

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: P244649

Luminaire Tested: **LD8B50D010 ER8B50950 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244649
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: LD8B50D010 ER8B50950 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5147.0 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

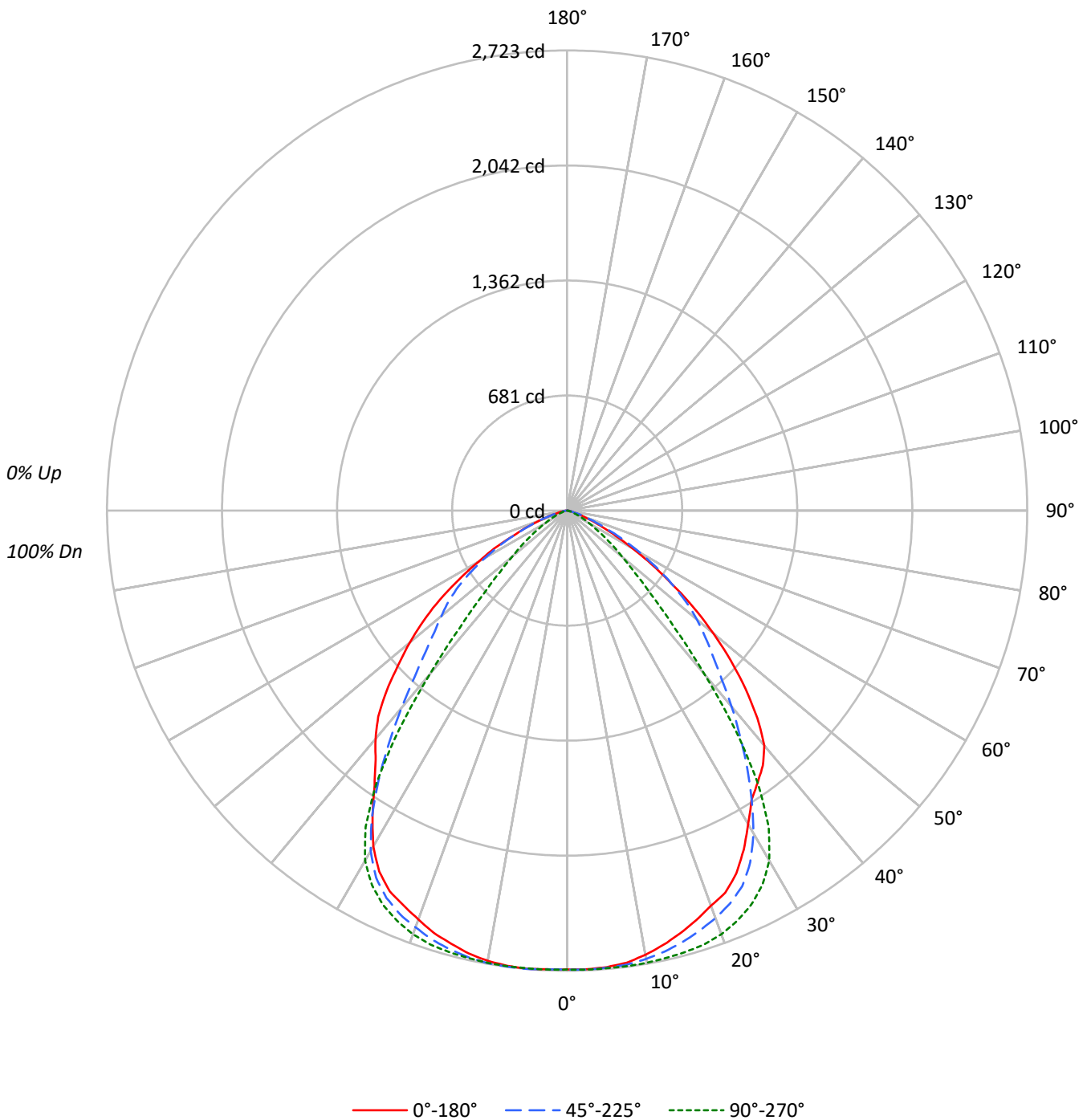
Input Watts (W): 53
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P244649

