

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: P244619

Luminaire Tested: **LSR8B50D010 EC8B50850 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244619
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 EC8B50850 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5653.0 lumens
Efficiency: N/A
Efficacy: 106.7 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

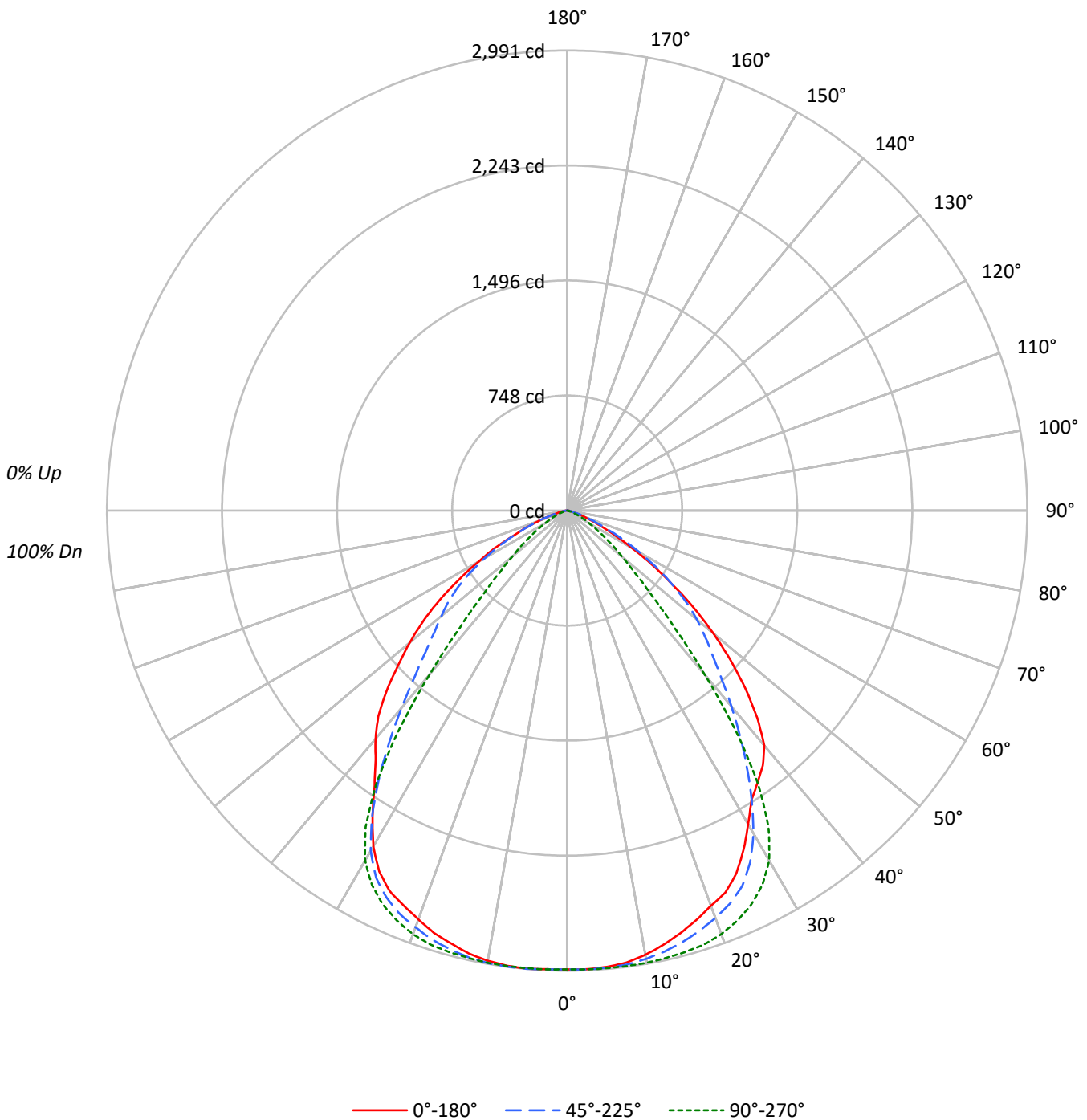
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	91972	91972	91972
5°	92175	92423	92525
10°	91788	93441	93041
15°	90770	94808	93020
20°	89681	96142	92779
25°	88517	96254	92876
30°	83743	93546	89729
35°	81240	81300	82147
40°	80234	55937	77980
45°	71493	33583	72470
50°	59448	22351	64053
55°	44584	15408	54310
60°	30213	10268	40975
65°	18227	6662	28150
70°	10107	3606	17320
75°	4575	1525	8971
80°	3978	1705	6251
85°	4529	2264	6227



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	284.6	5.0
10°-20°	826.7	14.6
20°-30°	1254.7	22.2
30°-40°	1317.8	23.3
40°-50°	988.0	17.5
50°-60°	633.9	11.2
60°-70°	271.2	4.8
70°-80°	64.1	1.1
80°-90°	11.9	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°	2366.0	41.9
0°-40°	3683.9	65.2
0°-60°	5305.8	93.9
0°-90°	5653.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5653.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2983	2983	2983	2983	2983	
5°	2978	2983	2986	2991	2989	283
15°	2843	2903	2970	2951	2914	802
25°	2602	2693	2829	2778	2730	1189
35°	2158	2038	2160	2134	2182	1354
45°	1639	1340	770	1302	1662	1256
55°	829	829	287	864	1010	752
65°	250	295	91	379	386	267
75°	38	45	13	77	75	56
85°	13	8	6	13	18	14
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°	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6
2.5°	2984.2	2987.5	2985.8	2985.8	2984.2	2985.8	2985.8	2989.1	2989.1	2985.8	2984.2
5°	2977.8	2981.0	2981.0	2977.8	2977.8	2985.8	2981.0	2984.2	2984.2	2982.6	2982.6
7.5°	2963.4	2963.4	2969.8	2965.0	2965.0	2969.8	2968.2	2971.4	2974.6	2976.2	2976.2
10°	2931.4	2934.6	2936.2	2936.2	2937.8	2942.6	2945.8	2952.2	2955.4	2958.6	2960.2
12.5°	2891.4	2896.2	2897.8	2896.2	2901.0	2907.4	2915.4	2923.4	2928.2	2934.6	2939.4
15°	2843.3	2843.3	2846.5	2851.4	2854.6	2864.2	2872.2	2881.8	2894.6	2902.6	2910.6
