

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: P249163

Luminaire Tested: **LSR8B60D010 EC8B60950 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249163
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 EC8B60950 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5831.0 lumens
Efficiency: N/A
Efficacy: 98.0 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

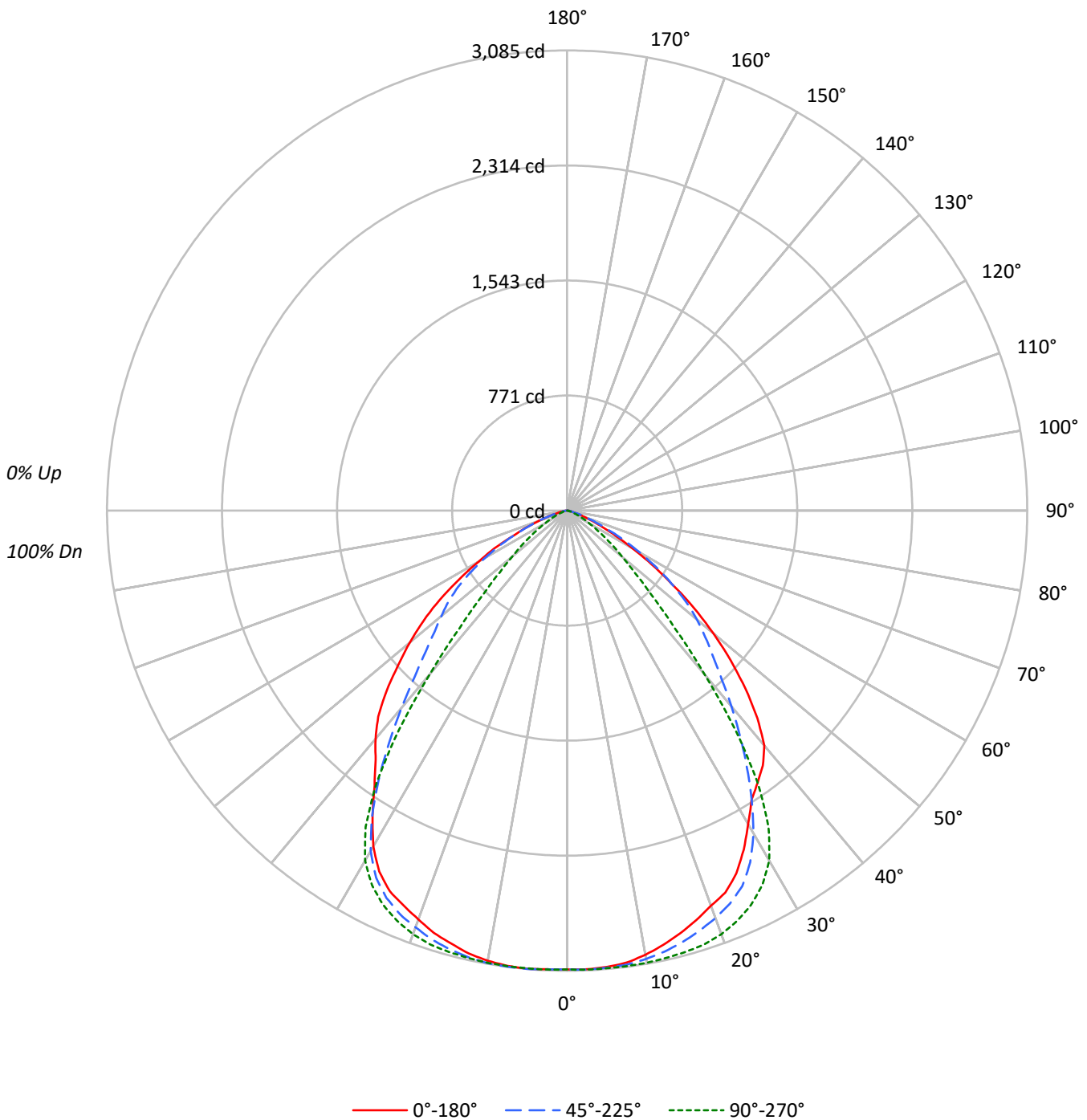
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	94871	94871	94871
5°	95079	95336	95438
10°	94678	96385	95971
15°	93630	97793	95951
20°	92506	99168	95703
25°	91304	99282	95798
30°	86378	96491	92553
35°	83800	83860	84733
40°	82762	57700	80435
45°	73743	34639	74750
50°	61319	23056	66073
55°	45988	15892	56019
60°	31163	10589	42264
65°	18796	6866	29040
70°	10422	3724	17870
75°	4718	1573	9245
80°	4102	1758	6446
85°	4670	2335	6439



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.6	5.0
10°-20°	852.7	14.6
20°-30°	1294.2	22.2
30°-40°	1359.3	23.3
40°-50°	1019.1	17.5
50°-60°	653.9	11.2
60°-70°	279.7	4.8
70°-80°	66.1	1.1
80°-90°	12.3	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°	2440.5	41.9
0°-40°	3799.9	65.2
0°-60°	5472.9	93.9
0°-90°	5831.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5831.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3077	3077	3077	3077	3077	
5°	3072	3077	3080	3085	3083	292
15°	2933	2994	3063	3044	3006	827
25°	2684	2778	2918	2865	2816	1226
35°	2226	2102	2228	2201	2251	1397
45°	1691	1382	794	1343	1714	1295
55°	855	855	296	892	1042	776
65°	258	304	94	391	398	275
75°	40	46	13	79	78	58
85°	13	8	7	13	18	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6
2.5°	3078.2	3081.5	3079.9	3079.9	3078.2	3079.9	3079.9	3083.2	3083.2	3079.9	3078.2
5°	3071.6	3074.9	3074.9	3071.6	3071.6	3079.9	3074.9	3078.2	3078.2	3076.6	3076.6
7.5°	3056.8	3056.8	3063.3	3058.4	3058.4	3063.3	3061.7	3065.0	3068.3	3070.0	3070.0
10°	3023.7	3027.0	3028.7	3028.7	3030.3	3035.3	3038.6	3045.2	3048.5	3051.8	3053.4
12.5°	2982.4	2987.4	2989.0	2987.4	2992.3	2998.9	3007.2	3015.5	3020.4	3027.0	3032.0
15°	2932.9	2932.9	2936.2	2941.1	2944.5	2954.4	2962.6	2972.5	2985.7	2994.0	3002.2
