

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: P249442

Luminaire Tested: **LSR8B60D010 EC8B60850 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249442
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B60D010 EC8B60850 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5668.0 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

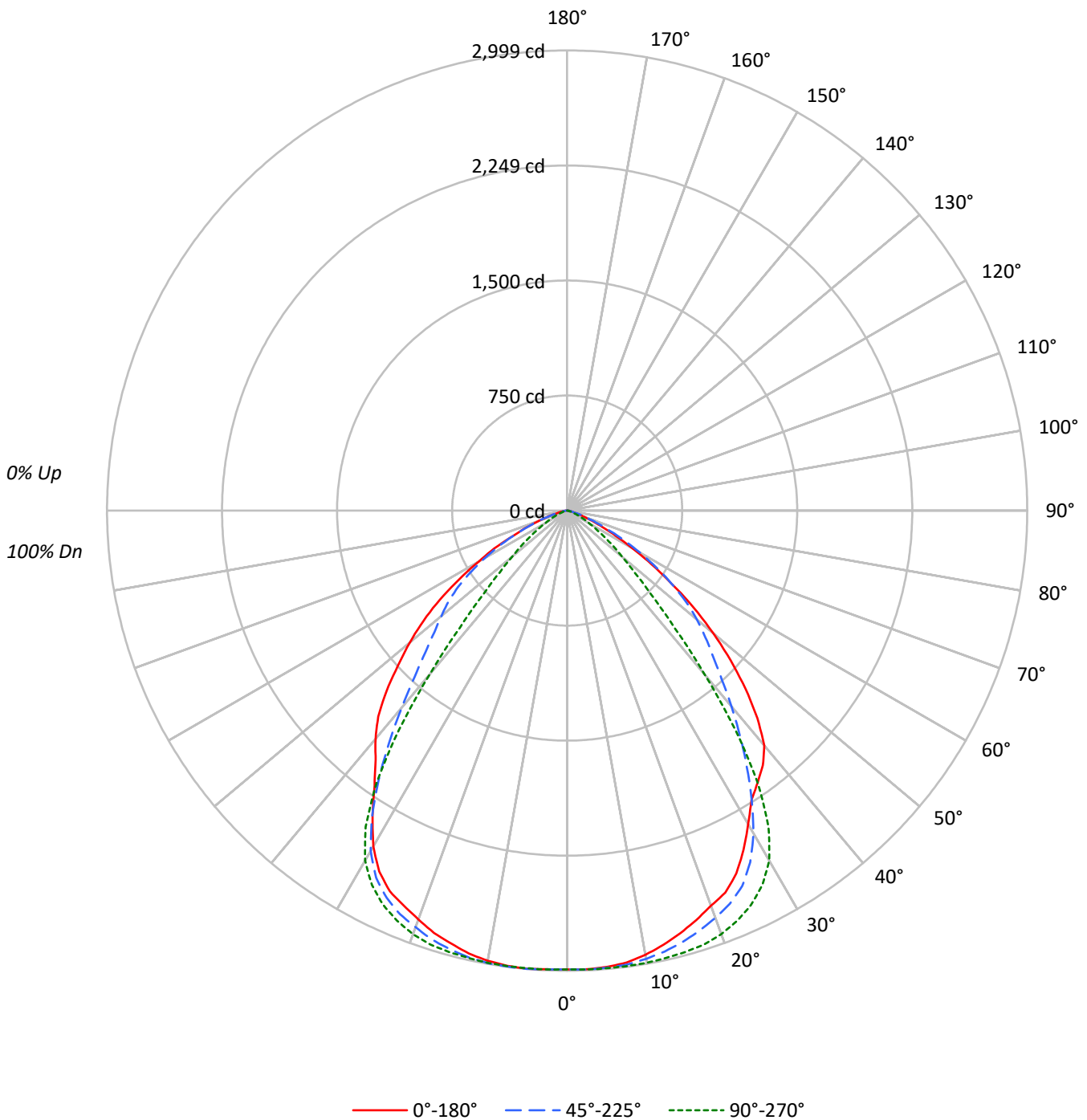
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: LSR8B60D010 EC8B60850 8LBDW0B

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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91					90				
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81					79				
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72					70				
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64					62				
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57					55				
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51					50				
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47					45				
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42					41				
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39					37				
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36					34				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	92216	92216	92216
5°	92420	92670	92769
10°	92032	93692	93288
15°	91012	95060	93266
20°	89921	96398	93028
25°	88752	96509	93121
30°	83964	93795	89964
35°	81458	81515	82365
40°	80448	56086	78185
45°	71685	33671	72662
50°	59606	22408	64226
55°	44703	15451	54455
60°	30294	10293	41086
65°	18270	6676	28223
70°	10134	3615	17365
75°	4587	1525	8995
80°	3996	1705	6269
85°	4529	2264	6262



