

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: P248417

Luminaire Tested: **LSR8B70D010 EC8B709727 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248417  
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 EC8B709727 8LBDW0LI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5508.0 lumens  
Efficiency: N/A  
Efficacy: 72.6 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

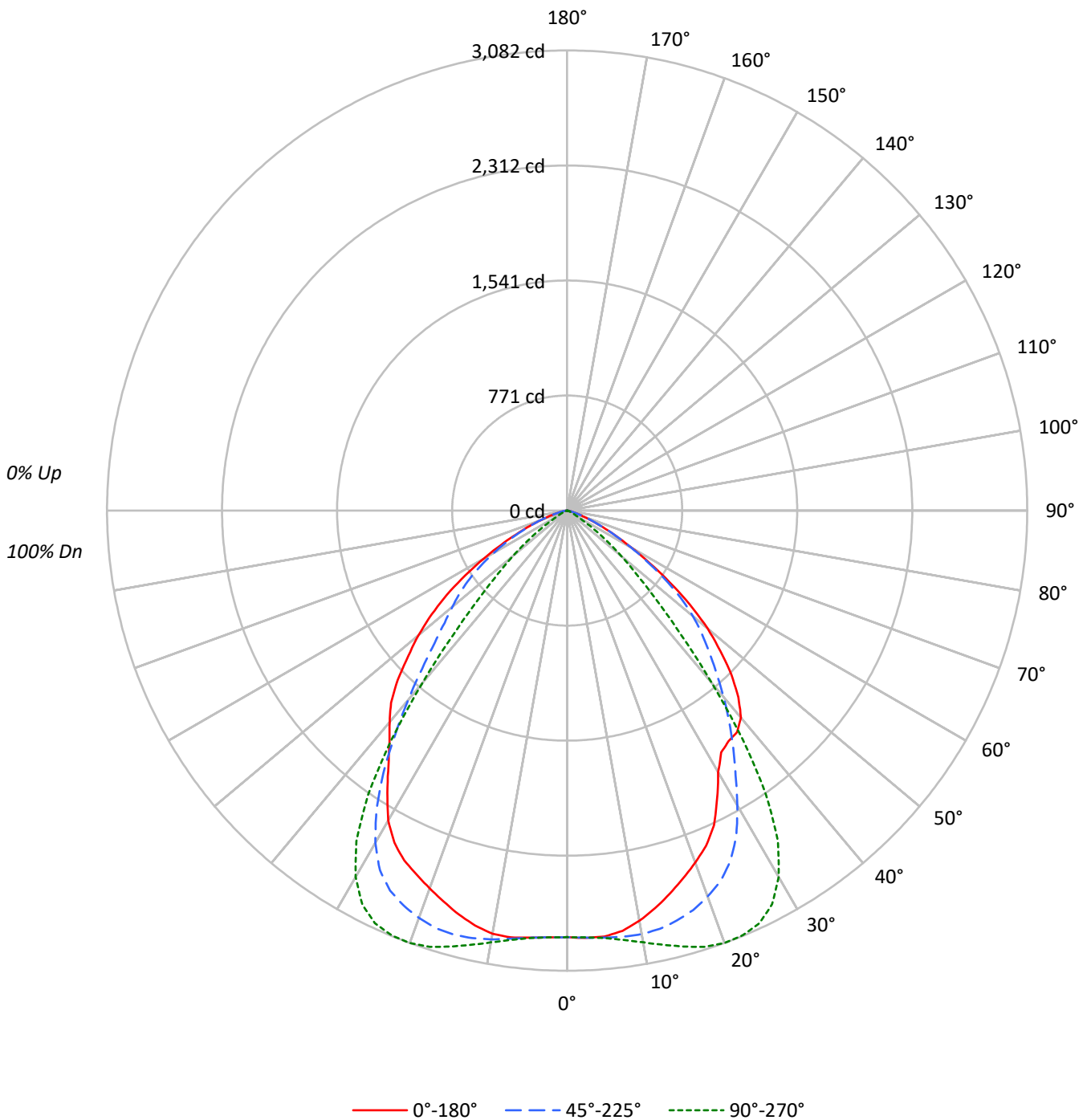
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	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
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	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°	274.8	5.0
10°-20°	814.0	14.8
20°-30°	1241.9	22.5
30°-40°	1295.9	23.5
40°-50°	973.4	17.7
50°-60°	598.9	10.9
60°-70°	243.7	4.4
70°-80°	57.4	1.0
80°-90°	7.9	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°	2330.7	42.3
0°-40°	3626.6	65.8
0°-60°	5198.9	94.4
0°-90°	5508.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5508.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2857	2857	2857	2857	2857	
5°	2863	2871	2874	2871	2871	271
15°	2656	2842	3023	2939	2801	748
25°	2326	2587	3048	2807	2584	1058
35°	1885	1938	2322	2146	2085	1190
45°	1556	1347	840	1254	1605	1187
55°	840	798	220	798	984	755
65°	262	265	33	356	378	274
75°	46	46	6	80	83	55
85°	5	5	2	11	14	6
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°	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4
2.5°	2865.0	2860.4	2865.0	2865.0	2866.5	2863.4	2865.0	2866.5	2863.4	2863.4	2863.4
5°	2863.4	2860.4	2863.4	2861.9	2865.0	2865.0	2868.0	2868.0	2871.0	2871.0	2875.6
7.5°	2839.2	2833.1	2839.2	2843.7	2846.7	2852.8	2860.4	2866.5	2872.5	2878.6	2886.2
10°	2789.1	2789.1	2793.7	2802.8	2811.9	2822.5	2836.1	2851.3	2866.5	2880.1	2893.8
12.5°	2727.0	2722.4	2731.5	2743.6	2757.3	2774.0	2795.2	2817.9	2842.2	2869.5	2890.8
15°	2655.7	2651.1	2661.7	2673.8	2690.5	2714.8	2740.6	2770.9	2805.8	2842.2	2877.1
17.5°	2582.9	2581.3	2591.9	2608.6	2622.3	2648.1	2681.5	2717.8	2757.3	2805.8	2851.3
20°	2508.6	2507.0	2517.7	2531.3	2549.5	2573.8	2607.1	2649.6	2696.6	2751.2	2804.3
22.5°	2431.2	2432.7	2441.8	2457.0	2472.2	2497.9	2532.8	2575.3	2626.8	2686.0	2745.1
