

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: P246041

Luminaire Tested: **LSR8B50D010 EC8B50830 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246041  
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: LSR8B50D010 EC8B50830 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5246.0 lumens  
Efficiency: N/A  
Efficacy: 99.0 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

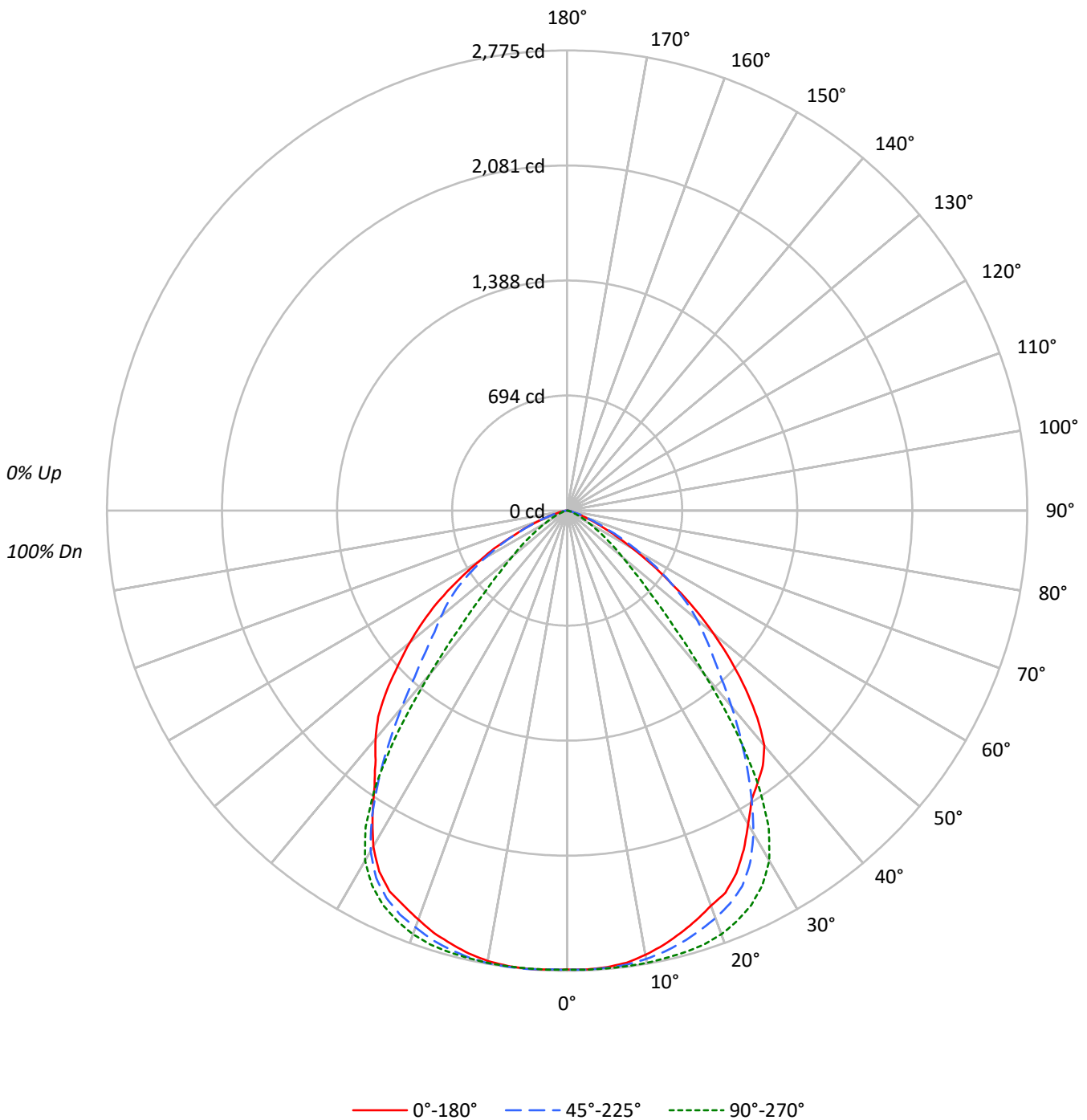
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	85352	85352	85352
5°	85539	85771	85864
10°	85178	86715	86343
15°	84235	87983	86323
20°	83223	89222	86101
25°	82144	89323	86190
30°	77712	86813	83266
35°	75394	75446	76233
40°	74458	51911	72365
45°	66347	31163	67254
50°	55169	20739	59443
55°	41375	14301	50401
60°	28036	9528	38027
65°	16913	6180	26121
70°	9377	3354	16075
75°	4253	1418	8316
80°	3694	1580	5807
85°	4210	2087	5802



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	264.2	5.0
10°-20°	767.1	14.6
20°-30°	1164.4	22.2
30°-40°	1223.0	23.3
40°-50°	916.9	17.5
50°-60°	588.3	11.2
60°-70°	251.7	4.8
70°-80°	59.5	1.1
80°-90°	11.1	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°	2195.7	41.9
0°-40°	3418.6	65.2
0°-60°	4923.8	93.9
0°-90°	5246.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5246.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2768	2768	2768	2768	2768	
5°	2763	2768	2771	2775	2774	262
15°	2639	2694	2756	2738	2704	744
25°	2414	2499	2625	2578	2533	1103
35°	2003	1891	2004	1980	2025	1257
45°	1521	1244	715	1208	1542	1165
55°	770	770	266	802	938	698
65°	232	273	85	352	358	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°	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9
2.5°	2769.4	2772.4	2770.9	2770.9	2769.4	2770.9	2770.9	2773.9	2773.9	2770.9	2769.4
5°	2763.4	2766.4	2766.4	2763.4	2763.4	2770.9	2766.4	2769.4	2769.4	2767.9	2767.9
7.5°	2750.1	2750.1	2756.0	2751.6	2751.6	2756.0	2754.5	2757.5	2760.5	2762.0	2762.0
10°	2720.3	2723.3	2724.8	2724.8	2726.3	2730.7	2733.7	2739.7	2742.6	2745.6	2747.1
12.5°	2683.2	2687.7	2689.2	2687.7	2692.1	2698.1	2705.5	2712.9	2717.4	2723.3	2727.8
