

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: P248534

Luminaire Tested: **LSR8B70D010 EC8B709730 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248534  
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: LSR8B70D010 EC8B709730 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5666.0 lumens  
Efficiency: N/A  
Efficacy: 74.7 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

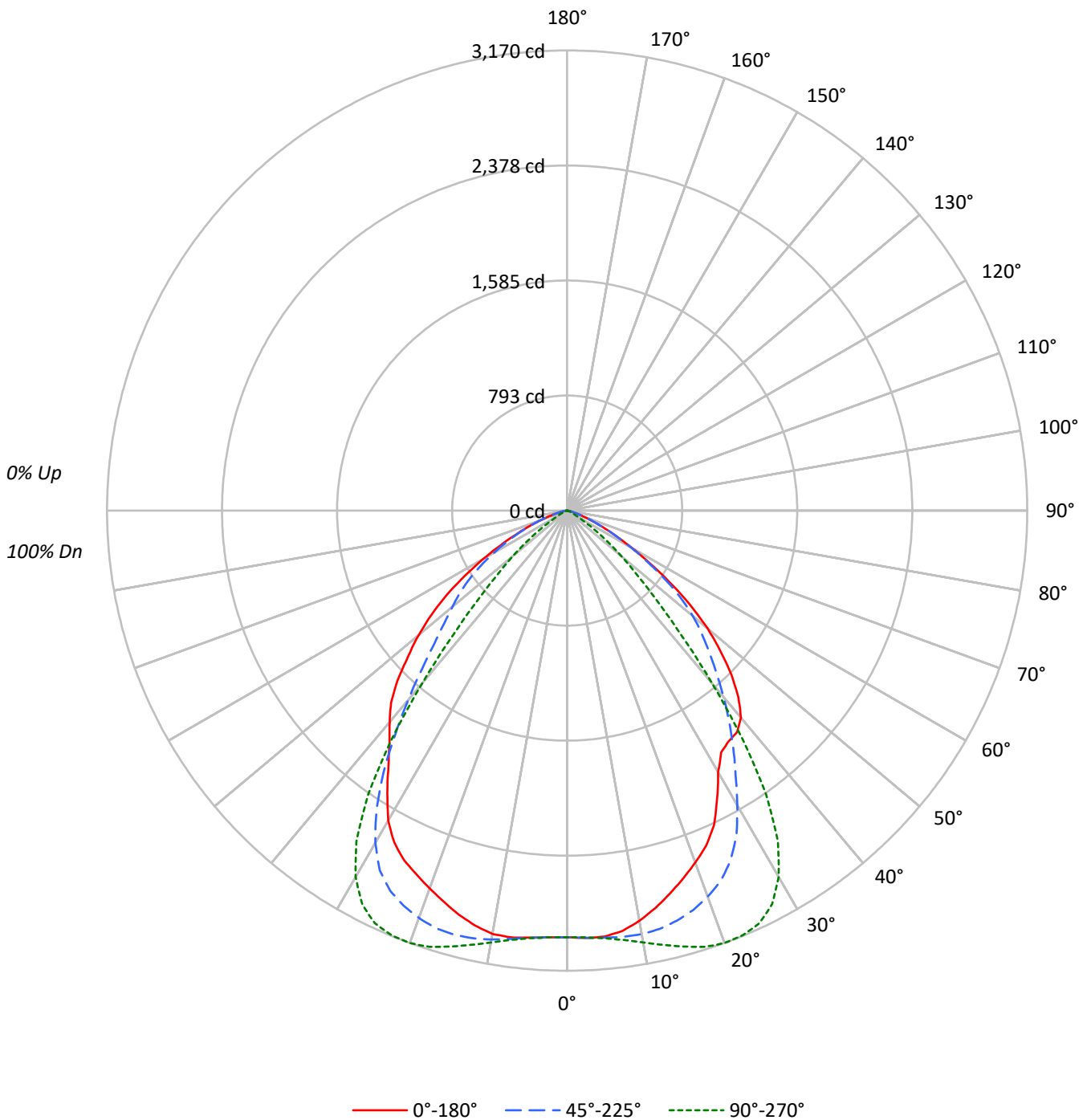
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90	90	90	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79	79	79	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70	70	70	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62	62	62	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56	56	56	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50	50	50	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45	45	45	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41	41	41	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38	38	38	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34	34	34	34

**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°	282.7	5.0
10°-20°	837.4	14.8
20°-30°	1277.5	22.5
30°-40°	1333.1	23.5
40°-50°	1001.3	17.7
50°-60°	616.1	10.9
60°-70°	250.7	4.4
70°-80°	59.1	1.0
80°-90°	8.1	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°	2397.5	42.3
0°-40°	3730.6	65.8
0°-60°	5348.1	94.4
0°-90°	5666.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5666.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2939	2939	2939	2939	2939	
5°	2946	2953	2956	2953	2953	279
15°	2732	2924	3109	3024	2882	770
25°	2393	2662	3136	2888	2658	1088
35°	1939	1994	2389	2208	2145	1224
45°	1601	1385	864	1290	1651	1221
55°	864	821	226	821	1012	777
65°	270	273	34	367	388	281
75°	47	47	6	83	86	56
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°	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3
2.5°	2947.1	2942.5	2947.1	2947.1	2948.7	2945.6	2947.1	2948.7	2945.6	2945.6	2945.6
5°	2945.6	2942.5	2945.6	2944.0	2947.1	2947.1	2950.3	2950.3	2953.4	2953.4	2958.1
7.5°	2920.6	2914.4	2920.6	2925.3	2928.4	2934.7	2942.5	2948.7	2954.9	2961.2	2969.0
10°	2869.1	2869.1	2873.8	2883.2	2892.5	2903.4	2917.5	2933.1	2948.7	2962.7	2976.8