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.4	5.0
10°-20°	828.9	14.6
20°-30°	1258.1	22.2
30°-40°	1321.3	23.3
40°-50°	990.6	17.5
50°-60°	635.6	11.2
60°-70°	271.9	4.8
70°-80°	64.2	1.1
80°-90°	11.9	0.2
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°	2372.3	41.9
0°-40°	3693.6	65.2
0°-60°	5319.9	93.9
0°-90°	5668.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5668.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2990	2990	2990	2990	2990	
5°	2986	2990	2994	2999	2997	284
15°	2851	2910	2978	2958	2922	804
25°	2608	2700	2836	2785	2737	1192
35°	2164	2044	2165	2140	2188	1358
45°	1644	1344	772	1305	1666	1259
55°	832	832	287	867	1013	754
65°	250	295	92	380	387	267
75°	38	45	13	77	76	56
85°	13	8	6	13	18	14
90°	0	0	0	0	0	



TEST NUMBER: P249442

CATALOG NUMBER: LSR8B60D010 EC8B60850 8LBDW0B

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5
2.5°	2992.2	2995.4	2993.8	2993.8	2992.2	2993.8	2993.8	2997.0	2997.0	2993.8	2992.2
5°	2985.7	2988.9	2988.9	2985.7	2985.7	2993.8	2988.9	2992.2	2992.2	2990.5	2990.5
7.5°	2971.3	2971.3	2977.7	2972.9	2972.9	2977.7	2976.1	2979.3	2982.5	2984.1	2984.1
10°	2939.2	2942.4	2944.0	2944.0	2945.6	2950.4	2953.6	2960.1	2963.3	2966.5	2968.1
12.5°	2899.1	2903.9	2905.5	2903.9	2908.7	2915.1	2923.1	2931.2	2936.0	2942.4	2947.2
15°	2850.9	2850.9	2854.1	2858.9	2862.1	2871.8	2879.8	2889.4	2902.3	2910.3	2918.3
17.5°	2797.9	2801.2	2805.9	2805.9	2812.4	2828.4	2833.2	2847.7	2862.1	2870.2	2886.2
20°	2740.2	2743.3	2748.2	2751.4	2759.4	2772.2	2781.9	2794.7	2810.8	2825.2	2841.3
22.5°	2695.2	2688.8	2692.0	2695.2	2703.2	2714.5	2725.7	2741.7	2757.8	2772.2	2788.3
25°	2608.5	2610.1	2614.9	2618.1	2627.8	2637.4	2650.2	2669.5	2683.9	2700.0	2717.6
27.5°	2491.3	2492.9	2501.0	2501.0	2509.0	2525.0	2533.0	2549.1	2568.4	2584.4	2605.3
30°	2358.1	2361.3	2361.3	2367.7	2372.5	2380.6	2388.6	2404.6	2414.3	2428.7	2457.6
32.5°	2236.1	2239.3	2237.7	2236.1	2231.3	2229.7	2228.1	2231.3	2234.5	2239.3	2250.5
35°	2163.9	2155.8	2149.4	2138.2	2125.3	2109.3	2094.8	2075.6	2057.9	2043.5	2027.4
37.5°	2094.8	2093.2	2083.6	2067.5	2041.8	2013.0	1979.3	1937.5	1895.8	1850.8	1807.5
40°	1998.5	1993.7	1985.7	1963.2	1934.3	1899.0	1854.1	1802.7	1735.2	1666.2	1595.6
42.5°	1834.8	1836.4	1826.8	1809.1	1781.8	1748.1	1701.5	1645.4	1573.1	1491.2	1399.8
45°	1643.8	1643.8	1640.5	1626.1	1606.8	1579.5	1544.2	1497.7	1427.1	1343.6	1245.6
47.5°	1444.7	1446.3	1441.5	1438.3	1430.3	1412.6	1386.9	1351.6	1301.9	1221.6	1123.7
50°	1242.5	1242.5	1250.5	1248.9	1248.9	1242.5	1231.2	1210.3	1167.0	1102.8	1011.3
52.5°	1040.2	1043.4	1048.2	1054.6	1062.7	1075.5	1062.7	1053.0	1025.7	976.0	897.3
55°	831.5	834.7	842.7	854.0	863.6	876.5	879.7	879.7	865.2	831.5	772.1
57.5°	653.3	648.5	655.0	664.6	677.4	690.3	699.9	711.1	709.5	687.0	638.9
60°	491.2	492.8	497.6	507.3	516.9	528.1	541.0	550.6	555.4	544.2	513.7
62.5°	358.0	358.0	364.4	374.0	378.8	394.9	402.9	407.7	412.5	410.9	391.7
65°	250.4	253.6	256.8	261.7	266.5	276.1	280.9	290.5	293.8	295.4	280.9
67.5°	176.6	171.8	175.0	178.2	183.0	189.4	199.1	199.1	203.9	203.9	194.2
70°	112.4	112.4	114.0	118.8	122.0	123.6	126.8	130.0	134.8	133.2	133.2
72.5°	75.5	73.8	75.5	77.1	78.7	83.5	83.5	85.1	88.3	89.9	83.5
75°	38.5	40.1	43.3	41.8	46.5	43.3	44.9	49.8	48.2	44.9	44.9
77.5°	32.1	32.1	32.1	30.5	33.7	33.7	32.1	35.3	33.7	33.7	32.1
80°	22.5	24.1	22.5	20.9	22.5	20.9	20.9	20.9	20.9	20.9	19.2
82.5°	17.7	14.5	16.1	14.5	16.1	16.1	14.5	12.8	12.8	14.5	12.8
85°	12.8	9.6	11.2	11.2	9.6	9.6	9.6	9.6	9.6	8.0	8.0
87.5°	8.0	4.8	4.8	4.8	6.4	6.4	6.4	4.8	6.4	6.4	3.2
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: P249442

