

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: P244169

Luminaire Tested: **LSR8B50D010 EC8B50830 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244169
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B50D010 EC8B50830 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5562.0 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

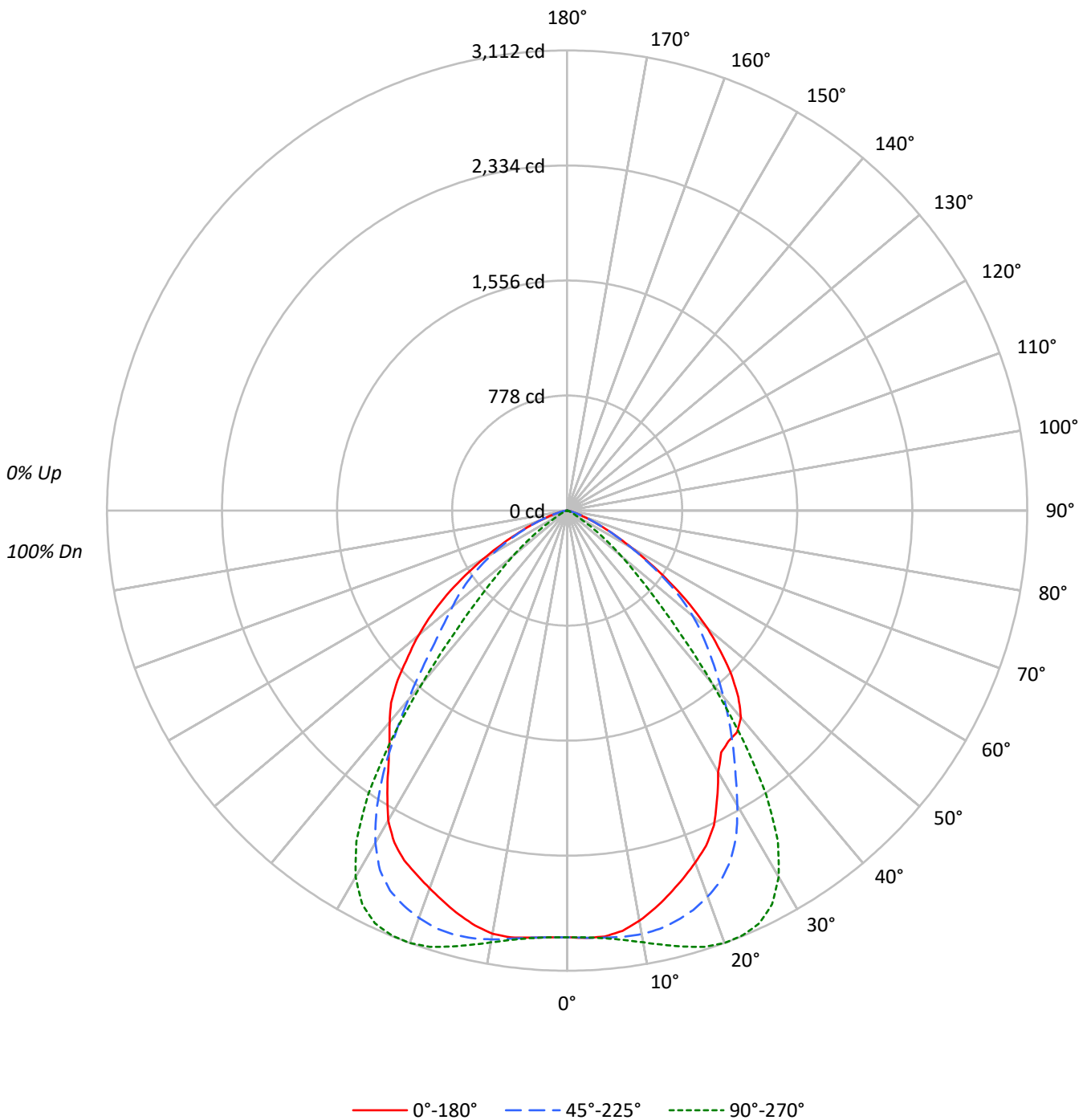
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	88975	88975	88975
5°	89504	89835	89742
10°	88190	92840	91018
15°	85611	97442	90304
20°	83128	102121	89208
25°	79933	104740	88793
30°	72745	101867	86161
35°	71663	88268	79271
40°	73608	61218	75150
45°	68527	36998	70664
50°	59438	22849	62964
55°	45611	11940	53439
60°	31077	4817	40334
65°	19328	2459	27822
70°	10495	1524	16986
75°	5469	727	10032
80°	2451	817	5434
85°	1628	531	4883



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.5	5.0
10°-20°	822.0	14.8
20°-30°	1254.1	22.5
30°-40°	1308.6	23.5
40°-50°	982.9	17.7
50°-60°	604.8	10.9
60°-70°	246.1	4.4
70°-80°	58.0	1.0
80°-90°	8.0	0.1
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°	2353.5	42.3
0°-40°	3662.2	65.8
0°-60°	5249.9	94.4
0°-90°	5562.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5562.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2885	2885	2885	2885	2885	
5°	2892	2899	2902	2899	2899	274
15°	2682	2870	3052	2968	2829	755
25°	2349	2613	3078	2835	2610	1068
35°	1904	1957	2345	2167	2106	1202
45°	1571	1360	848	1267	1620	1199
55°	848	806	222	806	994	763
65°	265	268	34	360	381	276
75°	46	46	6	81	84	55
85°	5	5	2	11	14	6
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°	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4
2.5°	2893.1	2888.4	2893.1	2893.1	2894.6	2891.5	2893.1	2894.6	2891.5	2891.5	2891.5
5°	2891.5	2888.4	2891.5	2890.0	2893.1	2893.1	2896.1	2896.1	2899.2	2899.2	2903.8
7.5°	2867.0	2860.9	2867.0	2871.6	2874.7	2880.8	2888.4	2894.6	2900.7	2906.8	2914.5
10°	2816.5	2816.5	2821.1	2830.2	2839.4	2850.1	2863.9	2879.3	2894.6	2908.3	2922.1
12.5°	2753.7	2749.1	2758.3	2770.5	2784.3	2801.2	2822.6	2845.6	2870.1	2897.6	2919.1
15°	2681.7	2677.1	2687.8	2700.1	2716.9	2741.4	2767.5	2798.1	2833.3	2870.1	2905.3
