

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: P245429

Luminaire Tested: **LSR8B50D010 EC8B50935 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245429
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 EC8B50935 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4786.0 lumens
Efficiency: N/A
Efficacy: 90.3 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

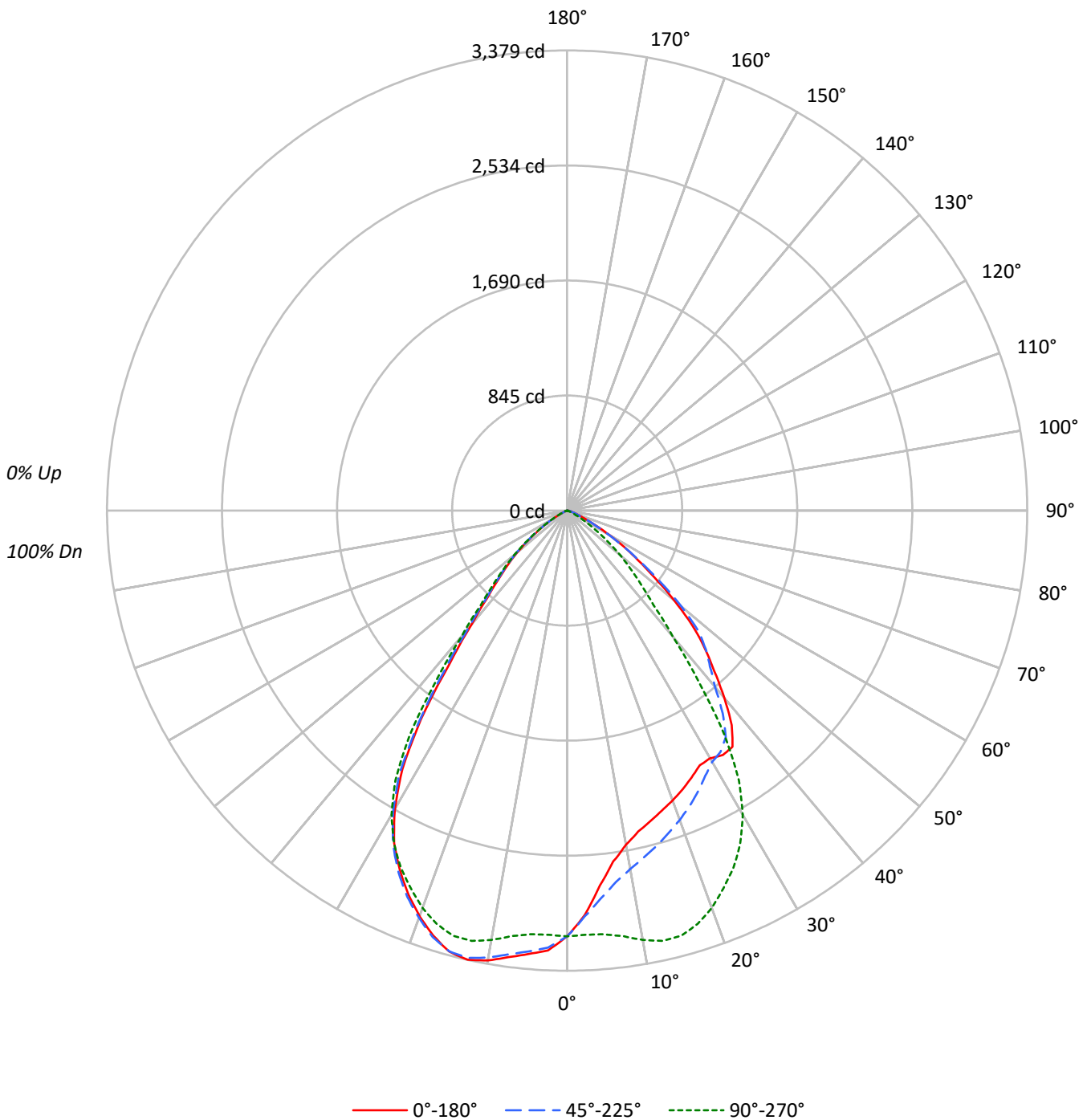
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	96413	96413	96413
5°	85542	96654	101180
10°	77992	100242	105024
15°	75373	103169	107026
20°	74294	101898	104002
25°	73567	98388	99000
30°	74763	91819	90121
35°	79693	75981	70477
40°	72220	48643	44046
45°	62335	33282	30989
50°	49182	24274	22859
55°	34139	14930	14042
60°	21733	7549	6741
65°	10850	2999	2277
70°	5996	1479	811
75°	4301	1072	393
80°	3498	728	142
85°	3786	566	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.4	6.1
10°-20°	841.7	17.6
20°-30°	1221.6	25.5
30°-40°	1203.2	25.1
40°-50°	754.2	15.8
50°-60°	363.9	7.6
60°-70°	88.1	1.8
70°-80°	17.8	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°	2354.7	49.2
0°-40°	3557.9	74.3
0°-60°	4676.0	97.7
0°-90°	4786.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4786.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3127	3127	3127	3127	3127	
5°	2764	2857	3122	3249	3269	256
15°	2361	2547	3232	3350	3352	668
25°	2162	2275	2892	2931	2910	1001
35°	2117	2031	2018	1903	1872	1281
45°	1429	1439	763	731	711	1093
55°	635	656	278	274	261	584
65°	149	147	41	35	31	170
75°	36	31	9	4	3	41
85°	11	8	2	0	0	11
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°	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6
2.5°	2972.2	2953.3	2917.9	2960.7	2960.7	2936.8	2984.5	2955.7	2978.7	3014.9	2982.8
5°	2763.5	2747.9	2718.3	2763.5	2769.2	2747.1	2804.6	2783.2	2816.9	2861.3	2857.1
7.5°	2598.4	2578.7	2551.6	2598.4	2607.4	2592.6	2647.7	2637.8	2682.2	2739.7	2749.5
10°	2490.8	2470.2	2446.4	2489.1	2495.7	2485.8	2541.7	2535.9	2579.5	2646.0	2672.3
12.5°	2414.4	2397.1	2370.8	2416.0	2423.4	2409.4	2462.0	2459.5	2504.7	2574.6	2607.4
15°	2361.0	2340.4	2316.6	2355.2	2365.1	2349.5	2399.6	2394.6	2440.7	2509.7	2546.6
