.4	2383.2	2359.2	2386.0	2435.7	2462.4
30°	2354.6	2330.7	2301.2	2332.5	2333.4	2304.9	2350.9	2322.4	2337.1	2374.0	2389.6
32.5°	2386.9	2362.9	2332.5	2358.3	2355.6	2324.2	2368.4	2333.4	2338.0	2357.4	2353.7
35°	2374.0	2345.4	2309.5	2337.1	2337.1	2299.4	2343.6	2302.1	2297.5	2300.3	2277.2
37.5°	2227.5	2205.4	2171.3	2198.0	2195.3	2166.7	2200.8	2166.7	2151.0	2144.6	2103.1
40°	2011.9	1985.2	1959.4	1988.0	1990.8	1960.3	2004.6	1965.9	1961.3	1942.8	1894.0
42.5°	1793.6	1784.4	1759.5	1783.5	1796.4	1770.6	1807.4	1789.0	1791.8	1787.2	1741.1
45°	1602.9	1587.3	1568.8	1596.5	1604.8	1591.9	1628.7	1617.7	1628.7	1651.7	1614.0
47.5°	1397.5	1381.8	1361.6	1391.0	1405.8	1381.8	1413.1	1409.5	1426.0	1465.7	1462.0
50°	1149.7	1138.6	1134.9	1138.6	1147.8	1136.8	1158.9	1159.8	1170.9	1225.2	1228.9
52.5°	910.2	907.4	894.5	906.5	906.5	889.0	911.1	901.0	912.0	948.9	972.8
55°	712.1	709.3	701.0	712.1	700.1	693.7	700.1	690.0	681.7	710.3	735.1
57.5°	554.6	545.4	535.2	539.8	538.9	525.1	532.5	520.5	514.0	524.2	546.3
60°	395.2	392.4	383.2	387.8	391.5	381.4	388.8	383.2	372.2	380.5	381.4
62.5°	262.5	264.4	258.9	259.8	257.0	255.2	259.8	262.5	259.8	256.1	257.0
65°	166.7	165.8	164.9	165.8	167.7	164.0	166.7	168.6	165.8	165.8	164.9
67.5°	110.5	107.8	105.0	106.9	108.7	105.9	108.7	107.8	108.7	107.8	105.0
70°	74.6	73.7	72.8	73.7	73.7	71.9	73.7	72.8	73.7	72.8	70.0
72.5°	54.4	54.4	53.4	54.4	54.4	52.5	53.4	51.6	52.5	51.6	49.7
75°	40.5	40.5	39.6	40.5	39.6	38.7	39.6	38.7	36.8	36.8	35.0
77.5°	29.5	29.5	29.5	29.5	29.5	28.6	28.6	27.6	26.7	25.8	25.8
80°	22.1	21.2	21.2	21.2	21.2	20.3	21.2	20.3	19.3	18.4	17.5
82.5°	15.7	16.6	15.7	15.7	15.7	14.7	15.7	14.7	14.7	13.8	12.0
85°	12.0	12.0	12.0	12.0	12.0	11.1	11.1	11.1	10.1	10.1	9.2
87.5°	6.4	6.4	6.4	7.4	6.4	6.4	6.4	5.5	5.5	4.6	4.6
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: P244145

