

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: P246089

Luminaire Tested: **LSR8B50D010 EC8B50950 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246089
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 EC8B50950 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5031.0 lumens
Efficiency: N/A
Efficacy: 94.9 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

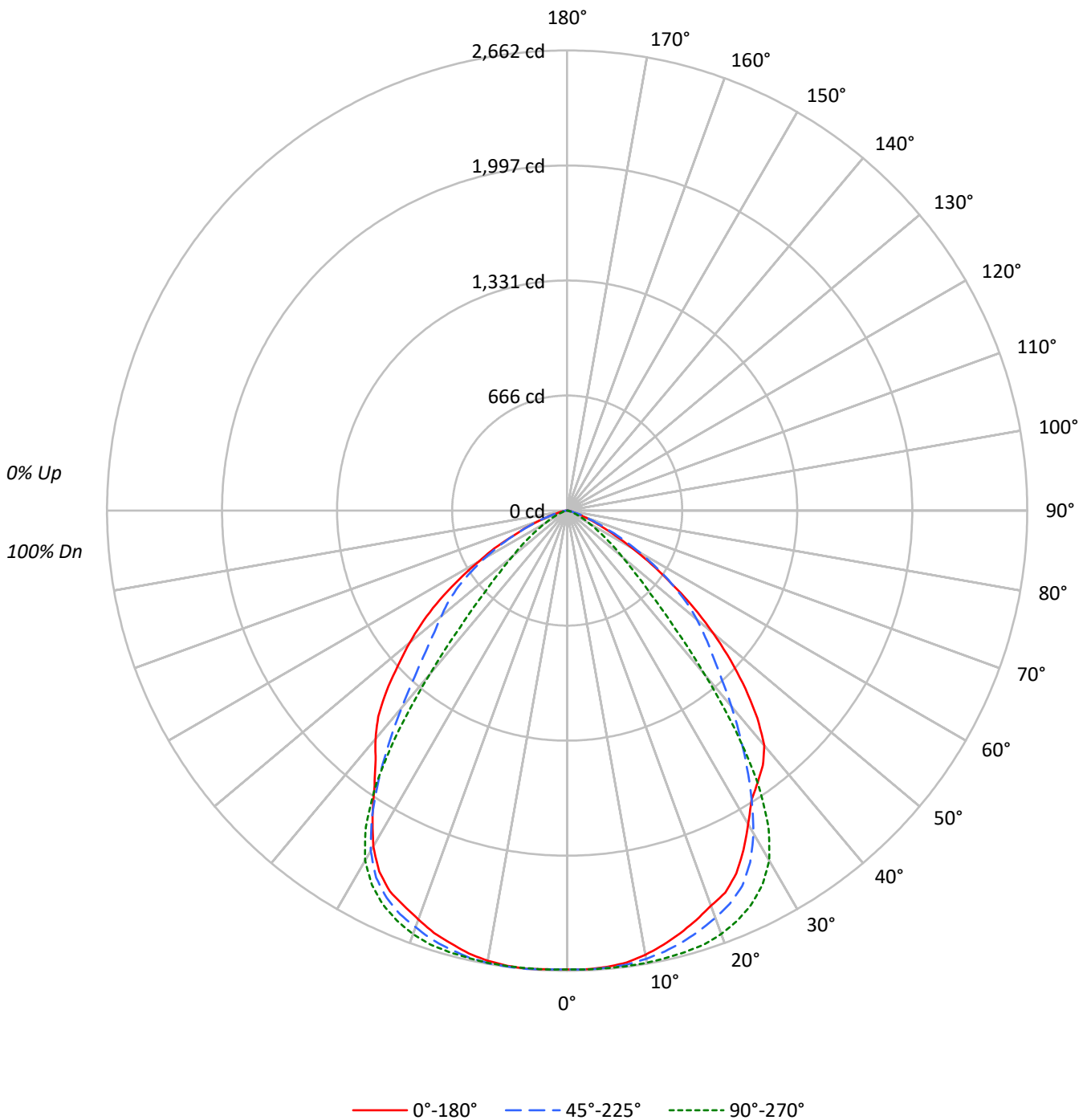
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	81855	81855	81855
5°	82035	82254	82344
10°	81690	83162	82805
15°	80784	84379	82786
20°	79813	85563	82573
25°	78776	85662	82655
30°	74528	83252	79855
35°	72303	72356	73109
40°	71406	49782	69402
45°	63626	29885	64498
50°	52904	19890	57006
55°	39681	13715	48337
60°	26889	9140	36467
65°	16220	5925	25056
70°	8989	3210	15417
75°	4075	1358	7983
80°	3534	1509	5558
85°	4033	2017	5555