CATALOG NUMBER: LD8B50D010 ER8B50950 8LBDW0H

Luminous Intensity Polar Plot





TEST NUMBER: P244649

CATALOG NUMBER: LD8B50D010 ER8B50950 8LBDW0H

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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	83742	83742	83742
5°	83926	84152	84242
10°	83572	85078	84715
15°	82645	86323	84695
20°	81654	87535	84476
25°	80593	87636	84564
30°	76245	85175	81696
35°	73971	74024	74791
40°	73053	50933	71000
45°	65095	30574	65985
50°	54128	20350	58321
55°	40595	14026	49450
60°	27512	9350	37306
65°	16592	6063	25633
70°	9196	3291	15769
75°	4170	1394	8161
80°	3623	1545	5700
85°	4140	2052	5661



TEST NUMBER: P244649

CATALOG NUMBER: LD8B50D010 ER8B50950 8LBDW0H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.2	5.0
10°-20°	752.7	14.6
20°-30°	1142.4	22.2
30°-40°	1199.9	23.3
40°-50°	899.6	17.5
50°-60°	577.2	11.2
60°-70°	246.9	4.8
70°-80°	58.3	1.1
80°-90°	10.8	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°	2154.3	41.9
0°-40°	3354.1	65.2
0°-60°	4830.9	93.9
0°-90°	5147.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5147.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2716	2716	2716	2716	2716	
5°	2711	2716	2719	2723	2722	258
15°	2589	2643	2704	2686	2653	730
25°	2369	2452	2576	2529	2485	1082
35°	1965	1856	1966	1943	1987	1233
45°	1493	1220	701	1185	1513	1143
55°	755	755	261	787	920	685
65°	227	268	83	346	351	243
75°	35	41	12	70	68	51
85°	12	7	6	12	16	12
90°	0	0	0	0	0	



TEST NUMBER: P244649

CATALOG NUMBER: LD8B50D010 ER8B50950 8LBDW0H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7
2.5°	2717.1	2720.0	2718.6	2718.6	2717.1	2718.6	2718.6	2721.5	2721.5	2718.6	2717.1
5°	2711.3	2714.2	2714.2	2711.3	2711.3	2718.6	2714.2	2717.1	2717.1	2715.7	2715.7
7.5°	2698.2	2698.2	2704.0	2699.6	2699.6	2704.0	2702.5	2705.5	2708.4	2709.8	2709.8
10°	2669.0	2671.9	2673.4	2673.4	2674.9	2679.2	2682.1	2688.0	2690.9	2693.8	2695.3
12.5°	2632.6	2636.9	2638.4	2636.9	2641.3	2647.1	2654.5	2661.7	2666.1	2671.9	2676.3
15°	2588.8	2588.8	2591.8	2596.1	2599.1	2607.8	2615.1	2623.8	2635.5	2642.8	2650.1
17.5°	2540.7	2543.7	2548.0	2548.0	2553.9	2568.4	2572.8	2585.9	2599.1	2606.3	2620.9
20°	2488.3	2491.2	2495.6	2498.5	2505.8	2517.4	2526.2	2537.8	2552.4	2565.5	2580.1
22.5°	2447.4	2441.6	2444.5	2447.4	2454.8	2465.0	2475.2	2489.7	2504.3	2517.4	2532.0
25°	2368.7	2370.2	2374.6	2377.5	2386.2	2395.0	2406.6	2424.1	2437.2	2451.8	2467.8
27.5°	2262.3	2263.8	2271.1	2271.1	2278.3	2292.9	2300.2	2314.8	2332.3	2346.9	2365.8
30°	2141.3	2144.2	2144.2	2150.1	2154.4	2161.7	2169.0	2183.6	2192.4	2205.5	2231.7
32.5°	2030.6	2033.5	2032.0	2030.6	2026.2	2024.7	2023.3	2026.2	2029.1	2033.5	2043.7
35°	1965.0	1957.7	1951.8	1941.6	1930.0	1915.4	1902.3	1884.8	1868.7	1855.6	1841.1
37.5°	1902.3	1900.8	1892.1	1877.5	1854.2	1827.9	1797.3	1759.4	1721.5	1680.7	1641.4
40°	1814.8	1810.4	1803.2	1782.7	1756.5	1724.4	1683.6	1637.0	1575.7	1513.1	1448.9
42.5°	1666.1	1667.6	1658.8	1642.8	1618.0	1587.4	1545.1	1494.1	1428.5	1354.2	1271.1
45°	1492.7	1492.7	1489.7	1476.6	1459.1	1434.4	1402.3	1360.0	1295.9	1220.1	1131.1
47.5°	1311.9	1313.4	1309.0	1306.1	1298.8	1282.8	1259.4	1227.4	1182.2	1109.3	1020.4
50°	1128.3	1128.3	1135.5	1134.1	1134.1	1128.3	1118.1	1099.1	1059.7	1001.4	918.4
52.5°	944.6	947.5	951.9	957.7	965.0	976.6	965.0	956.2	931.4	886.3	814.9
55°	755.1	758.0	765.3	775.5	784.2	795.9	798.8	798.8	785.7	755.1	701.1
57.5°	593.3	588.9	594.7	603.5	615.2	626.8	635.6	645.8	644.3	623.9	580.2
60°	446.1	447.5	451.9	460.6	469.4	479.6	491.2	500.0	504.4	494.2	466.5
62.5°	325.1	325.1	330.9	339.6	344.0	358.6	365.9	370.3	374.6	373.2	355.7
65°	227.4	230.3	233.2	237.6	242.0	250.7	255.1	263.8	266.8	268.2	255.1
67.5°	160.4	156.0	158.9	161.8	166.2	172.0	180.8	180.8	185.1	185.1	176.4
70°	102.0	102.0	103.5	107.9	110.8	112.2	115.2	118.1	122.4	121.0	121.0
72.5°	68.5	67.1	68.5	70.0	71.4	75.8	75.8	77.3	80.2	81.6	75.8
75°	35.0	36.5	39.3	37.9	42.3	39.3	40.8	45.2	43.7	40.8	40.8
77.5°	29.1	29.1	29.1	27.7	30.6	30.6	29.1	32.1	30.6	30.6	29.1
80°	20.4	21.9	20.4	18.9	20.4	18.9	18.9	18.9	18.9	18.9	17.5
82.5°	16.0	13.1	14.6	13.1	14.6	14.6	13.1	11.7	11.7	13.1	11.7
85°	11.7	8.7	10.2	10.2	8.7	8.7	8.7	8.7	8.7	7.3	7.3
87.5°	7.3	4.4	4.4	4.4	5.8	5.8	5.8	4.4	5.8	5.8	2.9
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: P244649