17.5°	2878.4	2881.7	2886.6	2886.6	2893.3	2909.8	2914.7	2929.6	2944.5	2952.7	2969.2
20°	2819.0	2822.2	2827.2	2830.5	2838.8	2852.0	2861.9	2875.1	2891.6	2906.5	2923.0
22.5°	2772.7	2766.1	2769.4	2772.7	2781.0	2792.5	2804.1	2820.6	2837.1	2852.0	2868.5
25°	2683.5	2685.2	2690.1	2693.4	2703.4	2713.3	2726.5	2746.3	2761.1	2777.7	2795.8
27.5°	2563.0	2564.6	2572.9	2572.9	2581.1	2597.6	2605.9	2622.4	2642.3	2658.7	2680.2
30°	2425.9	2429.2	2429.2	2435.8	2440.7	2449.0	2457.3	2473.8	2483.7	2498.6	2528.3
32.5°	2300.4	2303.7	2302.0	2300.4	2295.4	2293.8	2292.1	2295.4	2298.8	2303.7	2315.2
35°	2226.1	2217.8	2211.2	2199.7	2186.5	2169.9	2155.1	2135.3	2117.1	2102.2	2085.7
37.5°	2155.1	2153.4	2143.5	2127.0	2100.6	2070.9	2036.2	1993.2	1950.3	1904.1	1859.5
40°	2056.0	2051.0	2042.8	2019.7	1989.9	1953.6	1907.4	1854.5	1785.1	1714.1	1641.5
42.5°	1887.5	1889.2	1879.3	1861.1	1833.1	1798.4	1750.5	1692.7	1618.4	1534.1	1440.0
45°	1691.0	1691.0	1687.7	1672.9	1653.1	1625.0	1588.6	1540.8	1468.1	1382.2	1281.5
47.5°	1486.3	1487.9	1482.9	1479.7	1471.4	1453.2	1426.8	1390.5	1339.3	1256.7	1156.0
50°	1278.2	1278.2	1286.4	1284.8	1284.8	1278.2	1266.6	1245.1	1200.6	1134.5	1040.4
52.5°	1070.1	1073.4	1078.4	1085.0	1093.2	1106.4	1093.2	1083.3	1055.2	1004.0	923.1
55°	855.4	858.7	867.0	878.5	888.5	901.7	905.0	905.0	890.1	855.4	794.3
57.5°	672.1	667.2	673.8	683.7	696.9	710.1	720.0	731.6	729.9	706.8	657.3
60°	505.3	507.0	511.9	521.9	531.8	543.3	556.5	566.4	571.4	559.8	528.4
62.5°	368.3	368.3	374.9	384.8	389.7	406.3	414.5	419.5	424.4	422.7	402.9
65°	257.6	260.9	264.2	269.2	274.1	284.0	289.0	298.9	302.2	303.9	289.0
67.5°	181.7	176.7	180.0	183.3	188.3	194.9	204.8	204.8	209.7	209.7	199.8
70°	115.6	115.6	117.3	122.2	125.5	127.2	130.5	133.7	138.7	137.1	137.1
72.5°	77.6	76.0	77.6	79.3	80.9	85.9	85.9	87.5	90.8	92.5	85.9
75°	39.6	41.3	44.6	43.0	47.9	44.6	46.2	51.2	49.5	46.2	46.2
77.5°	33.0	33.0	33.0	31.4	34.7	34.7	33.0	36.3	34.7	34.7	33.0
80°	23.1	24.8	23.1	21.5	23.1	21.5	21.5	21.5	21.5	21.5	19.8
82.5°	18.2	14.9	16.5	14.9	16.5	16.5	14.9	13.2	13.2	14.9	13.2
85°	13.2	9.9	11.6	11.6	9.9	9.9	9.9	9.9	9.9	8.2	8.2
87.5°	8.2	5.0	5.0	5.0	6.6	6.6	6.6	5.0	6.6	6.6	3.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6
