

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: P249506

Luminaire Tested: **LSR8B70D010 EC8B70930 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249506
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: LSR8B70D010 EC8B70930 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5578.1 lumens
Efficiency: N/A
Efficacy: 73.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

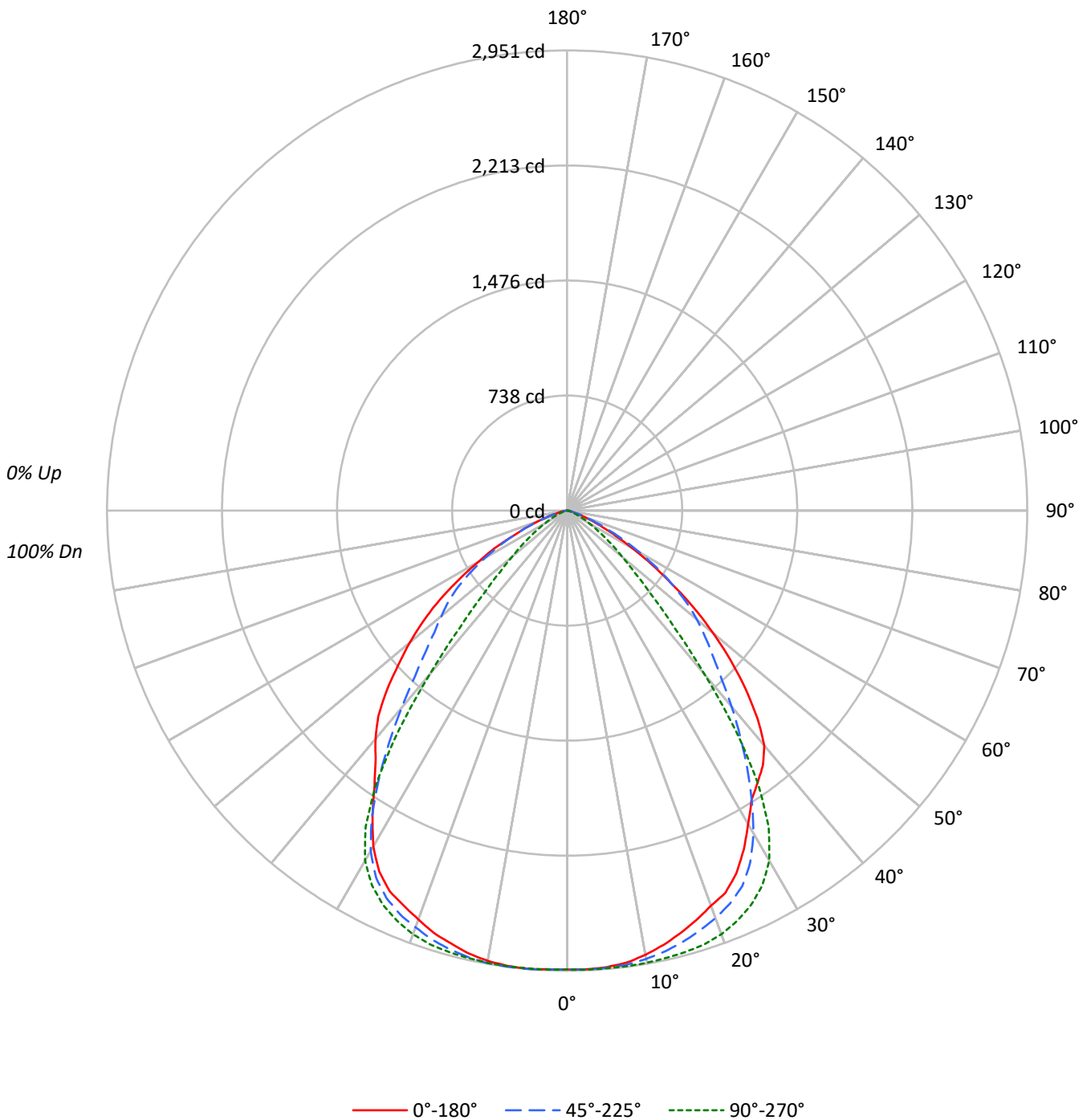
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	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°	280.9	5.0
10°-20°	815.7	14.6
20°-30°	1238.1	22.2
30°-40°	1300.4	23.3
40°-50°	974.9	17.5
50°-60°	625.5	11.2
60°-70°	267.6	4.8
70°-80°	63.2	1.1
80°-90°	11.7	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°	2334.7	41.9
0°-40°	3635.1	65.2
0°-60°	5235.5	93.9
0°-90°	5578.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5578.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2943	2943	2943	2943	2943	
5°	2938	2943	2946	2951	2950	279
15°	2806	2864	2930	2912	2875	791
25°	2567	2657	2792	2741	2694	1173
35°	2130	2011	2131	2106	2153	1337
45°	1618	1322	760	1284	1640	1239
55°	818	818	283	853	997	742
65°	246	291	90	374	381	263
75°	38	44	13	76	74	55
85°	13	8	6	13	17	13
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°	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1
2.5°	2944.6	2947.9	2946.3	2946.3	2944.6	2946.3	2946.3	2949.5	2949.5	2946.3	2944.6
5°	2938.4	2941.5	2941.5	2938.4	2938.4	2946.3	2941.5	2944.6	2944.6	2943.1	2943.1
7.5°	2924.1	2924.1	2930.5	2925.8	2925.8	2930.5	2928.8	2932.1	2935.2	2936.8	2936.8
10°	2892.5	2895.8	2897.3	2897.3	2898.9	2903.6	2906.8	2913.1	2916.3	2919.4	2921.0
12.5°	2853.1	2857.8	2859.3	2857.8	2862.6	2868.9	2876.8	2884.7	2889.4	2895.8	2900.5
15°	2805.6	2805.6	2808.8	2813.6	2816.7	2826.3	2834.1	2843.5	2856.2	2864.2	2872.0
17.5°	2753.5	2756.8	2761.5	2761.5	2767.7	2783.6	2788.3	2802.5	2816.7	2824.6	2840.5
20°	2696.7	2699.8	2704.5	2707.8	2715.6	2728.3	2737.7	2750.4	2766.2	2780.4	2796.2
22.5°	2652.4	2646.1	2649.3	2652.4	2660.4	2671.5	2682.4	2698.2	2714.1	2728.3	2744.1
25°	2567.1	2568.7	2573.5	2576.6	2586.1	2595.6	2608.2	2627.2	2641.4	2657.2	2674.6