25°	2326.5	2319.0	2331.1	2346.3	2372.0	2393.3	2426.7	2472.2	2525.2	2587.4	2657.2
27.5°	2174.9	2173.3	2184.0	2197.6	2220.4	2246.2	2282.6	2329.6	2385.7	2453.9	2522.2
30°	2023.2	2026.2	2030.8	2044.5	2059.6	2085.4	2121.8	2161.2	2214.3	2279.5	2352.3
32.5°	1920.1	1920.1	1926.2	1935.2	1945.9	1959.5	1985.3	2014.1	2055.1	2100.6	2153.6
35°	1885.2	1879.1	1885.2	1886.7	1888.2	1891.3	1895.8	1904.9	1918.5	1938.3	1958.0
37.5°	1870.0	1865.5	1865.5	1859.4	1851.8	1842.7	1830.6	1816.9	1801.8	1782.1	1766.9
40°	1810.9	1807.8	1804.8	1798.8	1782.1	1763.9	1744.1	1712.3	1677.4	1628.9	1580.4
42.5°	1697.1	1694.1	1692.6	1680.5	1665.3	1644.0	1621.3	1587.9	1544.0	1481.8	1412.0
45°	1556.1	1550.0	1545.5	1534.9	1524.2	1506.0	1484.8	1454.5	1410.5	1346.8	1263.4
47.5°	1392.3	1389.2	1387.7	1383.2	1372.6	1361.9	1348.3	1324.0	1284.6	1223.9	1137.5
50°	1227.0	1220.9	1223.9	1222.4	1217.9	1210.3	1201.2	1184.5	1154.2	1099.6	1020.7
52.5°	1037.4	1037.4	1035.9	1040.4	1041.9	1040.4	1041.9	1023.8	998.0	957.0	890.3
55°	840.2	840.2	844.8	850.9	856.9	858.4	856.9	849.3	831.1	797.8	738.6
57.5°	655.2	652.2	661.3	670.4	676.4	682.5	677.9	671.9	661.3	633.9	588.5
60°	499.0	499.0	505.0	511.1	517.2	523.3	521.7	520.2	511.1	492.9	456.5
62.5°	367.0	368.5	368.5	373.1	379.2	385.2	389.8	385.2	380.7	368.5	344.3
65°	262.4	260.8	262.4	266.9	271.5	277.5	280.6	279.1	274.5	265.4	247.2
67.5°	175.9	174.4	180.5	182.0	185.0	191.1	189.6	191.1	189.6	182.0	166.8
70°	115.3	112.2	115.3	113.7	118.3	119.8	122.8	124.4	122.8	118.3	113.7
72.5°	71.3	69.8	71.3	72.8	74.3	75.8	78.9	78.9	77.3	74.3	68.2
75°	45.5	40.9	42.5	39.4	42.5	42.5	45.5	47.0	45.5	45.5	42.5
77.5°	27.3	27.3	27.3	27.3	27.3	27.3	27.3	28.8	30.3	27.3	25.8
80°	13.7	13.7	15.2	15.2	15.2	16.7	15.2	15.2	15.2	16.7	12.1
82.5°	10.6	9.1	9.1	9.1	10.6	9.1	9.1	9.1	9.1	9.1	9.1
85°	4.6	6.0	4.6	3.0	4.6	4.6	6.0	4.6	4.6	4.6	6.0
87.5°	1.5	1.5	0.0	0.0	0.0	1.5	0.0	1.5	1.5	3.0	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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4
2.5°	2865.0	2861.9	2861.9	2860.4	2863.4	2860.4	2861.9	2860.4	2860.4	2863.4	2860.4
5°	2875.6	2877.1	2874.1	2872.5	2877.1	2877.1	2877.1	2874.1	2874.1	2875.6	2874.1
