

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: P249497

Luminaire Tested: **LSR8B70D010 EC8B70927 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249497
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 EC8B70927 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5290.9 lumens
Efficiency: N/A
Efficacy: 69.7 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

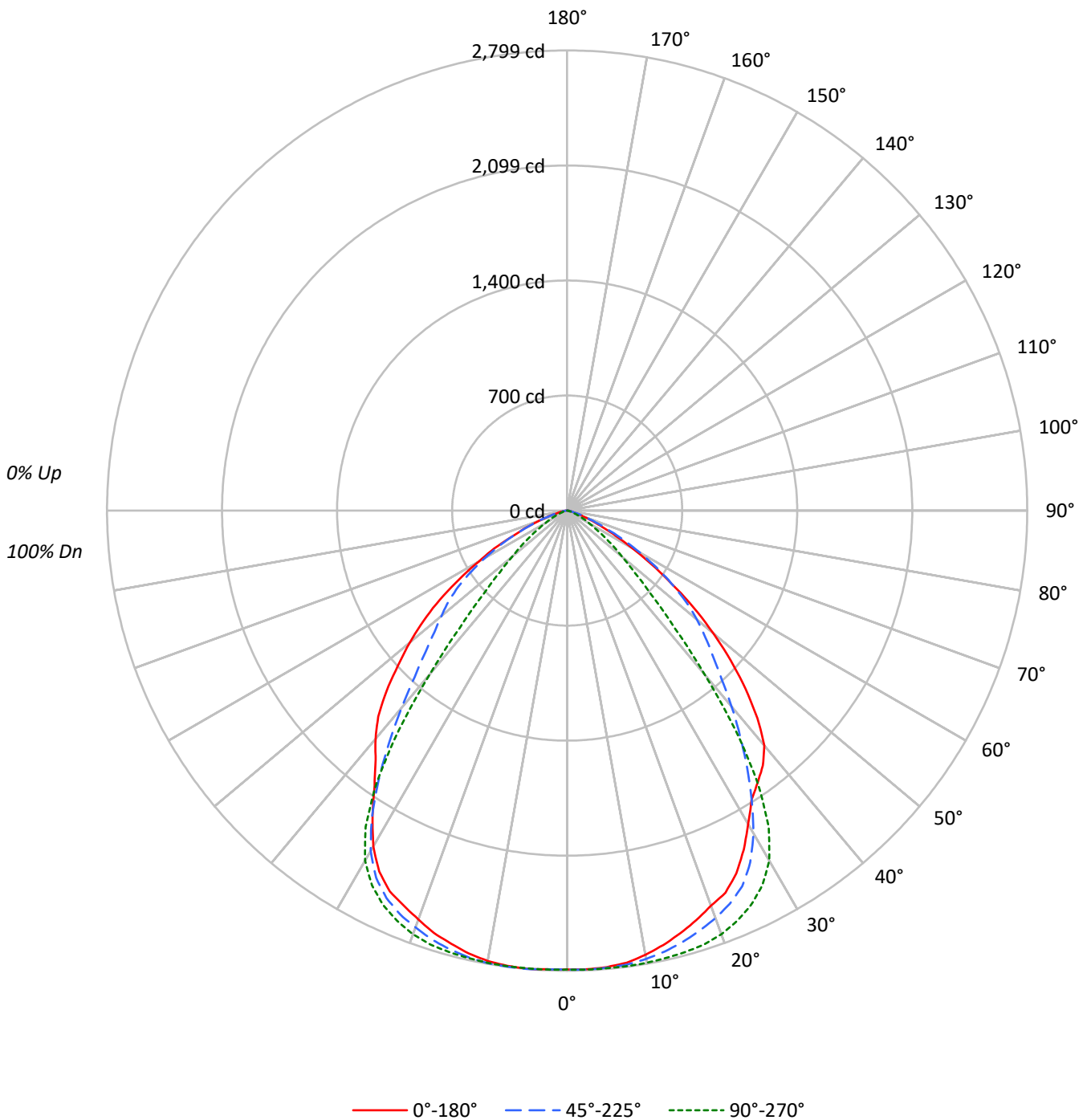
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	266.4	5.0
10°-20°	773.7	14.6
20°-30°	1174.3	22.2
30°-40°	1233.4	23.3
40°-50°	924.7	17.5
50°-60°	593.3	11.2
60°-70°	253.8	4.8
70°-80°	60.0	1.1
80°-90°	11.2	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°	2214.5	41.9
0°-40°	3447.9	65.2
0°-60°	4965.9	93.9
0°-90°	5290.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5290.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2792	2792	2792	2792	2792	
5°	2787	2792	2795	2799	2798	265
15°	2661	2717	2780	2762	2727	751
25°	2435	2520	2648	2600	2555	1112
35°	2020	1907	2021	1997	2042	1268
45°	1534	1254	721	1218	1555	1175
55°	776	776	268	809	945	704
65°	234	276	85	355	361	250
75°	36	42	12	72	70	52
85°	12	7	6	12	16	13
90°	0	0	0	0	0	



TEST NUMBER: P249497

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6
2.5°	2793.0	2796.1	2794.6	2794.6	2793.0	2794.6	2794.6	2797.5	2797.5	2794.6	2793.0
5°	2787.1	2790.1	2790.1	2787.1	2787.1	2794.6	2790.1	2793.0	2793.0	2791.6	2791.6
7.5°	2773.6	2773.6	2779.5	2775.2	2775.2	2779.5	2778.1	2781.1	2784.0	2785.6	2785.6
10°	2743.6	2746.6	2748.2	2748.2	2749.6	2754.1	2757.2	2763.1	2766.0	2769.1	2770.6
12.5°	2706.2	2710.7	2712.2	2710.7	2715.2	2721.2	2728.7	2736.1	2740.6	2746.6	2751.1
15°	2661.2	2661.2	2664.2	2668.7	2671.8	2680.6	2688.2	2697.2	2709.1	2716.6	2724.2
17.5°	2611.8	2614.7	2619.2	2619.2	2625.3	2640.3	2644.8	2658.3	2671.8	2679.2	2694.2
20°	2557.8	2560.8	2565.3	2568.4	2575.8	2587.8	2596.7	2608.8	2623.7	2637.2	2652.2
22.5°	2515.8	2509.9	2512.8	2515.8	2523.4	2533.8	2544.3	2559.3	2574.3	2587.8	2602.8
25°	2435.0	2436.4	2440.9	2444.0	2453.0	2462.0	2473.9	2491.9	2505.4	2520.3	2536.9
27.5°	2325.6	2327.1	2334.6	2334.6	2342.0	2357.0	2364.5	2379.5	2397.5	2412.5	2431.9
