

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: P246179

Luminaire Tested: **LSR8B50D010 EC8B50827 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246179
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 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5177.0 lumens
Efficiency: N/A
Efficacy: 97.7 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

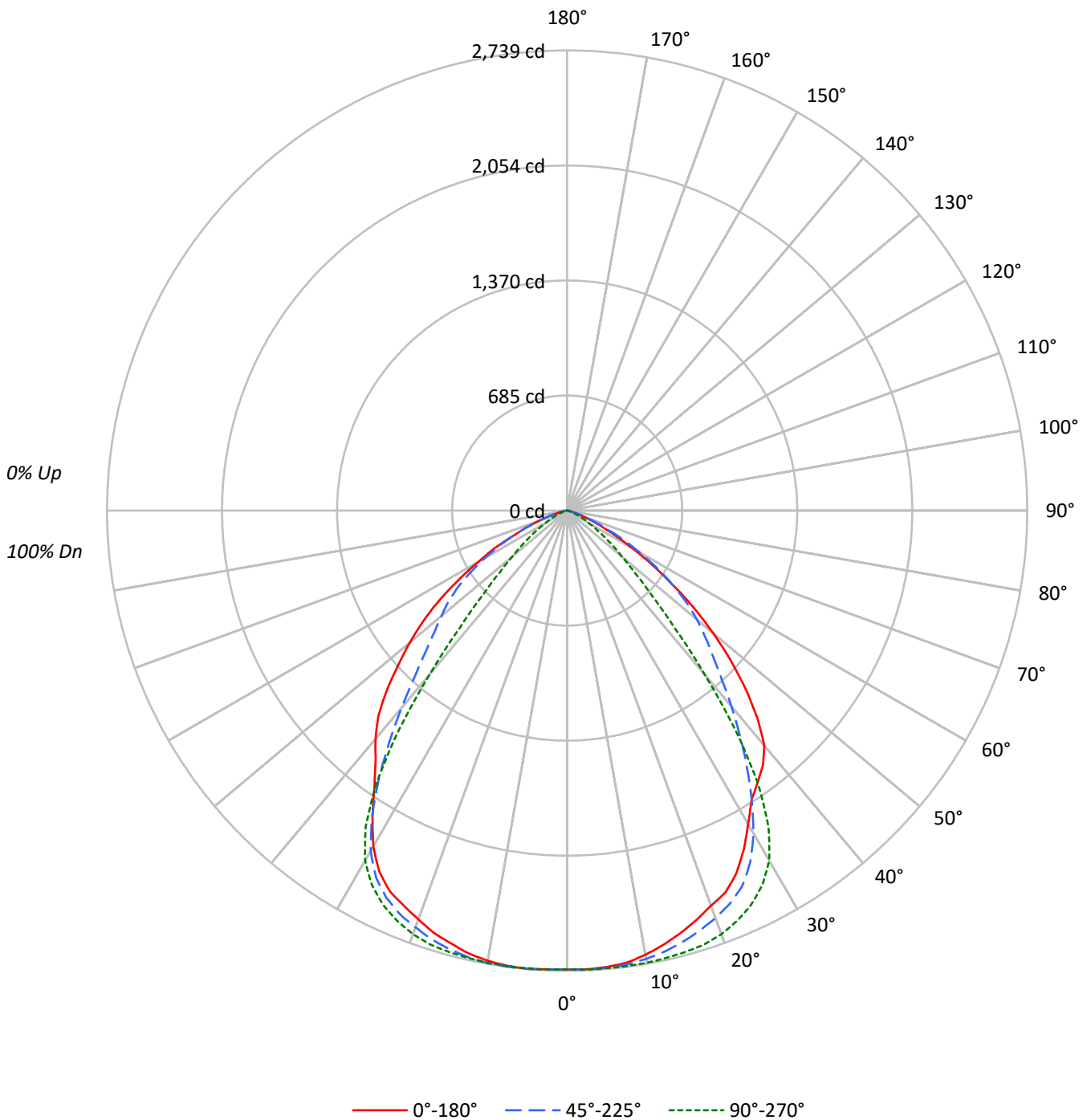
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	84229	84229	84229
5°	84415	84641	84734
10°	84060	85576	85206
15°	83127	86827	85189
20°	82130	88047	84969
25°	81062	88146	85053
30°	76690	85670	82173
35°	74400	74456	75228
40°	73480	51227	71415
45°	65475	30753	66369
50°	54440	20470	58661
55°	40832	14112	49735
60°	27673	9405	37528
65°	16687	6100	25779
70°	9250	3309	15859
75°	4194	1394	8209
80°	3640	1563	5736
85°	4140	2052	5696



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.7	5.0
10°-20°	757.1	14.6
20°-30°	1149.1	22.2
30°-40°	1206.9	23.3
40°-50°	904.8	17.5
50°-60°	580.6	11.2
60°-70°	248.4	4.8
70°-80°	58.7	1.1
80°-90°	10.9	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°	2166.8	41.9
0°-40°	3373.7	65.2
0°-60°	4859.1	93.9
0°-90°	5177.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5177.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2732	2732	2732	2732	2732	
5°	2727	2732	2734	2739	2737	259
15°	2604	2658	2720	2702	2668	734
25°	2382	2466	2591	2544	2500	1088
35°	1976	1866	1978	1954	1998	1240
45°	1501	1227	705	1192	1522	1150
55°	760	760	262	792	925	689
65°	229	270	84	348	353	244
75°	35	41	12	70	69	51
85°	12	7	6	12	16	12
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°	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5
2.5°	2733.0	2735.9	2734.4	2734.4	2733.0	2734.4	2734.4	2737.4	2737.4	2734.4	2733.0
5°	2727.1	2730.0	2730.0	2727.1	2727.1	2734.4	2730.0	2733.0	2733.0	2731.5	2731.5
7.5°	2713.9	2713.9	2719.8	2715.4	2715.4	2719.8	2718.3	2721.2	2724.2	2725.6	2725.6
10°	2684.6	2687.5	2689.0	2689.0	2690.4	2694.8	2697.8	2703.6	2706.6	2709.5	2711.0
12.5°	2647.9	2652.3	2653.8	2652.3	2656.7	2662.6	2669.9	2677.2	2681.7	2687.5	2691.9
15°	2603.9	2603.9	2606.9	2611.3	2614.2	2623.0	2630.3	2639.1	2650.8	2658.2	2665.5