15°	2638.6	2638.6	2641.6	2646.1	2649.1	2658.0	2665.4	2674.3	2686.2	2693.6	2701.0
17.5°	2589.6	2592.6	2597.0	2597.0	2603.0	2617.8	2622.3	2635.7	2649.1	2656.5	2671.3
20°	2536.1	2539.1	2543.6	2546.5	2554.0	2565.8	2574.7	2586.6	2601.5	2614.9	2629.7
22.5°	2494.5	2488.6	2491.5	2494.5	2502.0	2512.4	2522.8	2537.6	2552.5	2565.8	2580.7
25°	2414.3	2415.8	2420.2	2423.2	2432.1	2441.0	2452.9	2470.7	2484.1	2499.0	2515.3
27.5°	2305.8	2307.3	2314.8	2314.8	2322.2	2337.0	2344.5	2359.3	2377.2	2392.0	2411.3
30°	2182.5	2185.5	2185.5	2191.4	2195.9	2203.3	2210.7	2225.6	2234.5	2247.9	2274.7
32.5°	2069.6	2072.6	2071.1	2069.6	2065.1	2063.7	2062.2	2065.1	2068.1	2072.6	2083.0
35°	2002.8	1995.3	1989.4	1979.0	1967.1	1952.2	1938.9	1921.0	1904.7	1891.3	1876.5
37.5°	1938.9	1937.4	1928.5	1913.6	1889.8	1863.1	1831.9	1793.3	1754.6	1713.0	1672.9
40°	1849.7	1845.3	1837.8	1817.0	1790.3	1757.6	1716.0	1668.5	1606.0	1542.2	1476.8
42.5°	1698.2	1699.7	1690.7	1674.4	1649.2	1617.9	1574.9	1522.9	1456.0	1380.2	1295.6
45°	1521.4	1521.4	1518.4	1505.0	1487.2	1461.9	1429.3	1386.2	1320.8	1243.5	1152.9
47.5°	1337.1	1338.6	1334.2	1331.2	1323.8	1307.4	1283.7	1251.0	1204.9	1130.6	1040.0
50°	1150.0	1150.0	1157.4	1155.9	1155.9	1150.0	1139.6	1120.2	1080.1	1020.7	936.0
52.5°	962.7	965.7	970.2	976.1	983.5	995.4	983.5	974.6	949.4	903.3	830.5
55°	769.6	772.6	780.0	790.4	799.3	811.2	814.2	814.2	800.8	769.6	714.6
57.5°	604.7	600.2	606.2	615.1	627.0	638.9	647.8	658.2	656.7	635.9	591.3
60°	454.6	456.1	460.6	469.5	478.4	488.8	500.7	509.6	514.1	503.7	475.4
62.5°	331.3	331.3	337.2	346.2	350.6	365.5	372.9	377.4	381.8	380.3	362.5
65°	231.8	234.7	237.7	242.2	246.6	255.5	260.0	268.9	271.9	273.4	260.0
67.5°	163.4	159.0	162.0	164.9	169.4	175.3	184.2	184.2	188.7	188.7	179.8
70°	104.0	104.0	105.5	109.9	112.9	114.4	117.4	120.3	124.8	123.3	123.3
72.5°	69.8	68.3	69.8	71.3	72.8	77.3	77.3	78.7	81.7	83.2	77.3
75°	35.7	37.2	40.1	38.6	43.1	40.1	41.6	46.1	44.6	41.6	41.6
77.5°	29.7	29.7	29.7	28.2	31.2	31.2	29.7	32.7	31.2	31.2	29.7
80°	20.8	22.3	20.8	19.3	20.8	19.3	19.3	19.3	19.3	19.3	17.8
82.5°	16.4	13.4	14.9	13.4	14.9	14.9	13.4	11.9	11.9	13.4	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°	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9