17.5°	2608.2	2606.6	2617.4	2634.2	2648.0	2674.0	2707.7	2744.5	2784.3	2833.3	2879.3
20°	2533.2	2531.6	2542.3	2556.1	2574.5	2599.0	2632.7	2675.6	2723.0	2778.2	2831.8
22.5°	2455.0	2456.6	2465.7	2481.1	2496.4	2522.4	2557.6	2600.5	2652.6	2712.3	2772.0
25°	2349.3	2341.7	2354.0	2369.3	2395.3	2416.7	2450.4	2496.4	2550.0	2612.8	2683.2
27.5°	2196.2	2194.7	2205.4	2219.2	2242.1	2268.2	2304.9	2352.4	2409.1	2478.0	2546.9
30°	2043.0	2046.1	2050.7	2064.5	2079.8	2105.8	2142.6	2182.4	2236.0	2301.9	2375.4
32.5°	1938.9	1938.9	1945.0	1954.2	1964.9	1978.7	2004.8	2033.9	2075.2	2121.2	2174.8
35°	1903.7	1897.6	1903.7	1905.2	1906.7	1909.8	1914.4	1923.6	1937.4	1957.3	1977.2
37.5°	1888.4	1883.8	1883.8	1877.7	1870.0	1860.8	1848.5	1834.8	1819.5	1799.5	1784.2
40°	1828.6	1825.6	1822.5	1816.4	1799.5	1781.2	1761.2	1729.1	1693.9	1644.8	1595.9
42.5°	1713.8	1710.7	1709.2	1696.9	1681.6	1660.2	1637.2	1603.5	1559.1	1496.3	1425.8
45°	1571.4	1565.2	1560.6	1549.9	1539.2	1520.8	1499.4	1468.7	1424.3	1360.0	1275.8
47.5°	1405.9	1402.9	1401.3	1396.8	1386.0	1375.3	1361.5	1337.0	1297.2	1235.9	1148.6
50°	1239.0	1232.9	1235.9	1234.4	1229.8	1222.2	1213.0	1196.1	1165.5	1110.3	1030.7
52.5°	1047.5	1047.5	1046.0	1050.6	1052.2	1050.6	1052.2	1033.8	1007.7	966.4	899.0
55°	848.4	848.4	853.1	859.2	865.3	866.8	865.3	857.7	839.3	805.6	745.8
57.5°	661.6	658.6	667.7	676.9	683.1	689.2	684.6	678.5	667.7	640.2	594.2
60°	503.9	503.9	510.0	516.1	522.2	528.4	526.8	525.3	516.1	497.7	461.0
62.5°	370.6	372.2	372.2	376.8	382.9	389.0	393.6	389.0	384.4	372.2	347.6
65°	264.9	263.4	264.9	269.5	274.2	280.3	283.3	281.8	277.2	268.0	249.6
67.5°	177.7	176.1	182.2	183.8	186.8	193.0	191.5	193.0	191.5	183.8	168.5
70°	116.4	113.3	116.4	114.9	119.5	121.0	124.0	125.6	124.0	119.5	114.9
72.5°	72.0	70.5	72.0	73.5	75.1	76.6	79.6	79.6	78.1	75.1	68.9
75°	45.9	41.3	42.9	39.8	42.9	42.9	45.9	47.5	45.9	45.9	42.9
77.5°	27.6	27.6	27.6	27.6	27.6	27.6	27.6	29.1	30.6	27.6	26.0
80°	13.8	13.8	15.3	15.3	15.3	16.9	15.3	15.3	15.3	16.9	12.3
82.5°	10.7	9.2	9.2	9.2	10.7	9.2	9.2	9.2	9.2	9.2	9.2
85°	4.6	6.1	4.6	3.1	4.6	4.6	6.1	4.6	4.6	4.6	6.1
87.5°	1.5	1.5	0.0	0.0	0.0	1.5	0.0	1.5	1.5	3.1	0.0
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°	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4
