

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: P244613

Luminaire Tested: **LSR8B50D010 EC8B50840 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244613  
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 EC8B50840 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5545.0 lumens  
Efficiency: N/A  
Efficacy: 104.6 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

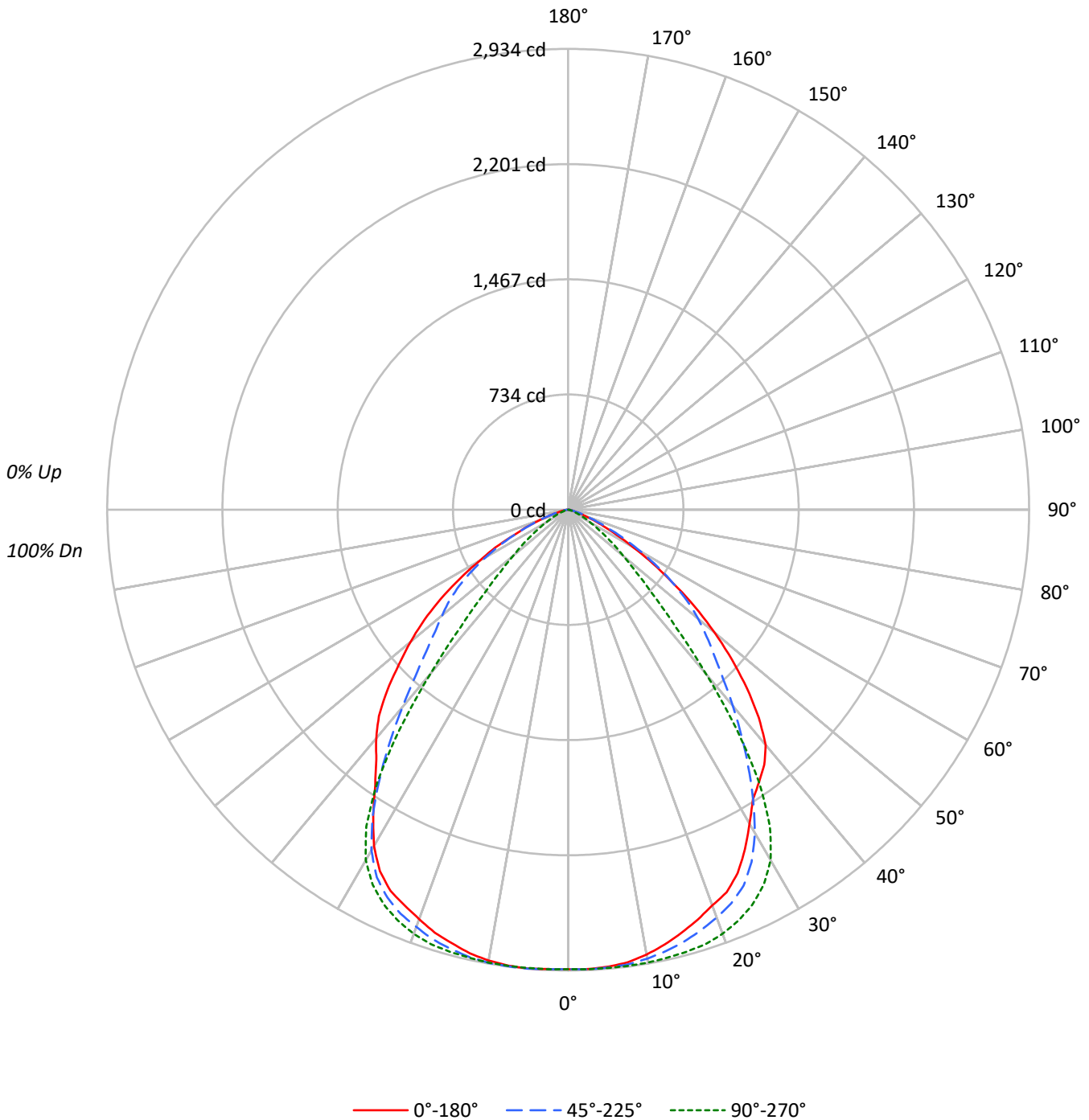
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	90218	90218	90218
5°	90414	90658	90757
10°	90035	91657	91265
15°	89036	92998	91242
20°	87968	94305	91007
25°	86826	94413	91100
30°	82141	91758	88013
35°	79689	79749	80577
40°	78700	54870	76491
45°	70128	32942	71087
50°	58311	21924	62830
55°	43735	15112	53272
60°	29634	10071	40192
65°	17876	6530	27610
70°	9909	3543	16986
75°	4492	1501	8793
80°	3907	1669	6126
85°	4458	2229	6121



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	279.2	5.0
10°-20°	810.9	14.6
20°-30°	1230.7	22.2
30°-40°	1292.7	23.3
40°-50°	969.1	17.5
50°-60°	621.8	11.2
60°-70°	266.0	4.8
70°-80°	62.8	1.1
80°-90°	11.7	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°	2320.8	41.9
0°-40°	3613.5	65.2
0°-60°	5204.5	93.9
0°-90°	5545.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5545.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2926	2926	2926	2926	2926	
5°	2921	2926	2929	2934	2932	277
15°	2789	2847	2913	2894	2858	787
25°	2552	2641	2775	2725	2678	1166
35°	2117	1999	2118	2093	2140	1329
45°	1608	1314	755	1277	1630	1232
55°	814	814	281	848	991	738
65°	245	289	90	372	378	262
75°	38	44	13	75	74	55
85°	13	8	6	13	17	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°	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7
2.5°	2927.2	2930.4	2928.8	2928.8	2927.2	2928.8	2928.8	2932.0	2932.0	2928.8	2927.2
5°	2920.9	2924.1	2924.1	2920.9	2920.9	2928.8	2924.1	2927.2	2927.2	2925.7	2925.7
7.5°	2906.8	2906.8	2913.1	2908.4	2908.4	2913.1	2911.5	2914.7	2917.8	2919.4	2919.4
10°	2875.4	2878.5	2880.1	2880.1	2881.7	2886.4	2889.5	2895.8	2898.9	2902.1	2903.7
12.5°	2836.2	2840.8	2842.4	2840.8	2845.6	2851.8	2859.7	2867.6	2872.3	2878.5	2883.3
15°	2789.0	2789.0	2792.2	2796.9	2800.0	2809.5	2817.3	2826.7	2839.3	2847.1	2855.0
