

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: P244157

Luminaire Tested: **LSR8B50D010 EC8B50930 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244157
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 EC8B50930 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4805.7 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

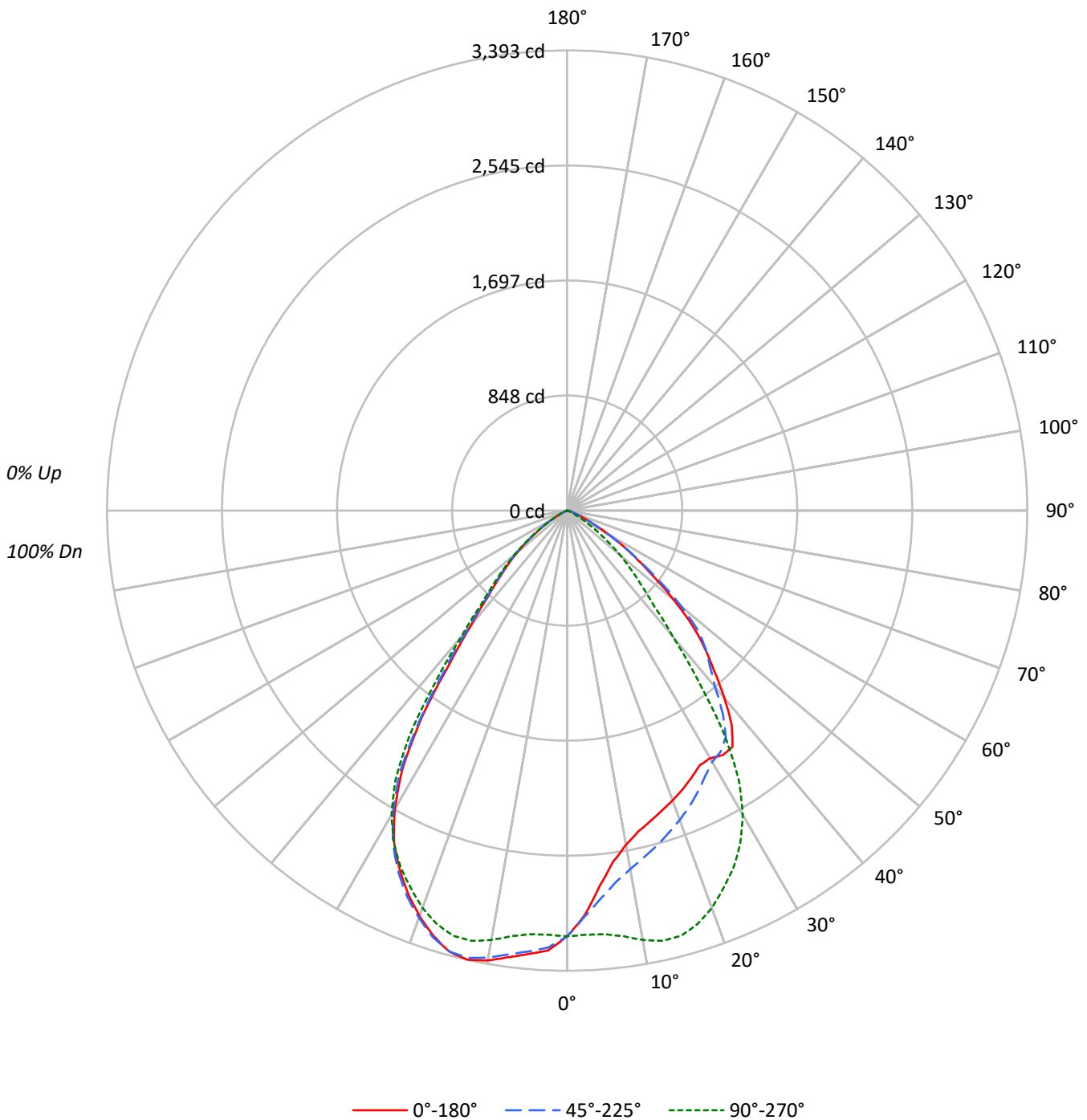
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