27.5°	2451.9	2453.4	2461.3	2461.3	2469.2	2485.0	2492.9	2508.7	2527.6	2543.4	2564.0
30°	2320.7	2323.8	2323.8	2330.2	2334.9	2342.8	2350.7	2366.5	2376.0	2390.2	2418.7
32.5°	2200.6	2203.8	2202.2	2200.6	2195.9	2194.2	2192.7	2195.9	2199.1	2203.8	2214.9
35°	2129.6	2121.6	2115.3	2104.2	2091.7	2075.9	2061.6	2042.7	2025.3	2011.1	1995.3
37.5°	2061.6	2060.1	2050.5	2034.7	2009.5	1981.0	1947.8	1906.8	1865.7	1821.5	1778.8
40°	1966.8	1962.1	1954.1	1932.0	1903.6	1868.8	1824.7	1774.1	1707.7	1639.8	1570.3
42.5°	1805.7	1807.3	1797.7	1780.4	1753.6	1720.4	1674.5	1619.3	1548.2	1467.6	1377.6
45°	1617.7	1617.7	1614.6	1600.3	1581.4	1554.5	1519.7	1473.9	1404.4	1322.2	1225.9
47.5°	1421.8	1423.3	1418.6	1415.5	1407.5	1390.2	1364.9	1330.2	1281.2	1202.2	1105.9
50°	1222.8	1222.8	1230.6	1229.1	1229.1	1222.8	1211.7	1191.2	1148.5	1085.4	995.2
52.5°	1023.7	1026.8	1031.7	1037.9	1045.8	1058.4	1045.8	1036.4	1009.5	960.5	883.1
55°	818.3	821.5	829.3	840.4	849.9	862.6	865.7	865.7	851.5	818.3	759.8
57.5°	643.0	638.2	644.6	654.0	666.7	679.3	688.7	699.8	698.3	676.2	628.8
60°	483.4	484.9	489.8	499.2	508.7	519.7	532.4	541.9	546.6	535.5	505.6
62.5°	352.3	352.3	358.6	368.0	372.8	388.7	396.5	401.3	406.0	404.5	385.5
65°	246.5	249.6	252.8	257.5	262.2	271.7	276.4	286.0	289.1	290.7	276.4
67.5°	173.8	169.0	172.2	175.3	180.1	186.4	196.0	196.0	200.7	200.7	191.1
70°	110.6	110.6	112.2	116.9	120.1	121.6	124.8	127.9	132.7	131.2	131.2
72.5°	74.2	72.6	74.2	75.9	77.5	82.2	82.2	83.7	86.9	88.4	82.2
75°	37.9	39.5	42.6	41.1	45.8	42.6	44.2	49.0	47.4	44.2	44.2
77.5°	31.6	31.6	31.6	30.0	33.2	33.2	31.6	34.8	33.2	33.2	31.6
80°	22.1	23.7	22.1	20.5	22.1	20.5	20.5	20.5	20.5	20.5	18.9
82.5°	17.4	14.2	15.8	14.2	15.8	15.8	14.2	12.7	12.7	14.2	12.7
85°	12.7	9.4	11.1	11.1	9.4	9.4	9.4	9.4	9.4	7.8	7.8
87.5°	7.8	4.7	4.7	4.7	6.3	6.3	6.3	4.7	6.3	6.3	3.1
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°	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1
2.5°	2947.9	2946.3	2949.5	2947.9	2947.9	2946.3	2947.9	2946.3	2949.5	2943.1	2944.6
5°	2947.9	2944.6	2946.3	2947.9	2949.5	2946.3	2946.3	2946.3	2949.5	2946.3	2947.9