17.5°	2737.2	2740.4	2745.1	2745.1	2751.4	2767.0	2771.8	2785.9	2800.0	2807.9	2823.6
20°	2680.7	2683.8	2688.5	2691.7	2699.5	2712.1	2721.5	2734.1	2749.8	2763.9	2779.6
22.5°	2636.7	2630.4	2633.5	2636.7	2644.6	2655.6	2666.5	2682.2	2697.9	2712.1	2727.8
25°	2551.9	2553.5	2558.2	2561.3	2570.8	2580.2	2592.7	2611.6	2625.7	2641.4	2658.7
27.5°	2437.3	2438.8	2446.7	2446.7	2454.5	2470.2	2478.1	2493.8	2512.7	2528.3	2548.8
30°	2306.9	2310.0	2310.0	2316.3	2321.0	2328.9	2336.7	2352.5	2361.9	2376.0	2404.3
32.5°	2187.6	2190.7	2189.1	2187.6	2182.9	2181.3	2179.7	2182.9	2186.0	2190.7	2201.7
35°	2116.9	2109.0	2102.8	2091.8	2079.2	2063.5	2049.4	2030.5	2013.2	1999.1	1983.4
37.5°	2049.4	2047.8	2038.4	2022.7	1997.5	1969.3	1936.3	1895.5	1854.6	1810.7	1768.3
40°	1955.1	1950.4	1942.6	1920.6	1892.3	1857.8	1813.8	1763.6	1697.6	1630.1	1561.0
42.5°	1795.0	1796.5	1787.1	1769.8	1743.2	1710.1	1664.6	1609.7	1539.0	1458.9	1369.4
45°	1608.1	1608.1	1604.9	1590.8	1572.0	1545.3	1510.7	1465.2	1396.1	1314.4	1218.6
47.5°	1413.4	1414.9	1410.2	1407.1	1399.2	1382.0	1356.8	1322.3	1273.6	1195.1	1099.3
50°	1215.5	1215.5	1223.3	1221.8	1221.8	1215.5	1204.5	1184.1	1141.7	1078.9	989.4
52.5°	1017.6	1020.8	1025.5	1031.8	1039.6	1052.2	1039.6	1030.2	1003.5	954.8	877.9
55°	813.5	816.6	824.5	835.4	844.9	857.5	860.6	860.6	846.4	813.5	755.4
57.5°	639.2	634.4	640.7	650.2	662.7	675.3	684.7	695.7	694.1	672.1	625.0
60°	480.5	482.1	486.8	496.3	505.7	516.7	529.2	538.6	543.4	532.4	502.5
62.5°	350.2	350.2	356.5	365.9	370.6	386.3	394.2	398.9	403.6	402.0	383.2
65°	245.0	248.1	251.3	256.0	260.7	270.1	274.8	284.2	287.4	289.0	274.8
67.5°	172.8	168.0	171.2	174.3	179.0	185.3	194.7	194.7	199.4	199.4	190.0
70°	109.9	109.9	111.5	116.2	119.3	120.9	124.1	127.2	131.9	130.3	130.3
72.5°	73.8	72.2	73.8	75.4	77.0	81.7	81.7	83.2	86.4	88.0	81.7
75°	37.7	39.3	42.4	40.8	45.5	42.4	44.0	48.7	47.1	44.0	44.0
77.5°	31.4	31.4	31.4	29.9	33.0	33.0	31.4	34.5	33.0	33.0	31.4
80°	22.0	23.6	22.0	20.4	22.0	20.4	20.4	20.4	20.4	20.4	18.8
82.5°	17.3	14.1	15.7	14.1	15.7	15.7	14.1	12.6	12.6	14.1	12.6
85°	12.6	9.4	11.0	11.0	9.4	9.4	9.4	9.4	9.4	7.8	7.8
87.5°	7.8	4.7	4.7	4.7	6.3	6.3	6.3	4.7	6.3	6.3	3.2
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: P244613

CATALOG NUMBER: LSR8B50D010 EC8B50840 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7