CATALOG NUMBER: LSR8B60D010 EC8B60850 8LBDW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5
2.5°	2995.4	2993.8	2997.0	2995.4	2995.4	2993.8	2995.4	2993.8	2997.0	2990.5	2992.2
5°	2995.4	2992.2	2993.8	2995.4	2997.0	2993.8	2993.8	2993.8	2997.0	2993.8	2995.4
7.5°	2988.9	2987.3	2992.2	2995.4	2993.8	2992.2	2995.4	2993.8	2997.0	2995.4	2998.6
10°	2976.1	2977.7	2980.9	2985.7	2987.3	2988.9	2992.2	2992.2	2997.0	2990.5	2993.8
12.5°	2956.8	2963.3	2971.3	2974.5	2980.9	2980.9	2984.1	2985.7	2988.9	2987.3	2992.2
15°	2932.8	2940.8	2950.4	2958.5	2966.5	2971.3	2976.1	2977.7	2982.5	2977.7	2979.3
17.5°	2903.9	2913.5	2927.9	2937.6	2950.4	2955.2	2961.6	2964.9	2969.7	2966.5	2968.1
20°	2863.7	2875.0	2891.0	2905.5	2913.5	2924.7	2932.8	2937.6	2940.8	2937.6	2939.2
22.5°	2807.6	2823.6	2844.5	2855.7	2871.8	2881.4	2883.0	2894.2	2902.3	2894.2	2897.5
25°	2741.7	2757.8	2773.9	2797.9	2812.4	2823.6	2834.9	2836.5	2844.5	2842.9	2841.3
27.5°	2632.6	2653.5	2680.7	2700.0	2719.3	2736.9	2749.8	2753.0	2761.0	2757.8	2759.4
30°	2483.3	2505.8	2531.5	2562.0	2589.2	2606.9	2623.0	2634.2	2642.2	2637.4	2635.8
32.5°	2271.4	2293.9	2321.2	2351.7	2383.8	2409.4	2428.7	2443.2	2452.8	2449.6	2441.6
35°	2029.0	2035.4	2053.1	2077.2	2104.4	2131.7	2149.4	2165.4	2176.7	2179.9	2179.9
37.5°	1780.2	1759.4	1746.5	1746.5	1762.5	1773.8	1789.8	1799.5	1817.1	1823.5	1828.4
40°	1539.4	1491.2	1446.3	1412.6	1390.1	1388.5	1388.5	1393.3	1409.4	1430.3	1449.5
42.5°	1324.3	1247.3	1178.2	1115.6	1070.7	1045.0	1033.8	1035.4	1048.2	1067.5	1099.6
45°	1152.6	1056.2	969.6	894.1	833.1	793.0	773.7	772.1	781.7	804.2	839.6
47.5°	1019.3	916.6	818.7	732.0	666.2	622.8	600.4	594.0	600.4	621.2	663.0
50°	908.6	802.6	701.5	611.6	541.0	496.0	475.1	467.1	475.1	492.8	534.5
52.5°	805.8	696.7	602.0	515.3	439.8	401.3	378.8	374.0	378.8	399.7	433.4
55°	687.0	594.0	500.8	414.1	348.4	309.8	292.1	287.4	292.1	311.4	346.7
57.5°	569.9	489.6	407.7	329.1	272.9	239.2	223.1	216.7	227.9	240.8	282.5
60°	460.7	396.5	327.5	258.4	211.9	181.4	168.5	166.9	170.2	186.2	215.1
62.5°	361.2	308.2	253.6	197.4	158.9	146.1	130.0	128.4	131.6	141.2	163.7
65°	260.1	226.4	184.6	144.5	114.0	96.3	89.9	91.5	94.7	101.1	122.0
67.5°	181.4	157.3	128.4	101.1	78.7	70.6	64.2	62.6	64.2	75.5	86.7
70°	122.0	107.5	86.7	77.1	54.6	43.3	44.9	40.1	46.5	46.5	56.2
72.5°	80.2	70.6	57.8	44.9	38.5	30.5	30.5	28.9	32.1	33.7	41.8
75°	41.8	32.1	32.1	22.5	16.1	8.0	14.5	12.8	11.2	12.8	16.1
77.5°	28.9	24.1	22.5	17.7	16.1	12.8	12.8	12.8	12.8	14.5	16.1
80°	17.7	17.7	12.8	11.2	9.6	8.0	9.6	9.6	9.6	9.6	11.2
82.5°	11.2	9.6	9.6	8.0	8.0	6.4	6.4	6.4	6.4	6.4	9.6
85°	9.6	6.4	6.4	4.8	6.4	11.2	4.8	6.4	6.4	6.4	4.8
87.5°	3.2	4.8	4.8	4.8	3.2	1.6	3.2	4.8	4.8	8.0	6.4
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: P249442

