

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: P244175

Luminaire Tested: **LSR8B50D010 EC8B50835 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244175  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B50D010 EC8B50835 8LBDW0LI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5784.0 lumens  
Efficiency: N/A  
Efficacy: 109.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

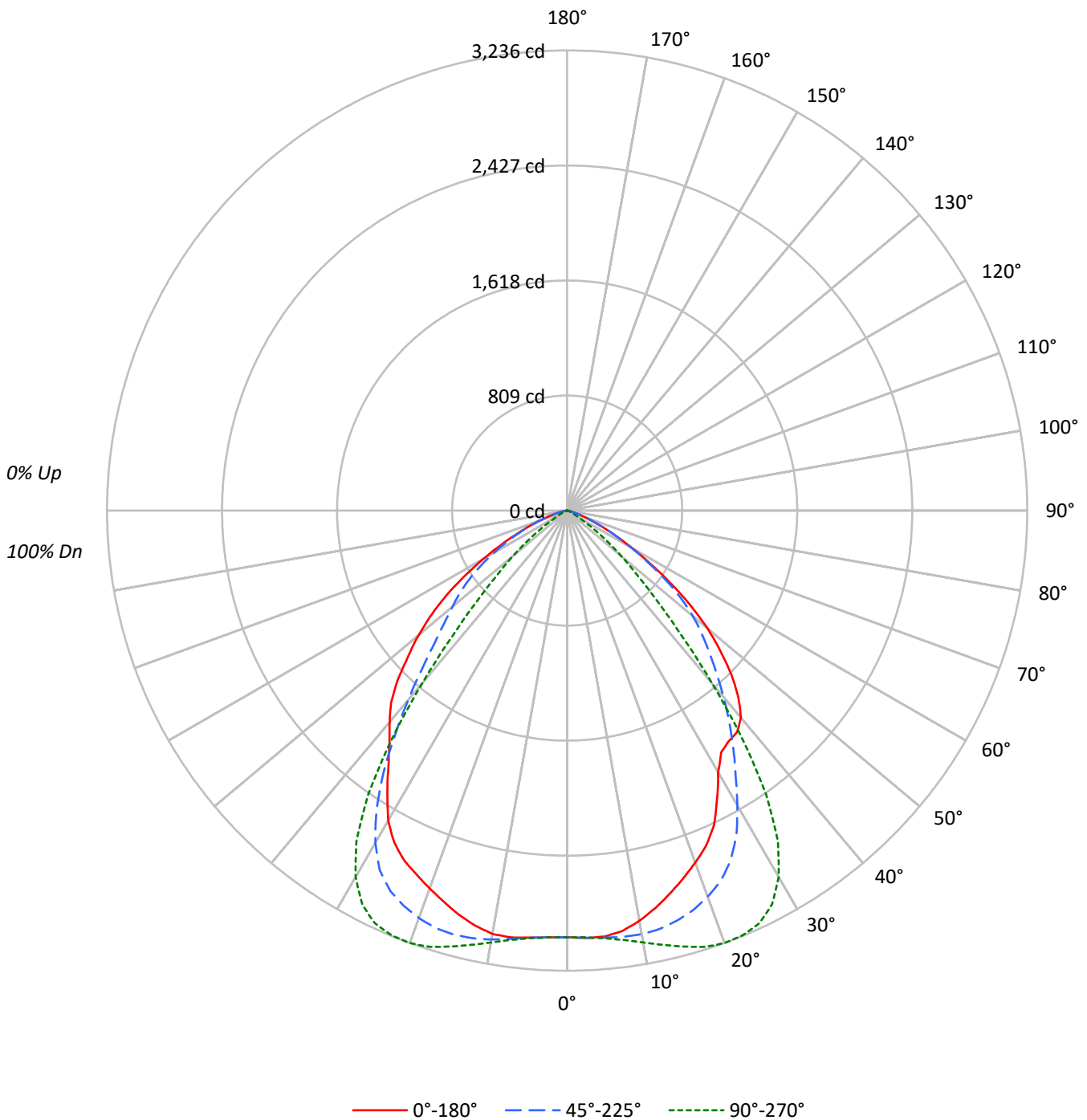
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	92524	92524	92524
5°	93076	93423	93324
10°	91710	96547	94653
15°	89027	101330	93908
20°	86445	106200	92769
25°	83124	108918	92338
30°	75650	105934	89601
35°	74524	91792	82437
40°	76547	63662	78149
45°	71262	38476	73481
50°	61808	23761	65478
55°	47434	12414	55568
60°	32316	5008	41944
65°	20102	2554	28938
70°	10909	1578	17662
75°	5695	763	10437
80°	2539	852	5647
85°	1698	566	5059



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	288.6	5.0
10°-20°	854.8	14.8
20°-30°	1304.1	22.5
30°-40°	1360.9	23.5
40°-50°	1022.2	17.7
50°-60°	628.9	10.9
60°-70°	256.0	4.4
70°-80°	60.3	1.0
80°-90°	8.3	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°	2447.5	42.3
0°-40°	3808.3	65.8
0°-60°	5459.4	94.4
0°-90°	5784.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5784.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3000	3000	3000	3000	3000	
5°	3007	3015	3018	3015	3015	284
15°	2789	2985	3174	3086	2942	786
25°	2443	2717	3201	2948	2714	1111
35°	1980	2035	2438	2254	2190	1250
45°	1634	1414	882	1317	1685	1247
55°	882	838	231	838	1034	793
65°	276	279	35	374	397	287
75°	48	48	6	84	88	58
85°	5	5	2	11	14	7
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°	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5
2.5°	3008.5	3003.7	3008.5	3008.5	3010.1	3006.9	3008.5	3010.1	3006.9	3006.9	3006.9
5°	3006.9	3003.7	3006.9	3005.3	3008.5	3008.5	3011.7	3011.7	3014.9	3014.9	3019.7
7.5°	2981.4	2975.1	2981.4	2986.2	2989.4	2995.8	3003.7	3010.1	3016.5	3022.9	3030.8
10°	2928.9	2928.9	2933.7	2943.2	2952.8	2963.9	2978.2	2994.2	3010.1	3024.4	3038.8
12.5°	2863.6	2858.8	2868.4	2881.1	2895.4	2913.0	2935.3	2959.1	2984.6	3013.3	3035.6
15°	2788.7	2783.9	2795.1	2807.8	2825.4	2850.9	2877.9	2909.8	2946.4	2984.6	3021.3