17.5°	2790.5	2793.7	2798.5	2798.5	2804.9	2820.9	2825.7	2840.2	2854.6	2862.6	2878.6
20°	2732.9	2736.1	2740.9	2744.1	2752.1	2764.9	2774.5	2787.3	2803.3	2817.8	2833.7
22.5°	2688.0	2681.7	2684.8	2688.0	2696.1	2707.3	2718.5	2734.5	2750.5	2764.9	2780.9
25°	2601.6	2603.2	2608.0	2611.2	2620.8	2630.4	2643.2	2662.4	2676.8	2692.9	2710.5
27.5°	2484.7	2486.3	2494.3	2494.3	2502.3	2518.3	2526.3	2542.4	2561.6	2577.6	2598.4
30°	2351.9	2355.0	2355.0	2361.5	2366.2	2374.3	2382.3	2398.3	2407.9	2422.3	2451.1
32.5°	2230.2	2233.4	2231.8	2230.2	2225.4	2223.8	2222.2	2225.4	2228.6	2233.4	2244.6
35°	2158.1	2150.1	2143.7	2132.5	2119.7	2103.7	2089.3	2070.1	2052.5	2038.0	2022.1
37.5°	2089.3	2087.7	2078.1	2062.1	2036.4	2007.6	1974.0	1932.4	1890.8	1845.9	1802.7
40°	1993.2	1988.4	1980.4	1958.0	1929.2	1894.0	1849.1	1797.9	1730.6	1661.8	1591.4
42.5°	1829.9	1831.5	1821.9	1804.3	1777.1	1743.5	1697.0	1641.0	1569.0	1487.3	1396.1
45°	1639.4	1639.4	1636.2	1621.8	1602.6	1575.4	1540.1	1493.7	1423.3	1340.0	1242.4
47.5°	1440.9	1442.5	1437.7	1434.5	1426.5	1408.9	1383.3	1348.0	1298.4	1218.3	1120.7
50°	1239.2	1239.2	1247.2	1245.6	1245.6	1239.2	1228.0	1207.1	1163.9	1099.9	1008.6
52.5°	1037.4	1040.6	1045.5	1051.8	1059.8	1072.7	1059.8	1050.2	1023.0	973.4	895.0
55°	829.3	832.5	840.5	851.7	861.3	874.2	877.3	877.3	862.9	829.3	770.1
57.5°	651.6	646.8	653.2	662.8	675.6	688.4	698.0	709.2	707.6	685.2	637.2
60°	489.9	491.5	496.3	505.9	515.5	526.7	539.5	549.1	554.0	542.7	512.3
62.5°	357.0	357.0	363.4	373.0	377.8	393.9	401.8	406.7	411.4	409.8	390.6
65°	249.8	252.9	256.2	261.0	265.8	275.4	280.2	289.8	293.0	294.6	280.2
67.5°	176.1	171.3	174.5	177.7	182.5	188.9	198.5	198.5	203.3	203.3	193.7
70°	112.1	112.1	113.7	118.5	121.7	123.3	126.5	129.7	134.5	132.9	132.9
72.5°	75.3	73.6	75.3	76.9	78.5	83.2	83.2	84.8	88.1	89.7	83.2
75°	38.4	40.0	43.2	41.6	46.4	43.2	44.8	49.6	48.0	44.8	44.8
77.5°	32.0	32.0	32.0	30.4	33.6	33.6	32.0	35.2	33.6	33.6	32.0
80°	22.4	24.0	22.4	20.8	22.4	20.8	20.8	20.8	20.8	20.8	19.2
82.5°	17.6	14.4	16.0	14.4	16.0	16.0	14.4	12.8	12.8	14.4	12.8
85°	12.8	9.6	11.2	11.2	9.6	9.6	9.6	9.6	9.6	8.0	8.0
87.5°	8.0	4.8	4.8	4.8	6.4	6.4	6.4	4.8	6.4	6.4	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6
