

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: P246203

Luminaire Tested: **LSR8B50D010 EC8B50850 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246203
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 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5590.0 lumens
Efficiency: N/A
Efficacy: 105.5 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

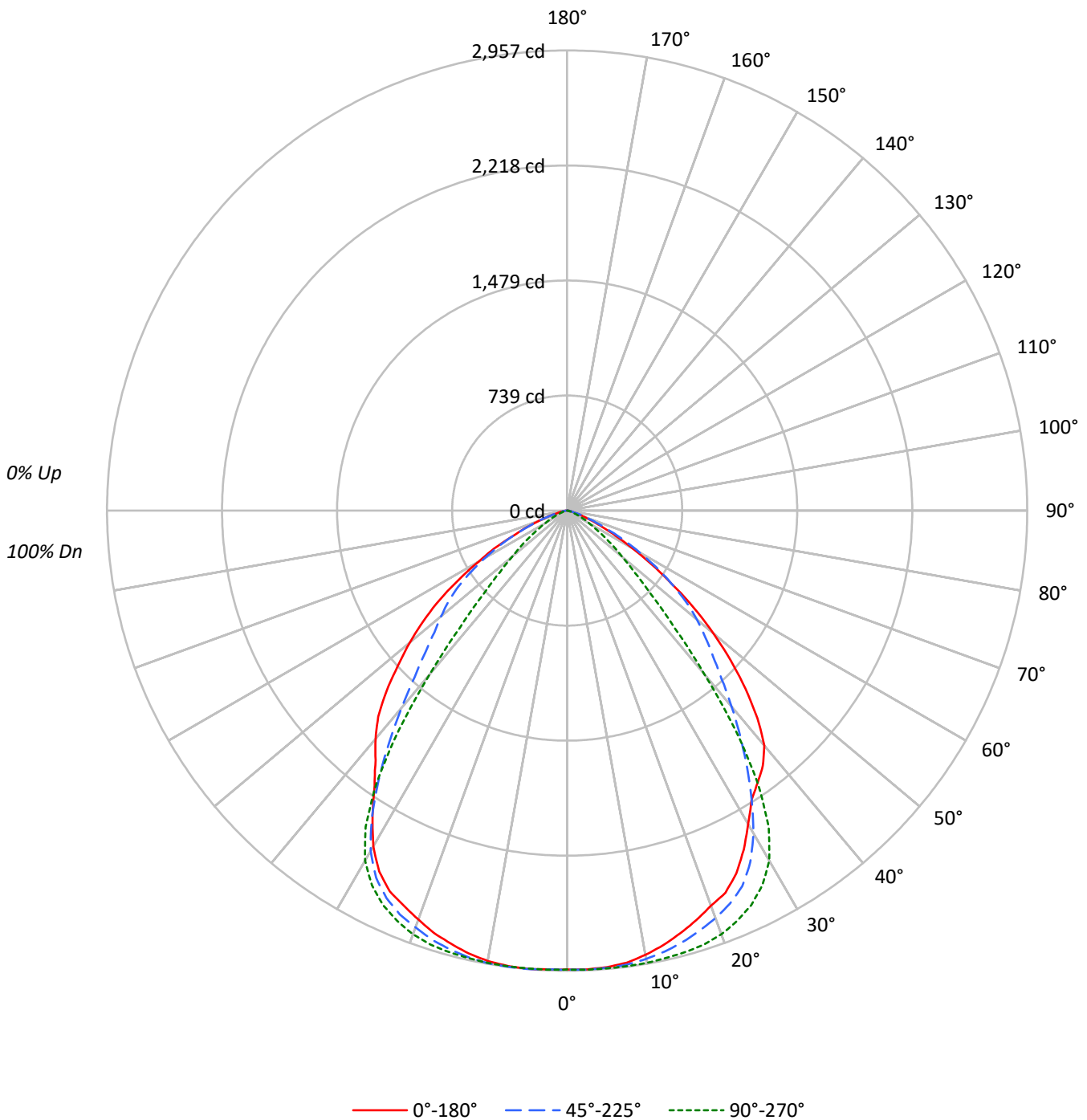
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	90949	90949	90949
5°	91147	91395	91491
10°	90764	92402	92004
15°	89758	93752	91983
20°	88680	95069	91745
25°	87530	95179	91841
30°	82811	92503	88728
35°	80336	80393	81229
40°	79341	55317	77110
45°	70695	33208	71663
50°	58786	22101	63338
55°	44090	15236	53702
60°	29874	10151	40519
65°	18022	6589	27836
70°	9990	3570	17130
75°	4527	1513	8864
80°	3942	1687	6180
85°	4493	2229	6156



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.5	5.0
10°-20°	817.5	14.6
20°-30°	1240.7	22.2
30°-40°	1303.1	23.3
40°-50°	977.0	17.5
50°-60°	626.9	11.2
60°-70°	268.2	4.8
70°-80°	63.3	1.1
80°-90°	11.8	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°	2339.7	41.9
0°-40°	3642.8	65.2
0°-60°	5246.7	93.9
0°-90°	5590.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5590.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2949	2949	2949	2949	2949	
5°	2945	2949	2953	2957	2956	280
15°	2812	2870	2937	2918	2881	793
25°	2573	2663	2797	2747	2699	1175
35°	2134	2015	2136	2110	2158	1339
45°	1621	1325	762	1287	1643	1242
55°	820	820	283	855	999	744
65°	247	291	90	375	382	264
75°	38	44	13	76	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°	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4
2.5°	2951.0	2954.2	2952.6	2952.6	2951.0	2952.6	2952.6	2955.7	2955.7	2952.6	2951.0
5°	2944.6	2947.8	2947.8	2944.6	2944.6	2952.6	2947.8	2951.0	2951.0	2949.4	2949.4
7.5°	2930.4	2930.4	2936.7	2932.0	2932.0	2936.7	2935.1	2938.3	2941.5	2943.1	2943.1
10°	2898.7	2901.9	2903.5	2903.5	2905.1	2909.8	2913.0	2919.3	2922.5	2925.6	2927.2
12.5°	2859.2	2863.9	2865.5	2863.9	2868.7	2875.0	2882.9	2890.8	2895.6	2901.9	2906.7
15°	2811.6	2811.6	2814.8	2819.6	2822.8	2832.3	2840.2	2849.6	2862.3	2870.3	2878.2