17.5°	2712.3	2710.7	2721.8	2739.4	2753.7	2780.7	2815.8	2854.0	2895.4	2946.4	2994.2
20°	2634.3	2632.7	2643.8	2658.1	2677.2	2702.7	2737.8	2782.3	2831.7	2889.1	2944.8
22.5°	2553.0	2554.6	2564.2	2580.1	2596.0	2623.1	2659.7	2704.3	2758.5	2820.6	2882.7
25°	2443.1	2435.2	2447.9	2463.8	2490.9	2513.2	2548.3	2596.0	2651.8	2717.1	2790.3
27.5°	2283.8	2282.2	2293.4	2307.7	2331.6	2358.7	2396.9	2446.3	2505.2	2576.9	2648.6
30°	2124.6	2127.8	2132.6	2146.9	2162.8	2189.9	2228.1	2269.5	2325.3	2393.7	2470.2
32.5°	2016.3	2016.3	2022.7	2032.2	2043.4	2057.7	2084.8	2115.0	2158.1	2205.8	2261.6
35°	1979.7	1973.3	1979.7	1981.2	1982.8	1986.0	1990.8	2000.4	2014.7	2035.4	2056.1
37.5°	1963.8	1959.0	1959.0	1952.6	1944.6	1935.1	1922.3	1908.0	1892.1	1871.4	1855.5
40°	1901.6	1898.4	1895.2	1888.9	1871.4	1852.3	1831.5	1798.1	1761.5	1710.5	1659.6
42.5°	1782.2	1779.0	1777.4	1764.7	1748.7	1726.4	1702.5	1667.5	1621.3	1556.0	1482.8
45°	1634.1	1627.7	1622.9	1611.8	1600.6	1581.5	1559.2	1527.3	1481.2	1414.3	1326.7
47.5°	1462.1	1458.9	1457.3	1452.5	1441.4	1430.2	1415.9	1390.4	1349.0	1285.3	1194.5
50°	1288.4	1282.1	1285.3	1283.7	1278.9	1271.0	1261.4	1243.9	1212.0	1154.7	1071.9
52.5°	1089.4	1089.4	1087.8	1092.5	1094.1	1092.5	1094.1	1075.1	1048.0	1004.9	934.9
55°	882.3	882.3	887.1	893.5	899.8	901.4	899.8	891.9	872.8	837.7	775.6
57.5°	688.0	684.8	694.4	703.9	710.3	716.7	711.9	705.5	694.4	665.7	617.9
60°	524.0	524.0	530.3	536.7	543.1	549.5	547.9	546.3	536.7	517.6	479.4
62.5°	385.4	387.0	387.0	391.8	398.2	404.5	409.3	404.5	399.7	387.0	361.5
65°	275.5	273.9	275.5	280.3	285.1	291.5	294.6	293.1	288.3	278.7	259.6
67.5°	184.8	183.2	189.5	191.1	194.3	200.7	199.1	200.7	199.1	191.1	175.2
70°	121.0	117.8	121.0	119.4	124.2	125.8	129.0	130.6	129.0	124.2	119.4
72.5°	74.9	73.3	74.9	76.5	78.1	79.6	82.8	82.8	81.2	78.1	71.7
75°	47.8	43.0	44.6	41.4	44.6	44.6	47.8	49.4	47.8	47.8	44.6
77.5°	28.7	28.7	28.7	28.7	28.7	28.7	28.7	30.3	31.8	28.7	27.1
80°	14.3	14.3	15.9	15.9	15.9	17.5	15.9	15.9	15.9	17.5	12.7
82.5°	11.1	9.5	9.5	9.5	11.1	9.5	9.5	9.5	9.5	9.5	9.5
85°	4.8	6.4	4.8	3.2	4.8	4.8	6.4	4.8	4.8	4.8	6.4
87.5°	1.6	1.6	0.0	0.0	0.0	1.6	0.0	1.6	1.6	3.2	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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5