2.5°	2930.4	2928.8	2932.0	2930.4	2930.4	2928.8	2930.4	2928.8	2932.0	2925.7	2927.2
5°	2930.4	2927.2	2928.8	2930.4	2932.0	2928.8	2928.8	2928.8	2932.0	2928.8	2930.4
7.5°	2924.1	2922.5	2927.2	2930.4	2928.8	2927.2	2930.4	2928.8	2932.0	2930.4	2933.5
10°	2911.5	2913.1	2916.2	2920.9	2922.5	2924.1	2927.2	2927.2	2932.0	2925.7	2928.8
12.5°	2892.7	2898.9	2906.8	2909.9	2916.2	2916.2	2919.4	2920.9	2924.1	2922.5	2927.2
15°	2869.1	2877.0	2886.4	2894.3	2902.1	2906.8	2911.5	2913.1	2917.8	2913.1	2914.7
17.5°	2840.8	2850.3	2864.4	2873.8	2886.4	2891.1	2897.4	2900.5	2905.2	2902.1	2903.7
20°	2801.6	2812.6	2828.3	2842.4	2850.3	2861.3	2869.1	2873.8	2877.0	2873.8	2875.4
22.5°	2746.6	2762.3	2782.7	2793.7	2809.5	2818.9	2820.4	2831.4	2839.3	2831.4	2834.6
25°	2682.2	2697.9	2713.7	2737.2	2751.4	2762.3	2773.3	2774.9	2782.7	2781.2	2779.6
27.5°	2575.4	2595.9	2622.6	2641.4	2660.2	2677.5	2690.1	2693.2	2701.1	2697.9	2699.5
30°	2429.4	2451.4	2476.5	2506.4	2533.1	2550.3	2566.0	2577.0	2584.9	2580.2	2578.6
32.5°	2222.1	2244.1	2270.8	2300.6	2332.1	2357.2	2376.0	2390.2	2399.6	2396.4	2388.6
35°	1985.0	1991.3	2008.6	2032.1	2058.8	2085.5	2102.8	2118.5	2129.4	2132.6	2132.6
37.5°	1741.6	1721.2	1708.6	1708.6	1724.3	1735.3	1751.0	1760.4	1777.7	1784.0	1788.7
40°	1506.0	1458.9	1414.9	1382.0	1360.0	1358.4	1358.4	1363.1	1378.8	1399.2	1418.1
42.5°	1295.6	1220.2	1152.7	1091.4	1047.5	1022.3	1011.3	1012.9	1025.5	1044.3	1075.7
45°	1127.5	1033.3	948.5	874.7	815.0	775.8	756.9	755.4	764.8	786.8	821.3
47.5°	997.2	896.7	800.9	716.1	651.7	609.3	587.3	581.1	587.3	607.7	648.6
50°	888.8	785.2	686.3	598.3	529.2	485.3	464.8	457.0	464.8	482.1	522.9
52.5°	788.3	681.5	588.9	504.1	430.3	392.6	370.6	365.9	370.6	391.0	424.0
55°	672.1	581.1	490.0	405.2	340.8	303.1	285.8	281.1	285.8	304.7	339.2
57.5°	557.5	479.0	398.9	321.9	267.0	234.0	218.3	212.0	223.0	235.5	276.4
60°	450.7	387.9	320.4	252.8	207.3	177.4	164.9	163.3	166.5	182.2	210.4
62.5°	353.4	301.5	248.1	193.2	155.5	142.9	127.2	125.6	128.8	138.2	160.2
65°	254.4	221.4	180.6	141.3	111.5	94.2	88.0	89.5	92.6	98.9	119.3
67.5°	177.4	153.9	125.6	98.9	77.0	69.1	62.8	61.2	62.8	73.8	84.8
70°	119.3	105.2	84.8	75.4	53.4	42.4	44.0	39.3	45.5	45.5	54.9
