

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: P244595

Luminaire Tested: **LSR8B50D010 EC8B50827 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244595
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 EC8B50827 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5236.0 lumens
Efficiency: N/A
Efficacy: 98.8 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

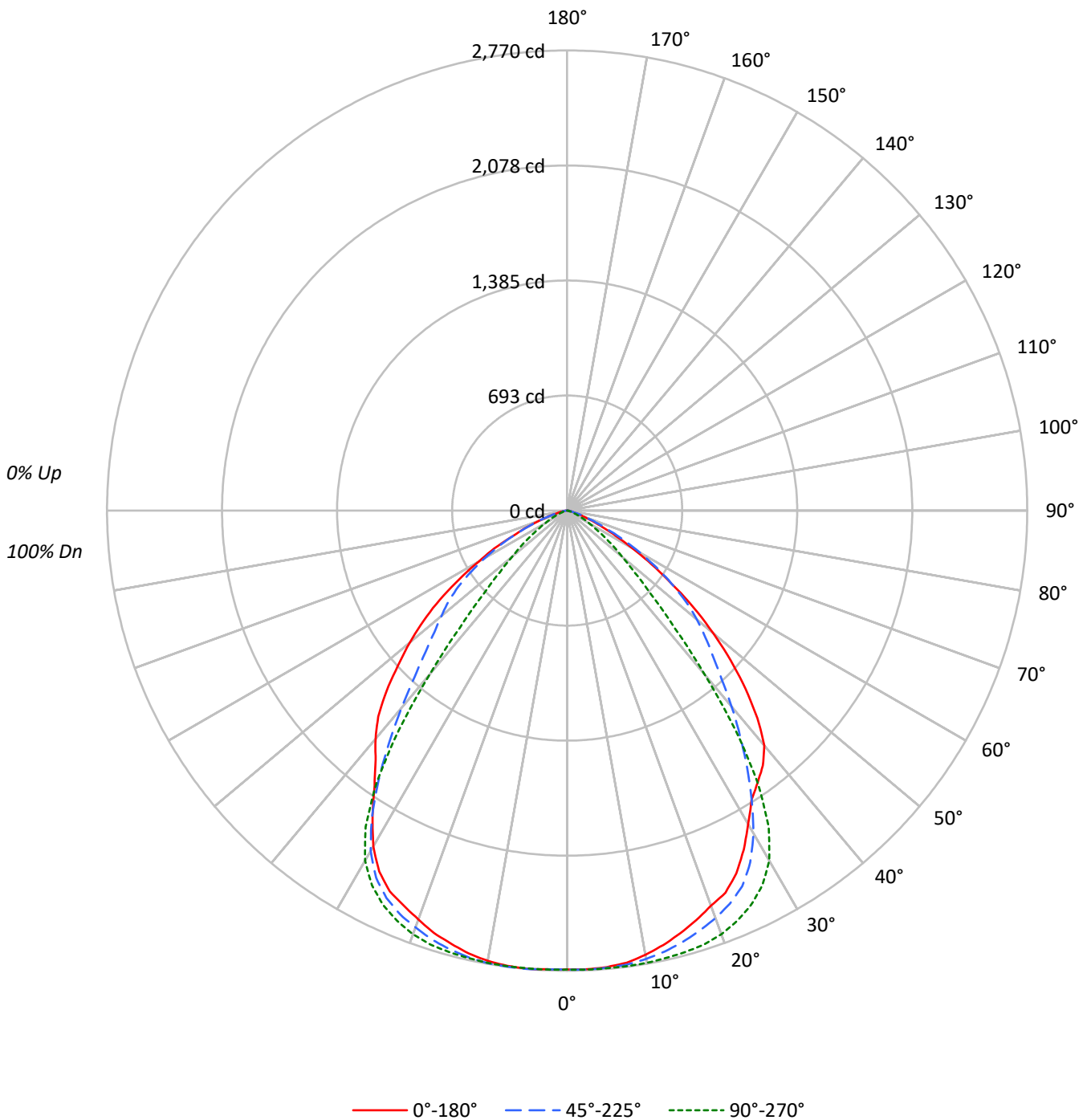
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	85188	85188	85188
5°	85378	85607	85700
10°	85018	86550	86177
15°	84075	87817	86160
20°	83065	89051	85937
25°	81988	89153	86023
30°	77566	86645	83110
35°	75247	75303	76086
40°	74317	51811	72228
45°	66220	31106	67123
50°	55063	20700	59328
55°	41294	14274	50305
60°	27987	9510	37953
65°	16877	6166	26078
70°	9359	3345	16039
75°	4241	1418	8304
80°	3694	1580	5789
85°	4210	2087	5767



