

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: P245447

Luminaire Tested: **LSR8B50D010 EC8B509727 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245447
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B50D010 EC8B509727 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3908.0 lumens
Efficiency: N/A
Efficacy: 73.7 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

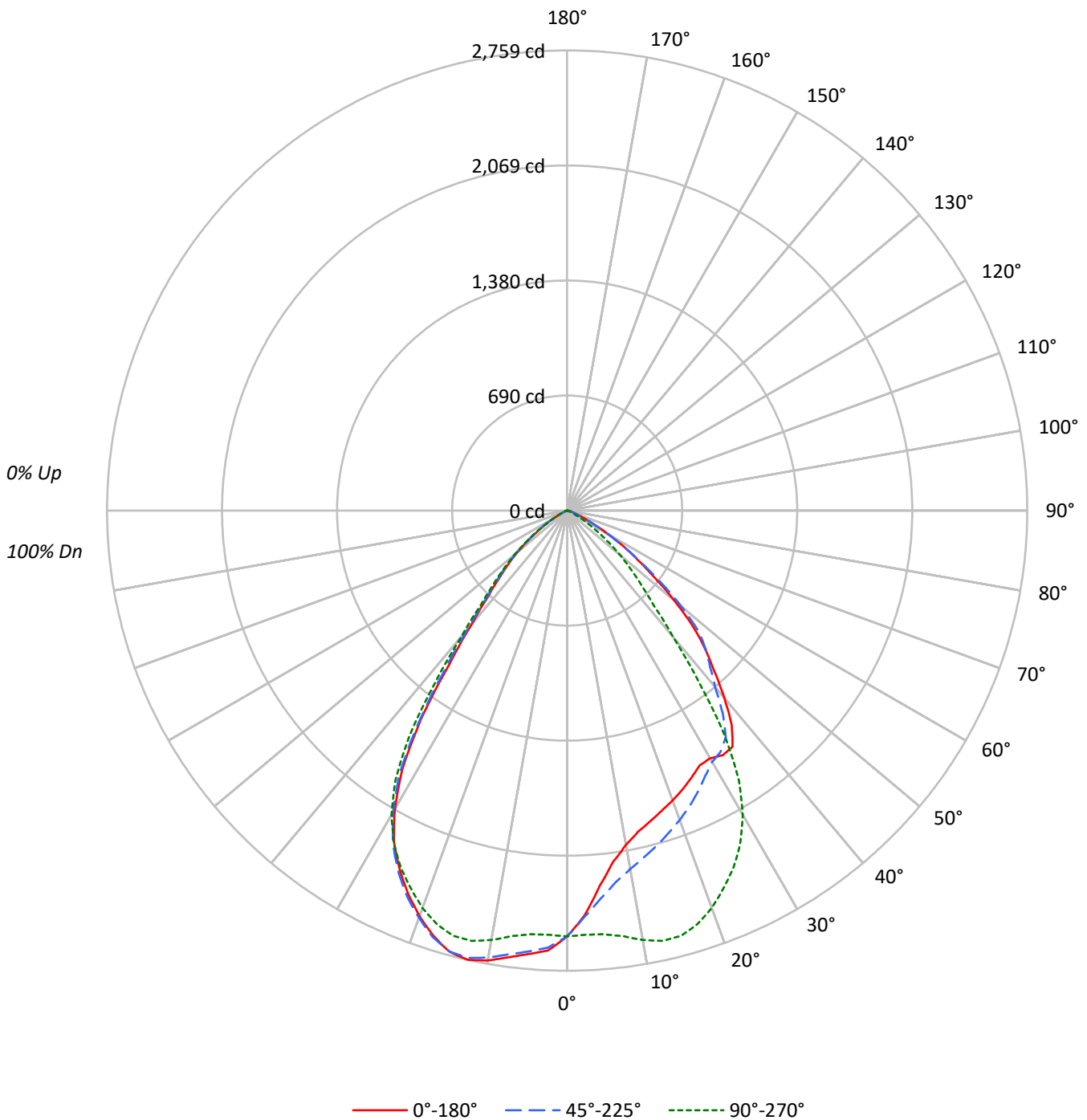
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.9	6.1
10°-20°	687.3	17.6
20°-30°	997.5	25.5
30°-40°	982.5	25.1
40°-50°	615.8	15.8
50°-60°	297.2	7.6
60°-70°	71.9	1.8
70°-80°	14.5	0.4
80°-90°	3.3	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°	1922.7	49.2
0°-40°	2905.2	74.3
0°-60°	3818.2	97.7
0°-90°	3908.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3908.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2553	2553	2553	2553	2553	
5°	2256	2333	2550	2653	2669	209
15°	1928	2079	2639	2736	2738	545
25°	1766	1857	2361	2393	2376	817
35°	1729	1658	1648	1554	1529	1046
45°	1167	1175	623	597	580	892
55°	518	535	227	224	213	477
65°	121	120	34	29	26	139
75°	30	26	7	3	3	33
85°	9	7	1	0	0	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0
2.5°	2426.9	2411.5	2382.6	2417.5	2417.5	2398.1	2437.0	2413.5	2432.3	2461.8	2435.6
5°	2256.5	2243.8	2219.6	2256.5	2261.2	2243.1	2290.1	2272.6	2300.1	2336.4	2333.0
7.5°	2121.7	2105.6	2083.5	2121.7	2129.1	2117.0	2161.9	2153.9	2190.1	2237.1	2245.1
10°	2033.8	2017.1	1997.6	2032.5	2037.9	2029.8	2075.4	2070.7	2106.3	2160.6	2182.1
12.5°	1971.4	1957.4	1935.9	1972.8	1978.8	1967.4	2010.4	2008.3	2045.2	2102.2	2129.1
15°	1927.8	1911.1	1891.6	1923.1	1931.2	1918.5	1959.4	1955.3	1992.9	2049.3	2079.4
17.5°	1886.9	1871.5	1851.4	1880.9	1888.9	1875.5	1915.8	1909.1	1941.3	1994.9	2025.8
20°	1848.7	1831.9	1813.8	1844.0	1848.7	1833.3	1873.5	1864.8	1893.6	1943.3	1973.5
22.5°	1809.1	1791.7	1772.9	1802.4	1807.1	1791.7	1828.6	1818.5	1845.3	1890.3	1917.8
25°	1765.5	1749.4	1730.6	1758.1	1762.2	1745.4	1784.3	1771.5	1795.0	1834.6	1857.4
27.5°	1721.9	1706.5	1685.7	1713.9	1715.9	1699.8	1735.3	1717.9	1737.3	1773.6	1793.0
30°	1714.5	1697.1	1675.6	1698.4	1699.1	1678.3	1711.8	1691.1	1701.8	1728.6	1740.0