30°	2201.2	2204.2	2204.2	2210.2	2214.7	2222.2	2229.6	2244.6	2253.6	2267.1	2294.1
32.5°	2087.3	2090.2	2088.8	2087.3	2082.8	2081.4	2079.8	2082.8	2085.9	2090.2	2100.8
35°	2019.9	2012.4	2006.4	1996.0	1983.9	1969.0	1955.5	1937.5	1920.9	1907.4	1892.5
37.5°	1955.5	1953.9	1945.0	1929.9	1906.0	1879.1	1847.6	1808.6	1769.6	1727.7	1687.3
40°	1865.6	1861.1	1853.6	1832.6	1805.6	1772.7	1730.7	1682.8	1619.8	1555.3	1489.4
42.5°	1712.7	1714.2	1705.2	1688.7	1663.3	1631.8	1588.3	1535.9	1468.5	1392.1	1306.7
45°	1534.4	1534.4	1531.4	1517.9	1500.0	1474.4	1441.5	1398.0	1332.1	1254.1	1162.8
47.5°	1348.5	1350.1	1345.6	1342.6	1335.0	1318.6	1294.6	1261.7	1215.2	1140.3	1048.8
50°	1159.8	1159.8	1167.3	1165.7	1165.7	1159.8	1149.3	1129.8	1089.3	1029.4	944.0
52.5°	971.0	974.0	978.5	984.5	991.9	1004.0	991.9	982.9	957.5	911.0	837.7
55°	776.1	779.2	786.7	797.2	806.2	818.2	821.1	821.1	807.6	776.1	720.8
57.5°	609.9	605.4	611.3	620.3	632.4	644.3	653.3	663.8	662.3	641.4	596.4
60°	458.6	460.0	464.5	473.5	482.5	493.0	505.0	514.0	518.5	507.9	479.5
62.5°	334.1	334.1	340.1	349.1	353.6	368.7	376.1	380.6	385.1	383.6	365.6
65°	233.8	236.7	239.7	244.2	248.7	257.7	262.2	271.2	274.2	275.7	262.2
67.5°	164.8	160.3	163.4	166.3	170.8	176.8	185.8	185.8	190.2	190.2	181.4
70°	104.8	104.8	106.4	110.9	113.8	115.4	118.4	121.4	125.9	124.3	124.3
72.5°	70.4	69.0	70.4	71.9	73.5	78.0	78.0	79.4	82.5	83.9	78.0
75°	36.0	37.5	40.4	38.9	43.4	40.4	42.0	46.5	45.0	42.0	42.0
77.5°	29.9	29.9	29.9	28.5	31.5	31.5	29.9	33.0	31.5	31.5	29.9
80°	20.9	22.5	20.9	19.5	20.9	19.5	19.5	19.5	19.5	19.5	18.0
82.5°	16.5	13.5	15.0	13.5	15.0	15.0	13.5	12.0	12.0	13.5	12.0
85°	12.0	9.0	10.5	10.5	9.0	9.0	9.0	9.0	9.0	7.4	7.4
87.5°	7.4	4.5	4.5	4.5	6.0	6.0	6.0	4.5	6.0	6.0	3.0
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: P249497

CATALOG NUMBER: LSR8B70D010 EC8B70927 8LBDW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6
2.5°	2796.1	2794.6	2797.5	2796.1	2796.1	2794.6	2796.1	2794.6	2797.5	2791.6	2793.0
5°	2796.1	2793.0	2794.6	2796.1	2797.5	2794.6	2794.6	2794.6	2797.5	2794.6	2796.1
7.5°	2790.1	2788.5	2793.0	2796.1	2794.6	2793.0	2796.1	2794.6	2797.5	2796.1	2799.0