7.5°	2890.8	2893.8	2895.3	2896.8	2899.8	2901.4	2901.4	2899.8	2898.3	2902.9	2896.8
10°	2907.4	2912.0	2921.1	2925.6	2933.2	2933.2	2936.3	2936.3	2933.2	2936.3	2934.7
12.5°	2901.4	2928.6	2943.8	2954.4	2965.0	2974.1	2977.2	2978.7	2977.2	2983.3	2977.2
15°	2912.0	2934.7	2959.0	2977.2	2996.9	3007.5	3010.5	3022.7	3025.7	3027.2	3018.2
17.5°	2895.3	2936.3	2962.0	2989.3	3018.2	3037.9	3056.0	3063.6	3065.2	3068.2	3056.0
20°	2857.4	2902.9	2942.3	2981.7	3015.1	3045.4	3060.6	3081.8	3075.8	3087.9	3071.2
22.5°	2805.8	2857.4	2907.4	2959.0	2993.9	3030.3	3062.1	3077.3	3084.9	3084.9	3066.7
25°	2723.9	2784.6	2839.2	2892.2	2945.3	2989.3	3025.7	3048.5	3053.0	3051.5	3030.3
27.5°	2596.5	2661.7	2725.4	2786.1	2851.3	2902.9	2945.3	2972.6	2980.2	2980.2	2957.5
30°	2420.6	2490.3	2552.5	2625.3	2692.1	2749.7	2808.9	2833.1	2846.7	2846.7	2821.0
32.5°	2211.3	2270.4	2328.1	2399.3	2472.2	2537.4	2593.5	2626.8	2643.5	2642.0	2619.3
35°	1983.8	2012.6	2056.6	2109.7	2174.9	2235.5	2290.1	2322.0	2350.8	2349.3	2328.1
37.5°	1756.3	1748.7	1753.3	1773.0	1813.9	1856.4	1898.8	1929.2	1953.4	1964.1	1959.5
40°	1533.3	1493.9	1456.0	1442.4	1445.4	1460.5	1483.3	1506.0	1533.3	1547.0	1553.1
42.5°	1333.1	1266.4	1199.7	1149.6	1120.8	1111.7	1122.3	1129.9	1146.6	1166.3	1186.0
45°	1172.4	1082.9	994.9	917.6	869.0	840.2	834.2	840.2	849.3	869.0	894.8
47.5°	1040.4	935.8	837.2	750.7	679.4	641.6	630.9	627.9	637.0	655.2	690.1
50°	923.6	819.0	709.8	609.7	535.4	492.9	477.8	471.7	482.3	495.9	527.8
52.5°	796.2	693.1	580.9	483.8	406.5	362.5	345.8	336.7	342.7	361.0	392.8
55°	658.2	562.7	461.1	361.0	286.6	245.7	226.0	219.9	226.0	245.7	277.5
57.5°	520.2	439.8	354.9	260.8	194.1	153.2	133.4	127.4	144.1	151.7	185.0
60°	406.5	341.3	268.5	191.1	133.4	101.6	81.9	77.3	84.9	98.6	125.9
62.5°	304.9	263.9	206.3	136.5	98.6	65.2	54.6	50.1	54.6	65.2	86.5
65°	221.4	189.6	144.1	100.1	66.7	48.5	36.4	33.4	37.9	45.5	63.7
67.5°	151.7	127.4	100.1	69.8	45.5	30.3	25.8	25.8	27.3	33.4	47.0
70°	98.6	83.4	63.7	45.5	30.3	22.7	19.7	16.7	19.7	24.3	31.8
72.5°	62.2	53.1	40.9	31.8	22.7	16.7	13.7	12.1	15.2	18.2	24.3
75°	37.9	28.8	21.2	16.7	12.1	12.1	12.1	6.0	7.6	12.1	15.2