TEST NUMBER: P244157

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.6	6.1
10°-20°	845.2	17.6
20°-30°	1226.7	25.5
30°-40°	1208.1	25.1
40°-50°	757.3	15.8
50°-60°	365.4	7.6
60°-70°	88.4	1.8
70°-80°	17.9	0.4
80°-90°	4.1	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°	2364.4	49.2
0°-40°	3572.6	74.3
0°-60°	4695.3	97.7
0°-90°	4805.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4805.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3140	3140	3140	3140	3140	
5°	2775	2869	3135	3262	3282	257
15°	2371	2557	3245	3364	3366	670
25°	2171	2284	2904	2943	2922	1005
35°	2126	2039	2027	1911	1880	1286
45°	1435	1445	766	734	714	1097
55°	638	658	279	276	262	587
65°	149	148	41	35	31	170
75°	36	31	9	4	3	41
85°	11	8	2	0	0	11
90°	0	0	0	0	0	



TEST NUMBER: P244157

CATALOG NUMBER: LSR8B50D010 EC8B50930 8LBSWOLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5
2.5°	2984.4	2965.4	2930.0	2972.9	2972.9	2948.9	2996.8	2968.0	2991.1	3027.3	2995.1
5°	2774.9	2759.2	2729.5	2774.9	2780.6	2758.4	2816.2	2794.7	2828.5	2873.0	2869.0
7.5°	2609.1	2589.3	2562.0	2609.1	2618.2	2603.3	2658.6	2648.7	2693.2	2750.9	2760.9
10°	2501.1	2480.4	2456.4	2499.4	2506.0	2496.1	2552.2	2546.4	2590.1	2656.9	2683.3
12.5°	2424.3	2407.0	2380.6	2426.0	2433.4	2419.3	2472.1	2469.7	2515.1	2585.1	2618.2
15°	2370.7	2350.1	2326.2	2365.0	2374.8	2359.1	2409.5	2404.5	2450.7	2520.0	2557.1
17.5°	2320.4	2301.4	2276.6	2313.0	2322.8	2306.3	2355.9	2347.6	2387.2	2453.2	2491.1
20°	2273.4	2252.8	2230.5	2267.6	2273.4	2254.4	2303.9	2293.1	2328.7	2389.6	2426.7
22.5°	2224.7	2203.2	2180.1	2216.4	2222.3	2203.2	2248.6	2236.3	2269.2	2324.5	2358.4
25°	2171.0	2151.3	2128.2	2162.0	2167.0	2146.4	2194.1	2178.6	2207.4	2256.0	2284.0
27.5°	2117.5	2098.5	2073.0	2107.6	2110.1	2090.2	2133.9	2112.5	2136.4	2181.0	2204.9
30°	2108.4	2087.0	2060.5	2088.5	2089.4	2063.9	2105.1	2079.6	2092.7	2125.8	2139.8
32.5°	2137.3	2115.8	2088.5	2111.7	2109.2	2081.1	2120.7	2089.4	2093.6	2110.8	2107.6
35°	2125.8	2100.2	2068.0	2092.7	2092.7	2058.9	2098.5	2061.4	2057.3	2059.7	2039.1
37.5°	1994.6	1974.8	1944.3	1968.1	1965.7	1940.1	1970.6	1940.1	1926.1	1920.3	1883.2
40°	1801.6	1777.6	1754.5	1780.0	1782.6	1755.4	1794.9	1760.3	1756.2	1739.7	1696.0
42.5°	1606.1	1597.8	1575.6	1597.0	1608.5	1585.4	1618.4	1601.9	1604.4	1600.2	1559.0
45°	1435.3	1421.3	1404.7	1429.5	1436.9	1425.4	1458.4	1448.4	1458.4	1479.0	1445.2
47.5°	1251.4	1237.4	1219.2	1245.5	1258.8	1237.4	1265.4	1262.0	1276.9	1312.4	1309.1
50°	1029.4	1019.5	1016.3	1019.5	1027.8	1017.9	1037.7	1038.5	1048.5	1097.1	1100.4
52.5°	815.0	812.5	801.0	811.7	811.7	796.0	815.8	806.8	816.6	849.6	871.0
55°	637.6	635.2	627.8	637.6	626.9	621.1	626.9	617.8	610.4	635.9	658.3
57.5°	496.6	488.3	479.2	483.4	482.6	470.1	476.8	466.1	460.3	469.4	489.2
60°	353.9	351.4	343.1	347.3	350.5	341.5	348.1	343.1	333.3	340.7	341.5
62.5°	235.1	236.8	231.8	232.6	230.1	228.5	232.6	235.1	232.6	229.4	230.1
65°	149.3	148.5	147.6	148.5	150.1	146.9	149.3	151.0	148.5	148.5	147.6
67.5°	99.0	96.5	94.1	95.7	97.3	94.8	97.3	96.5	97.3	96.5	94.1
70°	66.8	66.0	65.1	66.0	66.0	64.3	66.0	65.1	66.0	65.1	62.7
72.5°	48.7	48.7	47.9	48.7	48.7	47.0	47.9	46.2	47.0	46.2	44.5
75°	36.3	36.3	35.4	36.3	35.4	34.6	35.4	34.6	33.0	33.0	31.4
77.5°	26.3	26.3	26.3	26.3	26.3	25.6	25.6	24.8	23.9	23.1	23.1
80°	19.8	18.9	18.9	18.9	18.9	18.2	18.9	18.2	17.4	16.5	15.7
82.5°	14.0	14.8	14.0	14.0	14.0	13.2	14.0	13.2	13.2	12.3	10.8
85°	10.8	10.8	10.8	10.8	10.8	9.9	9.9	9.9	9.1	9.1	8.3
87.5°	5.8	5.8	5.8	6.6	5.8	5.8	5.8	4.9	4.9	4.1	4.1
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: P244157