10°	2778.1	2779.5	2782.6	2787.1	2788.5	2790.1	2793.0	2793.0	2797.5	2791.6	2794.6
12.5°	2760.1	2766.0	2773.6	2776.6	2782.6	2782.6	2785.6	2787.1	2790.1	2788.5	2793.0
15°	2737.7	2745.1	2754.1	2761.6	2769.1	2773.6	2778.1	2779.5	2784.0	2779.5	2781.1
17.5°	2710.7	2719.7	2733.1	2742.1	2754.1	2758.6	2764.6	2767.6	2772.1	2769.1	2770.6
20°	2673.2	2683.7	2698.6	2712.2	2719.7	2730.2	2737.7	2742.1	2745.1	2742.1	2743.6
22.5°	2620.8	2635.8	2655.2	2665.7	2680.6	2689.6	2691.2	2701.7	2709.1	2701.7	2704.7
25°	2559.3	2574.3	2589.3	2611.8	2625.3	2635.8	2646.2	2647.7	2655.2	2653.8	2652.2
27.5°	2457.5	2476.9	2502.3	2520.3	2538.3	2554.9	2566.8	2569.8	2577.3	2574.3	2575.8
30°	2318.1	2339.1	2363.1	2391.5	2417.0	2433.5	2448.5	2458.9	2466.5	2462.0	2460.4
32.5°	2120.3	2141.2	2166.8	2195.2	2225.1	2249.1	2267.1	2280.6	2289.6	2286.6	2279.1
35°	1894.0	1900.0	1916.6	1938.9	1964.5	1989.9	2006.4	2021.4	2031.9	2034.9	2034.9
37.5°	1661.7	1642.3	1630.4	1630.4	1645.3	1655.8	1670.7	1679.7	1696.3	1702.2	1706.7
40°	1437.0	1392.1	1350.1	1318.6	1297.7	1296.1	1296.1	1300.6	1315.6	1335.0	1353.0
42.5°	1236.1	1164.3	1099.8	1041.4	999.4	975.5	965.0	966.5	978.5	996.4	1026.4
45°	1075.8	986.0	905.1	834.6	777.7	740.2	722.2	720.8	729.7	750.7	783.7
47.5°	951.5	855.6	764.2	683.3	621.9	581.4	560.4	554.4	560.4	579.8	618.9
50°	848.1	749.2	654.9	570.9	505.0	463.0	443.5	436.0	443.5	460.0	498.9
52.5°	752.2	650.4	561.9	481.0	410.5	374.6	353.6	349.1	353.6	373.0	404.6
55°	641.4	554.4	467.6	386.6	325.1	289.2	272.7	268.2	272.7	290.7	323.7
57.5°	532.0	457.0	380.6	307.1	254.7	223.2	208.2	202.3	212.7	224.8	263.7
60°	430.1	370.1	305.7	241.2	197.8	169.3	157.3	155.8	158.8	173.8	200.8
62.5°	337.2	287.7	236.7	184.3	148.4	136.4	121.4	119.9	122.8	131.8	152.9
65°	242.8	211.3	172.4	134.9	106.4	89.9	83.9	85.4	88.4	94.4	113.8
67.5°	169.3	146.8	119.9	94.4	73.5	65.9	60.0	58.4	60.0	70.4	80.9
70°	113.8	100.4	80.9	71.9	51.0	40.4	42.0	37.5	43.4	43.4	52.4
72.5°	74.9	65.9	53.9	42.0	36.0	28.5	28.5	27.0	29.9	31.5	38.9
75°	38.9	29.9	29.9	20.9	15.0	7.4	13.5	12.0	10.5	12.0	15.0
77.5°	27.0	22.5	20.9	16.5	15.0	12.0	12.0	12.0	12.0	13.5	15.0
80°	16.5	16.5	12.0	10.5	9.0	7.4	9.0	9.0	9.0	9.0	10.5