2.5°	2987.5	2985.8	2989.1	2987.5	2987.5	2985.8	2987.5	2985.8	2989.1	2982.6	2984.2
5°	2987.5	2984.2	2985.8	2987.5	2989.1	2985.8	2985.8	2985.8	2989.1	2985.8	2987.5
7.5°	2981.0	2979.4	2984.2	2987.5	2985.8	2984.2	2987.5	2985.8	2989.1	2987.5	2990.6
10°	2968.2	2969.8	2973.0	2977.8	2979.4	2981.0	2984.2	2984.2	2989.1	2982.6	2985.8
12.5°	2949.0	2955.4	2963.4	2966.6	2973.0	2973.0	2976.2	2977.8	2981.0	2979.4	2984.2
15°	2925.0	2933.0	2942.6	2950.6	2958.6	2963.4	2968.2	2969.8	2974.6	2969.8	2971.4
17.5°	2896.2	2905.8	2920.2	2929.8	2942.6	2947.4	2953.8	2957.0	2961.8	2958.6	2960.2
20°	2856.1	2867.4	2883.4	2897.8	2905.8	2917.0	2925.0	2929.8	2933.0	2929.8	2931.4
22.5°	2800.1	2816.1	2836.9	2848.2	2864.2	2873.8	2875.4	2886.6	2894.6	2886.6	2889.8
25°	2734.5	2750.5	2766.5	2790.5	2804.9	2816.1	2827.3	2829.0	2836.9	2835.3	2833.7
27.5°	2625.6	2646.4	2673.6	2692.9	2712.1	2729.7	2742.5	2745.7	2753.7	2750.5	2752.1
30°	2476.7	2499.2	2524.8	2555.2	2582.4	2600.0	2616.0	2627.2	2635.2	2630.4	2628.8
32.5°	2265.4	2287.8	2315.0	2345.4	2377.5	2403.1	2422.3	2436.7	2446.3	2443.1	2435.1
35°	2023.7	2030.1	2047.7	2071.7	2098.9	2126.1	2143.7	2159.7	2170.9	2174.1	2174.1
37.5°	1775.5	1754.7	1741.9	1741.9	1757.9	1769.1	1785.1	1794.7	1812.3	1818.7	1823.5
40°	1535.3	1487.3	1442.5	1408.9	1386.5	1384.9	1384.9	1389.6	1405.7	1426.5	1445.7
42.5°	1320.8	1244.0	1175.1	1112.7	1067.9	1042.3	1031.0	1032.7	1045.5	1064.7	1096.7
45°	1149.5	1053.5	967.0	891.7	830.9	790.9	771.7	770.1	779.7	802.1	837.3
47.5°	1016.6	914.2	816.5	730.0	664.4	621.2	598.8	592.4	598.8	619.6	661.2
50°	906.2	800.5	699.6	610.0	539.5	494.7	473.9	465.9	473.9	491.5	533.1
52.5°	803.7	694.8	600.4	513.9	438.7	400.2	377.8	373.0	377.8	398.6	432.3
55°	685.2	592.4	499.5	413.0	347.4	309.0	291.4	286.6	291.4	310.6	345.8
57.5°	568.4	488.3	406.7	328.2	272.2	238.5	222.5	216.1	227.3	240.1	281.8
60°	459.5	395.5	326.6	257.8	211.3	180.9	168.1	166.5	169.7	185.7	214.5
62.5°	360.2	307.4	252.9	196.9	158.5	145.7	129.7	128.1	131.3	140.9	163.3
65°	259.4	225.8	184.1	144.1	113.7	96.1	89.7	91.3	94.4	100.9	121.7
67.5°	180.9	156.9	128.1	100.9	78.5	70.4	64.0	62.4	64.0	75.3	86.5
70°	121.7	107.3	86.5	76.9	54.5	43.2	44.8	40.0	46.4	46.4	56.0
72.5°	80.0	70.4	57.6	44.8	38.4	30.4	30.4	28.8	32.0	33.6	41.6