17.5°	2759.4	2762.6	2767.3	2767.3	2773.7	2789.5	2794.3	2808.5	2822.8	2830.7	2846.5
20°	2702.4	2705.6	2710.3	2713.5	2721.4	2734.1	2743.6	2756.3	2772.1	2786.3	2802.2
22.5°	2658.1	2651.8	2654.9	2658.1	2666.0	2677.1	2688.2	2704.0	2719.8	2734.1	2749.9
25°	2572.6	2574.2	2579.0	2582.1	2591.6	2601.1	2613.8	2632.8	2647.0	2662.9	2680.3
27.5°	2457.0	2458.6	2466.5	2466.5	2474.4	2490.3	2498.2	2514.0	2533.0	2548.9	2569.5
30°	2325.7	2328.8	2328.8	2335.1	2339.9	2347.8	2355.7	2371.6	2381.0	2395.3	2423.8
32.5°	2205.3	2208.5	2206.9	2205.3	2200.6	2199.0	2197.4	2200.6	2203.7	2208.5	2219.6
35°	2134.1	2126.2	2119.8	2108.8	2096.1	2080.3	2066.0	2047.0	2029.6	2015.3	1999.5
37.5°	2066.0	2064.4	2054.9	2039.1	2013.7	1985.3	1952.0	1910.9	1869.7	1825.4	1782.6
40°	1971.0	1966.3	1958.3	1936.2	1907.7	1872.9	1828.5	1777.9	1711.4	1643.3	1573.7
42.5°	1809.5	1811.1	1801.6	1784.2	1757.3	1724.0	1678.1	1622.7	1551.5	1470.7	1380.5
45°	1621.1	1621.1	1618.0	1603.7	1584.7	1557.8	1523.0	1477.1	1407.4	1325.1	1228.5
47.5°	1424.8	1426.4	1421.6	1418.5	1410.6	1393.2	1367.8	1333.0	1283.9	1204.8	1108.2
50°	1225.4	1225.4	1233.3	1231.7	1231.7	1225.4	1214.3	1193.7	1151.0	1087.6	997.4
52.5°	1025.9	1029.0	1033.8	1040.1	1048.0	1060.7	1048.0	1038.5	1011.6	962.5	885.0
55°	820.1	823.2	831.1	842.2	851.7	864.4	867.6	867.6	853.3	820.1	761.5
57.5°	644.4	639.6	645.9	655.4	668.1	680.8	690.3	701.3	699.7	677.6	630.1
60°	484.4	486.0	490.8	500.3	509.8	520.9	533.5	543.0	547.8	536.7	506.6
62.5°	353.0	353.0	359.4	368.9	373.6	389.5	397.4	402.1	406.9	405.3	386.3
65°	247.0	250.1	253.3	258.1	262.8	272.3	277.0	286.5	289.7	291.3	277.0
67.5°	174.2	169.4	172.6	175.7	180.5	186.8	196.3	196.3	201.0	201.0	191.6
70°	110.8	110.8	112.4	117.1	120.3	121.9	125.1	128.2	133.0	131.4	131.4
72.5°	74.4	72.8	74.4	76.0	77.6	82.3	82.3	83.9	87.1	88.7	82.3
75°	38.0	39.6	42.7	41.2	45.9	42.7	44.3	49.1	47.5	44.3	44.3
77.5°	31.6	31.6	31.6	30.1	33.2	33.2	31.6	34.8	33.2	33.2	31.6
80°	22.2	23.7	22.2	20.6	22.2	20.6	20.6	20.6	20.6	20.6	19.0
82.5°	17.4	14.3	15.8	14.3	15.8	15.8	14.3	12.7	12.7	14.3	12.7
85°	12.7	9.5	11.1	11.1	9.5	9.5	9.5	9.5	9.5	7.9	7.9
87.5°	7.9	4.8	4.8	4.8	6.3	6.3	6.3	4.8	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4