82.5°	10.5	9.0	9.0	7.4	7.4	6.0	6.0	6.0	6.0	6.0	9.0
85°	9.0	6.0	6.0	4.5	6.0	10.5	4.5	6.0	6.0	6.0	4.5
87.5°	3.0	4.5	4.5	4.5	3.0	1.5	3.0	4.5	4.5	7.4	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: P249497

CATALOG NUMBER: LSR8B70D010 EC8B70927 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6	2791.6
2.5°	2796.1	2797.5	2797.5	2796.1	2796.1	2793.0	2799.0	2794.6	2796.1	2802.0	2797.5
5°	2799.0	2800.6	2800.6	2799.0	2799.0	2799.0	2800.6	2800.6	2799.0	2797.5	2800.6
7.5°	2805.1	2803.6	2803.6	2800.6	2800.6	2797.5	2800.6	2796.1	2799.0	2796.1	2800.6
10°	2797.5	2799.0	2797.5	2796.1	2796.1	2794.6	2794.6	2790.1	2791.6	2787.1	2790.1
12.5°	2793.0	2791.6	2791.6	2788.5	2785.6	2782.6	2781.1	2776.6	2776.6	2766.0	2770.6
15°	2781.1	2782.6	2778.1	2772.1	2769.1	2761.6	2758.6	2752.6	2746.6	2739.2	2740.6
17.5°	2770.6	2766.0	2760.1	2754.1	2742.1	2736.1	2730.2	2721.2	2718.1	2709.1	2706.2
20°	2739.2	2736.1	2728.7	2718.1	2710.7	2697.2	2691.2	2682.2	2674.7	2665.7	2661.2
22.5°	2698.6	2695.6	2686.7	2676.2	2664.2	2658.3	2652.2	2635.8	2628.2	2619.2	2617.8
25°	2647.7	2643.2	2634.2	2622.3	2616.2	2599.8	2593.8	2581.8	2578.8	2569.8	2568.4
27.5°	2569.8	2563.8	2553.3	2538.3	2527.9	2517.4	2511.3	2502.3	2499.4	2490.4	2489.0
30°	2453.0	2445.4	2424.5	2418.5	2400.5	2390.0	2390.0	2378.0	2379.5	2373.5	2373.5
32.5°	2268.7	2256.6	2240.1	2228.2	2216.1	2210.2	2210.2	2205.7	2208.7	2208.7	2211.6
35°	2024.3	2007.9	1998.9	1991.4	1991.4	1997.4	2015.4	2019.9	2028.9	2036.4	2042.3
37.5°	1711.2	1709.8	1720.2	1729.2	1751.6	1777.2	1808.6	1835.6	1861.1	1879.1	1897.0
40°	1372.6	1410.1	1440.0	1482.0	1516.4	1565.9	1622.8	1669.3	1712.7	1744.2	1777.2
42.5°	1071.3	1119.4	1182.3	1243.7	1305.1	1372.6	1447.5	1511.9	1568.8	1612.4	1646.8
45°	834.6	900.6	977.0	1054.9	1134.3	1218.3	1296.1	1362.0	1422.0	1467.0	1501.4
47.5°	672.8	744.8	831.6	917.0	1007.0	1095.3	1182.3	1239.2	1288.7	1324.6	1356.1
50°	555.9	632.4	723.7	821.1	911.0	999.4	1074.4	1129.8	1170.3	1201.7	1221.2
52.5°	464.5	545.4	642.8	740.2	830.1	911.0	978.5	1020.5	1053.4	1075.8	1093.8
55°	383.6	461.5	552.9	644.3	732.7	809.1	864.6	896.1	921.5	935.0	945.4