CATALOG NUMBER: LSR8B50D010 EC8B50930 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5
2.5°	3038.0	3042.2	3033.1	3047.1	3101.6	3057.9	3076.0	3081.7	3123.0	3130.4	3125.5
5°	2922.6	2940.7	2952.3	2983.5	3043.9	3012.5	3044.6	3065.3	3118.1	3135.3	3139.5
7.5°	2831.8	2869.8	2897.8	2948.9	3019.9	2996.0	3044.6	3078.5	3142.8	3165.0	3175.8
10°	2764.2	2821.9	2870.5	2940.7	3020.6	3005.1	3068.5	3116.4	3188.1	3214.6	3227.7
12.5°	2713.0	2783.1	2848.3	2937.4	3024.0	3016.6	3093.3	3147.8	3223.7	3250.0	3265.7
15°	2656.9	2737.8	2813.7	2913.5	3006.6	3005.1	3087.6	3145.3	3222.8	3245.1	3259.9
17.5°	2590.1	2676.7	2760.0	2868.1	2960.4	2962.1	3045.4	3102.4	3178.3	3196.4	3206.3
20°	2522.5	2608.2	2691.5	2802.9	2893.6	2896.1	2977.8	3030.6	3103.2	3118.1	3120.5
22.5°	2450.7	2530.8	2614.1	2724.6	2812.0	2813.7	2894.5	2944.0	3005.8	3013.2	3019.9
25°	2369.0	2447.4	2525.7	2635.5	2718.8	2723.7	2797.1	2840.8	2897.8	2903.6	2906.1
27.5°	2284.0	2348.4	2423.5	2517.5	2601.6	2598.4	2667.6	2717.2	2768.3	2764.9	2764.2
30°	2198.3	2251.9	2298.2	2388.9	2450.7	2453.2	2518.3	2542.3	2595.9	2589.3	2588.5
32.5°	2138.1	2152.1	2164.4	2210.7	2269.2	2248.6	2293.1	2322.8	2359.9	2357.5	2358.4
35°	2027.6	2002.0	1964.9	1971.5	2006.9	1974.8	1998.6	1997.8	2035.8	2026.8	2037.4
37.5°	1838.7	1766.0	1683.6	1636.5	1643.2	1602.7	1594.5	1614.2	1627.5	1601.9	1611.0
40°	1637.3	1530.2	1401.5	1294.2	1288.5	1238.1	1229.1	1209.2	1234.9	1213.4	1220.0
42.5°	1488.9	1347.0	1177.9	1047.6	1019.5	977.5	952.7	949.5	956.9	942.0	937.9
45°	1375.0	1224.1	1030.3	881.0	849.6	804.2	779.5	770.5	771.2	766.3	762.2
47.5°	1241.4	1089.6	893.3	740.8	705.2	662.4	637.6	631.9	635.2	628.5	623.6
50°	1056.7	920.6	741.5	602.2	570.8	539.4	519.7	513.9	513.1	508.1	504.8
52.5°	857.9	744.9	589.8	473.5	445.5	414.9	400.9	393.5	394.3	389.3	384.4
55°	664.1	593.9	457.0	358.0	332.4	308.5	295.3	286.2	283.7	278.8	276.3
57.5°	494.1	447.1	342.4	258.2	243.4	220.3	207.0	196.3	194.7	192.3	191.4
60°	346.5	312.6	240.9	184.0	166.6	152.6	139.5	128.7	123.8	122.9	120.4
62.5°	224.3	203.8	158.4	122.9	109.7	99.8	86.7	79.1	75.9	72.6	73.4
65°	139.5	123.8	99.0	79.1	71.7	64.3	54.5	47.9	44.5	41.3	42.0
67.5°	86.7	77.6	62.7	51.1	46.2	40.5	33.0	28.0	25.6	23.1	21.4
70°	58.5	50.3	42.9	36.3	33.0	28.9	23.9	19.8	18.2	16.5	14.8
72.5°	41.3	37.1	31.4	27.2	24.8	21.4	18.2	15.7	14.0	12.3	10.8
75°	29.7	26.3	23.1	19.8	18.2	16.5	14.0	12.3	10.8	9.1	7.4
77.5°	21.4	18.9	16.5	14.8	14.0	11.5	9.9	9.1	8.3	6.6	4.9
80°	14.8	13.2	10.8	9.9	9.9	8.3	7.4	6.6	5.8	4.1	3.3
82.5°	9.9	9.1	8.3	7.4	6.6	5.8	5.8	4.1	3.3	2.5	1.7
85°	7.4	6.6	5.8	4.9	4.9	4.1	3.3	2.5	2.5	1.7	0.8
87.5°	4.1	4.1	3.3	2.5	2.5	1.7	1.7	0.8	0.8	0.8	0.8
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: P244157