17.5°	2555.6	2558.5	2562.9	2562.9	2568.8	2583.4	2587.8	2601.0	2614.2	2621.5	2636.2
20°	2502.8	2505.7	2510.1	2513.0	2520.4	2532.1	2540.9	2552.6	2567.3	2580.5	2595.1
22.5°	2461.7	2455.9	2458.8	2461.7	2469.1	2479.3	2489.6	2504.2	2518.9	2532.1	2546.8
25°	2382.5	2384.0	2388.4	2391.3	2400.1	2408.9	2420.7	2438.2	2451.4	2466.1	2482.2
27.5°	2275.5	2277.0	2284.3	2284.3	2291.6	2306.3	2313.6	2328.3	2345.9	2360.5	2379.6
30°	2153.8	2156.7	2156.7	2162.6	2167.0	2174.3	2181.7	2196.3	2205.1	2218.3	2244.7
32.5°	2042.4	2045.3	2043.8	2042.4	2038.0	2036.5	2035.0	2038.0	2040.9	2045.3	2055.6
35°	1976.4	1969.1	1963.2	1953.0	1941.2	1926.6	1913.4	1895.8	1879.6	1866.4	1851.8
37.5°	1913.4	1911.9	1903.1	1888.4	1865.0	1838.6	1807.8	1769.7	1731.5	1690.5	1650.9
40°	1825.4	1821.0	1813.7	1793.1	1766.7	1734.5	1693.4	1646.5	1584.9	1521.9	1457.4
42.5°	1675.8	1677.3	1668.5	1652.4	1627.5	1596.7	1554.1	1502.8	1436.9	1362.1	1278.5
45°	1501.4	1501.4	1498.4	1485.2	1467.6	1442.7	1410.5	1367.9	1303.4	1227.2	1137.7
47.5°	1319.6	1321.0	1316.6	1313.7	1306.4	1290.2	1266.8	1234.5	1189.1	1115.7	1026.3
50°	1134.8	1134.8	1142.2	1140.7	1140.7	1134.8	1124.6	1105.5	1065.9	1007.3	923.7
52.5°	950.1	953.0	957.4	963.3	970.6	982.3	970.6	961.8	936.9	891.4	819.6
55°	759.5	762.4	769.7	780.0	788.8	800.5	803.5	803.5	790.3	759.5	705.2
57.5°	596.7	592.3	598.2	607.0	618.7	630.5	639.3	649.5	648.0	627.5	583.5
60°	448.7	450.1	454.5	463.3	472.1	482.4	494.1	502.9	507.3	497.0	469.2
62.5°	327.0	327.0	332.8	341.6	346.0	360.7	368.0	372.4	376.8	375.3	357.7
65°	228.7	231.6	234.6	239.0	243.4	252.2	256.6	265.4	268.3	269.8	256.6
67.5°	161.3	156.9	159.8	162.7	167.1	173.0	181.8	181.8	186.2	186.2	177.4
70°	102.6	102.6	104.1	108.5	111.4	112.9	115.8	118.7	123.2	121.7	121.7
72.5°	68.9	67.4	68.9	70.4	71.9	76.2	76.2	77.7	80.6	82.1	76.2
75°	35.2	36.7	39.6	38.1	42.5	39.6	41.0	45.5	44.0	41.0	41.0
77.5°	29.3	29.3	29.3	27.9	30.8	30.8	29.3	32.3	30.8	30.8	29.3
80°	20.5	22.0	20.5	19.1	20.5	19.1	19.1	19.1	19.1	19.1	17.6
82.5°	16.1	13.2	14.7	13.2	14.7	14.7	13.2	11.7	11.7	13.2	11.7
85°	11.7	8.8	10.3	10.3	8.8	8.8	8.8	8.8	8.8	7.3	7.3
87.5°	7.3	4.4	4.4	4.4	5.8	5.8	5.8	4.4	5.8	5.8	2.9
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°	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5
