

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: P249498

Luminaire Tested: **LSR8B80D010 EC8B809727 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249498
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: LSR8B80D010 EC8B809727 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: 5230.0 lumens
Efficiency: N/A
Efficacy: 70.3 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

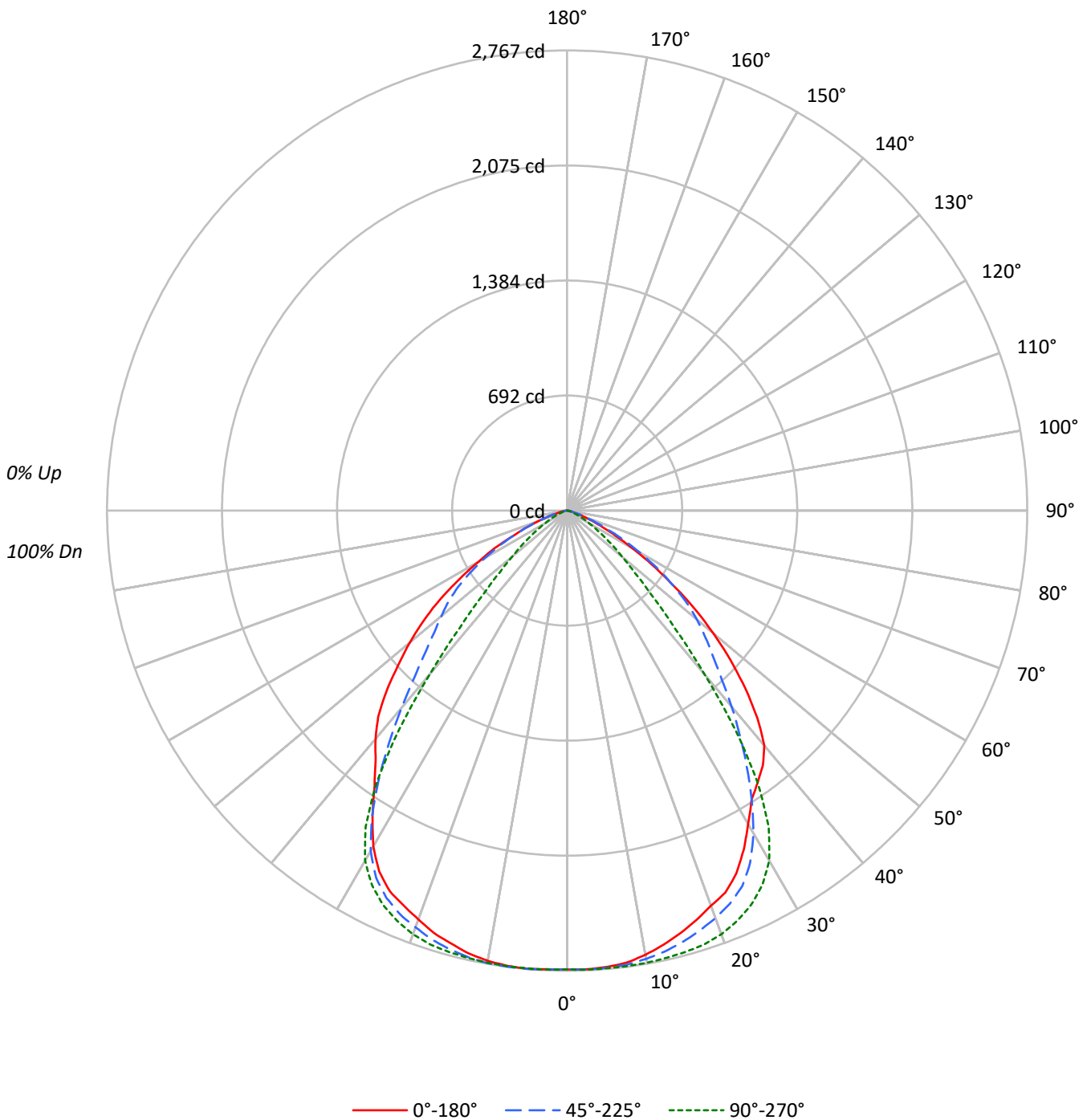
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	263.4	5.0
10°-20°	764.8	14.6
20°-30°	1160.8	22.2
30°-40°	1219.2	23.3
40°-50°	914.1	17.5
50°-60°	586.5	11.2
60°-70°	250.9	4.8
70°-80°	59.3	1.1
80°-90°	11.0	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°	2189.0	41.9
0°-40°	3408.2	65.2
0°-60°	4908.8	93.9
0°-90°	5230.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5230.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2760	2760	2760	2760	2760	
5°	2755	2760	2762	2767	2765	262
15°	2631	2685	2748	2730	2696	742
25°	2407	2491	2617	2570	2525	1100
35°	1997	1886	1998	1974	2019	1253
45°	1517	1240	712	1204	1538	1162
55°	767	767	265	800	935	696
65°	231	272	84	351	357	247
75°	36	42	12	71	70	52
85°	12	7	6	12	16	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°	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5
2.5°	2760.9	2763.9	2762.4	2762.4	2760.9	2762.4	2762.4	2765.4	2765.4	2762.4	2760.9
5°	2755.0	2758.0	2758.0	2755.0	2755.0	2762.4	2758.0	2760.9	2760.9	2759.5	2759.5
7.5°	2741.7	2741.7	2747.6	2743.2	2743.2	2747.6	2746.1	2749.1	2752.1	2753.5	2753.5
10°	2712.0	2715.0	2716.5	2716.5	2718.0	2722.4	2725.4	2731.3	2734.3	2737.2	2738.7
12.5°	2675.0	2679.5	2681.0	2679.5	2683.9	2689.8	2697.3	2704.7	2709.1	2715.0	2719.5
15°	2630.6	2630.6	2633.5	2638.0	2641.0	2649.9	2657.2	2666.1	2678.0	2685.4	2692.8
17.5°	2581.7	2584.7	2589.1	2589.1	2595.1	2609.8	2614.3	2627.6	2641.0	2648.4	2663.2
20°	2528.4	2531.3	2535.8	2538.8	2546.2	2558.0	2566.9	2578.7	2593.6	2606.9	2621.7
22.5°	2486.9	2481.0	2483.9	2486.9	2494.3	2504.7	2515.1	2529.9	2544.7	2558.0	2572.8
25°	2406.9	2408.4	2412.9	2415.8	2424.7	2433.6	2445.4	2463.2	2476.5	2491.4	2507.6