77.5°	22.7	19.7	16.7	13.7	10.6	6.0	6.0	6.0	7.6	9.1	13.7
80°	12.1	10.6	7.6	7.6	6.0	4.6	6.0	4.6	3.0	7.6	9.1
82.5°	7.6	6.0	6.0	6.0	7.6	3.0	4.6	3.0	4.6	6.0	4.6
85°	4.6	4.6	4.6	3.0	7.6	3.0	3.0	1.5	1.5	3.0	3.0
87.5°	0.0	1.5	1.5	0.0	1.5	0.0	1.5	1.5	1.5	1.5	1.5
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°	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4	2857.4
2.5°	2861.9	2860.4	2861.9	2860.4	2860.4	2860.4	2861.9	2861.9	2860.4	2860.4	2863.4
5°	2874.1	2874.1	2874.1	2872.5	2871.0	2871.0	2874.1	2874.1	2869.5	2874.1	2874.1
7.5°	2899.8	2895.3	2899.8	2893.8	2890.8	2892.2	2893.8	2890.8	2887.7	2889.2	2889.2
10°	2933.2	2928.6	2928.6	2924.1	2919.6	2916.5	2913.5	2905.9	2898.3	2896.8	2890.8
12.5°	2972.6	2965.0	2960.5	2951.4	2943.8	2933.2	2924.1	2912.0	2896.8	2886.2	2875.6
15°	3012.1	2999.9	2989.3	2974.1	2957.5	2939.3	2919.6	2899.8	2875.6	2854.3	2836.1
17.5°	3043.9	3027.2	3007.5	2983.3	2959.0	2931.7	2902.9	2874.1	2839.2	2811.9	2790.6
20°	3054.5	3030.3	3004.5	2972.6	2940.8	2902.9	2866.5	2828.6	2789.1	2760.3	2736.0
22.5°	3040.9	3012.1	2980.2	2946.9	2904.4	2863.4	2821.0	2777.0	2742.1	2702.7	2679.9
25°	3003.0	2968.1	2933.2	2893.8	2852.8	2807.3	2761.8	2716.3	2673.8	2652.6	2623.8
27.5°	2925.6	2887.7	2849.8	2808.9	2761.8	2716.3	2669.3	2625.3	2588.9	2560.1	2543.4
30°	2789.1	2745.1	2701.2	2657.2	2616.2	2569.2	2525.2	2488.8	2452.4	2429.7	2413.0
32.5°	2579.8	2540.4	2496.4	2453.9	2416.0	2376.6	2340.2	2308.4	2282.6	2267.4	2255.2
35°	2297.7	2258.3	2224.9	2194.6	2162.7	2146.1	2123.3	2105.1	2094.5	2088.4	2086.9
37.5°	1942.8	1920.1	1909.5	1903.4	1897.3	1892.8	1895.8	1903.4	1909.5	1920.1	1932.2
40°	1563.7	1583.4	1589.5	1610.7	1630.4	1656.2	1685.0	1718.4	1745.7	1780.5	1804.8
42.5°	1217.9	1254.3	1296.7	1342.2	1390.8	1437.8	1495.4	1548.5	1597.0	1641.0	1678.9
45°	935.8	991.9	1055.6	1120.8	1186.0	1254.3	1324.0	1389.2	1446.9	1493.9	1533.3
47.5°	729.5	791.7	873.6	954.0	1032.8	1113.2	1190.6	1258.8	1307.3	1352.8	1387.7
50°	577.8	649.1	738.6	831.1	917.6	1002.5	1084.4	1148.1	1196.6	1233.1	1258.8
52.5°	447.4	532.3	623.3	720.4	812.9	905.4	981.3	1040.4	1079.9	1111.7	1131.4
55°	333.7	417.1	514.2	614.2	708.3	797.8	869.0	920.6	955.5	973.7	984.3