12.5°	2805.2	2800.5	2809.8	2822.3	2836.4	2853.5	2875.4	2898.8	2923.7	2951.8	2973.7
15°	2731.8	2727.1	2738.1	2750.5	2767.7	2792.7	2819.2	2850.4	2886.3	2923.7	2959.6
17.5°	2656.9	2655.4	2666.3	2683.5	2697.5	2724.0	2758.4	2795.8	2836.4	2886.3	2933.1
20°	2580.5	2579.0	2589.9	2603.9	2622.6	2647.6	2681.9	2725.6	2773.9	2830.1	2884.7
22.5°	2500.9	2502.5	2511.8	2527.5	2543.1	2569.6	2605.4	2649.2	2702.2	2763.0	2823.9
25°	2393.3	2385.5	2398.0	2413.6	2440.1	2461.9	2496.3	2543.1	2597.7	2661.6	2733.4
27.5°	2237.3	2235.7	2246.6	2260.7	2284.1	2310.6	2348.0	2396.4	2454.1	2524.3	2594.5
30°	2081.2	2084.4	2089.1	2103.1	2118.7	2145.2	2182.7	2223.2	2277.8	2344.9	2419.8
32.5°	1975.1	1975.1	1981.4	1990.8	2001.7	2015.7	2042.3	2071.9	2114.0	2160.8	2215.4
35°	1939.3	1933.0	1939.3	1940.8	1942.4	1945.5	1950.2	1959.6	1973.6	1993.9	2014.2
37.5°	1923.7	1919.0	1919.0	1912.8	1904.9	1895.6	1883.1	1869.1	1853.5	1833.2	1817.6
40°	1862.8	1859.7	1856.6	1850.4	1833.2	1814.5	1794.2	1761.4	1725.5	1675.6	1625.7
42.5°	1745.8	1742.7	1741.1	1728.7	1713.0	1691.2	1667.8	1633.5	1588.2	1524.3	1452.5
45°	1600.7	1594.5	1589.8	1578.9	1567.9	1549.2	1527.4	1496.2	1450.9	1385.4	1299.6
47.5°	1432.2	1429.1	1427.5	1422.9	1412.0	1401.0	1387.0	1362.0	1321.4	1259.0	1170.1
50°	1262.2	1255.9	1259.0	1257.5	1252.8	1245.0	1235.6	1218.5	1187.3	1131.1	1050.0
52.5°	1067.1	1067.1	1065.6	1070.3	1071.8	1070.3	1071.8	1053.1	1026.6	984.4	915.8
55°	864.3	864.3	869.0	875.3	881.5	883.1	881.5	873.7	855.0	820.6	759.8
57.5°	674.0	670.9	680.2	689.6	695.8	702.1	697.4	691.1	680.2	652.1	605.3
60°	513.3	513.3	519.5	525.8	532.0	538.3	536.7	535.1	525.8	507.0	469.6
62.5°	377.5	379.1	379.1	383.8	390.0	396.3	400.9	396.3	391.6	379.1	354.1
65°	269.9	268.3	269.9	274.6	279.3	285.5	288.6	287.1	282.4	273.0	254.3
67.5°	181.0	179.4	185.6	187.2	190.3	196.6	195.0	196.6	195.0	187.2	171.6
70°	118.6	115.4	118.6	117.0	121.7	123.3	126.4	127.9	126.4	121.7	117.0
72.5°	73.3	71.8	73.3	74.9	76.5	78.0	81.1	81.1	79.6	76.5	70.2
75°	46.8	42.1	43.7	40.6	43.7	43.7	46.8	48.4	46.8	46.8	43.7
77.5°	28.1	28.1	28.1	28.1	28.1	28.1	28.1	29.7	31.2	28.1	26.5
80°	14.0	14.0	15.6	15.6	15.6	17.2	15.6	15.6	15.6	17.2	12.5
82.5°	10.9	9.4	9.4	9.4	10.9	9.4	9.4	9.4	9.4	9.4	9.4
85°	4.7	6.2	4.7	3.1	4.7	4.7	6.2	4.7	4.7	4.7	6.2