2.5°	3081.5	3079.9	3083.2	3081.5	3081.5	3079.9	3081.5	3079.9	3083.2	3076.6	3078.2
5°	3081.5	3078.2	3079.9	3081.5	3083.2	3079.9	3079.9	3079.9	3083.2	3079.9	3081.5
7.5°	3074.9	3073.2	3078.2	3081.5	3079.9	3078.2	3081.5	3079.9	3083.2	3081.5	3084.8
10°	3061.7	3063.3	3066.7	3071.6	3073.2	3074.9	3078.2	3078.2	3083.2	3076.6	3079.9
12.5°	3041.9	3048.5	3056.8	3060.0	3066.7	3066.7	3070.0	3071.6	3074.9	3073.2	3078.2
15°	3017.1	3025.4	3035.3	3043.5	3051.8	3056.8	3061.7	3063.3	3068.3	3063.3	3065.0
17.5°	2987.4	2997.3	3012.1	3022.0	3035.3	3040.2	3046.8	3050.1	3055.1	3051.8	3053.4
20°	2946.1	2957.7	2974.2	2989.0	2997.3	3008.8	3017.1	3022.0	3025.4	3022.0	3023.7
22.5°	2888.3	2904.8	2926.3	2937.8	2954.4	2964.3	2965.9	2977.5	2985.7	2977.5	2980.8
25°	2820.6	2837.1	2853.6	2878.4	2893.3	2904.8	2916.4	2918.0	2926.3	2924.6	2923.0
27.5°	2708.3	2729.8	2757.8	2777.7	2797.5	2815.6	2828.9	2832.1	2840.4	2837.1	2838.8
30°	2554.7	2577.8	2604.3	2635.6	2663.7	2681.9	2698.4	2709.9	2718.2	2713.3	2711.6
32.5°	2336.7	2359.9	2387.9	2419.3	2452.3	2478.7	2498.6	2513.4	2523.3	2520.0	2511.8
35°	2087.4	2094.0	2112.2	2136.9	2165.0	2193.1	2211.2	2227.7	2239.3	2242.6	2242.6
37.5°	1831.4	1810.0	1796.7	1796.7	1813.2	1824.8	1841.3	1851.2	1869.4	1876.0	1880.9
40°	1583.7	1534.1	1487.9	1453.2	1430.1	1428.5	1428.5	1433.4	1449.9	1471.4	1491.2
42.5°	1362.4	1283.1	1212.1	1147.7	1101.5	1075.1	1063.5	1065.2	1078.4	1098.2	1131.2
45°	1185.7	1086.6	997.4	919.8	857.1	815.8	796.0	794.3	804.2	827.3	863.7
47.5°	1048.6	942.9	842.2	753.0	685.3	640.7	617.6	611.0	617.6	639.1	682.0
50°	934.7	825.7	721.7	629.2	556.5	510.3	488.8	480.6	488.8	507.0	549.9
52.5°	829.0	716.7	619.3	530.1	452.5	412.8	389.7	384.8	389.7	411.2	445.9
55°	706.8	611.0	515.2	426.1	358.4	318.7	300.5	295.6	300.5	320.4	356.7
57.5°	586.3	503.7	419.5	338.5	280.7	246.0	229.6	222.9	234.5	247.7	290.6
60°	473.9	407.9	336.9	265.9	218.0	186.6	173.4	171.7	175.0	191.6	221.3
62.5°	371.6	317.1	260.9	203.1	163.5	150.3	133.7	132.1	135.4	145.3	168.5
65°	267.5	232.9	189.9	148.6	117.3	99.1	92.5	94.1	97.4	104.0	125.5
67.5°	186.6	161.8	132.1	104.0	80.9	72.7	66.1	64.4	66.1	77.6	89.2
70°	125.5	110.6	89.2	79.3	56.2	44.6	46.2	41.3	47.9	47.9	57.8
72.5°	82.6	72.7	59.4	46.2	39.6	31.4	31.4	29.7	33.0	34.7	43.0