72.5°	78.5	69.1	56.5	44.0	37.7	29.9	29.9	28.3	31.4	33.0	40.8
75°	40.8	31.4	31.4	22.0	15.7	7.8	14.1	12.6	11.0	12.6	15.7
77.5°	28.3	23.6	22.0	17.3	15.7	12.6	12.6	12.6	12.6	14.1	15.7
80°	17.3	17.3	12.6	11.0	9.4	7.8	9.4	9.4	9.4	9.4	11.0
82.5°	11.0	9.4	9.4	7.8	7.8	6.3	6.3	6.3	6.3	6.3	9.4
85°	9.4	6.3	6.3	4.7	6.3	11.0	4.7	6.3	6.3	6.3	4.7
87.5°	3.2	4.7	4.7	4.7	3.2	1.6	3.2	4.7	4.7	7.8	6.3
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: P244613

CATALOG NUMBER: LSR8B50D010 EC8B50840 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7	2925.7
2.5°	2930.4	2932.0	2932.0	2930.4	2930.4	2927.2	2933.5	2928.8	2930.4	2936.6	2932.0
5°	2933.5	2935.1	2935.1	2933.5	2933.5	2933.5	2935.1	2935.1	2933.5	2932.0	2935.1
7.5°	2939.8	2938.2	2938.2	2935.1	2935.1	2932.0	2935.1	2930.4	2933.5	2930.4	2935.1
10°	2932.0	2933.5	2932.0	2930.4	2930.4	2928.8	2928.8	2924.1	2925.7	2920.9	2924.1
12.5°	2927.2	2925.7	2925.7	2922.5	2919.4	2916.2	2914.7	2909.9	2909.9	2898.9	2903.7
15°	2914.7	2916.2	2911.5	2905.2	2902.1	2894.3	2891.1	2884.8	2878.5	2870.7	2872.3
17.5°	2903.7	2898.9	2892.7	2886.4	2873.8	2867.6	2861.3	2851.8	2848.7	2839.3	2836.2
20°	2870.7	2867.6	2859.7	2848.7	2840.8	2826.7	2820.4	2811.0	2803.2	2793.7	2789.0
22.5°	2828.3	2825.1	2815.7	2804.7	2792.2	2785.9	2779.6	2762.3	2754.5	2745.1	2743.5
25°	2774.9	2770.2	2760.8	2748.2	2741.9	2724.6	2718.3	2705.8	2702.7	2693.2	2691.7
27.5°	2693.2	2687.0	2676.0	2660.2	2649.3	2638.3	2632.0	2622.6	2619.4	2610.0	2608.5
30°	2570.8	2562.9	2540.9	2534.6	2515.8	2504.8	2504.8	2492.2	2493.8	2487.5	2487.5
32.5°	2377.6	2365.0	2347.7	2335.2	2322.6	2316.3	2316.3	2311.6	2314.8	2314.8	2317.9
35°	2121.6	2104.4	2094.9	2087.1	2087.1	2093.3	2112.2	2116.9	2126.3	2134.2	2140.5
37.5°	1793.4	1791.8	1802.8	1812.2	1835.8	1862.5	1895.5	1923.8	1950.4	1969.3	1988.1
40°	1438.5	1477.8	1509.1	1553.1	1589.2	1641.1	1700.7	1749.4	1795.0	1828.0	1862.5
42.5°	1122.8	1173.1	1239.1	1303.4	1367.8	1438.5	1517.0	1584.5	1644.2	1689.7	1725.9
45°	874.7	943.8	1023.9	1105.6	1188.8	1276.8	1358.4	1427.5	1490.3	1537.4	1573.5
47.5°	705.1	780.5	871.6	961.1	1055.3	1148.0	1239.1	1298.7	1350.5	1388.2	1421.2
50°	582.6	662.7	758.5	860.6	954.8	1047.5	1126.0	1184.1	1226.5	1259.5	1279.9
52.5°	486.8	571.6	673.7	775.8	870.0	954.8	1025.5	1069.4	1104.0	1127.5	1146.4
