

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: P244151

Luminaire Tested: **LSR8B50D010 EC8B50927 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244151
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 EC8B50927 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4558.5 lumens
Efficiency: N/A
Efficacy: 86.0 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

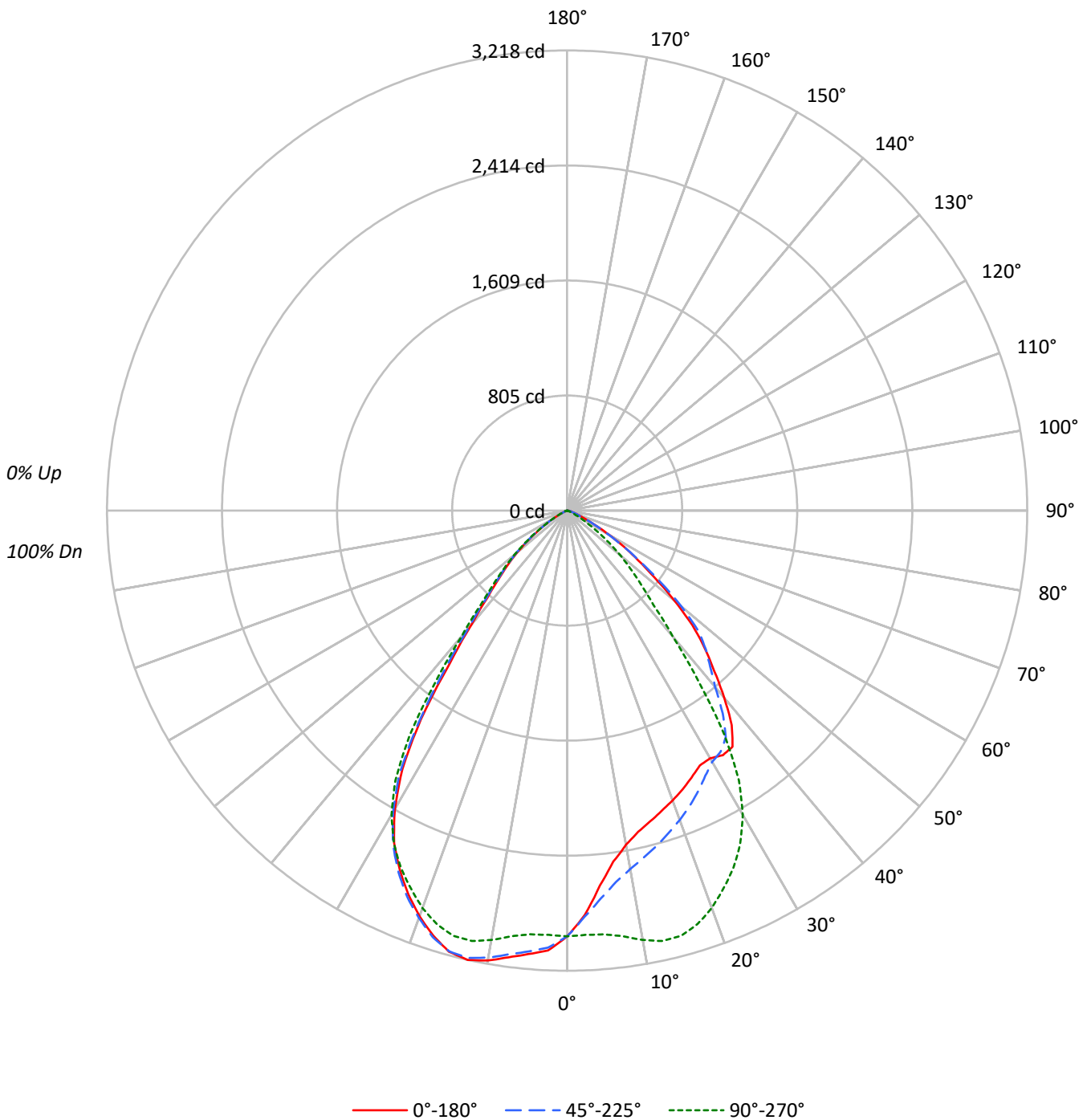
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.6	6.1
10°-20°	801.7	17.6
20°-30°	1163.6	25.5
30°-40°	1146.0	25.1
40°-50°	718.4	15.8
50°-60°	346.6	7.6
60°-70°	83.9	1.8
70°-80°	17.0	0.4
80°-90°	3.9	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°	2242.8	49.2
0°-40°	3388.8	74.3
0°-60°	4453.8	97.7
0°-90°	4558.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4558.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2978	2978	2978	2978	2978	
5°	2632	2721	2974	3094	3113	244
15°	2249	2426	3078	3191	3193	636
25°	2059	2167	2754	2792	2771	953
35°	2016	1934	1922	1813	1783	1220
45°	1362	1371	727	696	677	1041
55°	605	624	264	261	249	556
65°	142	140	39	34	30	162
75°	34	30	9	4	3	39
85°	10	8	2	0	0	10
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°	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0
2.5°	2830.8	2812.8	2779.2	2819.9	2819.9	2797.2	2842.6	2815.2	2837.1	2871.6	2841.1
5°	2632.2	2617.3	2589.1	2632.2	2637.6	2616.5	2671.3	2651.0	2683.0	2725.2	2721.4
7.5°	2474.9	2456.1	2430.2	2474.9	2483.4	2469.4	2521.8	2512.5	2554.6	2609.4	2618.9
10°	2372.4	2352.8	2330.1	2370.8	2377.0	2367.7	2420.9	2415.4	2456.9	2520.2	2545.3
12.5°	2299.6	2283.2	2258.1	2301.2	2308.2	2294.9	2345.0	2342.6	2385.7	2452.2	2483.4
15°	2248.8	2229.2	2206.5	2243.2	2252.7	2237.7	2285.5	2280.8	2324.6	2390.4	2425.6
17.5°	2201.1	2183.1	2159.5	2194.0	2203.3	2187.7	2234.7	2226.8	2264.4	2327.0	2363.0
20°	2156.4	2136.8	2115.7	2150.9	2156.4	2138.4	2185.3	2175.2	2208.8	2266.8	2302.0
22.5°	2110.3	2089.9	2068.0	2102.4	2107.9	2089.9	2132.9	2121.2	2152.5	2204.9	2237.0
25°	2059.4	2040.6	2018.7	2050.8	2055.5	2035.9	2081.2	2066.4	2093.8	2140.0	2166.6
27.5°	2008.6	1990.6	1966.3	1999.1	2001.5	1982.7	2024.2	2003.8	2026.6	2068.8	2091.5