75°	41.6	32.0	32.0	22.4	16.0	8.0	14.4	12.8	11.2	12.8	16.0
77.5°	28.8	24.0	22.4	17.6	16.0	12.8	12.8	12.8	12.8	14.4	16.0
80°	17.6	17.6	12.8	11.2	9.6	8.0	9.6	9.6	9.6	9.6	11.2
82.5°	11.2	9.6	9.6	8.0	8.0	6.4	6.4	6.4	6.4	6.4	9.6
85°	9.6	6.4	6.4	4.8	6.4	11.2	4.8	6.4	6.4	6.4	4.8
87.5°	3.2	4.8	4.8	4.8	3.2	1.6	3.2	4.8	4.8	8.0	6.4
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°	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6	2982.6
2.5°	2987.5	2989.1	2989.1	2987.5	2987.5	2984.2	2990.6	2985.8	2987.5	2993.8	2989.1
5°	2990.6	2992.2	2992.2	2990.6	2990.6	2990.6	2992.2	2992.2	2990.6	2989.1	2992.2
7.5°	2997.0	2995.4	2995.4	2992.2	2992.2	2989.1	2992.2	2987.5	2990.6	2987.5	2992.2
10°	2989.1	2990.6	2989.1	2987.5	2987.5	2985.8	2985.8	2981.0	2982.6	2977.8	2981.0
12.5°	2984.2	2982.6	2982.6	2979.4	2976.2	2973.0	2971.4	2966.6	2966.6	2955.4	2960.2
15°	2971.4	2973.0	2968.2	2961.8	2958.6	2950.6	2947.4	2941.0	2934.6	2926.6	2928.2
17.5°	2960.2	2955.4	2949.0	2942.6	2929.8	2923.4	2917.0	2907.4	2904.2	2894.6	2891.4
20°	2926.6	2923.4	2915.4	2904.2	2896.2	2881.8	2875.4	2865.8	2857.7	2848.2	2843.3
22.5°	2883.4	2880.2	2870.6	2859.4	2846.5	2840.2	2833.7	2816.1	2808.1	2798.5	2796.9
25°	2829.0	2824.1	2814.5	2801.7	2795.3	2777.7	2771.3	2758.5	2755.3	2745.7	2744.1
27.5°	2745.7	2739.3	2728.1	2712.1	2700.9	2689.7	2683.3	2673.6	2670.5	2660.8	2659.3
30°	2620.8	2612.8	2590.4	2584.0	2564.8	2553.6	2553.6	2540.8	2542.4	2536.0	2536.0
32.5°	2423.9	2411.1	2393.5	2380.7	2367.8	2361.5	2361.5	2356.6	2359.9	2359.9	2363.1
35°	2162.9	2145.3	2135.7	2127.7	2127.7	2134.1	2153.3	2158.1	2167.7	2175.7	2182.2
37.5°	1828.3	1826.7	1837.9	1847.5	1871.6	1898.8	1932.4	1961.2	1988.4	2007.6	2026.8
40°	1466.5	1506.5	1538.5	1583.4	1620.2	1673.0	1733.9	1783.5	1829.9	1863.6	1898.8
42.5°	1144.7	1195.9	1263.2	1328.8	1394.5	1466.5	1546.6	1615.4	1676.2	1722.7	1759.5
45°	891.7	962.2	1043.9	1127.1	1212.0	1301.6	1384.9	1455.3	1519.3	1567.4	1604.2
47.5°	718.8	795.7	888.5	979.8	1075.9	1170.3	1263.2	1324.0	1376.8	1415.3	1448.9
50°	593.9	675.6	773.3	877.3	973.4	1067.9	1147.9	1207.1	1250.4	1284.0	1304.8
52.5°	496.3	582.7	686.8	790.9	886.9	973.4	1045.5	1090.3	1125.5	1149.5	1168.7