57.5°	313.2	385.1	469.0	552.9	629.3	692.3	735.8	767.2	779.2	789.6	788.2
60°	245.8	313.2	389.6	461.5	527.4	578.4	609.9	627.9	636.9	641.4	638.3
62.5°	193.3	254.7	313.2	376.1	424.0	467.6	497.5	497.5	502.0	503.4	507.9
65°	143.9	190.2	241.2	287.7	326.6	355.2	371.6	376.1	382.2	380.6	377.6
67.5°	106.4	140.8	178.3	212.7	239.7	257.7	269.7	280.2	278.8	275.7	274.2
70°	73.5	96.0	128.9	149.8	169.3	187.3	190.2	191.8	193.3	194.8	191.8
72.5°	51.0	67.4	85.4	103.4	115.4	122.8	130.4	131.8	131.8	131.8	130.4
75°	25.4	34.4	51.0	58.4	69.0	71.9	78.0	78.0	82.5	76.4	74.9
77.5°	22.5	27.0	36.0	42.0	46.5	51.0	52.4	56.9	55.5	52.4	53.9
80°	13.5	16.5	22.5	25.4	31.5	33.0	34.4	36.0	34.4	36.0	36.0
82.5°	10.5	12.0	15.0	15.0	19.5	19.5	20.9	20.9	22.5	22.5	22.5
85°	6.0	10.5	9.0	18.0	12.0	12.0	15.0	18.0	15.0	15.0	18.0
87.5°	6.0	6.0	4.5	6.0	6.0	6.0	7.4	9.0	9.0	10.5	9.0
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: P249497

CATALOG NUMBER: LSR8B70D010 EC8B70927 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2791.6	2791.6	2791.6	2791.6
2.5°	2796.1	2799.0	2794.6	2793.0
5°	2800.6	2800.6	2797.5	2797.5
7.5°	2800.6	2800.6	2796.1	2793.0
10°	2788.5	2788.5	2784.0	2781.1
12.5°	2766.0	2766.0	2764.6	2760.1
15°	2737.7	2737.7	2731.6	2727.1
17.5°	2698.6	2701.7	2694.2	2694.2
20°	2656.7	2655.2	2649.3	2646.2
22.5°	2613.3	2610.2	2608.8	2599.8
25°	2566.8	2563.8	2559.3	2554.9
27.5°	2487.4	2485.9	2481.4	2475.5
30°	2366.0	2364.5	2358.6	2358.6
32.5°	2208.7	2207.1	2201.2	2202.8
35°	2045.4	2051.3	2048.4	2042.3
37.5°	1909.0	1913.5	1916.6	1913.5
40°	1795.2	1808.6	1810.1	1813.2
42.5°	1673.8	1691.8	1697.7	1700.7
45°	1528.4	1544.9	1558.4	1555.3
47.5°	1380.0	1392.1	1404.0	1395.0
50°	1237.7	1245.1	1249.6	1249.6
52.5°	1102.8	1102.8	1101.4	1102.8
55°	948.5	948.5	942.5	945.4
57.5°	786.7	789.6	785.1	777.7
60°	636.9	629.3	626.3	621.9
62.5°	496.0	496.0	485.6	498.9
65°	371.6	367.1	362.6	361.1
67.5°	269.7	268.2	263.7	262.2
70°	190.2	184.3	182.8	179.8
72.5°	127.4	127.4	124.3	124.3
75°	78.0	70.4	69.0	70.4
77.5°	53.9	52.4	52.4	51.0
80°	36.0	34.4	37.5	33.0
82.5°	22.5	24.0	22.5	24.0
85°	15.0	18.0	16.5	16.5
87.5°	9.0	9.0	9.0	9.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)