30°	1999.9	1979.6	1954.6	1981.1	1981.9	1957.7	1996.8	1972.6	1985.1	2016.3	2029.6
32.5°	2027.4	2007.0	1981.1	2003.1	2000.7	1974.2	2011.6	1981.9	1985.8	2002.3	1999.1
35°	2016.3	1992.2	1961.6	1985.1	1985.1	1953.0	1990.6	1955.4	1951.4	1953.8	1934.2
37.5°	1891.9	1873.1	1844.2	1866.9	1864.6	1840.3	1869.3	1840.3	1827.0	1821.5	1786.3
40°	1708.9	1686.2	1664.2	1688.5	1690.9	1665.0	1702.6	1669.7	1665.8	1650.2	1608.8
42.5°	1523.4	1515.6	1494.4	1514.8	1525.7	1503.9	1535.2	1519.5	1521.9	1518.0	1478.8
45°	1361.5	1348.2	1332.4	1356.0	1363.0	1352.0	1383.4	1374.0	1383.4	1402.9	1370.8
47.5°	1187.0	1173.7	1156.5	1181.5	1194.0	1173.7	1200.3	1197.1	1211.2	1244.8	1241.8
50°	976.5	967.0	964.0	967.0	974.9	965.6	984.3	985.0	994.5	1040.6	1043.8
52.5°	773.1	770.7	759.7	769.9	769.9	755.1	773.9	765.2	774.6	805.9	826.3
55°	604.8	602.4	595.5	604.8	594.7	589.2	594.7	586.0	579.0	603.2	624.4
57.5°	471.0	463.2	454.6	458.6	457.8	446.0	452.2	442.1	436.6	445.2	464.0
60°	335.7	333.3	325.5	329.4	332.6	323.9	330.2	325.5	316.1	323.1	323.9
62.5°	223.0	224.6	219.8	220.6	218.2	216.8	220.6	223.0	220.6	217.6	218.2
65°	141.6	140.8	140.1	140.8	142.4	139.3	141.6	143.2	140.8	140.8	140.1
67.5°	93.9	91.6	89.2	90.8	92.4	90.0	92.4	91.6	92.4	91.6	89.2
70°	63.3	62.6	61.8	62.6	62.6	61.0	62.6	61.8	62.6	61.8	59.5
72.5°	46.1	46.1	45.3	46.1	46.1	44.6	45.3	43.8	44.6	43.8	42.3
75°	34.4	34.4	33.6	34.4	33.6	32.8	33.6	32.8	31.3	31.3	29.7
77.5°	25.1	25.1	25.1	25.1	25.1	24.3	24.3	23.5	22.7	21.9	21.9
80°	18.8	18.0	18.0	18.0	18.0	17.2	18.0	17.2	16.4	15.6	14.8
82.5°	13.3	14.1	13.3	13.3	13.3	12.5	13.3	12.5	12.5	11.7	10.1
85°	10.1	10.1	10.1	10.1	10.1	9.3	9.3	9.3	8.7	8.7	7.9
87.5°	5.5	5.5	5.5	6.3	5.5	5.5	5.5	4.7	4.7	3.9	3.9
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0
2.5°	2881.7	2885.6	2877.1	2890.4	2942.0	2900.5	2917.7	2923.2	2962.4	2969.3	2964.7
5°	2772.2	2789.4	2800.4	2830.0	2887.2	2857.5	2888.0	2907.6	2957.6	2974.0	2978.0
7.5°	2686.2	2722.2	2748.7	2797.2	2864.5	2841.9	2888.0	2920.0	2981.1	3002.3	3012.4
10°	2621.9	2676.7	2723.0	2789.4	2865.3	2850.4	2910.7	2956.0	3024.1	3049.2	3061.7
12.5°	2573.4	2639.9	2701.8	2786.3	2868.4	2861.4	2934.1	2985.8	3057.8	3082.8	3097.7