2.5°	3008.5	3005.3	3005.3	3003.7	3006.9	3003.7	3005.3	3003.7	3003.7	3006.9	3003.7
5°	3019.7	3021.3	3018.1	3016.5	3021.3	3021.3	3021.3	3018.1	3018.1	3019.7	3018.1
7.5°	3035.6	3038.8	3040.4	3042.0	3045.2	3046.8	3046.8	3045.2	3043.6	3048.3	3042.0
10°	3053.1	3057.9	3067.4	3072.2	3080.2	3080.2	3083.4	3083.4	3080.2	3083.4	3081.8
12.5°	3046.8	3075.4	3091.3	3102.5	3113.6	3123.2	3126.4	3128.0	3126.4	3132.8	3126.4
15°	3057.9	3081.8	3107.3	3126.4	3147.1	3158.2	3161.4	3174.1	3177.3	3178.9	3169.4
17.5°	3040.4	3083.4	3110.4	3139.1	3169.4	3190.1	3209.2	3217.2	3218.8	3221.9	3209.2
20°	3000.5	3048.3	3089.7	3131.2	3166.2	3198.0	3214.0	3236.3	3229.9	3242.7	3225.1
22.5°	2946.4	3000.5	3053.1	3107.3	3143.9	3182.1	3215.6	3231.5	3239.5	3239.5	3220.3
25°	2860.4	2924.1	2981.4	3037.2	3092.9	3139.1	3177.3	3201.2	3206.0	3204.4	3182.1
27.5°	2726.6	2795.1	2862.0	2925.7	2994.2	3048.3	3092.9	3121.6	3129.6	3129.6	3105.7
30°	2541.9	2615.1	2680.4	2756.9	2827.0	2887.5	2949.6	2975.1	2989.4	2989.4	2962.3
32.5°	2322.1	2384.2	2444.7	2519.6	2596.0	2664.5	2723.4	2758.5	2776.0	2774.4	2750.5
35°	2083.2	2113.4	2159.6	2215.4	2283.8	2347.6	2404.9	2438.4	2468.6	2467.0	2444.7
37.5°	1844.3	1836.3	1841.1	1861.8	1904.8	1949.4	1994.0	2025.9	2051.3	2062.5	2057.7
40°	1610.2	1568.8	1528.9	1514.6	1517.8	1533.7	1557.6	1581.5	1610.2	1624.5	1630.9
42.5°	1399.9	1329.9	1259.8	1207.2	1177.0	1167.4	1178.6	1186.5	1204.0	1224.7	1245.5
45°	1231.1	1137.2	1044.8	963.6	912.6	882.3	876.0	882.3	891.9	912.6	939.7
47.5°	1092.5	982.7	879.2	788.4	713.5	673.7	662.6	659.4	668.9	688.0	724.6
50°	969.9	860.0	745.4	640.2	562.2	517.6	501.7	495.3	506.4	520.8	554.2
52.5°	836.1	727.8	610.0	508.0	426.8	380.7	363.1	353.6	359.9	379.1	412.5
55°	691.2	590.9	484.2	379.1	301.0	258.0	237.3	230.9	237.3	258.0	291.5
57.5°	546.3	461.9	372.7	273.9	203.8	160.9	140.1	133.8	151.3	159.3	194.3
60°	426.8	358.4	281.9	200.7	140.1	106.7	86.0	81.2	89.2	103.5	132.2
62.5°	320.1	277.1	216.6	143.3	103.5	68.5	57.3	52.6	57.3	68.5	90.8
65°	232.5	199.1	151.3	105.1	70.1	51.0	38.2	35.0	39.8	47.8	66.9
67.5°	159.3	133.8	105.1	73.3	47.8	31.8	27.1	27.1	28.7	35.0	49.4
70°	103.5	87.6	66.9	47.8	31.8	23.9	20.7	17.5	20.7	25.5	33.4