CATALOG NUMBER: LD8B50D010 ER8B50950 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7
2.5°	2720.0	2718.6	2721.5	2720.0	2720.0	2718.6	2720.0	2718.6	2721.5	2715.7	2717.1
5°	2720.0	2717.1	2718.6	2720.0	2721.5	2718.6	2718.6	2718.6	2721.5	2718.6	2720.0
7.5°	2714.2	2712.7	2717.1	2720.0	2718.6	2717.1	2720.0	2718.6	2721.5	2720.0	2722.9
10°	2702.5	2704.0	2706.9	2711.3	2712.7	2714.2	2717.1	2717.1	2721.5	2715.7	2718.6
12.5°	2685.1	2690.9	2698.2	2701.1	2706.9	2706.9	2709.8	2711.3	2714.2	2712.7	2717.1
15°	2663.2	2670.5	2679.2	2686.5	2693.8	2698.2	2702.5	2704.0	2708.4	2704.0	2705.5
17.5°	2636.9	2645.7	2658.8	2667.5	2679.2	2683.6	2689.4	2692.3	2696.7	2693.8	2695.3
20°	2600.5	2610.7	2625.3	2638.4	2645.7	2655.9	2663.2	2667.5	2670.5	2667.5	2669.0
22.5°	2549.5	2564.1	2583.0	2593.2	2607.8	2616.5	2618.0	2628.2	2635.5	2628.2	2631.1
25°	2489.7	2504.3	2518.9	2540.7	2553.9	2564.1	2574.3	2575.7	2583.0	2581.6	2580.1
27.5°	2390.6	2409.6	2434.3	2451.8	2469.3	2485.4	2497.0	2499.9	2507.2	2504.3	2505.8
30°	2255.0	2275.5	2298.8	2326.5	2351.2	2367.3	2381.8	2392.1	2399.3	2395.0	2393.5
32.5°	2062.6	2083.0	2107.8	2135.5	2164.7	2188.0	2205.5	2218.6	2227.3	2224.4	2217.1
35°	1842.5	1848.3	1864.4	1886.3	1911.0	1935.8	1951.8	1966.4	1976.6	1979.5	1979.5
37.5°	1616.6	1597.6	1586.0	1586.0	1600.5	1610.7	1625.3	1634.1	1650.1	1655.9	1660.3
40°	1397.9	1354.2	1313.4	1282.8	1262.4	1260.9	1260.9	1265.3	1279.8	1298.8	1316.3
42.5°	1202.6	1132.6	1069.9	1013.1	972.3	949.0	938.8	940.2	951.9	969.4	998.5
45°	1046.6	959.2	880.4	811.9	756.5	720.1	702.6	701.1	709.9	730.3	762.4
47.5°	925.6	832.3	743.4	664.7	604.9	565.6	545.2	539.4	545.2	564.1	602.0
50°	825.1	728.9	637.0	555.4	491.2	450.4	431.5	424.2	431.5	447.5	485.4
52.5°	731.7	632.6	546.6	467.9	399.4	364.4	344.0	339.6	344.0	362.9	393.6
55°	623.9	539.4	454.8	376.1	316.3	281.3	265.3	260.9	265.3	282.8	314.9
57.5°	517.5	444.6	370.3	298.8	247.8	217.2	202.6	196.8	207.0	218.6	256.6
60°	418.3	360.1	297.4	234.7	192.4	164.7	153.0	151.6	154.5	169.1	195.3
62.5°	328.0	279.9	230.3	179.3	144.3	132.6	118.1	116.6	119.5	128.3	148.7
65°	236.2	205.5	167.6	131.2	103.5	87.5	81.6	83.1	86.0	91.8	110.8
67.5°	164.7	142.8	116.6	91.8	71.4	64.1	58.3	56.9	58.3	68.5	78.7
70°	110.8	97.7	78.7	70.0	49.6	39.3	40.8	36.5	42.3	42.3	51.0
72.5°	72.9	64.1	52.5	40.8	35.0	27.7	27.7	26.3	29.1	30.6	37.9
75°	37.9	29.1	29.1	20.4	14.6	7.3	13.1	11.7	10.2	11.7	14.6
77.5°	26.3	21.9	20.4	16.0	14.6	11.7	11.7	11.7	11.7	13.1	14.6
80°	16.0	16.0	11.7	10.2	8.7	7.3	8.7	8.7	8.7	8.7	10.2
82.5°	10.2	8.7	8.7	7.3	7.3	5.8	5.8	5.8	5.8	5.8	8.7
85°	8.7	5.8	5.8	4.4	5.8	10.2	4.4	5.8	5.8	5.8	4.4
87.5°	2.9	4.4	4.4	4.4	2.9	1.5	2.9	4.4	4.4	7.3	5.8
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: P244649