87.5°	1.6	1.6	0.0	0.0	0.0	1.6	0.0	1.6	1.6	3.1	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°	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3
2.5°	2947.1	2944.0	2944.0	2942.5	2945.6	2942.5	2944.0	2942.5	2942.5	2945.6	2942.5
5°	2958.1	2959.6	2956.5	2954.9	2959.6	2959.6	2959.6	2956.5	2956.5	2958.1	2956.5
7.5°	2973.7	2976.8	2978.3	2979.9	2983.0	2984.6	2984.6	2983.0	2981.5	2986.2	2979.9
10°	2990.8	2995.5	3004.9	3009.6	3017.3	3017.3	3020.5	3020.5	3017.3	3020.5	3018.9
12.5°	2984.6	3012.7	3028.3	3039.2	3050.1	3059.5	3062.6	3064.2	3062.6	3068.8	3062.6
15°	2995.5	3018.9	3043.9	3062.6	3082.9	3093.8	3096.9	3109.4	3112.5	3114.1	3104.7
17.5°	2978.3	3020.5	3047.0	3075.1	3104.7	3125.0	3143.7	3151.5	3153.1	3156.2	3143.7
20°	2939.3	2986.2	3026.7	3067.3	3101.6	3132.8	3148.4	3170.2	3164.0	3176.5	3159.3
22.5°	2886.3	2939.3	2990.8	3043.9	3079.8	3117.2	3150.0	3165.5	3173.4	3173.4	3154.6
25°	2802.0	2864.5	2920.6	2975.2	3029.8	3075.1	3112.5	3135.9	3140.6	3139.0	3117.2
27.5°	2671.0	2738.1	2803.6	2866.0	2933.1	2986.2	3029.8	3057.9	3065.7	3065.7	3042.3
30°	2490.0	2561.8	2625.8	2700.6	2769.3	2828.6	2889.4	2914.4	2928.4	2928.4	2901.9
32.5°	2274.7	2335.6	2394.8	2468.2	2543.1	2610.1	2667.9	2702.2	2719.4	2717.8	2694.4
35°	2040.7	2070.3	2115.6	2170.2	2237.3	2299.7	2355.8	2388.6	2418.2	2416.7	2394.8
37.5°	1806.6	1798.9	1803.6	1823.8	1865.9	1909.6	1953.3	1984.5	2009.5	2020.4	2015.7
40°	1577.3	1536.8	1497.7	1483.7	1486.8	1502.4	1525.8	1549.2	1577.3	1591.4	1597.6
42.5°	1371.4	1302.7	1234.1	1182.6	1152.9	1143.6	1154.5	1162.3	1179.5	1199.7	1220.1
45°	1206.0	1114.0	1023.5	943.9	894.0	864.3	858.1	864.3	873.7	894.0	920.5
47.5°	1070.3	962.6	861.2	772.3	698.9	660.0	649.0	645.9	655.3	674.0	709.9
50°	950.1	842.5	730.2	627.2	550.7	507.0	491.5	485.2	496.1	510.2	542.9
52.5°	819.1	713.0	597.5	497.7	418.1	372.9	355.7	346.4	352.6	371.3	404.1
55°	677.1	578.8	474.3	371.3	294.9	252.8	232.4	226.2	232.4	252.8	285.5
57.5°	535.1	452.4	365.1	268.3	199.7	157.6	137.3	131.1	148.2	156.0	190.3
60°	418.1	351.1	276.2	196.6	137.3	104.5	84.3	79.6	87.4	101.4	129.5
62.5°	313.6	271.5	212.2	140.4	101.4	67.1	56.2	51.5	56.2	67.1	88.9
65°	227.8	195.0	148.2	103.0	68.6	49.9	37.4	34.3	39.0	46.8	65.5
67.5°	156.0	131.1	103.0	71.8	46.8	31.2	26.5	26.5	28.1	34.3	48.4