17.5°	2310.9	2292.0	2267.3	2303.5	2313.3	2296.9	2346.2	2338.0	2377.4	2443.1	2480.9
20°	2264.0	2243.5	2221.3	2258.3	2264.0	2245.1	2294.4	2283.7	2319.1	2379.9	2416.8
22.5°	2215.6	2194.2	2171.2	2207.3	2213.1	2194.2	2239.4	2227.1	2259.9	2315.0	2348.6
25°	2162.2	2142.4	2119.4	2153.1	2158.1	2137.5	2185.2	2169.6	2198.3	2246.8	2274.7
27.5°	2108.8	2089.9	2064.4	2098.9	2101.4	2081.7	2125.2	2103.8	2127.7	2172.0	2195.8
30°	2099.7	2078.4	2052.1	2080.0	2080.8	2055.4	2096.4	2071.0	2084.1	2117.0	2130.9
32.5°	2128.5	2107.1	2080.0	2103.0	2100.6	2072.6	2112.1	2080.8	2084.9	2102.2	2098.9
35°	2117.0	2091.5	2059.5	2084.1	2084.1	2050.4	2089.9	2052.9	2048.8	2051.3	2030.7
37.5°	1986.4	1966.7	1936.3	1960.1	1957.6	1932.1	1962.5	1932.1	1918.2	1912.4	1875.5
40°	1794.1	1770.3	1747.3	1772.8	1775.2	1748.1	1787.6	1753.1	1749.0	1732.5	1689.0
42.5°	1599.4	1591.2	1569.0	1590.4	1601.9	1578.9	1611.8	1595.3	1597.8	1593.7	1552.6
45°	1429.4	1415.4	1399.0	1423.6	1431.0	1419.5	1452.4	1442.5	1452.4	1472.9	1439.3
47.5°	1246.2	1232.2	1214.2	1240.5	1253.6	1232.2	1260.2	1256.9	1271.7	1307.0	1303.7
50°	1025.2	1015.4	1012.1	1015.4	1023.6	1013.7	1033.4	1034.3	1044.1	1092.6	1095.9
52.5°	811.6	809.2	797.7	808.3	808.3	792.7	812.5	803.4	813.3	846.1	867.5
55°	635.0	632.5	625.2	635.0	624.3	618.6	624.3	615.3	607.9	633.4	655.6
57.5°	494.5	486.3	477.3	481.4	480.6	468.3	474.8	464.1	458.4	467.4	487.1
60°	352.4	350.0	341.7	345.8	349.1	340.1	346.7	341.7	331.9	339.3	340.1
62.5°	234.1	235.8	230.8	231.7	229.2	227.6	231.7	234.1	231.7	228.4	229.2
65°	148.7	147.9	147.0	147.9	149.5	146.2	148.7	150.3	147.9	147.9	147.0
67.5°	98.6	96.1	93.7	95.3	96.9	94.5	96.9	96.1	96.9	96.1	93.7
70°	66.5	65.7	64.9	65.7	65.7	64.1	65.7	64.9	65.7	64.9	62.4
72.5°	48.5	48.5	47.6	48.5	48.5	46.8	47.6	46.0	46.8	46.0	44.4
75°	36.1	36.1	35.3	36.1	35.3	34.5	35.3	34.5	32.9	32.9	31.2
77.5°	26.3	26.3	26.3	26.3	26.3	25.5	25.5	24.6	23.8	23.0	23.0
80°	19.7	18.9	18.9	18.9	18.9	18.1	18.9	18.1	17.3	16.4	15.6
82.5°	14.0	14.8	14.0	14.0	14.0	13.1	14.0	13.1	13.1	12.3	10.7
85°	10.7	10.7	10.7	10.7	10.7	9.9	9.9	9.9	9.0	9.0	8.2
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6
2.5°	3025.6	3029.7	3020.6	3034.6	3088.8	3045.3	3063.3	3069.1	3110.2	3117.6	3112.6