2.5°	2735.9	2734.4	2737.4	2735.9	2735.9	2734.4	2735.9	2734.4	2737.4	2731.5	2733.0
5°	2735.9	2733.0	2734.4	2735.9	2737.4	2734.4	2734.4	2734.4	2737.4	2734.4	2735.9
7.5°	2730.0	2728.5	2733.0	2735.9	2734.4	2733.0	2735.9	2734.4	2737.4	2735.9	2738.8
10°	2718.3	2719.8	2722.7	2727.1	2728.5	2730.0	2733.0	2733.0	2737.4	2731.5	2734.4
12.5°	2700.7	2706.6	2713.9	2716.8	2722.7	2722.7	2725.6	2727.1	2730.0	2728.5	2733.0
15°	2678.7	2686.0	2694.8	2702.2	2709.5	2713.9	2718.3	2719.8	2724.2	2719.8	2721.2
17.5°	2652.3	2661.1	2674.3	2683.1	2694.8	2699.2	2705.1	2708.0	2712.4	2709.5	2711.0
20°	2615.6	2625.9	2640.6	2653.8	2661.1	2671.4	2678.7	2683.1	2686.0	2683.1	2684.6
22.5°	2564.3	2579.0	2598.1	2608.3	2623.0	2631.8	2633.3	2643.5	2650.8	2643.5	2646.5
25°	2504.2	2518.9	2533.6	2555.6	2568.8	2579.0	2589.3	2590.7	2598.1	2596.6	2595.1
27.5°	2404.5	2423.6	2448.5	2466.1	2483.7	2499.8	2511.6	2514.5	2521.8	2518.9	2520.4
30°	2268.2	2288.7	2312.2	2340.0	2365.0	2381.1	2395.7	2406.0	2413.3	2408.9	2407.5
32.5°	2074.7	2095.2	2120.1	2147.9	2177.3	2200.7	2218.3	2231.5	2240.3	2237.4	2230.1
35°	1853.3	1859.1	1875.3	1897.2	1922.1	1947.1	1963.2	1977.9	1988.1	1991.1	1991.1
37.5°	1626.0	1606.9	1595.2	1595.2	1609.9	1620.1	1634.8	1643.6	1659.7	1665.6	1670.0
40°	1406.0	1362.1	1321.0	1290.2	1269.7	1268.3	1268.3	1272.6	1287.3	1306.4	1324.0
42.5°	1209.6	1139.2	1076.2	1019.0	978.0	954.5	944.2	945.7	957.4	975.0	1004.3
45°	1052.7	964.8	885.6	816.7	760.9	724.3	706.7	705.2	714.0	734.5	766.8
47.5°	931.0	837.2	747.7	668.6	608.5	568.9	548.3	542.5	548.3	567.4	605.5
50°	829.9	733.1	640.7	558.6	494.1	453.1	434.0	426.7	434.0	450.1	488.2
52.5°	736.0	636.3	549.8	470.6	401.7	366.5	346.0	341.6	346.0	365.1	395.9
55°	627.5	542.5	457.4	378.3	318.2	283.0	266.8	262.5	266.8	284.5	316.7
57.5°	520.5	447.2	372.4	300.6	249.3	218.4	203.8	197.9	208.2	219.9	258.0
60°	420.8	362.2	299.1	236.1	193.5	165.7	153.9	152.5	155.4	170.1	196.5
62.5°	329.9	281.5	231.6	180.3	145.2	133.4	118.7	117.3	120.2	129.0	149.6
65°	237.5	206.7	168.6	131.9	104.1	88.0	82.1	83.6	86.5	92.4	111.4
67.5°	165.7	143.7	117.3	92.4	71.9	64.5	58.7	57.2	58.7	68.9	79.2
70°	111.4	98.2	79.2	70.4	49.9	39.6	41.0	36.7	42.5	42.5	51.3
72.5°	73.3	64.5	52.8	41.0	35.2	27.9	27.9	26.4	29.3	30.8	38.1
