

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: P249389

Luminaire Tested: **LSR8B70D010 EC8B709727 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249389
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 EC8B709727 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5195.0 lumens
Efficiency: N/A
Efficacy: 68.4 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

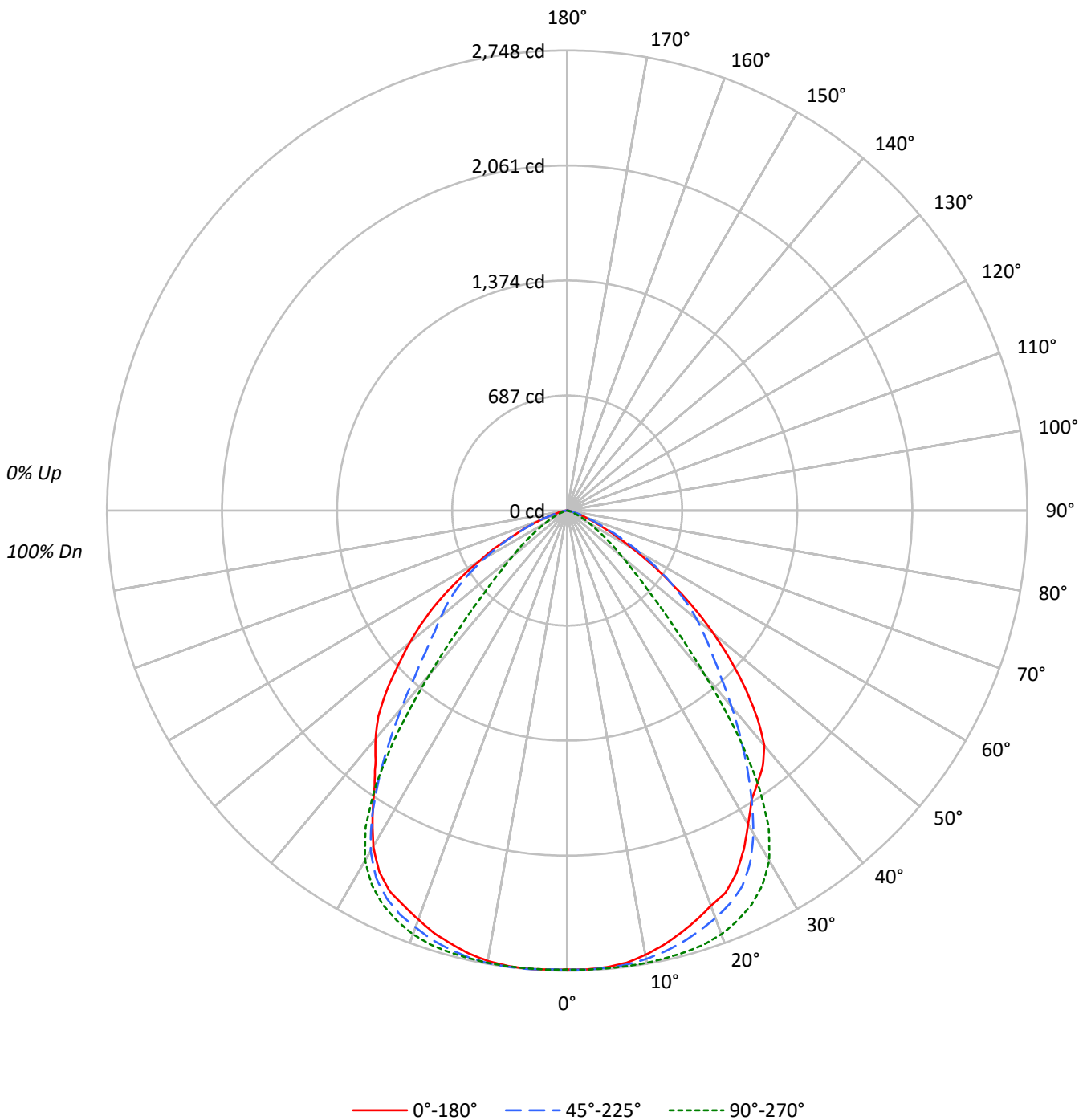
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	261.6	5.0
10°-20°	759.7	14.6
20°-30°	1153.1	22.2
30°-40°	1211.1	23.3
40°-50°	908.0	17.5
50°-60°	582.6	11.2
60°-70°	249.2	4.8
70°-80°	58.9	1.1
80°-90°	10.9	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°	2174.3	41.9
0°-40°	3385.4	65.2
0°-60°	4876.0	93.9
0°-90°	5195.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5195.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2741	2741	2741	2741	2741	
5°	2737	2741	2744	2748	2747	260
15°	2613	2667	2729	2712	2678	737
25°	2391	2475	2600	2553	2508	1092
35°	1983	1873	1985	1961	2005	1245
45°	1507	1231	708	1196	1527	1154
55°	762	762	263	794	928	691
65°	230	271	84	349	355	245
75°	35	41	12	71	69	51
85°	12	7	6	12	16	12
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°	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0
2.5°	2742.5	2745.4	2743.9	2743.9	2742.5	2743.9	2743.9	2746.9	2746.9	2743.9	2742.5
5°	2736.6	2739.5	2739.5	2736.6	2736.6	2743.9	2739.5	2742.5	2742.5	2741.0	2741.0
7.5°	2723.3	2723.3	2729.2	2724.8	2724.8	2729.2	2727.7	2730.7	2733.6	2735.1	2735.1
10°	2693.9	2696.8	2698.3	2698.3	2699.8	2704.2	2707.1	2713.0	2716.0	2718.9	2720.4
12.5°	2657.1	2661.5	2663.0	2661.5	2666.0	2671.8	2679.2	2686.6	2691.0	2696.8	2701.3
15°	2613.0	2613.0	2615.9	2620.3	2623.3	2632.1	2639.5	2648.3	2660.1	2667.4	2674.8
17.5°	2564.4	2567.4	2571.8	2571.8	2577.7	2592.4	2596.8	2610.1	2623.3	2630.6	2645.4
20°	2511.5	2514.4	2518.8	2521.8	2529.1	2540.9	2549.7	2561.5	2576.2	2589.5	2604.1
22.5°	2470.3	2464.4	2467.3	2470.3	2477.6	2487.9	2498.2	2512.9	2527.6	2540.9	2555.6
25°	2390.8	2392.3	2396.7	2399.6	2408.5	2417.3	2429.1	2446.7	2460.0	2474.7	2490.9