2.5°	2893.1	2890.0	2890.0	2888.4	2891.5	2888.4	2890.0	2888.4	2888.4	2891.5	2888.4
5°	2903.8	2905.3	2902.2	2900.7	2905.3	2905.3	2905.3	2902.2	2902.2	2903.8	2902.2
7.5°	2919.1	2922.1	2923.7	2925.2	2928.3	2929.8	2929.8	2928.3	2926.7	2931.3	2925.2
10°	2935.9	2940.5	2949.7	2954.3	2962.0	2962.0	2965.0	2965.0	2962.0	2965.0	2963.5
12.5°	2929.8	2957.4	2972.7	2983.4	2994.1	3003.3	3006.4	3007.9	3006.4	3012.5	3006.4
15°	2940.5	2963.5	2988.0	3006.4	3026.3	3037.0	3040.1	3052.3	3055.4	3056.9	3047.7
17.5°	2923.7	2965.0	2991.0	3018.6	3047.7	3067.6	3086.0	3093.7	3095.2	3098.3	3086.0
20°	2885.4	2931.3	2971.1	3011.0	3044.7	3075.3	3090.6	3112.0	3105.9	3118.2	3101.3
22.5°	2833.3	2885.4	2935.9	2988.0	3023.2	3060.0	3092.1	3107.4	3115.1	3115.1	3096.7
25°	2750.6	2811.9	2867.0	2920.6	2974.2	3018.6	3055.4	3078.4	3083.0	3081.4	3060.0
27.5°	2622.0	2687.8	2752.1	2813.4	2879.3	2931.3	2974.2	3001.8	3009.4	3009.4	2986.5
30°	2444.3	2514.8	2577.6	2651.0	2718.5	2776.7	2836.4	2860.9	2874.7	2874.7	2848.6
32.5°	2233.0	2292.7	2350.9	2422.9	2496.4	2562.2	2618.9	2652.6	2669.4	2667.9	2644.9
35°	2003.2	2032.3	2076.8	2130.3	2196.2	2257.5	2312.6	2344.8	2373.9	2372.3	2350.9
37.5°	1773.5	1765.8	1770.4	1790.3	1831.7	1874.6	1917.5	1948.1	1972.6	1983.3	1978.7
40°	1548.4	1508.5	1470.2	1456.5	1459.5	1474.9	1497.8	1520.8	1548.4	1562.2	1568.3
42.5°	1346.2	1278.8	1211.4	1160.9	1131.8	1122.6	1133.3	1141.0	1157.8	1177.7	1197.7
45°	1183.9	1093.5	1004.7	926.6	877.6	848.4	842.3	848.4	857.7	877.6	903.6
47.5°	1050.6	944.9	845.4	758.1	686.1	647.8	637.1	634.1	643.2	661.6	696.8
50°	932.7	827.0	716.8	615.7	540.6	497.7	482.4	476.3	487.0	500.8	533.0
52.5°	804.0	699.9	586.6	488.5	410.5	366.0	349.2	340.0	346.1	364.5	396.7
55°	664.7	568.2	465.6	364.5	289.4	248.1	228.2	222.1	228.2	248.1	280.3
57.5°	525.3	444.1	358.4	263.4	196.0	154.7	134.8	128.6	145.5	153.2	186.8
60°	410.5	344.6	271.1	193.0	134.8	102.6	82.7	78.1	85.8	99.5	127.1
62.5°	307.8	266.5	208.3	137.8	99.5	65.8	55.1	50.6	55.1	65.8	87.3
65°	223.6	191.5	145.5	101.1	67.4	49.0	36.8	33.7	38.3	45.9	64.3
67.5°	153.2	128.6	101.1	70.5	45.9	30.6	26.0	26.0	27.6	33.7	47.5
70°	99.5	84.2	64.3	45.9	30.6	23.0	19.9	16.9	19.9	24.5	32.2