15°	2520.2	2597.0	2669.0	2763.6	2852.0	2850.4	2928.7	2983.5	3057.0	3078.1	3092.2
17.5°	2456.9	2539.0	2618.1	2720.6	2808.2	2809.8	2888.8	2942.8	3014.8	3032.0	3041.3
20°	2392.8	2474.1	2553.1	2658.7	2744.8	2747.1	2824.6	2874.7	2943.6	2957.6	2960.0
22.5°	2324.6	2400.5	2479.6	2584.5	2667.4	2669.0	2745.6	2792.6	2851.2	2858.3	2864.5
25°	2247.2	2321.5	2395.8	2499.9	2579.0	2583.7	2653.3	2694.7	2748.7	2754.2	2756.6
27.5°	2166.6	2227.6	2298.8	2388.0	2467.8	2464.6	2530.5	2577.4	2625.9	2622.7	2621.9
30°	2085.2	2136.0	2179.9	2266.0	2324.6	2327.0	2388.8	2411.4	2462.4	2456.1	2455.3
32.5°	2028.0	2041.4	2053.1	2097.0	2152.5	2132.9	2175.2	2203.3	2238.5	2236.3	2237.0
35°	1923.2	1899.0	1863.8	1870.1	1903.7	1873.1	1895.8	1895.1	1931.1	1922.5	1932.6
37.5°	1744.1	1675.2	1596.9	1552.4	1558.6	1520.3	1512.4	1531.2	1543.7	1519.5	1528.1
40°	1553.2	1451.5	1329.4	1227.6	1222.2	1174.5	1165.8	1147.0	1171.4	1151.0	1157.3
42.5°	1412.3	1277.8	1117.4	993.7	967.0	927.2	903.7	900.6	907.6	893.6	889.6
45°	1304.3	1161.1	977.3	835.6	805.9	762.9	739.5	730.8	731.6	726.9	722.9
47.5°	1177.5	1033.6	847.4	702.7	669.0	628.3	604.8	599.4	602.4	596.2	591.5
50°	1002.3	873.2	703.5	571.2	541.5	511.8	493.0	487.5	486.7	482.0	478.8
52.5°	813.7	706.5	559.5	449.1	422.6	393.5	380.2	373.3	374.1	369.3	364.6
55°	629.9	563.4	433.5	339.5	315.3	292.6	280.1	271.5	269.2	264.5	262.1
57.5°	468.7	424.1	324.7	244.9	230.8	208.9	196.4	186.2	184.6	182.4	181.6
60°	328.6	296.6	228.5	174.5	158.1	144.8	132.2	122.1	117.3	116.6	114.2
62.5°	212.8	193.3	150.2	116.6	104.1	94.7	82.1	75.1	72.0	68.9	69.6
65°	132.2	117.3	93.9	75.1	68.1	61.0	51.6	45.3	42.3	39.2	39.9
67.5°	82.1	73.6	59.5	48.5	43.8	38.4	31.3	26.6	24.3	21.9	20.4
70°	55.6	47.7	40.7	34.4	31.3	27.3	22.7	18.8	17.2	15.6	14.1
72.5°	39.2	35.2	29.7	25.9	23.5	20.4	17.2	14.8	13.3	11.7	10.1
75°	28.1	25.1	21.9	18.8	17.2	15.6	13.3	11.7	10.1	8.7	7.1
77.5°	20.4	18.0	15.6	14.1	13.3	10.9	9.3	8.7	7.9	6.3	4.7
80°	14.1	12.5	10.1	9.3	9.3	7.9	7.1	6.3	5.5	3.9	3.2
82.5°	9.3	8.7	7.9	7.1	6.3	5.5	5.5	3.9	3.2	2.4	1.6
85°	7.1	6.3	5.5	4.7	4.7	3.9	3.2	2.4	2.4	1.6	0.8
87.5°	3.9	3.9	3.2	2.4	2.4	1.6	1.6	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0