75°	38.1	29.3	29.3	20.5	14.7	7.3	13.2	11.7	10.3	11.7	14.7
77.5°	26.4	22.0	20.5	16.1	14.7	11.7	11.7	11.7	11.7	13.2	14.7
80°	16.1	16.1	11.7	10.3	8.8	7.3	8.8	8.8	8.8	8.8	10.3
82.5°	10.3	8.8	8.8	7.3	7.3	5.8	5.8	5.8	5.8	5.8	8.8
85°	8.8	5.8	5.8	4.4	5.8	10.3	4.4	5.8	5.8	5.8	4.4
87.5°	2.9	4.4	4.4	4.4	2.9	1.5	2.9	4.4	4.4	7.3	5.8
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°	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5	2731.5
2.5°	2735.9	2737.4	2737.4	2735.9	2735.9	2733.0	2738.8	2734.4	2735.9	2741.7	2737.4
5°	2738.8	2740.3	2740.3	2738.8	2738.8	2738.8	2740.3	2740.3	2738.8	2737.4	2740.3
7.5°	2744.7	2743.2	2743.2	2740.3	2740.3	2737.4	2740.3	2735.9	2738.8	2735.9	2740.3
10°	2737.4	2738.8	2737.4	2735.9	2735.9	2734.4	2734.4	2730.0	2731.5	2727.1	2730.0
12.5°	2733.0	2731.5	2731.5	2728.5	2725.6	2722.7	2721.2	2716.8	2716.8	2706.6	2711.0
15°	2721.2	2722.7	2718.3	2712.4	2709.5	2702.2	2699.2	2693.4	2687.5	2680.2	2681.7
17.5°	2711.0	2706.6	2700.7	2694.8	2683.1	2677.2	2671.4	2662.6	2659.6	2650.8	2647.9
20°	2680.2	2677.2	2669.9	2659.6	2652.3	2639.1	2633.3	2624.5	2617.1	2608.3	2603.9
22.5°	2640.6	2637.6	2628.8	2618.6	2606.9	2601.0	2595.1	2579.0	2571.7	2562.9	2561.4
25°	2590.7	2586.3	2577.5	2565.8	2559.9	2543.8	2537.9	2526.2	2523.3	2514.5	2513.0
27.5°	2514.5	2508.6	2498.4	2483.7	2473.4	2463.2	2457.3	2448.5	2445.6	2436.8	2435.3
30°	2400.1	2392.8	2372.3	2366.4	2348.8	2338.5	2338.5	2326.8	2328.3	2322.4	2322.4
32.5°	2219.8	2208.1	2191.9	2180.2	2168.5	2162.6	2162.6	2158.2	2161.1	2161.1	2164.1
35°	1980.8	1964.7	1955.9	1948.6	1948.6	1954.4	1972.0	1976.4	1985.2	1992.5	1998.4
37.5°	1674.4	1672.9	1683.2	1692.0	1714.0	1738.9	1769.7	1796.1	1821.0	1838.6	1856.2
40°	1343.0	1379.7	1409.0	1450.1	1483.8	1532.1	1587.9	1633.3	1675.8	1706.6	1738.9
42.5°	1048.3	1095.2	1156.8	1216.9	1277.0	1343.0	1416.3	1479.4	1535.1	1577.6	1611.3
45°	816.7	881.2	956.0	1032.2	1109.9	1192.0	1268.3	1332.8	1391.4	1435.4	1469.1
47.5°	658.3	728.7	813.7	897.3	985.3	1071.8	1156.8	1212.5	1260.9	1296.1	1326.9
50°	543.9	618.7	708.2	803.5	891.4	978.0	1051.2	1105.5	1145.1	1175.9	1194.9
52.5°	454.5	533.7	629.0	724.3	812.2	891.4	957.4	998.5	1030.7	1052.7	1070.3