70°	101.4	85.8	65.5	46.8	31.2	23.4	20.3	17.2	20.3	25.0	32.8
72.5°	64.0	54.6	42.1	32.8	23.4	17.2	14.0	12.5	15.6	18.7	25.0
75°	39.0	29.7	21.8	17.2	12.5	12.5	12.5	6.2	7.8	12.5	15.6
77.5°	23.4	20.3	17.2	14.0	10.9	6.2	6.2	6.2	7.8	9.4	14.0
80°	12.5	10.9	7.8	7.8	6.2	4.7	6.2	4.7	3.1	7.8	9.4
82.5°	7.8	6.2	6.2	6.2	7.8	3.1	4.7	3.1	4.7	6.2	4.7
85°	4.7	4.7	4.7	3.1	7.8	3.1	3.1	1.6	1.6	3.1	3.1
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°	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3	2939.3
2.5°	2944.0	2942.5	2944.0	2942.5	2942.5	2942.5	2944.0	2944.0	2942.5	2942.5	2945.6
5°	2956.5	2956.5	2956.5	2954.9	2953.4	2953.4	2956.5	2956.5	2951.8	2956.5	2956.5
7.5°	2983.0	2978.3	2983.0	2976.8	2973.7	2975.2	2976.8	2973.7	2970.5	2972.1	2972.1
10°	3017.3	3012.7	3012.7	3008.0	3003.3	3000.2	2997.1	2989.3	2981.5	2979.9	2973.7
12.5°	3057.9	3050.1	3045.4	3036.1	3028.3	3017.3	3008.0	2995.5	2979.9	2969.0	2958.1
15°	3098.5	3086.0	3075.1	3059.5	3042.3	3023.6	3003.3	2983.0	2958.1	2936.2	2917.5
17.5°	3131.2	3114.1	3093.8	3068.8	3043.9	3015.8	2986.2	2956.5	2920.6	2892.5	2870.7
20°	3142.1	3117.2	3090.7	3057.9	3025.1	2986.2	2948.7	2909.7	2869.1	2839.5	2814.5
22.5°	3128.1	3098.5	3065.7	3031.4	2987.7	2945.6	2901.9	2856.6	2820.8	2780.2	2756.8
25°	3089.1	3053.2	3017.3	2976.8	2934.7	2887.9	2841.1	2794.3	2750.5	2728.7	2699.1
27.5°	3009.6	2970.5	2931.5	2889.4	2841.1	2794.3	2745.9	2700.6	2663.2	2633.5	2616.4
30°	2869.1	2823.9	2778.6	2733.4	2691.3	2642.9	2597.7	2560.2	2522.8	2499.4	2482.2
32.5°	2653.8	2613.3	2568.0	2524.3	2485.3	2444.8	2407.3	2374.6	2348.0	2332.4	2319.9
35°	2363.6	2323.1	2288.8	2257.6	2224.8	2207.6	2184.2	2165.5	2154.6	2148.3	2146.8
37.5°	1998.5	1975.1	1964.2	1958.0	1951.7	1947.1	1950.2	1958.0	1964.2	1975.1	1987.6
40°	1608.5	1628.8	1635.1	1656.9	1677.2	1703.7	1733.3	1767.7	1795.7	1831.6	1856.6
42.5°	1252.8	1290.3	1333.9	1380.7	1430.7	1479.0	1538.3	1592.9	1642.8	1688.1	1727.1
45°	962.6	1020.3	1085.9	1152.9	1220.1	1290.3	1362.0	1429.1	1488.4	1536.8	1577.3
47.5°	750.4	814.4	898.7	981.4	1062.5	1145.2	1224.7	1294.9	1344.8	1391.7	1427.5
50°	594.4	667.7	759.8	855.0	943.9	1031.2	1115.5	1181.0	1231.0	1268.4	1294.9
52.5°	460.2	547.6	641.2	741.1	836.2	931.4	1009.4	1070.3	1110.8	1143.6	1163.9