5°	2910.5	2928.6	2940.1	2971.3	3031.3	3000.1	3032.1	3052.7	3105.2	3122.5	3126.6
7.5°	2820.2	2858.0	2885.9	2936.8	3007.5	2983.7	3032.1	3065.8	3129.9	3152.1	3162.7
10°	2752.8	2810.3	2858.8	2928.6	3008.3	2992.7	3055.9	3103.6	3175.1	3201.4	3214.5
12.5°	2701.9	2771.7	2836.6	2925.3	3011.6	3004.2	3080.6	3134.8	3210.4	3236.7	3252.3
15°	2646.0	2726.5	2802.1	2901.5	2994.3	2992.7	3074.8	3132.3	3209.6	3231.7	3246.5
17.5°	2579.5	2665.7	2748.7	2856.3	2948.3	2950.0	3032.9	3089.6	3165.2	3183.3	3193.1
20°	2512.1	2597.6	2680.5	2791.4	2881.8	2884.3	2965.6	3018.2	3090.5	3105.2	3107.7
22.5°	2440.7	2520.3	2603.3	2713.4	2800.5	2802.1	2882.6	2931.9	2993.5	3000.9	3007.5
25°	2359.3	2437.4	2515.4	2624.7	2707.6	2712.6	2785.7	2829.2	2885.9	2891.7	2894.1
27.5°	2274.7	2338.8	2413.5	2507.2	2591.0	2587.7	2656.7	2706.0	2756.9	2753.6	2752.8
30°	2189.3	2242.7	2288.7	2379.0	2440.7	2443.1	2508.0	2531.8	2585.2	2578.7	2577.8
32.5°	2129.3	2143.3	2155.6	2201.6	2259.9	2239.4	2283.7	2313.3	2350.3	2347.8	2348.6
35°	2019.2	1993.8	1956.8	1963.4	1998.7	1966.7	1990.5	1989.7	2027.4	2018.4	2029.1
37.5°	1831.1	1758.8	1676.7	1629.8	1636.4	1596.2	1587.9	1607.7	1620.8	1595.3	1604.4
40°	1630.7	1523.9	1395.7	1288.9	1283.2	1233.1	1224.0	1204.3	1229.8	1208.4	1215.0
42.5°	1482.8	1341.5	1173.1	1043.3	1015.4	973.5	948.8	945.5	952.9	938.1	934.0
45°	1369.4	1219.1	1026.0	877.4	846.1	801.0	776.3	767.3	768.1	763.2	759.1
47.5°	1236.3	1085.2	889.7	737.7	702.4	659.7	635.0	629.3	632.5	626.0	621.0
50°	1052.3	916.8	738.5	599.7	568.5	537.3	517.5	511.8	511.0	506.0	502.8
52.5°	854.4	741.8	587.4	471.5	443.6	413.2	399.2	391.9	392.7	387.7	382.8
55°	661.3	591.5	455.1	356.5	331.1	307.2	294.1	285.1	282.6	277.7	275.2
57.5°	492.1	445.2	340.9	257.1	242.3	219.3	206.2	195.5	193.9	191.4	190.6
60°	345.0	311.3	239.9	183.2	165.9	152.0	138.8	128.2	123.2	122.4	119.9
62.5°	223.4	202.9	157.7	122.4	109.3	99.4	86.3	78.9	75.6	72.3	73.1
65°	138.8	123.2	98.6	78.9	71.5	64.1	54.2	47.6	44.4	41.1	41.9
67.5°	86.3	77.2	62.4	50.9	46.0	40.3	32.9	27.9	25.5	23.0	21.4
70°	58.3	50.1	42.7	36.1	32.9	28.8	23.8	19.7	18.1	16.4	14.8
72.5°	41.1	37.0	31.2	27.1	24.6	21.4	18.1	15.6	14.0	12.3	10.7
75°	29.6	26.3	23.0	19.7	18.1	16.4	14.0	12.3	10.7	9.0	7.4
77.5°	21.4	18.9	16.4	14.8	14.0	11.5	9.9	9.0	8.2	6.6	4.9