CATALOG NUMBER: LD8B50D010 ER8B50950 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7	2715.7
2.5°	2720.0	2721.5	2721.5	2720.0	2720.0	2717.1	2722.9	2718.6	2720.0	2725.9	2721.5
5°	2722.9	2724.4	2724.4	2722.9	2722.9	2722.9	2724.4	2724.4	2722.9	2721.5	2724.4
7.5°	2728.8	2727.3	2727.3	2724.4	2724.4	2721.5	2724.4	2720.0	2722.9	2720.0	2724.4
10°	2721.5	2722.9	2721.5	2720.0	2720.0	2718.6	2718.6	2714.2	2715.7	2711.3	2714.2
12.5°	2717.1	2715.7	2715.7	2712.7	2709.8	2706.9	2705.5	2701.1	2701.1	2690.9	2695.3
15°	2705.5	2706.9	2702.5	2696.7	2693.8	2686.5	2683.6	2677.7	2671.9	2664.7	2666.1
17.5°	2695.3	2690.9	2685.1	2679.2	2667.5	2661.7	2655.9	2647.1	2644.2	2635.5	2632.6
20°	2664.7	2661.7	2654.5	2644.2	2636.9	2623.8	2618.0	2609.3	2602.0	2593.2	2588.8
22.5°	2625.3	2622.4	2613.6	2603.4	2591.8	2585.9	2580.1	2564.1	2556.8	2548.0	2546.6
25°	2575.7	2571.3	2562.6	2550.9	2545.1	2529.1	2523.2	2511.6	2508.7	2499.9	2498.5
27.5°	2499.9	2494.1	2483.9	2469.3	2459.1	2448.9	2443.1	2434.3	2431.4	2422.7	2421.2
30°	2386.2	2378.9	2358.5	2352.7	2335.2	2325.0	2325.0	2313.3	2314.8	2309.0	2309.0
32.5°	2206.9	2195.3	2179.2	2167.6	2155.9	2150.1	2150.1	2145.7	2148.6	2148.6	2151.5
35°	1969.3	1953.3	1944.5	1937.3	1937.3	1943.1	1960.6	1965.0	1973.7	1981.0	1986.8
37.5°	1664.7	1663.2	1673.4	1682.2	1704.0	1728.8	1759.4	1785.7	1810.4	1827.9	1845.4
40°	1335.2	1371.7	1400.8	1441.7	1475.2	1523.3	1578.7	1623.9	1666.1	1696.8	1728.8
42.5°	1042.2	1088.9	1150.1	1209.9	1269.6	1335.2	1408.1	1470.8	1526.2	1568.5	1602.0
45°	811.9	876.1	950.4	1026.2	1103.5	1185.1	1260.9	1325.0	1383.3	1427.1	1460.6
47.5°	654.5	724.5	809.0	892.1	979.6	1065.6	1150.1	1205.5	1253.6	1288.6	1319.2
50°	540.8	615.2	704.1	798.8	886.3	972.3	1045.2	1099.1	1138.5	1169.1	1188.0
52.5°	451.9	530.6	625.4	720.1	807.5	886.3	951.9	992.7	1024.8	1046.6	1064.1
55°	373.2	449.0	537.9	626.8	712.8	787.1	841.1	871.7	896.5	909.6	919.8
57.5°	304.7	374.6	456.3	537.9	612.2	673.5	715.7	746.3	758.0	768.2	766.7
60°	239.1	304.7	379.0	449.0	513.1	562.6	593.3	610.8	619.5	623.9	621.0
62.5°	188.0	247.8	304.7	365.9	412.5	454.8	484.0	484.0	488.3	489.8	494.2
65°	139.9	185.1	234.7	279.9	317.8	345.5	361.5	365.9	371.7	370.3	367.3
67.5°	103.5	137.0	173.4	207.0	233.2	250.7	262.4	272.6	271.1	268.2	266.8
70°	71.4	93.3	125.4	145.8	164.7	182.2	185.1	186.6	188.0	189.5	186.6
72.5°	49.6	65.6	83.1	100.6	112.2	119.5	126.8	128.3	128.3	128.3	126.8
75°	24.8	33.5	49.6	56.9	67.1	70.0	75.8	75.8	80.2	74.3	72.9
77.5°	21.9	26.3	35.0	40.8	45.2	49.6	51.0	55.4	53.9	51.0	52.5
80°	13.1	16.0	21.9	24.8	30.6	32.1	33.5	35.0	33.5	35.0	35.0
82.5°	10.2	11.7	14.6	14.6	18.9	18.9	20.4	20.4	21.9	21.9	21.9
85°	5.8	10.2	8.7	17.5	11.7	11.7	14.6	17.5	14.6	14.6	17.5
87.5°	5.8	5.8	4.4	5.8	5.8	5.8	7.3	8.7	8.7	10.2	8.7
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: P244649