55°	409.8	493.1	590.8	688.4	782.9	864.5	923.8	957.4	984.6	999.0	1010.2
57.5°	334.6	411.4	501.1	590.8	672.4	739.7	786.1	819.7	832.5	843.7	842.1
60°	262.6	334.6	416.3	493.1	563.6	618.0	651.6	670.8	680.4	685.2	682.0
62.5°	206.5	272.2	334.6	401.8	453.1	499.5	531.5	531.5	536.3	537.9	542.7
65°	153.7	203.3	257.8	307.4	349.0	379.4	397.1	401.8	408.3	406.7	403.4
67.5°	113.7	150.5	190.5	227.3	256.2	275.4	288.2	299.4	297.8	294.6	293.0
70°	78.5	102.5	137.7	160.1	180.9	200.1	203.3	204.9	206.5	208.1	204.9
72.5°	54.5	72.0	91.3	110.5	123.3	131.3	139.3	140.9	140.9	140.9	139.3
75°	27.2	36.8	54.5	62.4	73.6	76.9	83.2	83.2	88.1	81.6	80.0
77.5°	24.0	28.8	38.4	44.8	49.6	54.5	56.0	60.8	59.2	56.0	57.6
80°	14.4	17.6	24.0	27.2	33.6	35.2	36.8	38.4	36.8	38.4	38.4
82.5°	11.2	12.8	16.0	16.0	20.8	20.8	22.4	22.4	24.0	24.0	24.0
85°	6.4	11.2	9.6	19.2	12.8	12.8	16.0	19.2	16.0	16.0	19.2
87.5°	6.4	6.4	4.8	6.4	6.4	6.4	8.0	9.6	9.6	11.2	9.6
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: P244619

CATALOG NUMBER: LSR8B50D010 EC8B50850 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2982.6	2982.6	2982.6	2982.6
2.5°	2987.5	2990.6	2985.8	2984.2
5°	2992.2	2992.2	2989.1	2989.1
7.5°	2992.2	2992.2	2987.5	2984.2
10°	2979.4	2979.4	2974.6	2971.4
12.5°	2955.4	2955.4	2953.8	2949.0
15°	2925.0	2925.0	2918.6	2913.8
17.5°	2883.4	2886.6	2878.6	2878.6
20°	2838.6	2836.9	2830.6	2827.3
22.5°	2792.1	2788.9	2787.3	2777.7
25°	2742.5	2739.3	2734.5	2729.7
27.5°	2657.6	2656.0	2651.2	2644.8
30°	2527.9	2526.3	2520.0	2520.0
32.5°	2359.9	2358.2	2351.9	2353.5
35°	2185.3	2191.8	2188.5	2182.2
37.5°	2039.6	2044.5	2047.7	2044.5
40°	1918.0	1932.4	1934.0	1937.2
42.5°	1788.3	1807.5	1813.9	1817.1
45°	1633.0	1650.6	1665.0	1661.8
47.5°	1474.5	1487.3	1500.1	1490.5
50°	1322.4	1330.4	1335.2	1335.2
52.5°	1178.3	1178.3	1176.7	1178.3
55°	1013.4	1013.4	1007.0	1010.2
57.5°	840.5	843.7	838.9	830.9
60°	680.4	672.4	669.2	664.4
62.5°	529.9	529.9	518.7	533.1
65°	397.1	392.2	387.4	385.8
67.5°	288.2	286.6	281.8	280.2
70°	203.3	196.9	195.3	192.1
72.5°	136.1	136.1	132.9	132.9
75°	83.2	75.3	73.6	75.3
77.5°	57.6	56.0	56.0	54.5
80°	38.4	36.8	40.0	35.2
82.5°	24.0	25.6	24.0	25.6
85°	16.0	19.2	17.6	17.6
87.5°	9.6	9.6	9.6	9.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)