CATALOG NUMBER: LSR8B60D010 EC8B60850 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5	2990.5
2.5°	2995.4	2997.0	2997.0	2995.4	2995.4	2992.2	2998.6	2993.8	2995.4	3001.8	2997.0
5°	2998.6	3000.2	3000.2	2998.6	2998.6	2998.6	3000.2	3000.2	2998.6	2997.0	3000.2
7.5°	3005.0	3003.4	3003.4	3000.2	3000.2	2997.0	3000.2	2995.4	2998.6	2995.4	3000.2
10°	2997.0	2998.6	2997.0	2995.4	2995.4	2993.8	2993.8	2988.9	2990.5	2985.7	2988.9
12.5°	2992.2	2990.5	2990.5	2987.3	2984.1	2980.9	2979.3	2974.5	2974.5	2963.3	2968.1
15°	2979.3	2980.9	2976.1	2969.7	2966.5	2958.5	2955.2	2948.8	2942.4	2934.4	2936.0
17.5°	2968.1	2963.3	2956.8	2950.4	2937.6	2931.2	2924.7	2915.1	2911.9	2902.3	2899.1
20°	2934.4	2931.2	2923.1	2911.9	2903.9	2889.4	2883.0	2873.4	2865.3	2855.7	2850.9
22.5°	2891.0	2887.8	2878.2	2866.9	2854.1	2847.7	2841.3	2823.6	2815.6	2805.9	2804.3
25°	2836.5	2831.6	2822.0	2809.2	2802.7	2785.1	2778.6	2765.8	2762.6	2753.0	2751.4
27.5°	2753.0	2746.6	2735.3	2719.3	2708.0	2696.8	2690.4	2680.7	2677.5	2667.9	2666.3
30°	2627.8	2619.7	2597.3	2590.9	2571.6	2560.3	2560.3	2547.5	2549.1	2542.7	2542.7
32.5°	2430.3	2417.5	2399.8	2387.0	2374.1	2367.7	2367.7	2362.9	2366.1	2366.1	2369.3
35°	2168.7	2151.0	2141.4	2133.4	2133.4	2139.8	2159.0	2163.9	2173.5	2181.5	2188.0
37.5°	1833.2	1831.6	1842.8	1852.4	1876.5	1903.8	1937.5	1966.4	1993.7	2013.0	2032.2
40°	1470.4	1510.5	1542.6	1587.6	1624.5	1677.5	1738.5	1788.2	1834.8	1868.5	1903.8
42.5°	1147.7	1199.1	1266.5	1332.3	1398.2	1470.4	1550.7	1619.7	1680.7	1727.2	1764.1
45°	894.1	964.7	1046.6	1130.1	1215.2	1305.1	1388.5	1459.2	1523.4	1571.5	1608.5
47.5°	720.7	797.8	890.9	982.4	1078.7	1173.4	1266.5	1327.5	1380.5	1419.0	1452.8
50°	595.5	677.4	775.3	879.7	976.0	1070.7	1150.9	1210.3	1253.7	1287.4	1308.3
52.5°	497.6	584.3	688.7	793.0	889.3	976.0	1048.2	1093.2	1128.5	1152.6	1171.8
55°	410.9	494.4	592.3	690.3	785.0	866.8	926.2	959.9	987.2	1001.7	1012.9
57.5°	335.5	412.5	502.4	592.3	674.2	741.6	788.2	821.9	834.7	846.0	844.3
60°	263.3	335.5	417.4	494.4	565.0	619.6	653.3	672.6	682.2	687.0	683.8
62.5°	207.1	272.9	335.5	402.9	454.3	500.8	533.0	533.0	537.7	539.4	544.2
65°	154.1	203.9	258.4	308.2	349.9	380.4	398.1	402.9	409.3	407.7	404.5
67.5°	114.0	150.9	191.0	227.9	256.8	276.1	288.9	300.2	298.6	295.4	293.8
70°	78.7	102.7	138.1	160.5	181.4	200.7	203.9	205.5	207.1	208.7	205.5
72.5°	54.6	72.2	91.5	110.8	123.6	131.6	139.7	141.2	141.2	141.2	139.7
75°	27.3	36.9	54.6	62.6	73.8	77.1	83.5	83.5	88.3	81.9	80.2
77.5°	24.1	28.9	38.5	44.9	49.8	54.6	56.2	61.0	59.4	56.2	57.8
80°	14.5	17.7	24.1	27.3	33.7	35.3	36.9	38.5	36.9	38.5	38.5
82.5°	11.2	12.8	16.1	16.1	20.9	20.9	22.5	22.5	24.1	24.1	24.1
85°	6.4	11.2	9.6	19.2	12.8	12.8	16.1	19.2	16.1	16.1	19.2
87.5°	6.4	6.4	4.8	6.4	6.4	6.4	8.0	9.6	9.6	11.2	9.6
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: P249442