TEST NUMBER: P244595

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.7	5.0
10°-20°	765.7	14.6
20°-30°	1162.2	22.2
30°-40°	1220.6	23.3
40°-50°	915.1	17.5
50°-60°	587.2	11.2
60°-70°	251.2	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°	2191.5	41.9
0°-40°	3412.1	65.2
0°-60°	4914.4	93.9
0°-90°	5236.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5236.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2763	2763	2763	2763	2763	
5°	2758	2763	2766	2770	2769	262
15°	2634	2688	2751	2733	2699	743
25°	2410	2494	2620	2573	2528	1101
35°	1999	1888	2000	1977	2021	1255
45°	1518	1241	713	1206	1539	1163
55°	768	768	266	801	936	697
65°	231	273	84	351	357	247
75°	36	42	12	71	70	52
85°	12	7	6	12	16	13
90°	0	0	0	0	0	



TEST NUMBER: P244595

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6
2.5°	2764.1	2767.1	2765.6	2765.6	2764.1	2765.6	2765.6	2768.6	2768.6	2765.6	2764.1
5°	2758.2	2761.1	2761.1	2758.2	2758.2	2765.6	2761.1	2764.1	2764.1	2762.6	2762.6
7.5°	2744.8	2744.8	2750.8	2746.3	2746.3	2750.8	2749.3	2752.2	2755.2	2756.7	2756.7
10°	2715.2	2718.1	2719.6	2719.6	2721.1	2725.5	2728.5	2734.5	2737.4	2740.4	2741.9
12.5°	2678.1	2682.5	2684.0	2682.5	2687.0	2692.9	2700.4	2707.8	2712.2	2718.1	2722.6
15°	2633.6	2633.6	2636.6	2641.0	2644.0	2652.9	2660.3	2669.2	2681.1	2688.5	2695.9
17.5°	2584.7	2587.7	2592.1	2592.1	2598.0	2612.8	2617.3	2630.7	2644.0	2651.4	2666.2
20°	2531.3	2534.2	2538.7	2541.7	2549.1	2561.0	2569.8	2581.7	2596.5	2609.9	2624.7
22.5°	2489.8	2483.8	2486.8	2489.8	2497.2	2507.6	2518.0	2532.8	2547.6	2561.0	2575.8
25°	2409.7	2411.2	2415.6	2418.6	2427.5	2436.4	2448.3	2466.0	2479.4	2494.2	2510.5
27.5°	2301.4	2302.9	2310.3	2310.3	2317.7	2332.6	2340.0	2354.8	2372.6	2387.4	2406.7
30°	2178.4	2181.3	2181.3	2187.3	2191.7	2199.1	2206.5	2221.4	2230.3	2243.6	2270.3
32.5°	2065.7	2068.6	2067.1	2065.7	2061.2	2059.7	2058.2	2061.2	2064.2	2068.6	2079.0
35°	1998.9	1991.5	1985.6	1975.2	1963.4	1948.5	1935.2	1917.4	1901.1	1887.7	1872.9
37.5°	1935.2	1933.7	1924.8	1909.9	1886.2	1859.5	1828.4	1789.8	1751.3	1709.8	1669.7
40°	1846.2	1841.7	1834.3	1813.6	1786.9	1754.3	1712.7	1665.3	1603.0	1539.2	1474.0
42.5°	1694.9	1696.4	1687.5	1671.2	1646.0	1614.9	1571.9	1520.0	1453.2	1377.6	1293.1
45°	1518.5	1518.5	1515.5	1502.2	1484.4	1459.2	1426.5	1383.5	1318.3	1241.2	1150.7
47.5°	1334.6	1336.1	1331.6	1328.7	1321.2	1304.9	1281.2	1248.6	1202.6	1128.5	1038.0
50°	1147.8	1147.8	1155.2	1153.7	1153.7	1147.8	1137.4	1118.1	1078.1	1018.7	934.2
52.5°	960.9	963.9	968.3	974.3	981.7	993.5	981.7	972.8	947.6	901.6	828.9
55°	768.1	771.1	778.5	788.9	797.8	809.7	812.6	812.6	799.3	768.1	713.3
57.5°	603.5	599.1	605.0	613.9	625.8	637.7	646.5	656.9	655.4	634.7	590.2
60°	453.8	455.3	459.7	468.6	477.5	487.9	499.7	508.6	513.1	502.7	474.5
62.5°	330.7	330.7	336.6	345.5	350.0	364.8	372.2	376.7	381.1	379.6	361.8
65°	231.3	234.3	237.3	241.7	246.2	255.0	259.5	268.4	271.4	272.9	259.5
67.5°	163.1	158.7	161.6	164.6	169.0	175.0	183.9	183.9	188.3	188.3	179.4
70°	103.8	103.8	105.3	109.7	112.7	114.2	117.2	120.1	124.6	123.1	123.1
72.5°	69.7	68.2	69.7	71.2	72.7	77.1	77.1	78.6	81.6	83.1	77.1
75°	35.6	37.1	40.0	38.6	43.0	40.0	41.5	46.0	44.5	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°	20.8	22.2	20.8	19.3	20.8	19.3	19.3	19.3	19.3	19.3	17.8
82.5°	16.3	13.4	14.8	13.4	14.8	14.8	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