2.5°	3004.5	3006.9	3020.2	3010.0	3035.9	3054.6	3045.3	3066.4	3059.3	3057.8	3082.0
5°	3024.9	3030.4	3048.4	3039.0	3067.2	3087.6	3078.1	3101.6	3094.5	3093.0	3118.0
7.5°	3064.0	3069.6	3085.2	3077.3	3107.0	3125.0	3113.3	3139.2	3129.8	3129.0	3153.3
10°	3113.3	3121.2	3134.5	3126.6	3154.0	3169.7	3158.0	3183.0	3174.4	3170.5	3197.0
12.5°	3150.1	3155.6	3168.9	3162.6	3189.3	3201.0	3190.8	3215.0	3204.1	3201.0	3224.5
15°	3141.5	3147.0	3158.0	3152.5	3177.5	3188.5	3175.2	3201.8	3190.8	3184.5	3205.7
17.5°	3086.8	3089.8	3097.7	3092.2	3118.8	3125.8	3111.0	3137.6	3127.4	3116.5	3136.8
20°	3006.1	3004.5	3009.3	3006.9	3028.8	3032.8	3023.3	3042.9	3031.2	3024.9	3036.7
22.5°	2906.0	2904.4	2907.6	2901.3	2923.2	2925.6	2911.5	2934.9	2923.2	2911.5	2931.1
25°	2794.8	2786.3	2784.7	2787.1	2801.9	2804.3	2789.4	2806.6	2791.8	2782.4	2801.1
27.5°	2657.9	2647.0	2644.6	2647.0	2661.9	2651.0	2638.4	2651.0	2636.1	2627.4	2639.1
30°	2489.0	2473.3	2466.2	2461.6	2477.2	2473.3	2444.4	2458.5	2435.0	2422.5	2431.0
32.5°	2261.2	2252.7	2233.9	2222.9	2237.7	2208.0	2190.0	2190.0	2180.7	2159.5	2164.3
35°	1945.1	1931.8	1914.6	1905.3	1907.6	1867.7	1837.9	1844.2	1812.9	1807.4	1809.8
37.5°	1545.3	1523.4	1517.2	1497.6	1502.3	1467.1	1426.4	1427.2	1410.8	1393.5	1388.0
40°	1161.1	1157.3	1151.0	1134.6	1140.8	1102.5	1086.9	1087.6	1076.6	1064.1	1070.3
42.5°	897.4	884.9	881.0	875.6	877.2	870.9	850.5	852.9	843.5	840.4	837.2
45°	729.2	715.9	706.5	711.2	711.2	704.2	696.4	701.1	696.4	690.1	693.2
47.5°	600.9	588.4	583.6	583.0	588.4	583.6	575.9	577.5	576.7	574.3	572.7
50°	479.6	476.6	472.6	470.2	472.6	471.0	464.0	467.9	470.2	462.4	464.7
52.5°	365.4	365.4	364.6	359.1	363.8	359.1	358.3	359.9	357.5	354.5	353.7
55°	267.6	265.3	261.3	260.6	262.1	260.6	259.0	259.8	261.3	253.5	253.5
57.5°	183.0	181.6	179.2	179.2	182.4	178.4	176.1	179.2	176.1	172.9	172.9
60°	117.3	116.6	114.2	114.2	114.2	113.4	111.2	111.9	113.4	108.8	109.6
62.5°	70.4	68.1	67.3	66.5	67.3	66.5	66.5	65.7	64.9	64.9	62.6
65°	38.4	36.8	35.2	36.0	36.0	35.2	35.2	35.2	33.6	32.8	32.1
67.5°	19.6	18.0	18.0	17.2	17.2	17.2	17.2	16.4	16.4	16.4	15.6
70°	12.5	11.7	10.9	10.9	10.9	10.1	10.1	10.1	10.1	10.1	9.3