55°	343.2	429.0	528.9	631.9	728.6	820.6	894.0	947.0	982.9	1001.6	1012.5
57.5°	248.1	326.1	425.9	528.9	616.3	703.6	762.9	811.3	831.6	842.5	847.2
60°	181.0	252.8	341.7	430.6	513.3	583.5	635.0	667.7	683.4	689.6	688.0
62.5°	132.6	195.0	271.5	346.4	413.4	471.2	511.7	533.6	541.4	544.5	539.8
65°	101.4	149.8	215.3	273.0	324.5	366.6	396.3	410.3	415.0	413.4	410.3
67.5°	74.9	112.3	160.7	204.4	241.8	274.6	290.2	302.7	305.8	301.1	296.4
70°	53.1	82.7	117.0	146.7	174.7	193.5	210.6	212.2	212.2	210.6	207.5
72.5°	37.4	57.7	79.6	99.9	117.0	131.1	137.3	142.0	140.4	138.8	135.7
75°	25.0	35.9	57.7	62.4	78.0	82.7	88.9	88.9	90.5	85.8	85.8
77.5°	15.6	25.0	34.3	40.6	46.8	53.1	56.2	56.2	57.7	56.2	56.2
80°	9.4	15.6	18.7	28.1	28.1	32.8	34.3	35.9	32.8	37.4	32.8
82.5°	6.2	9.4	14.0	14.0	17.2	20.3	20.3	21.8	21.8	20.3	20.3
85°	4.7	6.2	7.8	9.4	9.4	10.9	9.4	9.4	10.9	12.5	10.9
87.5°	1.6	3.1	1.6	3.1	3.1	6.2	4.7	4.7	4.7	6.2	6.2
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: P248534

CATALOG NUMBER: LSR8B70D010 EC8B709730 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2939.3	2939.3	2939.3	2939.3
2.5°	2942.5	2944.0	2942.5	2942.5
5°	2956.5	2954.9	2956.5	2953.4
7.5°	2967.4	2967.4	2965.9	2965.9
10°	2967.4	2961.2	2961.2	2961.2
12.5°	2944.0	2936.2	2931.5	2928.4
15°	2903.4	2889.4	2883.2	2881.6
17.5°	2850.4	2837.9	2830.1	2825.4
20°	2789.6	2777.1	2767.7	2769.3
22.5°	2736.5	2722.5	2716.2	2713.1
25°	2683.5	2666.3	2661.6	2658.5
27.5°	2597.7	2588.3	2583.6	2579.0
30°	2466.6	2461.9	2454.1	2465.0
32.5°	2315.3	2307.5	2301.2	2305.9
35°	2148.3	2143.7	2148.3	2145.2
37.5°	1995.5	2000.1	2006.4	2009.5
40°	1875.3	1892.5	1898.7	1901.8
42.5°	1755.2	1775.5	1787.9	1795.7
45°	1607.0	1627.2	1641.3	1650.7
47.5°	1454.1	1471.2	1485.3	1483.7
50°	1315.2	1324.6	1330.8	1337.1
52.5°	1174.8	1174.8	1176.3	1176.3
55°	1015.7	1012.5	1011.0	1012.5
57.5°	840.9	837.8	836.2	831.6
60°	681.8	672.4	666.2	666.2
62.5°	533.6	522.6	518.0	516.4
65°	400.9	399.4	390.0	388.5
67.5°	290.2	283.9	277.7	279.3
70°	204.4	195.0	195.0	191.9
72.5°	132.6	127.9	126.4	126.4
75°	82.7	82.7	79.6	85.8
77.5°	54.6	54.6	53.1	54.6
80°	32.8	32.8	32.8	31.2
82.5°	20.3	21.8	20.3	20.3
85°	10.9	12.5	9.4	14.0
87.5°	6.2	7.8	6.2	7.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)