CATALOG NUMBER: LSR8B50D010 EC8B50930 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5
2.5°	3167.5	3170.0	3184.0	3173.3	3200.6	3220.3	3210.4	3232.7	3225.2	3223.7	3249.2
5°	3189.0	3194.7	3213.7	3203.8	3233.5	3254.9	3245.1	3269.8	3262.4	3260.8	3287.1
7.5°	3230.3	3236.0	3252.5	3244.3	3275.6	3294.5	3282.2	3309.4	3299.6	3298.7	3324.2
10°	3282.2	3290.5	3304.5	3296.2	3325.1	3341.6	3329.3	3355.6	3346.5	3342.4	3370.4
12.5°	3321.0	3326.7	3340.8	3334.2	3362.2	3374.5	3363.9	3389.5	3377.9	3374.5	3399.3
15°	3311.9	3317.7	3329.3	3323.4	3349.8	3361.4	3347.3	3375.4	3363.9	3357.3	3379.5
17.5°	3254.2	3257.4	3265.7	3259.9	3288.0	3295.4	3279.7	3307.7	3297.1	3285.5	3307.0
20°	3169.2	3167.5	3172.4	3170.0	3193.1	3197.2	3187.3	3208.0	3195.5	3189.0	3201.4
22.5°	3063.6	3061.9	3065.3	3058.6	3081.7	3084.2	3069.4	3094.1	3081.7	3069.4	3090.0
25°	2946.4	2937.4	2935.8	2938.3	2953.8	2956.4	2940.7	2958.9	2943.2	2933.2	2953.1
27.5°	2802.2	2790.5	2788.0	2790.5	2806.2	2794.7	2781.5	2794.7	2779.0	2770.0	2782.3
30°	2623.9	2607.4	2600.0	2595.1	2611.6	2607.4	2577.0	2591.8	2567.0	2553.9	2562.9
32.5°	2383.9	2374.8	2355.0	2343.5	2359.1	2327.8	2308.8	2308.8	2298.9	2276.6	2281.6
35°	2050.6	2036.6	2018.5	2008.6	2011.1	1969.0	1937.6	1944.3	1911.2	1905.5	1907.9
37.5°	1629.1	1606.1	1599.4	1578.8	1583.7	1546.6	1503.7	1504.6	1487.2	1469.1	1463.4
40°	1224.1	1220.0	1213.4	1196.1	1202.7	1162.3	1145.8	1146.6	1135.0	1121.8	1128.4
42.5°	946.1	932.9	928.9	923.0	924.7	918.1	896.7	899.2	889.2	885.9	882.6
45°	768.8	754.8	744.9	749.8	749.8	742.4	734.1	739.1	734.1	727.5	730.9
47.5°	633.5	620.4	615.3	614.5	620.4	615.3	607.1	608.8	607.9	605.5	603.8
50°	505.7	502.3	498.2	495.7	498.2	496.6	489.2	493.2	495.7	487.5	490.0
52.5°	385.2	385.2	384.4	378.7	383.6	378.7	377.8	379.5	377.0	373.6	372.8
55°	282.2	279.7	275.5	274.6	276.3	274.6	273.1	273.9	275.5	267.2	267.2
57.5°	193.0	191.4	188.9	188.9	192.3	188.1	185.6	188.9	185.6	182.3	182.3
60°	123.8	122.9	120.4	120.4	120.4	119.6	117.1	117.9	119.6	114.7	115.5
62.5°	74.2	71.7	71.0	70.1	71.0	70.1	70.1	69.3	68.5	68.5	66.0
65°	40.5	38.8	37.1	37.9	37.9	37.1	37.1	37.1	35.4	34.6	33.9
67.5°	20.6	18.9	18.9	18.2	18.2	18.2	18.2	17.4	17.4	17.4	16.5
70°	13.2	12.3	11.5	11.5	11.5	10.8	10.8	10.8	10.8	10.8	9.9
72.5°	9.1	8.3	7.4	7.4	7.4	6.6	6.6	6.6	6.6	5.8	5.8
75°	6.6	5.8	4.9	4.9	4.9	4.1	4.1	4.1	4.1	4.1	4.1
77.5°	4.1	3.3	3.3	3.3	3.3	2.5	2.5	2.5	2.5	2.5	1.7
80°	2.5	2.5	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8
82.5°	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0
85°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0
87.5°	0.8	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: P244157