80°	14.8	13.1	10.7	9.9	9.9	8.2	7.4	6.6	5.8	4.1	3.3
82.5°	9.9	9.0	8.2	7.4	6.6	5.8	5.8	4.1	3.3	2.5	1.6
85°	7.4	6.6	5.8	4.9	4.9	4.1	3.3	2.5	2.5	1.6	0.8
87.5°	4.1	4.1	3.3	2.5	2.5	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°	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6
2.5°	3154.5	3157.0	3171.0	3160.3	3187.4	3207.1	3197.2	3219.4	3212.0	3210.4	3235.9
5°	3175.9	3181.6	3200.5	3190.7	3220.2	3241.6	3231.7	3256.4	3249.0	3247.4	3273.6
7.5°	3217.0	3222.7	3239.1	3230.9	3262.1	3281.0	3268.7	3295.8	3286.0	3285.1	3310.6
10°	3268.7	3276.9	3290.9	3282.7	3311.4	3327.9	3315.5	3341.8	3332.8	3328.7	3356.6
12.5°	3307.3	3313.1	3327.0	3320.5	3348.4	3360.7	3350.0	3375.5	3364.0	3360.7	3385.4
15°	3298.3	3304.0	3315.5	3309.8	3336.1	3347.6	3333.6	3361.5	3350.0	3343.5	3365.7
17.5°	3240.8	3244.1	3252.3	3246.5	3274.5	3281.9	3266.3	3294.2	3283.5	3272.0	3293.4
20°	3156.2	3154.5	3159.5	3157.0	3180.0	3184.1	3174.2	3194.8	3182.5	3175.9	3188.2
22.5°	3051.0	3049.4	3052.7	3046.1	3069.1	3071.6	3056.8	3081.4	3069.1	3056.8	3077.3
25°	2934.4	2925.3	2923.7	2926.2	2941.8	2944.2	2928.6	2946.7	2931.1	2921.2	2940.9
27.5°	2790.6	2779.1	2776.6	2779.1	2794.7	2783.2	2770.1	2783.2	2767.6	2758.6	2770.9
30°	2613.2	2596.7	2589.3	2584.4	2600.8	2596.7	2566.3	2581.1	2556.5	2543.3	2552.4
32.5°	2374.1	2365.1	2345.4	2333.9	2349.5	2318.2	2299.4	2299.4	2289.5	2267.3	2272.2
35°	2042.2	2028.3	2010.2	2000.3	2002.8	1960.9	1929.7	1936.3	1903.4	1897.6	1900.1
37.5°	1622.4	1599.4	1592.9	1572.3	1577.3	1540.3	1497.6	1498.4	1481.1	1463.1	1457.3
40°	1219.1	1215.0	1208.4	1191.2	1197.7	1157.5	1141.1	1141.9	1130.4	1117.2	1123.8
42.5°	942.3	929.1	925.0	919.2	920.9	914.3	893.0	895.4	885.6	882.3	879.0
45°	765.6	751.7	741.8	746.7	746.7	739.3	731.1	736.1	731.1	724.6	727.8
47.5°	630.9	617.8	612.8	612.0	617.8	612.8	604.6	606.3	605.4	603.0	601.3
50°	503.6	500.3	496.2	493.7	496.2	494.5	487.1	491.3	493.7	485.5	488.0
52.5°	383.6	383.6	382.8	377.1	382.0	377.1	376.2	377.9	375.4	372.1	371.3
55°	281.0	278.5	274.4	273.6	275.2	273.6	271.9	272.7	274.4	266.2	266.2
57.5°	192.2	190.6	188.1	188.1	191.4	187.3	184.8	188.1	184.8	181.5	181.5
60°	123.2	122.4	119.9	119.9	119.9	119.1	116.7	117.5	119.1	114.2	115.0