CATALOG NUMBER: LSR8B60D010 EC8B60850 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2990.5	2990.5	2990.5	2990.5
2.5°	2995.4	2998.6	2993.8	2992.2
5°	3000.2	3000.2	2997.0	2997.0
7.5°	3000.2	3000.2	2995.4	2992.2
10°	2987.3	2987.3	2982.5	2979.3
12.5°	2963.3	2963.3	2961.6	2956.8
15°	2932.8	2932.8	2926.3	2921.5
17.5°	2891.0	2894.2	2886.2	2886.2
20°	2846.1	2844.5	2838.1	2834.9
22.5°	2799.5	2796.3	2794.7	2785.1
25°	2749.8	2746.6	2741.7	2736.9
27.5°	2664.7	2663.1	2658.3	2651.9
30°	2534.7	2533.0	2526.6	2526.6
32.5°	2366.1	2364.5	2358.1	2359.7
35°	2191.1	2197.6	2194.4	2188.0
37.5°	2045.1	2049.9	2053.1	2049.9
40°	1923.1	1937.5	1939.1	1942.3
42.5°	1793.1	1812.3	1818.7	1821.9
45°	1637.3	1655.0	1669.4	1666.2
47.5°	1478.4	1491.2	1504.1	1494.5
50°	1325.9	1333.9	1338.8	1338.8
52.5°	1181.5	1181.5	1179.9	1181.5
55°	1016.1	1016.1	1009.7	1012.9
57.5°	842.7	846.0	841.1	833.1
60°	682.2	674.2	671.0	666.2
62.5°	531.3	531.3	520.1	534.5
65°	398.1	393.3	388.5	386.8
67.5°	288.9	287.4	282.5	280.9
70°	203.9	197.4	195.8	192.6
72.5°	136.4	136.4	133.2	133.2
75°	83.5	75.5	73.8	75.5
77.5°	57.8	56.2	56.2	54.6
80°	38.5	36.9	40.1	35.3
82.5°	24.1	25.7	24.1	25.7
85°	16.1	19.2	17.7	17.7
87.5°	9.6	9.6	9.6	9.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)