CATALOG NUMBER: LSR8B50D010 EC8B50930 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5	3139.5
2.5°	3240.1	3233.5	3237.7	3268.2	3254.9	3250.8	3216.1	3246.8
5°	3278.9	3274.0	3274.0	3308.6	3292.9	3289.6	3255.8	3282.2
7.5°	3315.1	3310.2	3311.1	3346.5	3334.2	3329.3	3295.4	3321.7
10°	3362.2	3358.9	3359.7	3393.5	3380.4	3375.4	3340.8	3367.9
12.5°	3390.2	3385.3	3385.3	3421.6	3406.7	3399.3	3366.4	3392.7
15°	3368.8	3361.4	3361.4	3397.6	3381.2	3370.4	3341.6	3366.4
17.5°	3295.4	3288.0	3288.0	3319.3	3307.0	3291.3	3261.5	3284.6
20°	3193.1	3184.0	3181.5	3217.8	3200.6	3186.6	3160.1	3182.4
22.5°	3077.6	3073.4	3066.0	3102.4	3086.7	3071.9	3043.9	3061.1
25°	2939.0	2932.4	2925.0	2960.4	2944.9	2930.0	2907.6	2921.7
27.5°	2766.6	2767.4	2763.4	2791.4	2775.7	2767.4	2740.3	2763.4
30°	2557.9	2548.8	2545.6	2578.5	2563.7	2553.0	2519.2	2541.4
32.5°	2285.7	2272.5	2255.2	2292.3	2266.8	2257.7	2228.8	2260.9
35°	1889.8	1885.6	1870.1	1901.3	1887.3	1870.8	1852.7	1879.9
37.5°	1460.9	1464.1	1462.5	1470.8	1462.5	1451.8	1432.0	1422.1
40°	1115.3	1107.0	1100.4	1115.3	1097.9	1097.9	1086.4	1098.7
42.5°	874.4	871.0	879.3	882.6	872.7	871.0	869.4	868.6
45°	721.8	721.8	723.4	726.7	723.4	721.8	716.8	713.5
47.5°	594.7	598.1	594.7	605.5	599.7	598.1	588.2	592.2
50°	481.7	477.7	481.7	485.1	485.8	480.9	476.0	478.4
52.5°	373.6	367.0	365.4	370.4	367.0	367.0	363.8	363.0
55°	263.1	265.6	261.5	265.6	264.0	261.5	259.1	262.3
57.5°	178.1	179.0	177.3	179.8	175.7	176.6	175.7	174.9
60°	115.5	112.2	112.2	114.7	110.5	110.5	109.7	109.7
62.5°	66.0	65.1	65.1	64.3	63.6	63.6	63.6	61.9
65°	33.9	33.0	32.2	32.2	32.2	32.2	31.4	31.4
67.5°	16.5	15.7	15.7	16.5	15.7	15.7	15.7	15.7
70°	9.9	9.9	9.1	9.9	9.1	9.1	9.1	9.1
72.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
75°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
77.5°	2.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)