72.5°	8.7	7.9	7.1	7.1	7.1	6.3	6.3	6.3	6.3	5.5	5.5
75°	6.3	5.5	4.7	4.7	4.7	3.9	3.9	3.9	3.9	3.9	3.9
77.5°	3.9	3.2	3.2	3.2	3.2	2.4	2.4	2.4	2.4	2.4	1.6
80°	2.4	2.4	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8
82.5°	1.6	1.6	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: P244151

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0	2978.0
2.5°	3073.4	3067.2	3071.1	3100.0	3087.6	3083.6	3050.8	3079.7
5°	3110.2	3105.6	3105.6	3138.4	3123.6	3120.4	3088.4	3113.3
7.5°	3144.6	3140.0	3140.8	3174.4	3162.6	3158.0	3125.8	3150.9
10°	3189.3	3186.1	3186.9	3219.0	3206.5	3201.8	3168.9	3194.7
12.5°	3215.8	3211.1	3211.1	3245.6	3231.5	3224.5	3193.2	3218.2
15°	3195.5	3188.5	3188.5	3222.9	3207.3	3197.0	3169.7	3193.2
17.5°	3125.8	3118.8	3118.8	3148.5	3136.8	3122.0	3093.8	3115.7
20°	3028.8	3020.2	3017.9	3052.4	3035.9	3022.5	2997.6	3018.7
22.5°	2919.3	2915.3	2908.4	2942.8	2927.9	2913.9	2887.2	2903.6
25°	2787.9	2781.6	2774.6	2808.2	2793.4	2779.2	2758.2	2771.4
27.5°	2624.3	2625.1	2621.1	2647.8	2633.0	2625.1	2599.3	2621.1
30°	2426.4	2417.7	2414.6	2445.9	2431.8	2421.7	2389.6	2410.6
32.5°	2168.1	2155.6	2139.2	2174.4	2150.1	2141.5	2114.2	2144.7
35°	1792.6	1788.6	1773.8	1803.5	1790.2	1774.6	1757.4	1783.2
37.5°	1385.7	1388.8	1387.2	1395.1	1387.2	1377.1	1358.3	1348.9
40°	1057.8	1050.1	1043.8	1057.8	1041.4	1041.4	1030.5	1042.2
42.5°	829.4	826.3	834.1	837.2	827.8	826.3	824.7	824.0
45°	684.7	684.7	686.2	689.3	686.2	684.7	679.9	676.8
47.5°	564.2	567.2	564.2	574.3	568.8	567.2	557.9	561.8
50°	457.0	453.0	457.0	460.1	460.9	456.2	451.5	453.8
52.5°	354.5	348.2	346.6	351.3	348.2	348.2	345.0	344.2
55°	249.6	252.0	248.1	252.0	250.4	248.1	245.7	248.8
57.5°	169.0	169.8	168.2	170.5	166.6	167.4	166.6	165.8
60°	109.6	106.4	106.4	108.8	104.8	104.8	104.1	104.1
62.5°	62.6	61.8	61.8	61.0	60.3	60.3	60.3	58.7
65°	32.1	31.3	30.5	30.5	30.5	30.5	29.7	29.7
67.5°	15.6	14.8	14.8	15.6	14.8	14.8	14.8	14.8
70°	9.3	9.3	8.7	9.3	8.7	8.7	8.7	8.7
72.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
75°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
77.5°	2.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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)