32.5°	1738.0	1720.6	1698.4	1717.2	1715.2	1692.4	1724.6	1699.1	1702.5	1716.5	1713.9
35°	1728.6	1707.8	1681.7	1701.8	1701.8	1674.3	1706.5	1676.3	1672.9	1675.0	1658.2
37.5°	1622.0	1605.9	1581.0	1600.5	1598.5	1577.7	1602.5	1577.7	1566.3	1561.6	1531.4
40°	1465.0	1445.5	1426.8	1447.6	1449.6	1427.4	1459.6	1431.5	1428.1	1414.7	1379.1
42.5°	1306.0	1299.3	1281.2	1298.6	1308.0	1289.3	1316.1	1302.7	1304.7	1301.3	1267.8
45°	1167.2	1155.8	1142.4	1162.5	1168.5	1159.1	1186.0	1177.9	1186.0	1202.7	1175.2
47.5°	1017.6	1006.2	991.4	1012.9	1023.6	1006.2	1029.0	1026.3	1038.4	1067.2	1064.5
50°	837.1	829.1	826.4	829.1	835.8	827.8	843.9	844.5	852.6	892.1	894.8
52.5°	662.7	660.7	651.3	660.1	660.1	647.3	663.4	656.0	664.1	690.9	708.4
55°	518.5	516.5	510.5	518.5	509.8	505.1	509.8	502.4	496.4	517.2	535.3
57.5°	403.8	397.1	389.7	393.1	392.4	382.3	387.7	379.0	374.3	381.7	397.8
60°	287.8	285.8	279.0	282.4	285.1	277.7	283.1	279.0	271.0	277.0	277.7
62.5°	191.2	192.5	188.5	189.2	187.1	185.8	189.2	191.2	189.2	186.5	187.1
65°	121.4	120.7	120.1	120.7	122.1	119.4	121.4	122.8	120.7	120.7	120.1
67.5°	80.5	78.5	76.5	77.8	79.2	77.1	79.2	78.5	79.2	78.5	76.5
70°	54.3	53.7	53.0	53.7	53.7	52.3	53.7	53.0	53.7	53.0	51.0
72.5°	39.6	39.6	38.9	39.6	39.6	38.2	38.9	37.6	38.2	37.6	36.2
75°	29.5	29.5	28.8	29.5	28.8	28.2	28.8	28.2	26.8	26.8	25.5
77.5°	21.5	21.5	21.5	21.5	21.5	20.8	20.8	20.1	19.5	18.8	18.8
80°	16.1	15.4	15.4	15.4	15.4	14.8	15.4	14.8	14.1	13.4	12.7
82.5°	11.4	12.1	11.4	11.4	11.4	10.7	11.4	10.7	10.7	10.1	8.7
85°	8.7	8.7	8.7	8.7	8.7	8.0	8.0	8.0	7.4	7.4	6.7
87.5°	4.7	4.7	4.7	5.4	4.7	4.7	4.7	4.0	4.0	3.4	3.4
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: P245447

CATALOG NUMBER: LSR8B50D010 EC8B509727 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0
2.5°	2470.5	2473.9	2466.5	2477.9	2522.2	2486.6	2501.4	2506.1	2539.6	2545.6	2541.6
5°	2376.6	2391.4	2400.7	2426.2	2475.2	2449.7	2475.9	2492.6	2535.6	2549.7	2553.0
7.5°	2302.8	2333.7	2356.5	2398.1	2455.8	2436.3	2475.9	2503.4	2555.7	2573.8	2582.5
10°	2247.8	2294.8	2334.3	2391.4	2456.4	2443.7	2495.3	2534.2	2592.6	2614.1	2624.8
12.5°	2206.2	2263.2	2316.2	2388.7	2459.1	2453.1	2515.5	2559.7	2621.4	2642.9	2655.6