72.5°	65.3	55.7	43.0	33.4	23.9	17.5	14.3	12.7	15.9	19.1	25.5
75°	39.8	30.3	22.3	17.5	12.7	12.7	12.7	6.4	8.0	12.7	15.9
77.5°	23.9	20.7	17.5	14.3	11.1	6.4	6.4	6.4	8.0	9.5	14.3
80°	12.7	11.1	8.0	8.0	6.4	4.8	6.4	4.8	3.2	8.0	9.5
82.5°	8.0	6.4	6.4	6.4	8.0	3.2	4.8	3.2	4.8	6.4	4.8
85°	4.8	4.8	4.8	3.2	8.0	3.2	3.2	1.6	1.6	3.2	3.2
87.5°	0.0	1.6	1.6	0.0	1.6	0.0	1.6	1.6	1.6	1.6	1.6
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°	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5	3000.5
2.5°	3005.3	3003.7	3005.3	3003.7	3003.7	3003.7	3005.3	3005.3	3003.7	3003.7	3006.9
5°	3018.1	3018.1	3018.1	3016.5	3014.9	3014.9	3018.1	3018.1	3013.3	3018.1	3018.1
7.5°	3045.2	3040.4	3045.2	3038.8	3035.6	3037.2	3038.8	3035.6	3032.4	3034.0	3034.0
10°	3080.2	3075.4	3075.4	3070.6	3065.8	3062.7	3059.5	3051.5	3043.6	3042.0	3035.6
12.5°	3121.6	3113.6	3108.9	3099.3	3091.3	3080.2	3070.6	3057.9	3042.0	3030.8	3019.7
15°	3163.0	3150.3	3139.1	3123.2	3105.7	3086.5	3065.8	3045.2	3019.7	2997.4	2978.2
17.5°	3196.4	3178.9	3158.2	3132.8	3107.3	3078.6	3048.3	3018.1	2981.4	2952.8	2930.5
20°	3207.6	3182.1	3155.0	3121.6	3088.1	3048.3	3010.1	2970.3	2928.9	2898.6	2873.1
22.5°	3193.3	3163.0	3129.6	3094.5	3049.9	3006.9	2962.3	2916.1	2879.5	2838.1	2814.2
25°	3153.5	3116.8	3080.2	3038.8	2995.8	2948.0	2900.2	2852.4	2807.8	2785.5	2755.3
27.5°	3072.2	3032.4	2992.6	2949.6	2900.2	2852.4	2803.1	2756.9	2718.7	2688.4	2670.9
30°	2928.9	2882.7	2836.5	2790.3	2747.3	2697.9	2651.8	2613.5	2575.3	2551.4	2533.9
32.5°	2709.1	2667.7	2621.5	2576.9	2537.1	2495.7	2457.5	2424.0	2396.9	2381.0	2368.3
35°	2412.9	2371.5	2336.4	2304.6	2271.1	2253.6	2229.7	2210.6	2199.4	2193.1	2191.5
37.5°	2040.2	2016.3	2005.1	1998.8	1992.4	1987.6	1990.8	1998.8	2005.1	2016.3	2029.0
40°	1642.0	1662.7	1669.1	1691.4	1712.1	1739.2	1769.4	1804.5	1833.1	1869.8	1895.2
42.5°	1278.9	1317.1	1361.7	1409.5	1460.5	1509.8	1570.4	1626.1	1677.1	1723.2	1763.1
45°	982.7	1041.6	1108.5	1177.0	1245.5	1317.1	1390.4	1458.9	1519.4	1568.8	1610.2
47.5°	766.1	831.4	917.4	1001.8	1084.6	1169.0	1250.2	1321.9	1372.9	1420.6	1457.3
50°	606.8	681.7	775.6	872.8	963.6	1052.7	1138.7	1205.6	1256.6	1294.8	1321.9
52.5°	469.8	559.0	654.6	756.5	853.7	950.8	1030.4	1092.5	1134.0	1167.4	1188.1