57.5°	241.1	317.0	414.0	514.2	599.1	684.0	741.6	788.7	808.4	819.0	823.5
60°	175.9	245.7	332.1	418.6	499.0	567.2	617.3	649.1	664.3	670.4	668.8
62.5°	128.9	189.6	263.9	336.7	401.9	458.0	497.5	518.7	526.3	529.3	524.8
65°	98.6	145.6	209.3	265.4	315.5	356.4	385.2	398.9	403.4	401.9	398.9
67.5°	72.8	109.2	156.2	198.7	235.1	266.9	282.1	294.2	297.3	292.7	288.2
70°	51.6	80.4	113.7	142.6	169.9	188.1	204.7	206.3	206.3	204.7	201.7
72.5°	36.4	56.1	77.3	97.1	113.7	127.4	133.4	138.0	136.5	135.0	132.0
75°	24.3	34.9	56.1	60.7	75.8	80.4	86.5	86.5	88.0	83.4	83.4
77.5°	15.2	24.3	33.4	39.4	45.5	51.6	54.6	54.6	56.1	54.6	54.6
80°	9.1	15.2	18.2	27.3	27.3	31.8	33.4	34.9	31.8	36.4	31.8
82.5°	6.0	9.1	13.7	13.7	16.7	19.7	19.7	21.2	21.2	19.7	19.7
85°	4.6	6.0	7.6	9.1	9.1	10.6	9.1	9.1	10.6	12.1	10.6
87.5°	1.5	3.0	1.5	3.0	3.0	6.0	4.6	4.6	4.6	6.0	6.0
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: P248417

CATALOG NUMBER: LSR8B70D010 EC8B709727 8LBDWOLI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2857.4	2857.4	2857.4	2857.4
2.5°	2860.4	2861.9	2860.4	2860.4
5°	2874.1	2872.5	2874.1	2871.0
7.5°	2884.7	2884.7	2883.1	2883.1
10°	2884.7	2878.6	2878.6	2878.6
12.5°	2861.9	2854.3	2849.8	2846.7
15°	2822.5	2808.9	2802.8	2801.2
17.5°	2770.9	2758.8	2751.2	2746.7
20°	2711.8	2699.6	2690.5	2692.1
22.5°	2660.2	2646.6	2640.5	2637.4
25°	2608.6	2591.9	2587.4	2584.4
27.5°	2525.2	2516.1	2511.6	2507.0
30°	2397.8	2393.3	2385.7	2396.3
32.5°	2250.7	2243.1	2237.1	2241.6
35°	2088.4	2083.9	2088.4	2085.4
37.5°	1939.8	1944.3	1950.4	1953.4
40°	1823.0	1839.7	1845.8	1848.8
42.5°	1706.2	1725.9	1738.1	1745.7
45°	1562.1	1581.9	1595.5	1604.6
47.5°	1413.5	1430.2	1443.8	1442.4
50°	1278.5	1287.6	1293.7	1299.8
52.5°	1142.0	1142.0	1143.5	1143.5
55°	987.3	984.3	982.8	984.3
57.5°	817.5	814.5	812.9	808.4
60°	662.8	653.7	647.6	647.6
62.5°	518.7	508.1	503.5	502.0
65°	389.8	388.2	379.2	377.6
67.5°	282.1	276.0	270.0	271.5
70°	198.7	189.6	189.6	186.6
72.5°	128.9	124.4	122.8	122.8
75°	80.4	80.4	77.3	83.4
77.5°	53.1	53.1	51.6	53.1
80°	31.8	31.8	31.8	30.3
82.5°	19.7	21.2	19.7	19.7
85°	10.6	12.1	9.1	13.7
87.5°	6.0	7.6	6.0	7.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)