2.5°	2772.4	2770.9	2773.9	2772.4	2772.4	2770.9	2772.4	2770.9	2773.9	2767.9	2769.4
5°	2772.4	2769.4	2770.9	2772.4	2773.9	2770.9	2770.9	2770.9	2773.9	2770.9	2772.4
7.5°	2766.4	2764.9	2769.4	2772.4	2770.9	2769.4	2772.4	2770.9	2773.9	2772.4	2775.3
10°	2754.5	2756.0	2759.0	2763.4	2764.9	2766.4	2769.4	2769.4	2773.9	2767.9	2770.9
12.5°	2736.7	2742.6	2750.1	2753.0	2759.0	2759.0	2762.0	2763.4	2766.4	2764.9	2769.4
15°	2714.4	2721.8	2730.7	2738.2	2745.6	2750.1	2754.5	2756.0	2760.5	2756.0	2757.5
17.5°	2687.7	2696.6	2709.9	2718.9	2730.7	2735.2	2741.1	2744.1	2748.6	2745.6	2747.1
20°	2650.5	2660.9	2675.8	2689.2	2696.6	2707.0	2714.4	2718.9	2721.8	2718.9	2720.3
22.5°	2598.5	2613.4	2632.7	2643.1	2658.0	2666.9	2668.4	2678.8	2686.2	2678.8	2681.7
25°	2537.6	2552.5	2567.3	2589.6	2603.0	2613.4	2623.8	2625.3	2632.7	2631.2	2629.7
27.5°	2436.6	2455.9	2481.1	2499.0	2516.8	2533.2	2545.0	2548.0	2555.4	2552.5	2554.0
30°	2298.4	2319.2	2343.0	2371.2	2396.5	2412.8	2427.7	2438.1	2445.5	2441.0	2439.6
32.5°	2102.3	2123.1	2148.4	2176.6	2206.3	2230.0	2247.9	2261.3	2270.2	2267.2	2259.8
35°	1878.0	1883.9	1900.3	1922.5	1947.8	1973.0	1989.4	2004.2	2014.6	2017.6	2017.6
37.5°	1647.7	1628.4	1616.5	1616.5	1631.3	1641.7	1656.6	1665.5	1681.8	1687.8	1692.2
40°	1424.8	1380.2	1338.6	1307.4	1286.6	1285.2	1285.2	1289.6	1304.5	1323.8	1341.6
42.5°	1225.7	1154.4	1090.5	1032.6	991.0	967.2	956.8	958.3	970.2	988.0	1017.7
45°	1066.7	977.6	897.4	827.5	771.1	733.9	716.1	714.6	723.5	744.3	777.0
47.5°	943.4	848.3	757.7	677.5	616.6	576.5	555.7	549.7	555.7	575.0	613.6
50°	840.9	742.9	649.3	566.1	500.7	459.1	439.8	432.3	439.8	456.1	494.7
52.5°	745.8	644.8	557.1	476.9	407.1	371.4	350.6	346.2	350.6	369.9	401.2
55°	635.9	549.7	463.5	383.3	322.4	286.8	270.4	266.0	270.4	288.2	320.9
57.5°	527.4	453.1	377.4	304.6	252.6	221.4	206.5	200.6	211.0	222.8	261.5
60°	426.4	367.0	303.1	239.2	196.1	167.9	156.0	154.5	157.5	172.3	199.1
62.5°	334.3	285.3	234.7	182.7	147.1	135.2	120.3	118.9	121.8	130.7	151.6
65°	240.7	209.5	170.9	133.7	105.5	89.1	83.2	84.7	87.6	93.6	112.9
67.5°	167.9	145.6	118.9	93.6	72.8	65.4	59.4	57.9	59.4	69.8	80.2