15°	2160.6	2226.3	2288.1	2369.2	2445.0	2443.7	2510.8	2557.7	2620.8	2638.9	2651.0
17.5°	2106.3	2176.7	2244.5	2332.3	2407.5	2408.8	2476.5	2522.8	2584.5	2599.3	2607.4
20°	2051.3	2121.0	2188.8	2279.3	2353.1	2355.1	2421.5	2464.5	2523.5	2535.6	2537.6
22.5°	1992.9	2058.0	2125.7	2215.6	2286.7	2288.1	2353.8	2394.0	2444.3	2450.4	2455.8
25°	1926.5	1990.2	2054.0	2143.2	2210.9	2214.9	2274.6	2310.2	2356.5	2361.2	2363.2
27.5°	1857.4	1909.7	1970.8	2047.2	2115.7	2113.0	2169.3	2209.6	2251.2	2248.5	2247.8
30°	1787.6	1831.2	1868.8	1942.6	1992.9	1994.9	2047.9	2067.4	2111.0	2105.6	2104.9
32.5°	1738.7	1750.1	1760.1	1797.7	1845.3	1828.6	1864.8	1888.9	1919.1	1917.1	1917.8
35°	1648.8	1628.0	1597.8	1603.2	1632.0	1605.9	1625.3	1624.6	1655.5	1648.1	1656.8
37.5°	1495.2	1436.2	1369.1	1330.8	1336.2	1303.3	1296.6	1312.7	1323.5	1302.7	1310.0
40°	1331.5	1244.3	1139.7	1052.5	1047.8	1006.9	999.5	983.4	1004.2	986.7	992.1
42.5°	1210.8	1095.4	957.9	851.9	829.1	794.9	774.8	772.1	778.1	766.0	762.7
45°	1118.2	995.4	837.8	716.4	690.9	654.0	633.9	626.5	627.2	623.2	619.8
47.5°	1009.5	886.1	726.5	602.4	573.5	538.6	518.5	513.8	516.5	511.1	507.1
50°	859.3	748.6	603.0	489.7	464.2	438.7	422.6	417.9	417.2	413.2	410.5
52.5°	697.6	605.7	479.6	385.0	362.2	337.4	326.0	320.0	320.6	316.6	312.6
55°	540.0	483.0	371.6	291.1	270.3	250.9	240.1	232.8	230.8	226.7	224.7
57.5°	401.8	363.6	278.4	210.0	197.9	179.1	168.4	159.6	158.3	156.3	155.6
60°	281.7	254.2	195.9	149.6	135.5	124.1	113.4	104.6	100.6	99.9	97.9
62.5°	182.5	165.7	128.8	99.9	89.2	81.2	70.4	64.4	61.7	59.0	59.7
65°	113.4	100.6	80.5	64.4	58.4	52.3	44.3	38.9	36.2	33.5	34.2
67.5°	70.4	63.1	51.0	41.6	37.6	32.9	26.8	22.8	20.8	18.8	17.4
70°	47.6	40.9	34.9	29.5	26.8	23.5	19.5	16.1	14.8	13.4	12.1
72.5°	33.5	30.2	25.5	22.1	20.1	17.4	14.8	12.7	11.4	10.1	8.7
75°	24.1	21.5	18.8	16.1	14.8	13.4	11.4	10.1	8.7	7.4	6.0
77.5°	17.4	15.4	13.4	12.1	11.4	9.4	8.0	7.4	6.7	5.4	4.0
80°	12.1	10.7	8.7	8.0	8.0	6.7	6.0	5.4	4.7	3.4	2.7
82.5°	8.0	7.4	6.7	6.0	5.4	4.7	4.7	3.4	2.7	2.0	1.3
85°	6.0	5.4	4.7	4.0	4.0	3.4	2.7	2.0	2.0	1.3	0.7
87.5°	3.4	3.4	2.7	2.0	2.0	1.3	1.3	0.7	0.7	0.7	0.7
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0