27.5°	2283.4	2284.9	2292.2	2292.2	2299.6	2314.3	2321.7	2336.4	2354.1	2368.7	2387.9
30°	2161.3	2164.2	2164.2	2170.1	2174.5	2181.9	2189.3	2204.0	2212.8	2226.0	2252.5
32.5°	2049.5	2052.4	2050.9	2049.5	2045.1	2043.6	2042.1	2045.1	2048.0	2052.4	2062.7
35°	1983.3	1975.9	1970.0	1959.8	1948.0	1933.3	1920.0	1902.4	1886.2	1872.9	1858.2
37.5°	1920.0	1918.5	1909.7	1895.0	1871.4	1845.0	1814.1	1775.8	1737.6	1696.4	1656.7
40°	1831.7	1827.3	1820.0	1799.4	1772.9	1740.5	1699.3	1652.2	1590.4	1527.2	1462.5
42.5°	1681.7	1683.1	1674.3	1658.1	1633.1	1602.2	1559.5	1508.1	1441.9	1366.8	1283.0
45°	1506.6	1506.6	1503.6	1490.4	1472.7	1447.7	1415.4	1372.7	1308.0	1231.4	1141.7
47.5°	1324.1	1325.6	1321.2	1318.3	1310.9	1294.7	1271.2	1238.8	1193.2	1119.6	1029.9
50°	1138.8	1138.8	1146.1	1144.6	1144.6	1138.8	1128.5	1109.3	1069.6	1010.8	926.9
52.5°	953.4	956.3	960.8	966.6	974.0	985.7	974.0	965.2	940.1	894.5	822.4
55°	762.1	765.1	772.4	782.7	791.6	803.3	806.3	806.3	793.0	762.1	707.7
57.5°	598.8	594.4	600.3	609.1	620.9	632.7	641.5	651.8	650.3	629.7	585.6
60°	450.2	451.7	456.1	464.9	473.8	484.1	495.8	504.6	509.1	498.8	470.8
62.5°	328.1	328.1	334.0	342.8	347.2	361.9	369.3	373.7	378.1	376.6	359.0
65°	229.5	232.5	235.4	239.8	244.2	253.0	257.5	266.3	269.2	270.7	257.5
67.5°	161.9	157.4	160.4	163.3	167.7	173.6	182.4	182.4	186.8	186.8	178.0
70°	103.0	103.0	104.5	108.9	111.8	113.3	116.2	119.2	123.6	122.1	122.1
72.5°	69.2	67.7	69.2	70.6	72.1	76.5	76.5	78.0	80.9	82.4	76.5
75°	35.3	36.8	39.7	38.3	42.7	39.7	41.2	45.6	44.1	41.2	41.2
77.5°	29.4	29.4	29.4	28.0	30.9	30.9	29.4	32.4	30.9	30.9	29.4
80°	20.6	22.1	20.6	19.1	20.6	19.1	19.1	19.1	19.1	19.1	17.6
82.5°	16.2	13.2	14.7	13.2	14.7	14.7	13.2	11.8	11.8	13.2	11.8
85°	11.8	8.8	10.3	10.3	8.8	8.8	8.8	8.8	8.8	7.3	7.3
87.5°	7.3	4.4	4.4	4.4	5.9	5.9	5.9	4.4	5.9	5.9	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0
2.5°	2745.4	2743.9	2746.9	2745.4	2745.4	2743.9	2745.4	2743.9	2746.9	2741.0	2742.5
5°	2745.4	2742.5	2743.9	2745.4	2746.9	2743.9	2743.9	2743.9	2746.9	2743.9	2745.4
7.5°	2739.5	2738.0	2742.5	2745.4	2743.9	2742.5	2745.4	2743.9	2746.9	2745.4	2748.3