7.5°	2941.5	2939.9	2944.6	2947.9	2946.3	2944.6	2947.9	2946.3	2949.5	2947.9	2951.0
10°	2928.8	2930.5	2933.7	2938.4	2939.9	2941.5	2944.6	2944.6	2949.5	2943.1	2946.3
12.5°	2909.9	2916.3	2924.1	2927.3	2933.7	2933.7	2936.8	2938.4	2941.5	2939.9	2944.6
15°	2886.2	2894.1	2903.6	2911.6	2919.4	2924.1	2928.8	2930.5	2935.2	2930.5	2932.1
17.5°	2857.8	2867.3	2881.5	2890.9	2903.6	2908.3	2914.7	2917.9	2922.6	2919.4	2921.0
20°	2818.3	2829.4	2845.2	2859.3	2867.3	2878.3	2886.2	2890.9	2894.1	2890.9	2892.5
22.5°	2763.0	2778.8	2799.4	2810.5	2826.3	2835.7	2837.3	2848.3	2856.2	2848.3	2851.5
25°	2698.2	2714.1	2729.9	2753.5	2767.7	2778.8	2789.8	2791.5	2799.4	2797.8	2796.2
27.5°	2590.9	2611.4	2638.2	2657.2	2676.2	2693.5	2706.2	2709.3	2717.2	2714.1	2715.6
30°	2443.9	2466.1	2491.3	2521.4	2548.1	2565.5	2581.3	2592.4	2600.3	2595.6	2594.0
32.5°	2235.4	2257.5	2284.4	2314.3	2346.0	2371.3	2390.2	2404.4	2413.8	2410.7	2402.9
35°	1996.8	2003.1	2020.5	2044.3	2071.0	2098.0	2115.3	2131.1	2142.1	2145.4	2145.4
37.5°	1752.0	1731.5	1718.8	1718.8	1734.6	1745.6	1761.4	1771.0	1788.3	1794.6	1799.3
40°	1515.0	1467.6	1423.3	1390.2	1368.1	1366.5	1366.5	1371.2	1387.0	1407.5	1426.6
42.5°	1303.3	1227.5	1159.6	1097.9	1053.7	1028.4	1017.4	1019.0	1031.7	1050.6	1082.1
45°	1134.2	1039.5	954.2	880.0	819.9	780.4	761.5	759.8	769.3	791.4	826.3
47.5°	1003.2	902.1	805.7	720.4	655.7	613.0	590.9	584.5	590.9	611.4	652.4
50°	894.1	789.9	690.4	601.9	532.4	488.2	467.6	459.7	467.6	484.9	526.1
52.5°	793.0	685.6	592.4	507.1	432.8	394.9	372.8	368.0	372.8	393.4	426.5
55°	676.2	584.5	492.9	407.6	342.8	304.9	287.5	282.8	287.5	306.5	341.2
57.5°	560.8	481.8	401.3	323.9	268.6	235.4	219.6	213.2	224.3	237.0	278.0
60°	453.3	390.2	322.3	254.4	208.5	178.5	165.9	164.2	167.5	183.3	211.6
62.5°	355.5	303.3	249.6	194.3	156.4	143.7	127.9	126.4	129.6	139.0	161.2
65°	255.9	222.7	181.7	142.1	112.2	94.8	88.4	90.0	93.2	99.5	120.1
67.5°	178.5	154.8	126.4	99.5	77.5	69.5	63.2	61.7	63.2	74.2	85.3
70°	120.1	105.8	85.3	75.9	53.7	42.6	44.2	39.5	45.8	45.8	55.3
72.5°	78.9	69.5	56.8	44.2	37.9	30.0	30.0	28.5	31.6	33.2	41.1
75°	41.1	31.6	31.6	22.1	15.8	7.8	14.2	12.7	11.1	12.7	15.8