2.5°	2954.2	2952.6	2955.7	2954.2	2954.2	2952.6	2954.2	2952.6	2955.7	2949.4	2951.0
5°	2954.2	2951.0	2952.6	2954.2	2955.7	2952.6	2952.6	2952.6	2955.7	2952.6	2954.2
7.5°	2947.8	2946.2	2951.0	2954.2	2952.6	2951.0	2954.2	2952.6	2955.7	2954.2	2957.3
10°	2935.1	2936.7	2939.9	2944.6	2946.2	2947.8	2951.0	2951.0	2955.7	2949.4	2952.6
12.5°	2916.2	2922.5	2930.4	2933.6	2939.9	2939.9	2943.1	2944.6	2947.8	2946.2	2951.0
15°	2892.4	2900.3	2909.8	2917.7	2925.6	2930.4	2935.1	2936.7	2941.5	2936.7	2938.3
17.5°	2863.9	2873.4	2887.6	2897.1	2909.8	2914.6	2920.9	2924.1	2928.8	2925.6	2927.2
20°	2824.3	2835.4	2851.2	2865.5	2873.4	2884.5	2892.4	2897.1	2900.3	2897.1	2898.7
22.5°	2768.9	2784.8	2805.3	2816.4	2832.3	2841.7	2843.3	2854.4	2862.3	2854.4	2857.6
25°	2704.0	2719.8	2735.7	2759.4	2773.7	2784.8	2795.8	2797.4	2805.3	2803.7	2802.2
27.5°	2596.3	2617.0	2643.8	2662.9	2681.8	2699.3	2711.9	2715.1	2723.0	2719.8	2721.4
30°	2449.1	2471.3	2496.6	2526.7	2553.6	2571.0	2586.9	2597.9	2605.8	2601.1	2599.5
32.5°	2240.2	2262.3	2289.2	2319.3	2351.0	2376.3	2395.3	2409.6	2419.0	2415.9	2408.0
35°	2001.1	2007.4	2024.9	2048.6	2075.5	2102.4	2119.8	2135.6	2146.7	2149.9	2149.9
37.5°	1755.7	1735.1	1722.5	1722.5	1738.3	1749.4	1765.2	1774.7	1792.1	1798.4	1803.2
40°	1518.2	1470.7	1426.4	1393.2	1371.0	1369.4	1369.4	1374.2	1390.0	1410.6	1429.6
42.5°	1306.1	1230.1	1162.0	1100.3	1056.0	1030.6	1019.6	1021.1	1033.8	1052.8	1084.4
45°	1136.7	1041.7	956.2	881.8	821.6	782.1	763.1	761.5	771.0	793.1	828.0
47.5°	1005.3	904.0	807.4	721.9	657.0	614.3	592.1	585.8	592.1	612.7	653.8
50°	896.1	791.6	691.8	603.2	533.5	489.2	468.6	460.7	468.6	486.0	527.2
52.5°	794.7	687.1	593.7	508.2	433.8	395.8	373.6	368.9	373.6	394.2	427.5
55°	677.6	585.8	493.9	408.4	343.6	305.6	288.1	283.4	288.1	307.1	342.0
57.5°	562.0	482.9	402.1	324.5	269.1	235.9	220.1	213.7	224.8	237.5	278.6
60°	454.3	391.0	323.0	254.9	209.0	178.9	166.2	164.6	167.8	183.7	212.1
62.5°	356.2	304.0	250.1	194.7	156.7	144.1	128.2	126.7	129.8	139.3	161.5
65°	256.5	223.2	182.1	142.5	112.4	95.0	88.7	90.3	93.4	99.7	120.3
67.5°	178.9	155.1	126.7	99.7	77.6	69.6	63.3	61.7	63.3	74.4	85.5
70°	120.3	106.1	85.5	76.0	53.8	42.7	44.3	39.6	45.9	45.9	55.4