55°	375.3	451.6	541.0	630.5	717.0	791.7	846.0	876.8	901.7	914.9	925.1
57.5°	306.4	376.8	458.9	541.0	615.8	677.4	719.9	750.7	762.4	772.7	771.2
60°	240.5	306.4	381.2	451.6	516.1	565.9	596.7	614.3	623.1	627.5	624.6
62.5°	189.1	249.3	306.4	368.0	414.9	457.4	486.8	486.8	491.2	492.6	497.0
65°	140.7	186.2	236.1	281.5	319.6	347.5	363.6	368.0	373.9	372.4	369.5
67.5°	104.1	137.8	174.5	208.2	234.6	252.2	263.9	274.2	272.7	269.8	268.3
70°	71.9	93.8	126.1	146.6	165.7	183.3	186.2	187.7	189.1	190.6	187.7
72.5°	49.9	66.0	83.6	101.2	112.9	120.2	127.6	129.0	129.0	129.0	127.6
75°	24.9	33.7	49.9	57.2	67.4	70.4	76.2	76.2	80.6	74.8	73.3
77.5°	22.0	26.4	35.2	41.0	45.5	49.9	51.3	55.7	54.2	51.3	52.8
80°	13.2	16.1	22.0	24.9	30.8	32.3	33.7	35.2	33.7	35.2	35.2
82.5°	10.3	11.7	14.7	14.7	19.1	19.1	20.5	20.5	22.0	22.0	22.0
85°	5.8	10.3	8.8	17.6	11.7	11.7	14.7	17.6	14.7	14.7	17.6
87.5°	5.8	5.8	4.4	5.8	5.8	5.8	7.3	8.8	8.8	10.3	8.8
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: P246179

CATALOG NUMBER: LSR8B50D010 EC8B50827 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2731.5	2731.5	2731.5	2731.5
2.5°	2735.9	2738.8	2734.4	2733.0
5°	2740.3	2740.3	2737.4	2737.4
7.5°	2740.3	2740.3	2735.9	2733.0
10°	2728.5	2728.5	2724.2	2721.2
12.5°	2706.6	2706.6	2705.1	2700.7
15°	2678.7	2678.7	2672.8	2668.5
17.5°	2640.6	2643.5	2636.2	2636.2
20°	2599.5	2598.1	2592.2	2589.3
22.5°	2557.0	2554.1	2552.6	2543.8
25°	2511.6	2508.6	2504.2	2499.8
27.5°	2433.9	2432.4	2428.0	2422.1
30°	2315.1	2313.6	2307.8	2307.8
32.5°	2161.1	2159.7	2153.8	2155.3
35°	2001.3	2007.2	2004.3	1998.4
37.5°	1867.9	1872.3	1875.3	1872.3
40°	1756.5	1769.7	1771.1	1774.1
42.5°	1637.7	1655.3	1661.2	1664.1
45°	1495.5	1511.6	1524.8	1521.9
47.5°	1350.3	1362.1	1373.8	1365.0
50°	1211.1	1218.4	1222.8	1222.8
52.5°	1079.1	1079.1	1077.6	1079.1
55°	928.1	928.1	922.2	925.1
57.5°	769.7	772.7	768.3	760.9
60°	623.1	615.8	612.9	608.5
62.5°	485.3	485.3	475.1	488.2
65°	363.6	359.2	354.8	353.3
67.5°	263.9	262.5	258.0	256.6
70°	186.2	180.3	178.9	175.9
72.5°	124.6	124.6	121.7	121.7
75°	76.2	68.9	67.4	68.9
77.5°	52.8	51.3	51.3	49.9
80°	35.2	33.7	36.7	32.3
82.5°	22.0	23.5	22.0	23.5
85°	14.7	17.6	16.1	16.1
87.5°	8.8	8.8	8.8	8.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)