77.5°	28.5	23.7	22.1	17.4	15.8	12.7	12.7	12.7	12.7	14.2	15.8
80°	17.4	17.4	12.7	11.1	9.4	7.8	9.4	9.4	9.4	9.4	11.1
82.5°	11.1	9.4	9.4	7.8	7.8	6.3	6.3	6.3	6.3	6.3	9.4
85°	9.4	6.3	6.3	4.7	6.3	11.1	4.7	6.3	6.3	6.3	4.7
87.5°	3.1	4.7	4.7	4.7	3.1	1.6	3.1	4.7	4.7	7.8	6.3
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1	2943.1
2.5°	2947.9	2949.5	2949.5	2947.9	2947.9	2944.6	2951.0	2946.3	2947.9	2954.2	2949.5
5°	2951.0	2952.6	2952.6	2951.0	2951.0	2951.0	2952.6	2952.6	2951.0	2949.5	2952.6
7.5°	2957.3	2955.7	2955.7	2952.6	2952.6	2949.5	2952.6	2947.9	2951.0	2947.9	2952.6
10°	2949.5	2951.0	2949.5	2947.9	2947.9	2946.3	2946.3	2941.5	2943.1	2938.4	2941.5
12.5°	2944.6	2943.1	2943.1	2939.9	2936.8	2933.7	2932.1	2927.3	2927.3	2916.3	2921.0
15°	2932.1	2933.7	2928.8	2922.6	2919.4	2911.6	2908.3	2902.0	2895.8	2887.8	2889.4
17.5°	2921.0	2916.3	2909.9	2903.6	2890.9	2884.7	2878.3	2868.9	2865.7	2856.2	2853.1
20°	2887.8	2884.7	2876.8	2865.7	2857.8	2843.5	2837.3	2827.8	2819.9	2810.5	2805.6
22.5°	2845.2	2842.0	2832.5	2821.4	2808.8	2802.5	2796.2	2778.8	2770.9	2761.5	2759.9
25°	2791.5	2786.7	2777.3	2764.6	2758.2	2741.0	2734.6	2721.9	2718.8	2709.3	2707.8
27.5°	2709.3	2703.0	2692.0	2676.2	2665.1	2654.0	2647.7	2638.2	2635.0	2625.6	2624.0
30°	2586.1	2578.2	2556.1	2549.7	2530.8	2519.8	2519.8	2507.1	2508.7	2502.4	2502.4
32.5°	2391.8	2379.1	2361.7	2349.1	2336.5	2330.2	2330.2	2325.4	2328.5	2328.5	2331.8
35°	2134.3	2116.9	2107.4	2099.5	2099.5	2105.8	2124.7	2129.6	2139.0	2146.9	2153.2
37.5°	1804.1	1802.6	1813.6	1823.1	1846.7	1873.6	1906.8	1935.2	1962.1	1981.0	2000.0
40°	1447.1	1486.6	1518.2	1562.4	1598.7	1650.9	1710.9	1759.9	1805.7	1838.9	1873.6
42.5°	1129.5	1180.1	1246.4	1311.2	1376.0	1447.1	1526.1	1593.9	1654.0	1699.9	1736.2
45°	880.0	949.5	1030.0	1112.1	1195.9	1284.3	1366.5	1436.0	1499.2	1546.6	1583.0
47.5°	709.3	785.1	876.7	966.9	1061.6	1154.9	1246.4	1306.5	1358.5	1396.5	1429.7
50°	586.1	666.7	763.1	865.7	960.5	1053.7	1132.7	1191.2	1233.8	1267.0	1287.5
52.5°	489.8	575.1	677.8	780.4	875.2	960.5	1031.7	1075.8	1110.6	1134.2	1153.2
55°	404.5	486.6	582.9	679.3	772.5	853.1	911.5	944.7	971.6	985.8	996.8