75°	43.0	33.0	33.0	23.1	16.5	8.2	14.9	13.2	11.6	13.2	16.5
77.5°	29.7	24.8	23.1	18.2	16.5	13.2	13.2	13.2	13.2	14.9	16.5
80°	18.2	18.2	13.2	11.6	9.9	8.2	9.9	9.9	9.9	9.9	11.6
82.5°	11.6	9.9	9.9	8.2	8.2	6.6	6.6	6.6	6.6	6.6	9.9
85°	9.9	6.6	6.6	5.0	6.6	11.6	5.0	6.6	6.6	6.6	5.0
87.5°	3.3	5.0	5.0	5.0	3.3	1.7	3.3	5.0	5.0	8.2	6.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6
2.5°	3081.5	3083.2	3083.2	3081.5	3081.5	3078.2	3084.8	3079.9	3081.5	3088.1	3083.2
5°	3084.8	3086.5	3086.5	3084.8	3084.8	3084.8	3086.5	3086.5	3084.8	3083.2	3086.5
7.5°	3091.4	3089.8	3089.8	3086.5	3086.5	3083.2	3086.5	3081.5	3084.8	3081.5	3086.5
10°	3083.2	3084.8	3083.2	3081.5	3081.5	3079.9	3079.9	3074.9	3076.6	3071.6	3074.9
12.5°	3078.2	3076.6	3076.6	3073.2	3070.0	3066.7	3065.0	3060.0	3060.0	3048.5	3053.4
15°	3065.0	3066.7	3061.7	3055.1	3051.8	3043.5	3040.2	3033.6	3027.0	3018.8	3020.4
17.5°	3053.4	3048.5	3041.9	3035.3	3022.0	3015.5	3008.8	2998.9	2995.6	2985.7	2982.4
20°	3018.8	3015.5	3007.2	2995.6	2987.4	2972.5	2965.9	2956.0	2947.7	2937.8	2932.9
22.5°	2974.2	2970.8	2960.9	2949.4	2936.2	2929.6	2923.0	2904.8	2896.5	2886.6	2885.0
25°	2918.0	2913.1	2903.2	2890.0	2883.3	2865.2	2858.6	2845.3	2842.1	2832.1	2830.5
27.5°	2832.1	2825.5	2814.0	2797.5	2785.9	2774.3	2767.8	2757.8	2754.5	2744.6	2743.0
30°	2703.4	2695.1	2672.0	2665.4	2645.5	2634.0	2634.0	2620.8	2622.4	2615.8	2615.8
32.5°	2500.2	2487.0	2468.8	2455.6	2442.4	2435.8	2435.8	2430.8	2434.2	2434.2	2437.5
35°	2231.0	2212.9	2203.0	2194.7	2194.7	2201.3	2221.1	2226.1	2236.0	2244.2	2250.9
37.5°	1885.9	1884.3	1895.8	1905.7	1930.5	1958.6	1993.2	2023.0	2051.0	2070.9	2090.7
40°	1512.7	1554.0	1587.0	1633.3	1671.2	1725.7	1788.5	1839.7	1887.5	1922.2	1958.6
42.5°	1180.7	1233.6	1303.0	1370.6	1438.4	1512.7	1595.3	1666.3	1729.0	1776.9	1814.9
45°	919.8	992.5	1076.7	1162.6	1250.1	1342.6	1428.5	1501.1	1567.2	1616.7	1654.7
47.5°	741.5	820.7	916.5	1010.7	1109.7	1207.2	1303.0	1365.7	1420.2	1459.8	1494.5
50°	612.7	696.9	797.6	905.0	1004.0	1101.5	1184.0	1245.1	1289.8	1324.4	1345.9
52.5°	511.9	601.1	708.5	815.8	914.9	1004.0	1078.4	1124.6	1160.9	1185.7	1205.5
55°	422.7	508.6	609.4	710.1	807.5	891.7	952.8	987.5	1015.6	1030.5	1042.0