2.5°	2575.8	2577.8	2589.2	2580.5	2602.7	2618.8	2610.7	2628.8	2622.8	2621.4	2642.2
5°	2593.3	2598.0	2613.4	2605.3	2629.5	2646.9	2638.9	2659.0	2653.0	2651.6	2673.1
7.5°	2626.8	2631.5	2644.9	2638.2	2663.7	2679.1	2669.1	2691.2	2683.1	2682.5	2703.3
10°	2669.1	2675.8	2687.2	2680.5	2703.9	2717.4	2707.3	2728.8	2721.4	2718.0	2740.8
12.5°	2700.6	2705.3	2716.7	2711.3	2734.1	2744.2	2735.5	2756.3	2746.9	2744.2	2764.3
15°	2693.2	2697.9	2707.3	2702.6	2724.1	2733.5	2722.1	2744.9	2735.5	2730.1	2748.2
17.5°	2646.3	2648.9	2655.6	2651.0	2673.8	2679.8	2667.1	2689.9	2681.1	2671.7	2689.2
20°	2577.2	2575.8	2579.8	2577.8	2596.6	2600.0	2591.9	2608.7	2598.6	2593.3	2603.3
22.5°	2491.3	2490.0	2492.6	2487.3	2506.1	2508.1	2496.0	2516.1	2506.1	2496.0	2512.8
25°	2396.1	2388.7	2387.3	2389.3	2402.1	2404.1	2391.4	2406.1	2393.4	2385.3	2401.4
27.5°	2278.7	2269.3	2267.3	2269.3	2282.0	2272.6	2261.9	2272.6	2259.9	2252.5	2262.6
30°	2133.8	2120.4	2114.3	2110.3	2123.7	2120.4	2095.5	2107.6	2087.5	2076.8	2084.1
32.5°	1938.6	1931.2	1915.1	1905.7	1918.5	1893.0	1877.5	1877.5	1869.5	1851.4	1855.4
35°	1667.6	1656.2	1641.4	1633.4	1635.4	1601.2	1575.7	1581.0	1554.2	1549.5	1551.5
37.5°	1324.8	1306.0	1300.7	1283.9	1287.9	1257.7	1222.8	1223.5	1209.4	1194.7	1190.0
40°	995.4	992.1	986.7	972.6	978.0	945.1	931.7	932.4	923.0	912.3	917.6
42.5°	769.4	758.7	755.3	750.6	752.0	746.6	729.1	731.2	723.1	720.4	717.7
45°	625.2	613.8	605.7	609.7	609.7	603.7	597.0	601.0	597.0	591.6	594.3
47.5°	515.2	504.4	500.4	499.7	504.4	500.4	493.7	495.0	494.4	492.4	491.0
50°	411.2	408.5	405.2	403.1	405.2	403.8	397.8	401.1	403.1	396.4	398.4
52.5°	313.3	313.3	312.6	307.9	311.9	307.9	307.2	308.6	306.5	303.9	303.2
55°	229.4	227.4	224.0	223.4	224.7	223.4	222.0	222.7	224.0	217.3	217.3
57.5°	157.0	155.6	153.6	153.6	156.3	152.9	150.9	153.6	150.9	148.2	148.2
60°	100.6	99.9	97.9	97.9	97.9	97.3	95.3	95.9	97.3	93.2	93.9
62.5°	60.4	58.4	57.7	57.0	57.7	57.0	57.0	56.3	55.7	55.7	53.7
65°	32.9	31.5	30.2	30.9	30.9	30.2	30.2	30.2	28.8	28.2	27.5
67.5°	16.8	15.4	15.4	14.8	14.8	14.8	14.8	14.1	14.1	14.1	13.4
70°	10.7	10.1	9.4	9.4	9.4	8.7	8.7	8.7	8.7	8.7	8.0
72.5°	7.4	6.7	6.0	6.0	6.0	5.4	5.4	5.4	5.4	4.7	4.7
75°	5.4	4.7	4.0	4.0	4.0	3.4	3.4	3.4	3.4	3.4	3.4