CATALOG NUMBER: LSR8B50D010 EC8B50950 8LBSW0LI

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2
2.5°	3392.8	3397.4	3387.3	3403.0	3463.8	3415.0	3435.2	3441.7	3487.7	3496.0	3490.5
5°	3263.9	3284.1	3297.0	3332.0	3399.3	3364.3	3400.2	3423.2	3482.2	3501.5	3506.2
7.5°	3162.5	3204.9	3236.2	3293.4	3372.6	3345.9	3400.2	3438.0	3509.8	3534.7	3546.7
10°	3087.0	3151.5	3205.8	3284.1	3373.5	3356.0	3426.9	3480.4	3560.5	3590.0	3604.7
12.5°	3029.9	3108.2	3181.0	3280.5	3377.2	3368.9	3454.6	3515.4	3600.1	3629.6	3647.1
15°	2967.2	3057.5	3142.3	3253.7	3357.8	3356.0	3448.1	3512.6	3599.2	3624.1	3640.6
17.5°	2892.6	2989.3	3082.4	3203.1	3306.2	3308.1	3401.1	3464.7	3549.4	3569.7	3580.8
20°	2817.1	2912.9	3005.9	3130.3	3231.6	3234.4	3325.6	3384.6	3465.6	3482.2	3485.0
22.5°	2736.9	2826.3	2919.3	3042.8	3140.4	3142.3	3232.6	3287.8	3356.9	3365.2	3372.6
25°	2645.7	2733.3	2820.8	2943.3	3036.3	3041.9	3123.8	3172.7	3236.2	3242.7	3245.4
27.5°	2550.9	2622.7	2706.5	2811.6	2905.5	2901.8	2979.2	3034.5	3091.6	3087.9	3087.0
30°	2455.0	2514.9	2566.5	2667.8	2736.9	2739.7	2812.5	2839.2	2899.1	2891.7	2890.8
32.5°	2387.8	2403.5	2417.3	2468.9	2534.3	2511.2	2561.0	2594.1	2635.6	2632.8	2633.8
35°	2264.4	2235.8	2194.3	2201.7	2241.3	2205.4	2232.1	2231.2	2273.6	2263.4	2275.4
37.5°	2053.4	1972.3	1880.2	1827.7	1835.1	1789.9	1780.7	1802.8	1817.6	1789.0	1799.1
40°	1828.6	1708.9	1565.1	1445.4	1438.9	1382.7	1372.6	1350.5	1379.1	1355.1	1362.5
42.5°	1662.8	1504.3	1315.5	1169.9	1138.6	1091.6	1064.0	1060.3	1068.6	1052.0	1047.4
45°	1535.7	1367.1	1150.6	983.9	948.9	898.2	870.6	860.4	861.3	855.8	851.2
47.5°	1386.4	1216.9	997.7	827.3	787.6	739.7	712.1	705.7	709.3	702.0	696.4
50°	1180.1	1028.1	828.2	672.5	637.5	602.5	580.4	573.9	573.0	567.5	563.8
52.5°	958.1	831.9	658.7	528.8	497.5	463.4	447.7	439.4	440.3	434.8	429.3
55°	741.6	663.3	510.4	399.8	371.3	344.5	329.8	319.7	316.9	311.4	308.6
57.5°	551.8	499.3	382.3	288.3	271.8	246.0	231.2	219.2	217.4	214.6	213.7
60°	386.9	349.1	269.0	205.4	186.1	170.4	155.7	143.7	138.2	137.3	134.5
62.5°	250.6	227.5	176.9	137.3	122.5	111.5	96.7	88.4	84.8	81.1	82.0
65°	155.7	138.2	110.5	88.4	80.1	71.9	60.8	53.4	49.7	46.1	47.0
67.5°	96.7	86.6	70.0	57.1	51.6	45.1	36.8	31.3	28.6	25.8	24.0
70°	65.4	56.2	47.9	40.5	36.8	32.2	26.7	22.1	20.3	18.4	16.6
72.5°	46.1	41.5	35.0	30.4	27.6	24.0	20.3	17.5	15.7	13.8	12.0
75°	33.2	29.5	25.8	22.1	20.3	18.4	15.7	13.8	12.0	10.1	8.3
77.5°	24.0	21.2	18.4	16.6	15.7	12.9	11.1	10.1	9.2	7.4	5.5
80°	16.6	14.7	12.0	11.1	11.1	9.2	8.3	7.4	6.4	4.6	3.7
82.5°	11.1	10.1	9.2	8.3	7.4	6.4	6.4	4.6	3.7	2.8	1.8
85°	8.3	7.4	6.4	5.5	5.5	4.6	3.7	2.8	2.8	1.8	0.9
87.5°	4.6	4.6	3.7	2.8	2.8	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



TEST NUMBER: P244145

CATALOG NUMBER: LSR8B50D010 EC8B50950 8LBSW0LI

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2
2.5°	3537.5	3540.2	3555.9	3543.9	3574.3	3596.4	3585.4	3610.2	3602.0	3600.1	3628.7
5°	3561.4	3567.9	3589.1	3578.0	3611.2	3635.1	3624.1	3651.7	3643.4	3641.6	3671.1
7.5°	3607.5	3613.9	3632.4	3623.1	3658.2	3679.3	3665.5	3695.9	3684.9	3683.9	3712.5
10°	3665.5	3674.7	3690.4	3681.2	3713.4	3731.9	3718.0	3747.5	3737.4	3732.8	3764.1
12.5°	3708.8	3715.3	3730.9	3723.6	3754.9	3768.7	3756.7	3785.3	3772.4	3768.7	3796.3
15°	3698.7	3705.1	3718.0	3711.6	3741.1	3754.0	3738.3	3769.6	3756.7	3749.4	3774.2
17.5°	3634.2	3637.9	3647.1	3640.6	3672.0	3680.3	3662.8	3694.1	3682.1	3669.2	3693.2
20°	3539.3	3537.5	3543.0	3540.2	3566.0	3570.6	3559.6	3582.6	3568.8	3561.4	3575.2
22.5°	3421.4	3419.6	3423.2	3415.9	3441.7	3444.4	3427.8	3455.5	3441.7	3427.8	3450.9
25°	3290.6	3280.5	3278.6	3281.4	3298.9	3301.6	3284.1	3304.4	3286.9	3275.8	3298.0
27.5°	3129.4	3116.5	3113.7	3116.5	3134.0	3121.1	3106.3	3121.1	3103.6	3093.4	3107.3
30°	2930.4	2912.0	2903.7	2898.1	2916.6	2912.0	2877.9	2894.5	2866.8	2852.1	2862.2
32.5°	2662.3	2652.2	2630.1	2617.2	2634.7	2599.7	2578.5	2578.5	2567.4	2542.6	2548.1
35°	2290.1	2274.5	2254.2	2243.2	2245.9	2198.9	2163.9	2171.3	2134.5	2128.0	2130.8
37.5°	1819.4	1793.6	1786.2	1763.2	1768.7	1727.3	1679.4	1680.3	1661.0	1640.7	1634.2
40°	1367.1	1362.5	1355.1	1335.8	1343.1	1298.0	1279.6	1280.5	1267.6	1252.9	1260.2
42.5°	1056.6	1041.9	1037.3	1030.8	1032.7	1025.3	1001.4	1004.1	993.1	989.4	985.7
45°	858.6	842.9	831.9	837.4	837.4	829.1	819.9	825.4	819.9	812.5	816.2
47.5°	707.5	692.8	687.2	686.3	692.8	687.2	678.0	679.9	678.9	676.2	674.3
50°	564.7	561.0	556.4	553.7	556.4	554.6	546.3	550.9	553.7	544.4	547.2
52.5°	430.2	430.2	429.3	422.8	428.4	422.8	421.9	423.8	421.0	417.3	416.4
55°	315.1	312.3	307.7	306.8	308.6	306.8	304.9	305.8	307.7	298.5	298.5
57.5°	215.6	213.7	211.0	211.0	214.6	210.0	207.3	211.0	207.3	203.6	203.6
60°	138.2	137.3	134.5	134.5	134.5	133.6	130.8	131.7	133.6	128.0	129.0
62.5°	82.9	80.1	79.2	78.3	79.2	78.3	78.3	77.4	76.5	76.5	73.7
65°	45.1	43.3	41.5	42.4	42.4	41.5	41.5	41.5	39.6	38.7	37.8
67.5°	23.0	21.2	21.2	20.3	20.3	20.3	20.3	19.3	19.3	19.3	18.4
70°	14.7	13.8	12.9	12.9	12.9	12.0	12.0	12.0	12.0	12.0	11.1
72.5°	10.1	9.2	8.3	8.3	8.3	7.4	7.4	7.4	7.4	6.4	6.4
75°	7.4	6.4	5.5	5.5	5.5	4.6	4.6	4.6	4.6	4.6	4.6
77.5°	4.6	3.7	3.7	3.7	3.7	2.8	2.8	2.8	2.8	2.8	1.8
80°	2.8	2.8	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: P244145