TEST NUMBER: P244595

CATALOG NUMBER: LSR8B50D010 EC8B50827 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6
2.5°	2767.1	2765.6	2768.6	2767.1	2767.1	2765.6	2767.1	2765.6	2768.6	2762.6	2764.1
5°	2767.1	2764.1	2765.6	2767.1	2768.6	2765.6	2765.6	2765.6	2768.6	2765.6	2767.1
7.5°	2761.1	2759.6	2764.1	2767.1	2765.6	2764.1	2767.1	2765.6	2768.6	2767.1	2770.0
10°	2749.3	2750.8	2753.7	2758.2	2759.6	2761.1	2764.1	2764.1	2768.6	2762.6	2765.6
12.5°	2731.5	2737.4	2744.8	2747.8	2753.7	2753.7	2756.7	2758.2	2761.1	2759.6	2764.1
15°	2709.2	2716.6	2725.5	2733.0	2740.4	2744.8	2749.3	2750.8	2755.2	2750.8	2752.2
17.5°	2682.5	2691.4	2704.8	2713.7	2725.5	2730.0	2735.9	2738.9	2743.3	2740.4	2741.9
20°	2645.5	2655.9	2670.7	2684.0	2691.4	2701.8	2709.2	2713.7	2716.6	2713.7	2715.2
22.5°	2593.6	2608.4	2627.7	2638.1	2652.9	2661.8	2663.3	2673.6	2681.1	2673.6	2676.6
25°	2532.8	2547.6	2562.4	2584.7	2598.0	2608.4	2618.8	2620.3	2627.7	2626.2	2624.7
27.5°	2431.9	2451.2	2476.4	2494.2	2512.0	2528.3	2540.2	2543.1	2550.6	2547.6	2549.1
30°	2294.0	2314.8	2338.5	2366.7	2391.9	2408.2	2423.0	2433.4	2440.8	2436.4	2434.9
32.5°	2098.3	2119.0	2144.3	2172.4	2202.1	2225.8	2243.6	2257.0	2265.9	2262.9	2255.5
35°	1874.4	1880.3	1896.6	1918.9	1944.1	1969.3	1985.6	2000.4	2010.8	2013.8	2013.8
37.5°	1644.5	1625.3	1613.4	1613.4	1628.2	1638.6	1653.4	1662.3	1678.6	1684.6	1689.0
40°	1422.1	1377.6	1336.1	1304.9	1284.2	1282.7	1282.7	1287.1	1302.0	1321.2	1339.1
42.5°	1223.4	1152.2	1088.4	1030.6	989.1	965.4	955.0	956.5	968.3	986.1	1015.8
45°	1064.7	975.7	895.7	826.0	769.6	732.5	714.8	713.3	722.2	742.9	775.6
47.5°	941.6	846.7	756.3	676.2	615.4	575.4	554.6	548.7	554.6	573.9	612.4
50°	839.3	741.5	648.0	565.0	499.7	458.2	438.9	431.5	438.9	455.3	493.8
52.5°	744.4	643.6	556.1	476.0	406.3	370.7	350.0	345.5	350.0	369.2	400.4
55°	634.7	548.7	462.7	382.6	321.8	286.2	269.9	265.5	269.9	287.7	320.3
57.5°	526.4	452.3	376.7	304.0	252.1	220.9	206.1	200.2	210.6	222.4	261.0
60°	425.6	366.3	302.5	238.7	195.8	167.6	155.7	154.2	157.2	172.0	198.7
62.5°	333.7	284.7	234.3	182.4	146.8	134.9	120.1	118.6	121.6	130.5	151.3
65°	240.2	209.1	170.5	133.5	105.3	89.0	83.1	84.5	87.5	93.4	112.7
67.5°	167.6	145.3	118.6	93.4	72.7	65.2	59.3	57.8	59.3	69.7	80.1
70°	112.7	99.3	80.1	71.2	50.4	40.0	41.5	37.1	43.0	43.0	51.9
72.5°	74.1	65.2	53.4	41.5	35.6	28.2	28.2	26.7	29.6	31.1	38.6
75°	38.6	29.6	29.6	20.8	14.8	7.4	13.4	11.9	10.4	11.9	14.8
77.5°	26.7	22.2	20.8	16.3	14.8	11.9	11.9	11.9	11.9	13.4	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