77.5°	3.4	2.7	2.7	2.7	2.7	2.0	2.0	2.0	2.0	2.0	1.3
80°	2.0	2.0	1.3	1.3	1.3	1.3	0.7	0.7	0.7	0.7	0.7
82.5°	1.3	1.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0
87.5°	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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



TEST NUMBER: P245447

CATALOG NUMBER: LSR8B50D010 EC8B509727 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0	2553.0
2.5°	2634.9	2629.5	2632.8	2657.7	2646.9	2643.6	2615.4	2640.2
5°	2666.4	2662.4	2662.4	2690.5	2677.8	2675.1	2647.6	2669.1
7.5°	2695.9	2691.9	2692.5	2721.4	2711.3	2707.3	2679.8	2701.3
10°	2734.1	2731.4	2732.1	2759.6	2748.9	2744.9	2716.7	2738.8
12.5°	2756.9	2752.9	2752.9	2782.4	2770.4	2764.3	2737.5	2758.9
15°	2739.5	2733.5	2733.5	2763.0	2749.6	2740.8	2717.4	2737.5
17.5°	2679.8	2673.8	2673.8	2699.2	2689.2	2676.4	2652.3	2671.1
20°	2596.6	2589.2	2587.2	2616.7	2602.7	2591.3	2569.8	2587.9
22.5°	2502.7	2499.4	2493.3	2522.8	2510.1	2498.0	2475.2	2489.3
25°	2390.0	2384.6	2378.6	2407.5	2394.7	2382.6	2364.5	2375.9
27.5°	2249.8	2250.5	2247.1	2269.9	2257.2	2250.5	2228.4	2247.1
30°	2080.1	2072.7	2070.1	2096.9	2084.8	2076.1	2048.6	2066.7
32.5°	1858.8	1848.0	1833.9	1864.1	1843.3	1835.9	1812.5	1838.6
35°	1536.8	1533.4	1520.7	1546.2	1534.8	1521.3	1506.6	1528.7
37.5°	1188.0	1190.6	1189.3	1196.0	1189.3	1180.6	1164.5	1156.4
40°	906.9	900.2	894.8	906.9	892.8	892.8	883.4	893.5
42.5°	711.0	708.4	715.1	717.7	709.7	708.4	707.0	706.3
45°	586.9	586.9	588.3	591.0	588.3	586.9	582.9	580.2
47.5°	483.6	486.3	483.6	492.4	487.7	486.3	478.3	481.6
50°	391.7	388.4	391.7	394.4	395.1	391.1	387.0	389.1
52.5°	303.9	298.5	297.2	301.2	298.5	298.5	295.8	295.1
55°	214.0	216.0	212.6	216.0	214.7	212.6	210.6	213.3
57.5°	144.9	145.6	144.2	146.2	142.9	143.5	142.9	142.2
60°	93.9	91.2	91.2	93.2	89.9	89.9	89.2	89.2
62.5°	53.7	53.0	53.0	52.3	51.7	51.7	51.7	50.3
65°	27.5	26.8	26.2	26.2	26.2	26.2	25.5	25.5
67.5°	13.4	12.7	12.7	13.4	12.7	12.7	12.7	12.7
70°	8.0	8.0	7.4	8.0	7.4	7.4	7.4	7.4
72.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
75°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
77.5°	2.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)