27.5°	2298.8	2300.3	2307.7	2307.7	2315.1	2329.9	2337.3	2352.1	2369.9	2384.7	2404.0
30°	2175.9	2178.8	2178.8	2184.8	2189.2	2196.6	2204.0	2218.8	2227.7	2241.0	2267.7
32.5°	2063.3	2066.2	2064.8	2063.3	2058.9	2057.4	2055.9	2058.9	2061.8	2066.2	2076.6
35°	1996.7	1989.2	1983.3	1973.0	1961.1	1946.3	1932.9	1915.2	1898.9	1885.5	1870.8
37.5°	1932.9	1931.5	1922.6	1907.8	1884.1	1857.4	1826.3	1787.8	1749.3	1707.8	1667.8
40°	1844.1	1839.6	1832.2	1811.5	1784.8	1752.2	1710.8	1663.4	1601.1	1537.5	1472.3
42.5°	1693.0	1694.5	1685.6	1669.3	1644.1	1613.0	1570.1	1518.2	1451.6	1376.0	1291.6
45°	1516.7	1516.7	1513.8	1500.4	1482.7	1457.5	1424.9	1382.0	1316.8	1239.7	1149.4
47.5°	1333.1	1334.5	1330.1	1327.2	1319.7	1303.5	1279.8	1247.2	1201.2	1127.2	1036.8
50°	1146.5	1146.5	1153.8	1152.4	1152.4	1146.5	1136.1	1116.8	1076.8	1017.6	933.2
52.5°	959.8	962.8	967.2	973.1	980.5	992.4	980.5	971.7	946.5	900.5	828.0
55°	767.2	770.2	777.6	788.0	796.9	808.7	811.7	811.7	798.3	767.2	712.5
57.5°	602.9	598.4	604.3	613.2	625.1	636.9	645.8	656.2	654.7	633.9	589.5
60°	453.2	454.7	459.2	468.1	476.9	487.3	499.2	508.0	512.5	502.1	474.0
62.5°	330.3	330.3	336.2	345.1	349.6	364.4	371.8	376.2	380.7	379.2	361.4
65°	231.1	234.0	237.0	241.4	245.9	254.7	259.2	268.1	271.1	272.5	259.2
67.5°	162.9	158.5	161.5	164.4	168.9	174.8	183.7	183.7	188.1	188.1	179.2
70°	103.7	103.7	105.2	109.6	112.6	114.1	117.0	120.0	124.4	122.9	122.9
72.5°	69.6	68.1	69.6	71.1	72.6	77.0	77.0	78.5	81.5	83.0	77.0
75°	35.6	37.0	40.0	38.5	42.9	40.0	41.5	45.9	44.4	41.5	41.5
77.5°	29.6	29.6	29.6	28.2	31.1	31.1	29.6	32.6	31.1	31.1	29.6
80°	20.7	22.2	20.7	19.2	20.7	19.2	19.2	19.2	19.2	19.2	17.8
82.5°	16.3	13.3	14.8	13.3	14.8	14.8	13.3	11.9	11.9	13.3	11.9
85°	11.9	8.9	10.4	10.4	8.9	8.9	8.9	8.9	8.9	7.4	7.4
87.5°	7.4	4.5	4.5	4.5	5.9	5.9	5.9	4.5	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°	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5
2.5°	2763.9	2762.4	2765.4	2763.9	2763.9	2762.4	2763.9	2762.4	2765.4	2759.5	2760.9
5°	2763.9	2760.9	2762.4	2763.9	2765.4	2762.4	2762.4	2762.4	2765.4	2762.4	2763.9
7.5°	2758.0	2756.5	2760.9	2763.9	2762.4	2760.9	2763.9	2762.4	2765.4	2763.9	2766.8