55°	350.4	438.0	539.9	645.0	743.8	837.7	912.6	966.8	1003.4	1022.5	1033.6
57.5°	253.2	332.9	434.8	539.9	629.1	718.3	778.8	828.2	848.9	860.0	864.8
60°	184.8	258.0	348.8	439.6	524.0	595.6	648.2	681.7	697.6	703.9	702.3
62.5°	135.4	199.1	277.1	353.6	422.0	481.0	522.4	544.7	552.7	555.8	551.1
65°	103.5	152.9	219.8	278.7	331.3	374.3	404.5	418.9	423.6	422.0	418.9
67.5°	76.5	114.7	164.1	208.6	246.9	280.3	296.2	309.0	312.1	307.4	302.6
70°	54.2	84.4	119.4	149.7	178.4	197.5	215.0	216.6	216.6	215.0	211.8
72.5°	38.2	58.9	81.2	101.9	119.4	133.8	140.1	144.9	143.3	141.7	138.6
75°	25.5	36.6	58.9	63.7	79.6	84.4	90.8	90.8	92.4	87.6	87.6
77.5°	15.9	25.5	35.0	41.4	47.8	54.2	57.3	57.3	58.9	57.3	57.3
80°	9.5	15.9	19.1	28.7	28.7	33.4	35.0	36.6	33.4	38.2	33.4
82.5°	6.4	9.5	14.3	14.3	17.5	20.7	20.7	22.3	22.3	20.7	20.7
85°	4.8	6.4	8.0	9.5	9.5	11.1	9.5	9.5	11.1	12.7	11.1
87.5°	1.6	3.2	1.6	3.2	3.2	6.4	4.8	4.8	4.8	6.4	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: P244175

CATALOG NUMBER: LSR8B50D010 EC8B50835 8LBDW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3000.5	3000.5	3000.5	3000.5
2.5°	3003.7	3005.3	3003.7	3003.7
5°	3018.1	3016.5	3018.1	3014.9
7.5°	3029.2	3029.2	3027.6	3027.6
10°	3029.2	3022.9	3022.9	3022.9
12.5°	3005.3	2997.4	2992.6	2989.4
15°	2963.9	2949.6	2943.2	2941.6
17.5°	2909.8	2897.0	2889.1	2884.3
20°	2847.7	2834.9	2825.4	2827.0
22.5°	2793.5	2779.2	2772.8	2769.6
25°	2739.4	2721.8	2717.1	2713.9
27.5°	2651.8	2642.2	2637.4	2632.7
30°	2518.0	2513.2	2505.2	2516.4
32.5°	2363.5	2355.5	2349.2	2354.0
35°	2193.1	2188.3	2193.1	2189.9
37.5°	2037.0	2041.8	2048.2	2051.3
40°	1914.4	1931.9	1938.3	1941.4
42.5°	1791.7	1812.4	1825.2	1833.1
45°	1640.4	1661.1	1675.5	1685.0
47.5°	1484.3	1501.9	1516.2	1514.6
50°	1342.6	1352.2	1358.5	1364.9
52.5°	1199.2	1199.2	1200.8	1200.8
55°	1036.8	1033.6	1032.0	1033.6
57.5°	858.4	855.3	853.7	848.9
60°	696.0	686.4	680.1	680.1
62.5°	544.7	533.5	528.8	527.2
65°	409.3	407.7	398.2	396.6
67.5°	296.2	289.9	283.5	285.1
70°	208.6	199.1	199.1	195.9
72.5°	135.4	130.6	129.0	129.0
75°	84.4	84.4	81.2	87.6
77.5°	55.7	55.7	54.2	55.7
80°	33.4	33.4	33.4	31.8
82.5°	20.7	22.3	20.7	20.7
85°	11.1	12.7	9.5	14.3
87.5°	6.4	8.0	6.4	8.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)