10°	2727.7	2729.2	2732.2	2736.6	2738.0	2739.5	2742.5	2742.5	2746.9	2741.0	2743.9
12.5°	2710.1	2716.0	2723.3	2726.3	2732.2	2732.2	2735.1	2736.6	2739.5	2738.0	2742.5
15°	2688.0	2695.4	2704.2	2711.6	2718.9	2723.3	2727.7	2729.2	2733.6	2729.2	2730.7
17.5°	2661.5	2670.4	2683.6	2692.4	2704.2	2708.6	2714.5	2717.4	2721.9	2718.9	2720.4
20°	2624.7	2635.1	2649.8	2663.0	2670.4	2680.6	2688.0	2692.4	2695.4	2692.4	2693.9
22.5°	2573.3	2588.0	2607.1	2617.4	2632.1	2640.9	2642.4	2652.7	2660.1	2652.7	2655.7
25°	2512.9	2527.6	2542.4	2564.4	2577.7	2588.0	2598.3	2599.8	2607.1	2605.6	2604.1
27.5°	2412.9	2432.0	2457.0	2474.7	2492.3	2508.5	2520.3	2523.2	2530.6	2527.6	2529.1
30°	2276.0	2296.7	2320.2	2348.2	2373.2	2389.3	2404.1	2414.4	2421.7	2417.3	2415.8
32.5°	2081.9	2102.5	2127.5	2155.4	2184.9	2208.4	2226.0	2239.3	2248.1	2245.2	2237.8
35°	1859.7	1865.6	1881.8	1903.8	1928.8	1953.9	1970.0	1984.7	1995.0	1998.0	1998.0
37.5°	1631.7	1612.5	1600.8	1600.8	1615.5	1625.7	1640.5	1649.3	1665.5	1671.4	1675.8
40°	1410.9	1366.8	1325.6	1294.7	1274.1	1272.7	1272.7	1277.1	1291.8	1310.9	1328.6
42.5°	1213.8	1143.2	1079.9	1022.5	981.4	957.8	947.5	949.0	960.8	978.4	1007.8
45°	1056.4	968.1	888.7	819.5	763.6	726.8	709.2	707.7	716.5	737.1	769.5
47.5°	934.3	840.1	750.3	670.9	610.6	570.8	550.3	544.4	550.3	569.4	607.6
50°	832.7	735.7	643.0	560.6	495.8	454.6	435.5	428.1	435.5	451.7	489.9
52.5°	738.6	638.5	551.7	472.3	403.1	367.8	347.2	342.8	347.2	366.3	397.3
55°	629.7	544.4	459.0	379.6	319.3	284.0	267.8	263.4	267.8	285.4	317.8
57.5°	522.3	448.7	373.7	301.6	250.1	219.2	204.5	198.6	208.9	220.7	258.9
60°	422.2	363.4	300.1	236.9	194.2	166.2	154.5	153.0	156.0	170.7	197.1
62.5°	331.1	282.5	232.5	181.0	145.7	133.9	119.2	117.7	120.6	129.5	150.1
65°	238.4	207.5	169.2	132.4	104.5	88.3	82.4	83.9	86.8	92.7	111.8
67.5°	166.2	144.2	117.7	92.7	72.1	64.7	58.9	57.4	58.9	69.2	79.5
70°	111.8	98.6	79.5	70.6	50.0	39.7	41.2	36.8	42.7	42.7	51.5
72.5°	73.5	64.7	53.0	41.2	35.3	28.0	28.0	26.5	29.4	30.9	38.3
75°	38.3	29.4	29.4	20.6	14.7	7.3	13.2	11.8	10.3	11.8	14.7
77.5°	26.5	22.1	20.6	16.2	14.7	11.8	11.8	11.8	11.8	13.2	14.7
80°	16.2	16.2	11.8	10.3	8.8	7.3	8.8	8.8	8.8	8.8	10.3