10°	2746.1	2747.6	2750.6	2755.0	2756.5	2758.0	2760.9	2760.9	2765.4	2759.5	2762.4
12.5°	2728.4	2734.3	2741.7	2744.6	2750.6	2750.6	2753.5	2755.0	2758.0	2756.5	2760.9
15°	2706.1	2713.5	2722.4	2729.8	2737.2	2741.7	2746.1	2747.6	2752.1	2747.6	2749.1
17.5°	2679.5	2688.3	2701.7	2710.6	2722.4	2726.9	2732.8	2735.7	2740.2	2737.2	2738.7
20°	2642.4	2652.8	2667.6	2681.0	2688.3	2698.7	2706.1	2710.6	2713.5	2710.6	2712.0
22.5°	2590.6	2605.4	2624.7	2635.0	2649.9	2658.7	2660.2	2670.6	2678.0	2670.6	2673.6
25°	2529.9	2544.7	2559.5	2581.7	2595.1	2605.4	2615.8	2617.3	2624.7	2623.2	2621.7
27.5°	2429.1	2448.4	2473.6	2491.4	2509.1	2525.4	2537.3	2540.2	2547.7	2544.7	2546.2
30°	2291.4	2312.1	2335.9	2364.0	2389.2	2405.4	2420.3	2430.6	2438.0	2433.6	2432.1
32.5°	2095.9	2116.6	2141.8	2169.9	2199.6	2223.2	2241.0	2254.4	2263.3	2260.3	2252.9
35°	1872.2	1878.1	1894.5	1916.7	1941.8	1967.0	1983.3	1998.1	2008.5	2011.4	2011.4
37.5°	1642.6	1623.4	1611.5	1611.5	1626.3	1636.7	1651.5	1660.4	1676.7	1682.6	1687.1
40°	1420.4	1376.0	1334.5	1303.5	1282.7	1281.2	1281.2	1285.7	1300.5	1319.7	1337.5
42.5°	1222.0	1150.9	1087.2	1029.4	988.0	964.3	953.9	955.4	967.2	985.0	1014.6
45°	1063.5	974.6	894.6	825.0	768.7	731.7	713.9	712.5	721.3	742.1	774.7
47.5°	940.6	845.8	755.4	675.4	614.7	574.7	554.0	548.1	554.0	573.2	611.7
50°	838.4	740.6	647.3	564.3	499.2	457.7	438.4	431.0	438.4	454.7	493.2
52.5°	743.5	642.8	555.4	475.5	405.8	370.3	349.6	345.1	349.6	368.8	399.9
55°	633.9	548.1	462.1	382.1	321.4	285.9	269.6	265.1	269.6	287.4	319.9
57.5°	525.8	451.8	376.2	303.6	251.8	220.7	205.9	199.9	210.3	222.2	260.7
60°	425.1	365.9	302.2	238.5	195.5	167.4	155.5	154.0	157.0	171.8	198.5
62.5°	333.3	284.4	234.0	182.2	146.6	134.8	120.0	118.5	121.4	130.3	151.1
65°	240.0	208.9	170.3	133.3	105.2	88.9	83.0	84.4	87.4	93.3	112.6
67.5°	167.4	145.2	118.5	93.3	72.6	65.2	59.3	57.8	59.3	69.6	80.0
70°	112.6	99.2	80.0	71.1	50.4	40.0	41.5	37.0	42.9	42.9	51.8
72.5°	74.0	65.2	53.3	41.5	35.6	28.2	28.2	26.7	29.6	31.1	38.5
75°	38.5	29.6	29.6	20.7	14.8	7.4	13.3	11.9	10.4	11.9	14.8
77.5°	26.7	22.2	20.7	16.3	14.8	11.9	11.9	11.9	11.9	13.3	14.8