62.5°	73.9	71.5	70.6	69.8	70.6	69.8	69.8	69.0	68.2	68.2	65.7
65°	40.3	38.6	37.0	37.8	37.8	37.0	37.0	37.0	35.3	34.5	33.7
67.5°	20.5	18.9	18.9	18.1	18.1	18.1	18.1	17.3	17.3	17.3	16.4
70°	13.1	12.3	11.5	11.5	11.5	10.7	10.7	10.7	10.7	10.7	9.9
72.5°	9.0	8.2	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	1.6
80°	2.5	2.5	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: P245429

CATALOG NUMBER: LSR8B50D010 EC8B50935 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6	3126.6
2.5°	3226.8	3220.2	3224.4	3254.7	3241.6	3237.5	3203.0	3233.4
5°	3265.4	3260.5	3260.5	3295.0	3279.4	3276.1	3242.4	3268.7
7.5°	3301.6	3296.6	3297.5	3332.8	3320.5	3315.5	3281.9	3308.1
10°	3348.4	3345.1	3345.9	3379.6	3366.5	3361.5	3327.0	3354.1
12.5°	3376.3	3371.4	3371.4	3407.5	3392.8	3385.4	3352.5	3378.8
15°	3355.0	3347.6	3347.6	3383.7	3367.3	3356.6	3327.9	3352.5
17.5°	3281.9	3274.5	3274.5	3305.7	3293.4	3277.8	3248.2	3271.2
20°	3180.0	3171.0	3168.5	3204.6	3187.4	3173.4	3147.1	3169.3
22.5°	3065.0	3060.9	3053.5	3089.6	3074.0	3059.2	3031.3	3048.6
25°	2927.0	2920.4	2913.0	2948.3	2932.7	2917.9	2895.8	2909.7
27.5°	2755.3	2756.1	2752.0	2779.9	2764.3	2756.1	2729.0	2752.0
30°	2547.4	2538.4	2535.1	2568.0	2553.2	2542.5	2508.8	2531.0
32.5°	2276.4	2263.2	2246.0	2282.9	2257.5	2248.4	2219.7	2251.7
35°	1882.0	1877.9	1862.3	1893.5	1879.6	1863.1	1845.1	1872.2
37.5°	1454.9	1458.1	1456.5	1464.7	1456.5	1445.8	1426.1	1416.3
40°	1110.7	1102.4	1095.9	1110.7	1093.4	1093.4	1081.9	1094.2
42.5°	870.8	867.5	875.7	879.0	869.1	867.5	865.9	865.0
45°	718.8	718.8	720.4	723.7	720.4	718.8	713.9	710.6
47.5°	592.3	595.6	592.3	603.0	597.2	595.6	585.7	589.8
50°	479.8	475.6	479.8	483.0	483.9	478.9	474.0	476.5
52.5°	372.1	365.6	363.9	368.8	365.6	365.6	362.3	361.5
55°	262.1	264.5	260.4	264.5	262.9	260.4	257.9	261.2
57.5°	177.4	178.3	176.6	179.1	175.0	175.8	175.0	174.2
60°	115.0	111.7	111.7	114.2	110.1	110.1	109.3	109.3
62.5°	65.7	64.9	64.9	64.1	63.3	63.3	63.3	61.6
65°	33.7	32.9	32.0	32.0	32.0	32.0	31.2	31.2
67.5°	16.4	15.6	15.6	16.4	15.6	15.6	15.6	15.6
70°	9.9	9.9	9.0	9.9	9.0	9.0	9.0	9.0
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	1.6	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)