55°	402.0	483.7	579.5	675.3	767.9	848.0	906.1	939.1	965.8	979.9	990.9
57.5°	328.2	403.6	491.5	579.5	659.6	725.5	771.1	804.0	816.6	827.6	826.0
60°	257.6	328.2	408.3	483.7	552.8	606.2	639.2	658.0	667.4	672.1	669.0
62.5°	202.6	267.0	328.2	394.2	444.4	490.0	521.4	521.4	526.1	527.7	532.4
65°	150.7	199.4	252.8	301.5	342.3	372.2	389.5	394.2	400.5	398.9	395.7
67.5°	111.5	147.6	186.9	223.0	251.3	270.1	282.7	293.7	292.1	289.0	287.4
70°	77.0	100.5	135.1	157.0	177.4	196.3	199.4	201.0	202.6	204.2	201.0
72.5°	53.4	70.7	89.5	108.4	120.9	128.8	136.6	138.2	138.2	138.2	136.6
75°	26.7	36.1	53.4	61.2	72.2	75.4	81.7	81.7	86.4	80.1	78.5
77.5°	23.6	28.3	37.7	44.0	48.7	53.4	54.9	59.7	58.1	54.9	56.5
80°	14.1	17.3	23.6	26.7	33.0	34.5	36.1	37.7	36.1	37.7	37.7
82.5°	11.0	12.6	15.7	15.7	20.4	20.4	22.0	22.0	23.6	23.6	23.6
85°	6.3	11.0	9.4	18.8	12.6	12.6	15.7	18.8	15.7	15.7	18.8
87.5°	6.3	6.3	4.7	6.3	6.3	6.3	7.8	9.4	9.4	11.0	9.4
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: P244613

CATALOG NUMBER: LSR8B50D010 EC8B50840 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2925.7	2925.7	2925.7	2925.7
2.5°	2930.4	2933.5	2928.8	2927.2
5°	2935.1	2935.1	2932.0	2932.0
7.5°	2935.1	2935.1	2930.4	2927.2
10°	2922.5	2922.5	2917.8	2914.7
12.5°	2898.9	2898.9	2897.4	2892.7
15°	2869.1	2869.1	2862.8	2858.1
17.5°	2828.3	2831.4	2823.6	2823.6
20°	2784.3	2782.7	2776.5	2773.3
22.5°	2738.8	2735.6	2734.1	2724.6
25°	2690.1	2687.0	2682.2	2677.5
27.5°	2606.9	2605.3	2600.6	2594.3
30°	2479.7	2478.1	2471.8	2471.8
32.5°	2314.8	2313.2	2306.9	2308.5
35°	2143.6	2149.9	2146.7	2140.5
37.5°	2000.7	2005.4	2008.6	2005.4
40°	1881.3	1895.5	1897.0	1900.2
42.5°	1754.1	1773.0	1779.3	1782.4
45°	1601.8	1619.1	1633.2	1630.1
47.5°	1446.3	1458.9	1471.5	1462.0
50°	1297.2	1305.0	1309.7	1309.7
52.5°	1155.8	1155.8	1154.3	1155.8
55°	994.1	994.1	987.8	990.9
57.5°	824.5	827.6	822.9	815.0
60°	667.4	659.6	656.4	651.7
62.5°	519.8	519.8	508.8	522.9
65°	389.5	384.8	380.0	378.4
67.5°	282.7	281.1	276.4	274.8
70°	199.4	193.2	191.6	188.4
72.5°	133.5	133.5	130.3	130.3
75°	81.7	73.8	72.2	73.8
77.5°	56.5	54.9	54.9	53.4
80°	37.7	36.1	39.3	34.5
82.5°	23.6	25.1	23.6	25.1
85°	15.7	18.8	17.3	17.3
87.5°	9.4	9.4	9.4	9.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)