80°	16.3	16.3	11.9	10.4	8.9	7.4	8.9	8.9	8.9	8.9	10.4
82.5°	10.4	8.9	8.9	7.4	7.4	5.9	5.9	5.9	5.9	5.9	8.9
85°	8.9	5.9	5.9	4.5	5.9	10.4	4.5	5.9	5.9	5.9	4.5
87.5°	3.0	4.5	4.5	4.5	3.0	1.5	3.0	4.5	4.5	7.4	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°	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5	2759.5
2.5°	2763.9	2765.4	2765.4	2763.9	2763.9	2760.9	2766.8	2762.4	2763.9	2769.8	2765.4
5°	2766.8	2768.3	2768.3	2766.8	2766.8	2766.8	2768.3	2768.3	2766.8	2765.4	2768.3
7.5°	2772.8	2771.3	2771.3	2768.3	2768.3	2765.4	2768.3	2763.9	2766.8	2763.9	2768.3
10°	2765.4	2766.8	2765.4	2763.9	2763.9	2762.4	2762.4	2758.0	2759.5	2755.0	2758.0
12.5°	2760.9	2759.5	2759.5	2756.5	2753.5	2750.6	2749.1	2744.6	2744.6	2734.3	2738.7
15°	2749.1	2750.6	2746.1	2740.2	2737.2	2729.8	2726.9	2720.9	2715.0	2707.6	2709.1
17.5°	2738.7	2734.3	2728.4	2722.4	2710.6	2704.7	2698.7	2689.8	2686.9	2678.0	2675.0
20°	2707.6	2704.7	2697.3	2686.9	2679.5	2666.1	2660.2	2651.3	2643.9	2635.0	2630.6
22.5°	2667.6	2664.6	2655.8	2645.4	2633.5	2627.6	2621.7	2605.4	2598.0	2589.1	2587.6
25°	2617.3	2612.8	2603.9	2592.1	2586.1	2569.9	2563.9	2552.1	2549.1	2540.2	2538.8
27.5°	2540.2	2534.3	2523.9	2509.1	2498.8	2488.4	2482.5	2473.6	2470.6	2461.7	2460.3
30°	2424.7	2417.3	2396.6	2390.6	2372.9	2362.5	2362.5	2350.6	2352.1	2346.2	2346.2
32.5°	2242.5	2230.7	2214.4	2202.5	2190.7	2184.8	2184.8	2180.3	2183.3	2183.3	2186.2
35°	2001.1	1984.8	1975.9	1968.5	1968.5	1974.4	1992.2	1996.7	2005.5	2012.9	2018.9
37.5°	1691.5	1690.0	1700.4	1709.3	1731.5	1756.7	1787.8	1814.5	1839.6	1857.4	1875.2
40°	1356.8	1393.8	1423.4	1464.9	1498.9	1547.8	1604.1	1650.0	1693.0	1724.1	1756.7
42.5°	1059.0	1106.4	1168.7	1229.4	1290.1	1356.8	1430.8	1494.5	1550.8	1593.8	1627.8
45°	825.0	890.2	965.7	1042.8	1121.3	1204.2	1281.2	1346.4	1405.7	1450.1	1484.2
47.5°	665.0	736.2	822.0	906.5	995.4	1082.7	1168.7	1225.0	1273.8	1309.4	1340.5
50°	549.5	625.1	715.4	811.7	900.5	988.0	1062.0	1116.8	1156.8	1187.9	1207.2
52.5°	459.2	539.1	635.4	731.7	820.6	900.5	967.2	1008.7	1041.3	1063.5	1081.3
55°	379.2	456.2	546.6	636.9	724.3	799.8	854.6	885.8	910.9	924.3	934.6
57.5°	309.6	380.7	463.6	546.6	622.1	684.3	727.3	758.4	770.2	780.6	779.1