57.5°	345.2	424.4	516.9	609.4	693.6	763.0	810.8	845.5	858.7	870.3	868.6
60°	270.8	345.2	429.4	508.6	581.3	637.4	672.1	691.9	701.8	706.8	703.5
62.5°	213.0	280.7	345.2	414.5	467.3	515.2	548.3	548.3	553.2	554.9	559.8
65°	158.5	209.7	265.9	317.1	360.0	391.4	409.6	414.5	421.1	419.5	416.2
67.5°	117.3	155.2	196.5	234.5	264.2	284.0	297.2	308.8	307.2	303.9	302.2
70°	80.9	105.7	142.0	165.1	186.6	206.4	209.7	211.4	213.0	214.7	211.4
72.5°	56.2	74.3	94.1	113.9	127.2	135.4	143.7	145.3	145.3	145.3	143.7
75°	28.1	38.0	56.2	64.4	76.0	79.3	85.9	85.9	90.8	84.2	82.6
77.5°	24.8	29.7	39.6	46.2	51.2	56.2	57.8	62.8	61.1	57.8	59.4
80°	14.9	18.2	24.8	28.1	34.7	36.3	38.0	39.6	38.0	39.6	39.6
82.5°	11.6	13.2	16.5	16.5	21.5	21.5	23.1	23.1	24.8	24.8	24.8
85°	6.6	11.6	9.9	19.8	13.2	13.2	16.5	19.8	16.5	16.5	19.8
87.5°	6.6	6.6	5.0	6.6	6.6	6.6	8.2	9.9	9.9	11.6	9.9
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: P249163

CATALOG NUMBER: LSR8B60D010 EC8B60950 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3076.6	3076.6	3076.6	3076.6
2.5°	3081.5	3084.8	3079.9	3078.2
5°	3086.5	3086.5	3083.2	3083.2
7.5°	3086.5	3086.5	3081.5	3078.2
10°	3073.2	3073.2	3068.3	3065.0
12.5°	3048.5	3048.5	3046.8	3041.9
15°	3017.1	3017.1	3010.5	3005.6
17.5°	2974.2	2977.5	2969.2	2969.2
20°	2927.9	2926.3	2919.7	2916.4
22.5°	2880.1	2876.7	2875.1	2865.2
25°	2828.9	2825.5	2820.6	2815.6
27.5°	2741.3	2739.7	2734.7	2728.1
30°	2607.5	2605.9	2599.3	2599.3
32.5°	2434.2	2432.5	2425.9	2427.6
35°	2254.1	2260.8	2257.5	2250.9
37.5°	2103.9	2108.8	2112.2	2108.8
40°	1978.4	1993.2	1994.9	1998.2
42.5°	1844.6	1864.4	1871.0	1874.3
45°	1684.4	1702.6	1717.5	1714.1
47.5°	1520.9	1534.1	1547.3	1537.4
50°	1364.1	1372.3	1377.3	1377.3
52.5°	1215.4	1215.4	1213.8	1215.4
55°	1045.3	1045.3	1038.7	1042.0
57.5°	867.0	870.3	865.3	857.1
60°	701.8	693.6	690.3	685.3
62.5°	546.6	546.6	535.1	549.9
65°	409.6	404.6	399.6	398.0
67.5°	297.2	295.6	290.6	289.0
70°	209.7	203.1	201.5	198.2
72.5°	140.4	140.4	137.1	137.1
75°	85.9	77.6	76.0	77.6
77.5°	59.4	57.8	57.8	56.2
80°	39.6	38.0	41.3	36.3
82.5°	24.8	26.4	24.8	26.4
85°	16.5	19.8	18.2	18.2
87.5°	9.9	9.9	9.9	9.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)