82.5°	10.3	8.8	8.8	7.3	7.3	5.9	5.9	5.9	5.9	5.9	8.8
85°	8.8	5.9	5.9	4.4	5.9	10.3	4.4	5.9	5.9	5.9	4.4
87.5°	3.0	4.4	4.4	4.4	3.0	1.5	3.0	4.4	4.4	7.3	5.9
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°	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0	2741.0
2.5°	2745.4	2746.9	2746.9	2745.4	2745.4	2742.5	2748.3	2743.9	2745.4	2751.3	2746.9
5°	2748.3	2749.8	2749.8	2748.3	2748.3	2748.3	2749.8	2749.8	2748.3	2746.9	2749.8
7.5°	2754.2	2752.8	2752.8	2749.8	2749.8	2746.9	2749.8	2745.4	2748.3	2745.4	2749.8
10°	2746.9	2748.3	2746.9	2745.4	2745.4	2743.9	2743.9	2739.5	2741.0	2736.6	2739.5
12.5°	2742.5	2741.0	2741.0	2738.0	2735.1	2732.2	2730.7	2726.3	2726.3	2716.0	2720.4
15°	2730.7	2732.2	2727.7	2721.9	2718.9	2711.6	2708.6	2702.7	2696.8	2689.5	2691.0
17.5°	2720.4	2716.0	2710.1	2704.2	2692.4	2686.6	2680.6	2671.8	2668.9	2660.1	2657.1
20°	2689.5	2686.6	2679.2	2668.9	2661.5	2648.3	2642.4	2633.6	2626.2	2617.4	2613.0
22.5°	2649.8	2646.8	2638.0	2627.7	2615.9	2610.1	2604.1	2588.0	2580.6	2571.8	2570.3
25°	2599.8	2595.3	2586.5	2574.7	2568.8	2552.7	2546.8	2535.0	2532.1	2523.2	2521.8
27.5°	2523.2	2517.4	2507.1	2492.3	2482.0	2471.7	2465.9	2457.0	2454.1	2445.2	2443.8
30°	2408.5	2401.1	2380.5	2374.7	2357.0	2346.7	2346.7	2334.9	2336.4	2330.5	2330.5
32.5°	2227.5	2215.7	2199.5	2187.8	2176.0	2170.1	2170.1	2165.7	2168.7	2168.7	2171.6
35°	1987.7	1971.5	1962.7	1955.3	1955.3	1961.2	1978.9	1983.3	1992.1	1999.5	2005.4
37.5°	1680.2	1678.7	1689.0	1697.9	1719.9	1744.9	1775.8	1802.3	1827.3	1845.0	1862.6
40°	1347.7	1384.5	1413.9	1455.1	1488.9	1537.5	1593.4	1639.0	1681.7	1712.6	1744.9
42.5°	1051.9	1099.0	1160.8	1221.1	1281.5	1347.7	1421.3	1484.5	1540.4	1583.1	1616.9
45°	819.5	884.2	959.3	1035.8	1113.8	1196.2	1272.7	1337.4	1396.2	1440.4	1474.2
47.5°	660.6	731.2	816.5	900.4	988.7	1075.5	1160.8	1216.8	1265.3	1300.6	1331.5
50°	545.8	620.9	710.6	806.3	894.5	981.4	1054.9	1109.3	1149.1	1180.0	1199.1
52.5°	456.1	535.5	631.2	726.8	815.1	894.5	960.8	1001.9	1034.3	1056.4	1074.0
55°	376.6	453.2	542.9	632.7	719.5	794.5	848.9	879.8	904.8	918.1	928.4
57.5°	307.5	378.1	460.5	542.9	617.9	679.7	722.4	753.3	765.1	775.4	773.9