60°	242.9	309.6	385.1	456.2	521.4	571.7	602.9	620.6	629.5	633.9	631.0
62.5°	191.1	251.8	309.6	371.8	419.2	462.1	491.8	491.8	496.2	497.7	502.1
65°	142.2	188.1	238.5	284.4	322.9	351.0	367.4	371.8	377.7	376.2	373.3
67.5°	105.2	139.2	176.2	210.3	237.0	254.7	266.6	277.0	275.5	272.5	271.1
70°	72.6	94.8	127.4	148.1	167.4	185.2	188.1	189.6	191.1	192.6	189.6
72.5°	50.4	66.6	84.4	102.2	114.1	121.4	128.9	130.3	130.3	130.3	128.9
75°	25.2	34.1	50.4	57.8	68.1	71.1	77.0	77.0	81.5	75.5	74.0
77.5°	22.2	26.7	35.6	41.5	45.9	50.4	51.8	56.3	54.8	51.8	53.3
80°	13.3	16.3	22.2	25.2	31.1	32.6	34.1	35.6	34.1	35.6	35.6
82.5°	10.4	11.9	14.8	14.8	19.2	19.2	20.7	20.7	22.2	22.2	22.2
85°	5.9	10.4	8.9	17.8	11.9	11.9	14.8	17.8	14.8	14.8	17.8
87.5°	5.9	5.9	4.5	5.9	5.9	5.9	7.4	8.9	8.9	10.4	8.9
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: P249498

CATALOG NUMBER: LSR8B80D010 EC8B809727 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2759.5	2759.5	2759.5	2759.5
2.5°	2763.9	2766.8	2762.4	2760.9
5°	2768.3	2768.3	2765.4	2765.4
7.5°	2768.3	2768.3	2763.9	2760.9
10°	2756.5	2756.5	2752.1	2749.1
12.5°	2734.3	2734.3	2732.8	2728.4
15°	2706.1	2706.1	2700.2	2695.8
17.5°	2667.6	2670.6	2663.2	2663.2
20°	2626.2	2624.7	2618.8	2615.8
22.5°	2583.2	2580.2	2578.7	2569.9
25°	2537.3	2534.3	2529.9	2525.4
27.5°	2458.8	2457.3	2452.8	2446.9
30°	2338.8	2337.3	2331.4	2331.4
32.5°	2183.3	2181.8	2175.9	2177.4
35°	2021.8	2027.8	2024.8	2018.9
37.5°	1887.0	1891.5	1894.5	1891.5
40°	1774.5	1787.8	1789.3	1792.3
42.5°	1654.5	1672.3	1678.2	1681.1
45°	1510.8	1527.1	1540.4	1537.5
47.5°	1364.2	1376.0	1387.9	1379.0
50°	1223.5	1230.9	1235.3	1235.3
52.5°	1090.2	1090.2	1088.7	1090.2
55°	937.6	937.6	931.7	934.6
57.5°	777.6	780.6	776.1	768.7
60°	629.5	622.1	619.1	614.7
62.5°	490.3	490.3	479.9	493.2
65°	367.4	362.9	358.4	357.0
67.5°	266.6	265.1	260.7	259.2
70°	188.1	182.2	180.7	177.7
72.5°	125.9	125.9	122.9	122.9
75°	77.0	69.6	68.1	69.6
77.5°	53.3	51.8	51.8	50.4
80°	35.6	34.1	37.0	32.6
82.5°	22.2	23.7	22.2	23.7
85°	14.8	17.8	16.3	16.3
87.5°	8.9	8.9	8.9	8.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)