57.5°	330.1	406.0	494.5	582.9	663.5	729.9	775.7	808.8	821.5	832.6	831.0
60°	259.1	330.1	410.7	486.6	556.1	609.8	643.0	662.0	671.4	676.2	672.9
62.5°	203.8	268.6	330.1	396.5	447.1	492.9	524.5	524.5	529.2	530.8	535.5
65°	151.7	200.7	254.4	303.3	344.4	374.4	391.8	396.5	402.9	401.3	398.1
67.5°	112.2	148.5	188.0	224.3	252.8	271.7	284.4	295.4	293.8	290.7	289.1
70°	77.5	101.1	135.9	157.9	178.5	197.5	200.7	202.2	203.8	205.4	202.2
72.5°	53.7	71.1	90.0	109.0	121.6	129.6	137.4	139.0	139.0	139.0	137.4
75°	26.9	36.3	53.7	61.7	72.6	75.9	82.2	82.2	86.9	80.6	78.9
77.5°	23.7	28.5	37.9	44.2	49.0	53.7	55.3	60.1	58.4	55.3	56.8
80°	14.2	17.4	23.7	26.9	33.2	34.8	36.3	37.9	36.3	37.9	37.9
82.5°	11.1	12.7	15.8	15.8	20.5	20.5	22.1	22.1	23.7	23.7	23.7
85°	6.3	11.1	9.4	18.9	12.7	12.7	15.8	18.9	15.8	15.8	18.9
87.5°	6.3	6.3	4.7	6.3	6.3	6.3	7.8	9.4	9.4	11.1	9.4
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: P249506

CATALOG NUMBER: LSR8B70D010 EC8B70930 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2943.1	2943.1	2943.1	2943.1
2.5°	2947.9	2951.0	2946.3	2944.6
5°	2952.6	2952.6	2949.5	2949.5
7.5°	2952.6	2952.6	2947.9	2944.6
10°	2939.9	2939.9	2935.2	2932.1
12.5°	2916.3	2916.3	2914.7	2909.9
15°	2886.2	2886.2	2880.0	2875.1
17.5°	2845.2	2848.3	2840.5	2840.5
20°	2800.9	2799.4	2793.1	2789.8
22.5°	2755.1	2751.9	2750.4	2741.0
25°	2706.2	2703.0	2698.2	2693.5
27.5°	2622.5	2620.9	2616.1	2609.8
30°	2494.4	2492.9	2486.6	2486.6
32.5°	2328.5	2327.0	2320.7	2322.3
35°	2156.4	2162.7	2159.5	2153.2
37.5°	2012.6	2017.4	2020.5	2017.4
40°	1892.6	1906.8	1908.4	1911.5
42.5°	1764.6	1783.5	1789.9	1793.0
45°	1611.3	1628.7	1642.9	1639.8
47.5°	1454.9	1467.6	1480.3	1470.8
50°	1304.8	1312.8	1317.5	1317.5
52.5°	1162.7	1162.7	1161.1	1162.7
55°	1000.0	1000.0	993.7	996.8
57.5°	829.3	832.6	827.7	819.9
60°	671.4	663.5	660.4	655.7
62.5°	522.9	522.9	511.8	526.1
65°	391.8	387.1	382.3	380.7
67.5°	284.4	282.8	278.0	276.4
70°	200.7	194.3	192.7	189.6
72.5°	134.3	134.3	131.2	131.2
75°	82.2	74.2	72.6	74.2
77.5°	56.8	55.3	55.3	53.7
80°	37.9	36.3	39.5	34.8
82.5°	23.7	25.3	23.7	25.3
85°	15.8	18.9	17.4	17.4
87.5°	9.4	9.4	9.4	9.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)