70°	112.9	99.5	80.2	71.3	50.5	40.1	41.6	37.2	43.1	43.1	52.0
72.5°	74.3	65.4	53.5	41.6	35.7	28.2	28.2	26.8	29.7	31.2	38.6
75°	38.6	29.7	29.7	20.8	14.9	7.4	13.4	11.9	10.4	11.9	14.9
77.5°	26.8	22.3	20.8	16.4	14.9	11.9	11.9	11.9	11.9	13.4	14.9
80°	16.4	16.4	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°	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9	2767.9
2.5°	2772.4	2773.9	2773.9	2772.4	2772.4	2769.4	2775.3	2770.9	2772.4	2778.3	2773.9
5°	2775.3	2776.8	2776.8	2775.3	2775.3	2775.3	2776.8	2776.8	2775.3	2773.9	2776.8
7.5°	2781.3	2779.8	2779.8	2776.8	2776.8	2773.9	2776.8	2772.4	2775.3	2772.4	2776.8
10°	2773.9	2775.3	2773.9	2772.4	2772.4	2770.9	2770.9	2766.4	2767.9	2763.4	2766.4
12.5°	2769.4	2767.9	2767.9	2764.9	2762.0	2759.0	2757.5	2753.0	2753.0	2742.6	2747.1
15°	2757.5	2759.0	2754.5	2748.6	2745.6	2738.2	2735.2	2729.3	2723.3	2715.9	2717.4
17.5°	2747.1	2742.6	2736.7	2730.7	2718.9	2712.9	2707.0	2698.1	2695.1	2686.2	2683.2
20°	2715.9	2712.9	2705.5	2695.1	2687.7	2674.3	2668.4	2659.5	2652.0	2643.1	2638.6
22.5°	2675.8	2672.8	2663.9	2653.5	2641.6	2635.7	2629.7	2613.4	2605.9	2597.0	2595.5
25°	2625.3	2620.8	2611.9	2600.0	2594.1	2577.7	2571.8	2559.9	2556.9	2548.0	2546.5
27.5°	2548.0	2542.1	2531.7	2516.8	2506.4	2496.0	2490.1	2481.1	2478.2	2469.3	2467.8
30°	2432.1	2424.7	2403.9	2398.0	2380.1	2369.7	2369.7	2357.8	2359.3	2353.4	2353.4
32.5°	2249.4	2237.5	2221.1	2209.3	2197.4	2191.4	2191.4	2187.0	2190.0	2190.0	2192.9
35°	2007.2	1990.9	1981.9	1974.5	1974.5	1980.4	1998.3	2002.8	2011.7	2019.1	2025.1
37.5°	1696.7	1695.2	1705.6	1714.5	1736.8	1762.1	1793.3	1820.0	1845.3	1863.1	1880.9
40°	1360.9	1398.1	1427.8	1469.4	1503.5	1552.6	1609.0	1655.1	1698.2	1729.4	1762.1
42.5°	1062.3	1109.8	1172.2	1233.1	1294.1	1360.9	1435.2	1499.1	1555.6	1598.6	1632.8
45°	827.5	892.9	968.7	1046.0	1124.7	1207.9	1285.2	1350.5	1410.0	1454.5	1488.7
47.5°	667.1	738.4	824.6	909.3	998.4	1086.1	1172.2	1228.7	1277.7	1313.4	1344.6
50°	551.2	627.0	717.6	814.2	903.3	991.0	1065.3	1120.2	1160.4	1191.5	1210.9
52.5°	460.6	540.8	637.4	733.9	823.1	903.3	970.2	1011.8	1044.5	1066.7	1084.6