72.5°	62.8	53.6	41.3	32.2	23.0	16.9	13.8	12.3	15.3	18.4	24.5
75°	38.3	29.1	21.4	16.9	12.3	12.3	12.3	6.1	7.6	12.3	15.3
77.5°	23.0	19.9	16.9	13.8	10.7	6.1	6.1	6.1	7.6	9.2	13.8
80°	12.3	10.7	7.6	7.6	6.1	4.6	6.1	4.6	3.1	7.6	9.2
82.5°	7.6	6.1	6.1	6.1	7.6	3.1	4.6	3.1	4.6	6.1	4.6
85°	4.6	4.6	4.6	3.1	7.6	3.1	3.1	1.5	1.5	3.1	3.1
87.5°	0.0	1.5	1.5	0.0	1.5	0.0	1.5	1.5	1.5	1.5	1.5
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°	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4	2885.4
2.5°	2890.0	2888.4	2890.0	2888.4	2888.4	2888.4	2890.0	2890.0	2888.4	2888.4	2891.5
5°	2902.2	2902.2	2902.2	2900.7	2899.2	2899.2	2902.2	2902.2	2897.6	2902.2	2902.2
7.5°	2928.3	2923.7	2928.3	2922.1	2919.1	2920.6	2922.1	2919.1	2916.0	2917.6	2917.6
10°	2962.0	2957.4	2957.4	2952.8	2948.2	2945.1	2942.1	2934.4	2926.7	2925.2	2919.1
12.5°	3001.8	2994.1	2989.5	2980.3	2972.7	2962.0	2952.8	2940.5	2925.2	2914.5	2903.8
15°	3041.6	3029.3	3018.6	3003.3	2986.5	2968.1	2948.2	2928.3	2903.8	2882.3	2863.9
17.5°	3073.8	3056.9	3037.0	3012.5	2988.0	2960.4	2931.3	2902.2	2867.0	2839.4	2818.0
20°	3084.5	3060.0	3034.0	3001.8	2969.6	2931.3	2894.6	2856.3	2816.5	2787.4	2762.9
22.5°	3070.7	3041.6	3009.4	2975.8	2932.8	2891.5	2848.6	2804.2	2769.0	2729.2	2706.2
25°	3032.4	2997.2	2962.0	2922.1	2880.8	2834.9	2788.9	2743.0	2700.1	2678.6	2649.5
27.5°	2954.3	2916.0	2877.7	2836.4	2788.9	2743.0	2695.5	2651.0	2614.3	2585.2	2568.4
30°	2816.5	2772.0	2727.6	2683.2	2641.9	2594.4	2550.0	2513.2	2476.5	2453.5	2436.7
32.5°	2605.1	2565.3	2520.9	2478.0	2439.7	2399.9	2363.1	2331.0	2304.9	2289.6	2277.4
35°	2320.3	2280.4	2246.7	2216.1	2183.9	2167.1	2144.1	2125.7	2115.0	2108.9	2107.4
37.5°	1961.9	1938.9	1928.2	1922.1	1915.9	1911.3	1914.4	1922.1	1928.2	1938.9	1951.1
40°	1579.0	1598.9	1605.0	1626.5	1646.4	1672.4	1701.5	1735.2	1762.8	1798.0	1822.5
42.5°	1229.8	1266.6	1309.4	1355.4	1404.4	1451.9	1510.1	1563.7	1612.7	1657.1	1695.4
45°	944.9	1001.6	1065.9	1131.8	1197.7	1266.6	1337.0	1402.9	1461.1	1508.5	1548.4
47.5°	736.7	799.5	882.2	963.3	1043.0	1124.1	1202.2	1271.1	1320.2	1366.1	1401.3
50°	583.5	655.5	745.8	839.3	926.6	1012.3	1095.0	1159.4	1208.4	1245.1	1271.1
52.5°	451.8	537.6	629.4	727.5	820.9	914.3	990.9	1050.6	1090.4	1122.6	1142.5