TEST NUMBER: P244595

CATALOG NUMBER: LSR8B50D010 EC8B50827 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6	2762.6
2.5°	2767.1	2768.6	2768.6	2767.1	2767.1	2764.1	2770.0	2765.6	2767.1	2773.0	2768.6
5°	2770.0	2771.5	2771.5	2770.0	2770.0	2770.0	2771.5	2771.5	2770.0	2768.6	2771.5
7.5°	2776.0	2774.5	2774.5	2771.5	2771.5	2768.6	2771.5	2767.1	2770.0	2767.1	2771.5
10°	2768.6	2770.0	2768.6	2767.1	2767.1	2765.6	2765.6	2761.1	2762.6	2758.2	2761.1
12.5°	2764.1	2762.6	2762.6	2759.6	2756.7	2753.7	2752.2	2747.8	2747.8	2737.4	2741.9
15°	2752.2	2753.7	2749.3	2743.3	2740.4	2733.0	2730.0	2724.0	2718.1	2710.7	2712.2
17.5°	2741.9	2737.4	2731.5	2725.5	2713.7	2707.8	2701.8	2692.9	2689.9	2681.1	2678.1
20°	2710.7	2707.8	2700.4	2689.9	2682.5	2669.2	2663.3	2654.4	2646.9	2638.1	2633.6
22.5°	2670.7	2667.7	2658.8	2648.4	2636.6	2630.7	2624.7	2608.4	2601.0	2592.1	2590.6
25°	2620.3	2615.8	2606.9	2595.1	2589.1	2572.8	2566.9	2555.0	2552.1	2543.1	2541.7
27.5°	2543.1	2537.2	2526.8	2512.0	2501.6	2491.2	2485.3	2476.4	2473.5	2464.5	2463.1
30°	2427.5	2420.1	2399.3	2393.4	2375.6	2365.2	2365.2	2353.3	2354.8	2348.9	2348.9
32.5°	2245.1	2233.2	2216.9	2205.0	2193.2	2187.3	2187.3	2182.8	2185.8	2185.8	2188.8
35°	2003.4	1987.1	1978.2	1970.8	1970.8	1976.7	1994.5	1998.9	2007.8	2015.2	2021.2
37.5°	1693.4	1692.0	1702.4	1711.3	1733.5	1758.7	1789.8	1816.6	1841.7	1859.5	1877.3
40°	1358.3	1395.4	1425.0	1466.6	1500.7	1549.6	1606.0	1651.9	1694.9	1726.1	1758.7
42.5°	1060.3	1107.7	1170.0	1230.8	1291.6	1358.3	1432.5	1496.2	1552.6	1595.6	1629.7
45°	826.0	891.2	966.9	1044.0	1122.5	1205.6	1282.7	1347.9	1407.3	1451.8	1485.9
47.5°	665.8	737.0	823.0	907.5	996.5	1084.0	1170.0	1226.4	1275.3	1310.9	1342.0
50°	550.1	625.8	716.2	812.6	901.6	989.1	1063.2	1118.1	1158.1	1189.3	1208.5
52.5°	459.7	539.8	636.2	732.5	821.5	901.6	968.3	1009.9	1042.5	1064.7	1082.5
55°	379.6	456.7	547.2	637.7	725.1	800.7	855.6	886.8	912.0	925.3	935.7
57.5°	309.9	381.1	464.1	547.2	622.8	685.1	728.1	759.2	771.1	781.5	780.0
60°	243.2	309.9	385.6	456.7	522.0	572.4	603.5	621.3	630.2	634.7	631.7
62.5°	191.3	252.1	309.9	372.2	419.7	462.7	492.3	492.3	496.8	498.2	502.7
65°	142.3	188.3	238.7	284.7	323.3	351.4	367.8	372.2	378.1	376.7	373.7
67.5°	105.3	139.4	176.4	210.6	237.3	255.0	266.9	277.3	275.8	272.9	271.4
70°	72.7	94.9	127.5	148.3	167.6	185.4	188.3	189.8	191.3	192.8	189.8
72.5°	50.4	66.7	84.5	102.3	114.2	121.6	129.0	130.5	130.5	130.5	129.0
75°	25.2	34.1	50.4	57.8	68.2	71.2	77.1	77.1	81.6	75.6	74.1
77.5°	22.2	26.7	35.6	41.5	46.0	50.4	51.9	56.3	54.9	51.9	53.4
80°	13.4	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	19.3	19.3	20.8	20.8	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: P244595