CATALOG NUMBER: LSR8B50D010 EC8B50950 8LBSW0LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2	3506.2
2.5°	3618.5	3611.2	3615.8	3649.9	3635.1	3630.5	3591.8	3625.9
5°	3661.8	3656.3	3656.3	3695.0	3677.5	3673.8	3636.0	3665.5
7.5°	3702.4	3696.8	3697.8	3737.4	3723.6	3718.0	3680.3	3709.7
10°	3754.9	3751.2	3752.1	3789.9	3775.1	3769.6	3730.9	3761.3
12.5°	3786.2	3780.7	3780.7	3821.2	3804.6	3796.3	3759.5	3789.0
15°	3762.3	3754.0	3754.0	3794.5	3776.1	3764.1	3731.9	3759.5
17.5°	3680.3	3672.0	3672.0	3707.0	3693.2	3675.7	3642.5	3668.3
20°	3566.0	3555.9	3553.1	3593.7	3574.3	3558.7	3529.2	3554.1
22.5°	3437.1	3432.5	3424.2	3464.7	3447.2	3430.6	3399.3	3418.6
25°	3282.3	3274.9	3266.6	3306.2	3288.7	3272.2	3247.3	3263.0
27.5°	3089.8	3090.7	3086.1	3117.4	3099.9	3090.7	3060.3	3086.1
30°	2856.7	2846.6	2842.9	2879.7	2863.1	2851.2	2813.4	2838.3
32.5°	2552.7	2538.0	2518.6	2560.1	2531.5	2521.4	2489.1	2525.1
35°	2110.5	2105.9	2088.4	2123.4	2107.7	2089.3	2069.1	2099.5
37.5°	1631.5	1635.2	1633.3	1642.5	1633.3	1621.3	1599.2	1588.2
40°	1245.5	1236.3	1228.9	1245.5	1226.1	1226.1	1213.2	1227.1
42.5°	976.5	972.8	982.0	985.7	974.6	972.8	971.0	970.0
45°	806.1	806.1	807.9	811.6	807.9	806.1	800.5	796.9
47.5°	664.2	667.9	664.2	676.2	669.7	667.9	656.8	661.4
50°	538.0	533.4	538.0	541.7	542.6	537.1	531.5	534.3
52.5°	417.3	409.9	408.1	413.6	409.9	409.9	406.3	405.3
55°	293.9	296.6	292.0	296.6	294.8	292.0	289.3	292.9
57.5°	199.0	199.9	198.1	200.8	196.2	197.1	196.2	195.3
60°	129.0	125.3	125.3	128.0	123.4	123.4	122.5	122.5
62.5°	73.7	72.8	72.8	71.9	70.9	70.9	70.9	69.1
65°	37.8	36.8	35.9	35.9	35.9	35.9	35.0	35.0
67.5°	18.4	17.5	17.5	18.4	17.5	17.5	17.5	17.5
70°	11.1	11.1	10.1	11.1	10.1	10.1	10.1	10.1
72.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
75°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
77.5°	2.8	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)