55°	336.9	421.2	519.2	620.3	715.2	805.6	877.6	929.6	964.9	983.2	994.0
57.5°	243.5	320.1	418.1	519.2	604.9	690.7	748.9	796.4	816.3	827.0	831.6
60°	177.7	248.1	335.4	422.7	503.9	572.8	623.3	655.5	670.8	676.9	675.4
62.5°	130.2	191.5	266.5	340.0	405.8	462.5	502.3	523.8	531.5	534.5	529.9
65°	99.5	147.0	211.4	268.0	318.6	359.9	389.0	402.8	407.4	405.8	402.8
67.5°	73.5	110.3	157.8	200.6	237.4	269.5	284.9	297.1	300.2	295.6	291.0
70°	52.1	81.2	114.9	144.0	171.5	189.9	206.7	208.3	208.3	206.7	203.7
72.5°	36.8	56.7	78.1	98.0	114.9	128.6	134.8	139.4	137.8	136.3	133.3
75°	24.5	35.2	56.7	61.3	76.6	81.2	87.3	87.3	88.8	84.2	84.2
77.5°	15.3	24.5	33.7	39.8	45.9	52.1	55.1	55.1	56.7	55.1	55.1
80°	9.2	15.3	18.4	27.6	27.6	32.2	33.7	35.2	32.2	36.8	32.2
82.5°	6.1	9.2	13.8	13.8	16.9	19.9	19.9	21.4	21.4	19.9	19.9
85°	4.6	6.1	7.6	9.2	9.2	10.7	9.2	9.2	10.7	12.3	10.7
87.5°	1.5	3.1	1.5	3.1	3.1	6.1	4.6	4.6	4.6	6.1	6.1
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: P244169

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2885.4	2885.4	2885.4	2885.4
2.5°	2888.4	2890.0	2888.4	2888.4
5°	2902.2	2900.7	2902.2	2899.2
7.5°	2912.9	2912.9	2911.4	2911.4
10°	2912.9	2906.8	2906.8	2906.8
12.5°	2890.0	2882.3	2877.7	2874.7
15°	2850.1	2836.4	2830.2	2828.7
17.5°	2798.1	2785.8	2778.2	2773.6
20°	2738.4	2726.1	2716.9	2718.5
22.5°	2686.3	2672.5	2666.4	2663.3
25°	2634.2	2617.4	2612.8	2609.7
27.5°	2550.0	2540.8	2536.2	2531.6
30°	2421.3	2416.7	2409.1	2419.8
32.5°	2272.8	2265.1	2259.0	2263.6
35°	2108.9	2104.3	2108.9	2105.8
37.5°	1958.8	1963.4	1969.5	1972.6
40°	1840.9	1857.7	1863.9	1866.9
42.5°	1723.0	1742.9	1755.1	1762.8
45°	1577.5	1597.4	1611.1	1620.4
47.5°	1427.4	1444.2	1458.0	1456.5
50°	1291.1	1300.3	1306.4	1312.5
52.5°	1153.2	1153.2	1154.8	1154.8
55°	997.0	994.0	992.4	994.0
57.5°	825.5	822.4	820.9	816.3
60°	669.3	660.1	654.0	654.0
62.5°	523.8	513.1	508.5	506.9
65°	393.6	392.1	382.9	381.3
67.5°	284.9	278.7	272.6	274.2
70°	200.6	191.5	191.5	188.4
72.5°	130.2	125.6	124.0	124.0
75°	81.2	81.2	78.1	84.2
77.5°	53.6	53.6	52.1	53.6
80°	32.2	32.2	32.2	30.6
82.5°	19.9	21.4	19.9	19.9
85°	10.7	12.3	9.2	13.8
87.5°	6.1	7.6	6.1	7.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)