60°	241.3	307.5	382.5	453.2	517.9	567.9	598.8	616.5	625.3	629.7	626.8
62.5°	189.8	250.1	307.5	369.3	416.4	459.0	488.5	488.5	492.9	494.3	498.8
65°	141.2	186.8	236.9	282.5	320.7	348.7	364.9	369.3	375.2	373.7	370.8
67.5°	104.5	138.3	175.1	208.9	235.4	253.0	264.8	275.1	273.7	270.7	269.2
70°	72.1	94.2	126.5	147.1	166.2	183.9	186.8	188.3	189.8	191.3	188.3
72.5°	50.0	66.2	83.9	101.5	113.3	120.6	128.0	129.5	129.5	129.5	128.0
75°	25.0	33.8	50.0	57.4	67.7	70.6	76.5	76.5	80.9	75.0	73.5
77.5°	22.1	26.5	35.3	41.2	45.6	50.0	51.5	55.9	54.4	51.5	53.0
80°	13.2	16.2	22.1	25.0	30.9	32.4	33.8	35.3	33.8	35.3	35.3
82.5°	10.3	11.8	14.7	14.7	19.1	19.1	20.6	20.6	22.1	22.1	22.1
85°	5.9	10.3	8.8	17.6	11.8	11.8	14.7	17.6	14.7	14.7	17.6
87.5°	5.9	5.9	4.4	5.9	5.9	5.9	7.3	8.8	8.8	10.3	8.8
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: P249389

CATALOG NUMBER: LSR8B70D010 EC8B709727 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2741.0	2741.0	2741.0	2741.0
2.5°	2745.4	2748.3	2743.9	2742.5
5°	2749.8	2749.8	2746.9	2746.9
7.5°	2749.8	2749.8	2745.4	2742.5
10°	2738.0	2738.0	2733.6	2730.7
12.5°	2716.0	2716.0	2714.5	2710.1
15°	2688.0	2688.0	2682.1	2677.7
17.5°	2649.8	2652.7	2645.4	2645.4
20°	2608.6	2607.1	2601.2	2598.3
22.5°	2565.9	2563.0	2561.5	2552.7
25°	2520.3	2517.4	2512.9	2508.5
27.5°	2442.3	2440.9	2436.4	2430.6
30°	2323.1	2321.7	2315.8	2315.8
32.5°	2168.7	2167.2	2161.3	2162.8
35°	2008.3	2014.2	2011.2	2005.4
37.5°	1874.4	1878.8	1881.8	1878.8
40°	1762.6	1775.8	1777.3	1780.3
42.5°	1643.4	1661.1	1667.0	1669.9
45°	1500.7	1516.9	1530.1	1527.2
47.5°	1355.0	1366.8	1378.6	1369.8
50°	1215.3	1222.6	1227.1	1227.1
52.5°	1082.9	1082.9	1081.4	1082.9
55°	931.3	931.3	925.4	928.4
57.5°	772.4	775.4	770.9	763.6
60°	625.3	617.9	615.0	610.6
62.5°	487.0	487.0	476.7	489.9
65°	364.9	360.5	356.0	354.6
67.5°	264.8	263.4	258.9	257.5
70°	186.8	181.0	179.5	176.5
72.5°	125.1	125.1	122.1	122.1
75°	76.5	69.2	67.7	69.2
77.5°	53.0	51.5	51.5	50.0
80°	35.3	33.8	36.8	32.4
82.5°	22.1	23.5	22.1	23.5
85°	14.7	17.6	16.2	16.2
87.5°	8.8	8.8	8.8	8.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)