CATALOG NUMBER: LSR8B50D010 EC8B50827 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2762.6	2762.6	2762.6	2762.6
2.5°	2767.1	2770.0	2765.6	2764.1
5°	2771.5	2771.5	2768.6	2768.6
7.5°	2771.5	2771.5	2767.1	2764.1
10°	2759.6	2759.6	2755.2	2752.2
12.5°	2737.4	2737.4	2735.9	2731.5
15°	2709.2	2709.2	2703.3	2698.9
17.5°	2670.7	2673.6	2666.2	2666.2
20°	2629.2	2627.7	2621.8	2618.8
22.5°	2586.2	2583.2	2581.7	2572.8
25°	2540.2	2537.2	2532.8	2528.3
27.5°	2461.6	2460.1	2455.7	2449.7
30°	2341.5	2340.0	2334.1	2334.1
32.5°	2185.8	2184.3	2178.4	2179.9
35°	2024.1	2030.1	2027.1	2021.2
37.5°	1889.2	1893.7	1896.6	1893.7
40°	1776.5	1789.8	1791.3	1794.3
42.5°	1656.4	1674.2	1680.1	1683.1
45°	1512.5	1528.9	1542.2	1539.2
47.5°	1365.7	1377.6	1389.5	1380.6
50°	1224.9	1232.3	1236.7	1236.7
52.5°	1091.4	1091.4	1089.9	1091.4
55°	938.7	938.7	932.7	935.7
57.5°	778.5	781.5	777.0	769.6
60°	630.2	622.8	619.8	615.4
62.5°	490.8	490.8	480.5	493.8
65°	367.8	363.3	358.8	357.4
67.5°	266.9	265.5	261.0	259.5
70°	188.3	182.4	180.9	177.9
72.5°	126.0	126.0	123.1	123.1
75°	77.1	69.7	68.2	69.7
77.5°	53.4	51.9	51.9	50.4
80°	35.6	34.1	37.1	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)