72.5°	79.1	69.6	57.0	44.3	38.0	30.1	30.1	28.5	31.6	33.2	41.2
75°	41.2	31.6	31.6	22.2	15.8	7.9	14.3	12.7	11.1	12.7	15.8
77.5°	28.5	23.7	22.2	17.4	15.8	12.7	12.7	12.7	12.7	14.3	15.8
80°	17.4	17.4	12.7	11.1	9.5	7.9	9.5	9.5	9.5	9.5	11.1
82.5°	11.1	9.5	9.5	7.9	7.9	6.3	6.3	6.3	6.3	6.3	9.5
85°	9.5	6.3	6.3	4.8	6.3	11.1	4.8	6.3	6.3	6.3	4.8
87.5°	3.2	4.8	4.8	4.8	3.2	1.6	3.2	4.8	4.8	7.9	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4	2949.4
2.5°	2954.2	2955.7	2955.7	2954.2	2954.2	2951.0	2957.3	2952.6	2954.2	2960.5	2955.7
5°	2957.3	2958.9	2958.9	2957.3	2957.3	2957.3	2958.9	2958.9	2957.3	2955.7	2958.9
7.5°	2963.6	2962.1	2962.1	2958.9	2958.9	2955.7	2958.9	2954.2	2957.3	2954.2	2958.9
10°	2955.7	2957.3	2955.7	2954.2	2954.2	2952.6	2952.6	2947.8	2949.4	2944.6	2947.8
12.5°	2951.0	2949.4	2949.4	2946.2	2943.1	2939.9	2938.3	2933.6	2933.6	2922.5	2927.2
15°	2938.3	2939.9	2935.1	2928.8	2925.6	2917.7	2914.6	2908.2	2901.9	2894.0	2895.6
17.5°	2927.2	2922.5	2916.2	2909.8	2897.1	2890.8	2884.5	2875.0	2871.8	2862.3	2859.2
20°	2894.0	2890.8	2882.9	2871.8	2863.9	2849.6	2843.3	2833.8	2825.9	2816.4	2811.6
22.5°	2851.2	2848.1	2838.6	2827.5	2814.8	2808.5	2802.2	2784.8	2776.8	2767.3	2765.7
25°	2797.4	2792.7	2783.2	2770.5	2764.2	2746.8	2740.4	2727.7	2724.6	2715.1	2713.5
27.5°	2715.1	2708.8	2697.7	2681.8	2670.8	2659.7	2653.4	2643.8	2640.7	2631.2	2629.6
30°	2591.6	2583.7	2561.5	2555.2	2536.2	2525.1	2525.1	2512.4	2514.0	2507.7	2507.7
32.5°	2396.9	2384.2	2366.8	2354.1	2341.5	2335.1	2335.1	2330.4	2333.6	2333.6	2336.7
35°	2138.8	2121.4	2111.9	2104.0	2104.0	2110.3	2129.3	2134.1	2143.6	2151.5	2157.8
37.5°	1807.9	1806.4	1817.5	1827.0	1850.7	1877.6	1910.9	1939.4	1966.3	1985.3	2004.3
40°	1450.2	1489.7	1521.4	1565.7	1602.1	1654.4	1714.5	1763.6	1809.5	1842.8	1877.6
42.5°	1131.9	1182.6	1249.1	1314.0	1378.9	1450.2	1529.3	1597.4	1657.6	1703.5	1739.9
45°	881.8	951.5	1032.2	1114.5	1198.4	1287.1	1369.4	1439.1	1502.4	1549.9	1586.3
47.5°	710.8	786.8	878.6	968.9	1063.9	1157.3	1249.1	1309.3	1361.5	1399.5	1432.8
50°	587.3	668.1	764.7	867.6	962.5	1056.0	1135.1	1193.7	1236.4	1269.7	1290.3
52.5°	490.8	576.3	679.2	782.1	877.0	962.5	1033.8	1078.1	1113.0	1136.7	1155.7
55°	405.3	487.6	584.2	680.8	774.2	854.9	913.5	946.7	973.6	987.9	998.9