55°	380.3	457.6	548.2	638.9	726.5	802.3	857.2	888.5	913.7	927.1	937.5
57.5°	310.5	381.8	465.0	548.2	624.0	686.4	729.5	760.7	772.6	783.0	781.5
60°	243.7	310.5	386.3	457.6	523.0	573.5	604.7	622.5	631.4	635.9	632.9
62.5°	191.7	252.6	310.5	372.9	420.5	463.5	493.3	493.3	497.7	499.2	503.7
65°	142.6	188.7	239.2	285.3	323.9	352.1	368.5	372.9	378.9	377.4	374.4
67.5°	105.5	139.7	176.8	211.0	237.7	255.5	267.4	277.8	276.4	273.4	271.9
70°	72.8	95.1	127.8	148.6	167.9	185.7	188.7	190.2	191.7	193.1	190.2
72.5°	50.5	66.9	84.7	102.5	114.4	121.8	129.3	130.7	130.7	130.7	129.3
75°	25.3	34.2	50.5	57.9	68.3	71.3	77.3	77.3	81.7	75.8	74.3
77.5°	22.3	26.8	35.7	41.6	46.1	50.5	52.0	56.5	55.0	52.0	53.5
80°	13.4	16.4	22.3	25.3	31.2	32.7	34.2	35.7	34.2	35.7	35.7
82.5°	10.4	11.9	14.9	14.9	19.3	19.3	20.8	20.8	22.3	22.3	22.3
85°	5.9	10.4	8.9	17.8	11.9	11.9	14.9	17.8	14.9	14.9	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: P246041

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2767.9	2767.9	2767.9	2767.9
2.5°	2772.4	2775.3	2770.9	2769.4
5°	2776.8	2776.8	2773.9	2773.9
7.5°	2776.8	2776.8	2772.4	2769.4
10°	2764.9	2764.9	2760.5	2757.5
12.5°	2742.6	2742.6	2741.1	2736.7
15°	2714.4	2714.4	2708.5	2704.0
17.5°	2675.8	2678.8	2671.3	2671.3
20°	2634.2	2632.7	2626.8	2623.8
22.5°	2591.1	2588.1	2586.6	2577.7
25°	2545.0	2542.1	2537.6	2533.2
27.5°	2466.3	2464.8	2460.3	2454.4
30°	2345.9	2344.5	2338.5	2338.5
32.5°	2190.0	2188.5	2182.5	2184.0
35°	2028.0	2034.0	2031.0	2025.1
37.5°	1892.8	1897.3	1900.3	1897.3
40°	1779.9	1793.3	1794.8	1797.7
42.5°	1659.6	1677.4	1683.3	1686.3
45°	1515.4	1531.8	1545.2	1542.2
47.5°	1368.3	1380.2	1392.1	1383.2
50°	1227.2	1234.6	1239.1	1239.1
52.5°	1093.5	1093.5	1092.0	1093.5
55°	940.5	940.5	934.5	937.5
57.5°	780.0	783.0	778.5	771.1
60°	631.4	624.0	621.0	616.6
62.5°	491.8	491.8	481.4	494.7
65°	368.5	364.0	359.5	358.0
67.5°	267.4	266.0	261.5	260.0
70°	188.7	182.7	181.3	178.3
72.5°	126.3	126.3	123.3	123.3
75°	77.3	69.8	68.3	69.8
77.5°	53.5	52.0	52.0	50.5
80°	35.7	34.2	37.2	32.7
82.5°	22.3	23.8	22.3	23.8
85°	14.9	17.8	16.4	16.4
87.5°	8.9	8.9	8.9	8.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)