CATALOG NUMBER: LD8B50D010 ER8B50950 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2715.7	2715.7	2715.7	2715.7
2.5°	2720.0	2722.9	2718.6	2717.1
5°	2724.4	2724.4	2721.5	2721.5
7.5°	2724.4	2724.4	2720.0	2717.1
10°	2712.7	2712.7	2708.4	2705.5
12.5°	2690.9	2690.9	2689.4	2685.1
15°	2663.2	2663.2	2657.3	2653.0
17.5°	2625.3	2628.2	2620.9	2620.9
20°	2584.5	2583.0	2577.2	2574.3
22.5°	2542.2	2539.3	2537.8	2529.1
25°	2497.0	2494.1	2489.7	2485.4
27.5°	2419.8	2418.3	2413.9	2408.1
30°	2301.7	2300.2	2294.4	2294.4
32.5°	2148.6	2147.2	2141.3	2142.8
35°	1989.7	1995.6	1992.7	1986.8
37.5°	1857.1	1861.5	1864.4	1861.5
40°	1746.3	1759.4	1760.9	1763.8
42.5°	1628.2	1645.7	1651.6	1654.5
45°	1486.8	1502.9	1516.0	1513.1
47.5°	1342.5	1354.2	1365.8	1357.1
50°	1204.1	1211.3	1215.7	1215.7
52.5°	1072.9	1072.9	1071.4	1072.9
55°	922.7	922.7	916.9	919.8
57.5°	765.3	768.2	763.8	756.5
60°	619.5	612.2	609.3	604.9
62.5°	482.5	482.5	472.3	485.4
65°	361.5	357.1	352.7	351.3
67.5°	262.4	260.9	256.6	255.1
70°	185.1	179.3	177.8	174.9
72.5°	123.9	123.9	121.0	121.0
75°	75.8	68.5	67.1	68.5
77.5°	52.5	51.0	51.0	49.6
80°	35.0	33.5	36.5	32.1
82.5°	21.9	23.3	21.9	23.3
85°	14.6	17.5	16.0	16.0
87.5°	8.7	8.7	8.7	8.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)