57.5°	330.9	406.9	495.5	584.2	664.9	731.4	777.3	810.6	823.2	834.3	832.7
60°	259.7	330.9	411.6	487.6	557.3	611.1	644.4	663.3	672.8	677.6	674.4
62.5°	204.2	269.1	330.9	397.4	448.0	493.9	525.6	525.6	530.3	531.9	536.7
65°	152.0	201.0	254.9	304.0	345.1	375.2	392.6	397.4	403.7	402.1	399.0
67.5°	112.4	148.8	188.4	224.8	253.3	272.3	284.9	296.1	294.5	291.3	289.7
70°	77.6	101.3	136.2	158.3	178.9	197.9	201.0	202.6	204.2	205.8	202.6
72.5°	53.8	71.2	90.3	109.2	121.9	129.8	137.7	139.3	139.3	139.3	137.7
75°	26.9	36.4	53.8	61.7	72.8	76.0	82.3	82.3	87.1	80.7	79.1
77.5°	23.7	28.5	38.0	44.3	49.1	53.8	55.4	60.2	58.6	55.4	57.0
80°	14.3	17.4	23.7	26.9	33.2	34.8	36.4	38.0	36.4	38.0	38.0
82.5°	11.1	12.7	15.8	15.8	20.6	20.6	22.2	22.2	23.7	23.7	23.7
85°	6.3	11.1	9.5	19.0	12.7	12.7	15.8	19.0	15.8	15.8	19.0
87.5°	6.3	6.3	4.8	6.3	6.3	6.3	7.9	9.5	9.5	11.1	9.5
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: P246203

CATALOG NUMBER: LSR8B50D010 EC8B50850 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2949.4	2949.4	2949.4	2949.4
2.5°	2954.2	2957.3	2952.6	2951.0
5°	2958.9	2958.9	2955.7	2955.7
7.5°	2958.9	2958.9	2954.2	2951.0
10°	2946.2	2946.2	2941.5	2938.3
12.5°	2922.5	2922.5	2920.9	2916.2
15°	2892.4	2892.4	2886.1	2881.3
17.5°	2851.2	2854.4	2846.5	2846.5
20°	2806.9	2805.3	2799.0	2795.8
22.5°	2761.0	2757.8	2756.3	2746.8
25°	2711.9	2708.8	2704.0	2699.3
27.5°	2628.0	2626.4	2621.7	2615.4
30°	2499.8	2498.2	2491.9	2491.9
32.5°	2333.6	2332.0	2325.7	2327.2
35°	2161.0	2167.3	2164.2	2157.8
37.5°	2016.9	2021.7	2024.9	2021.7
40°	1896.6	1910.9	1912.4	1915.6
42.5°	1768.4	1787.4	1793.7	1796.9
45°	1614.8	1632.2	1646.5	1643.3
47.5°	1458.1	1470.7	1483.4	1473.9
50°	1307.7	1315.6	1320.3	1320.3
52.5°	1165.2	1165.2	1163.6	1165.2
55°	1002.1	1002.1	995.8	998.9
57.5°	831.1	834.3	829.6	821.6
60°	672.8	664.9	661.7	657.0
62.5°	524.0	524.0	513.0	527.2
65°	392.6	387.9	383.1	381.5
67.5°	284.9	283.4	278.6	277.0
70°	201.0	194.7	193.1	190.0
72.5°	134.6	134.6	131.4	131.4
75°	82.3	74.4	72.8	74.4
77.5°	57.0	55.4	55.4	53.8
80°	38.0	36.4	39.6	34.8
82.5°	23.7	25.3	23.7	25.3
85°	15.8	19.0	17.4	17.4
87.5°	9.5	9.5	9.5	9.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)