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.3	5.0
10°-20°	735.7	14.6
20°-30°	1116.7	22.2
30°-40°	1172.8	23.3
40°-50°	879.3	17.5
50°-60°	564.2	11.2
60°-70°	241.4	4.8
70°-80°	57.0	1.1
80°-90°	10.6	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°	2105.7	41.9
0°-40°	3278.5	65.2
0°-60°	4722.0	93.9
0°-90°	5031.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5031.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2654	2654	2654	2654	2654	
5°	2650	2654	2657	2662	2660	252
15°	2530	2583	2643	2626	2593	714
25°	2315	2397	2518	2472	2429	1058
35°	1921	1814	1922	1899	1942	1205
45°	1459	1193	685	1158	1479	1117
55°	738	738	255	769	899	669
65°	222	262	81	338	343	237
75°	34	40	11	68	67	50
85°	11	7	6	11	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°	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5
2.5°	2655.9	2658.7	2657.3	2657.3	2655.9	2657.3	2657.3	2660.2	2660.2	2657.3	2655.9
5°	2650.2	2653.0	2653.0	2650.2	2650.2	2657.3	2653.0	2655.9	2655.9	2654.5	2654.5
7.5°	2637.4	2637.4	2643.1	2638.8	2638.8	2643.1	2641.6	2644.5	2647.3	2648.8	2648.8
10°	2608.9	2611.7	2613.1	2613.1	2614.6	2618.8	2621.7	2627.4	2630.2	2633.1	2634.5
12.5°	2573.3	2577.5	2578.9	2577.5	2581.8	2587.5	2594.6	2601.7	2606.0	2611.7	2616.0
15°	2530.5	2530.5	2533.3	2537.6	2540.5	2549.0	2556.1	2564.7	2576.1	2583.2	2590.3
17.5°	2483.5	2486.3	2490.6	2490.6	2496.3	2510.5	2514.8	2527.7	2540.5	2547.6	2561.9
20°	2432.2	2435.0	2439.3	2442.2	2449.3	2460.7	2469.2	2480.6	2494.9	2507.7	2521.9
22.5°	2392.3	2386.6	2389.4	2392.3	2399.4	2409.4	2419.4	2433.6	2447.9	2460.7	2474.9
25°	2315.3	2316.8	2321.1	2323.9	2332.5	2341.0	2352.4	2369.5	2382.3	2396.6	2412.2
27.5°	2211.3	2212.8	2219.9	2219.9	2227.0	2241.3	2248.4	2262.6	2279.7	2294.0	2312.5
30°	2093.1	2095.9	2095.9	2101.6	2105.9	2113.0	2120.1	2134.4	2142.9	2155.8	2181.4
32.5°	1984.8	1987.6	1986.2	1984.8	1980.5	1979.1	1977.7	1980.5	1983.4	1987.6	1997.6
35°	1920.7	1913.5	1907.9	1897.9	1886.5	1872.2	1859.4	1842.3	1826.6	1813.8	1799.6
37.5°	1859.4	1858.0	1849.4	1835.2	1812.4	1786.7	1756.8	1719.8	1682.7	1642.8	1604.4
40°	1773.9	1769.6	1762.5	1742.6	1716.9	1685.6	1645.7	1600.1	1540.2	1479.0	1416.3
42.5°	1628.6	1630.0	1621.5	1605.8	1581.6	1551.6	1510.3	1460.5	1396.3	1323.7	1242.5
45°	1459.0	1459.0	1456.2	1443.3	1426.3	1402.0	1370.7	1329.4	1266.7	1192.6	1105.7
47.5°	1282.3	1283.8	1279.5	1276.7	1269.5	1253.9	1231.1	1199.7	1155.5	1084.3	997.4
50°	1102.8	1102.8	1109.9	1108.5	1108.5	1102.8	1092.9	1074.3	1035.9	978.9	897.7
52.5°	923.3	926.1	930.4	936.1	943.2	954.6	943.2	934.7	910.5	866.3	796.5
55°	738.1	740.9	748.0	758.0	766.6	778.0	780.8	780.8	768.0	738.1	685.3
57.5°	579.9	575.6	581.3	589.9	601.3	612.7	621.2	631.2	629.8	609.8	567.1
60°	436.0	437.4	441.7	450.3	458.8	468.8	480.2	488.7	493.0	483.0	455.9
62.5°	317.7	317.7	323.4	332.0	336.3	350.5	357.6	361.9	366.2	364.7	347.7
65°	222.3	225.1	228.0	232.3	236.5	245.1	249.3	257.9	260.7	262.2	249.3
67.5°	156.7	152.5	155.3	158.1	162.4	168.1	176.7	176.7	180.9	180.9	172.4
70°	99.7	99.7	101.2	105.4	108.3	109.7	112.6	115.4	119.7	118.3	118.3
72.5°	67.0	65.5	67.0	68.4	69.8	74.1	74.1	75.5	78.4	79.8	74.1
75°	34.2	35.6	38.5	37.1	41.3	38.5	39.9	44.2	42.7	39.9	39.9
77.5°	28.5	28.5	28.5	27.1	29.9	29.9	28.5	31.3	29.9	29.9	28.5
80°	19.9	21.4	19.9	18.5	19.9	18.5	18.5	18.5	18.5	18.5	17.1
82.5°	15.7	12.8	14.3	12.8	14.3	14.3	12.8	11.4	11.4	12.8	11.4
85°	11.4	8.5	10.0	10.0	8.5	8.5	8.5	8.5	8.5	7.1	7.1
87.5°	7.1	4.3	4.3	4.3	5.7	5.7	5.7	4.3	5.7	5.7	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°	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5
2.5°	2658.7	2657.3	2660.2	2658.7	2658.7	2657.3	2658.7	2657.3	2660.2	2654.5	2655.9
5°	2658.7	2655.9	2657.3	2658.7	2660.2	2657.3	2657.3	2657.3	2660.2	2657.3	2658.7
7.5°	2653.0	2651.6	2655.9	2658.7	2657.3	2655.9	2658.7	2657.3	2660.2	2658.7	2661.6
10°	2641.6	2643.1	2645.9	2650.2	2651.6	2653.0	2655.9	2655.9	2660.2	2654.5	2657.3
12.5°	2624.5	2630.2	2637.4	2640.2	2645.9	2645.9	2648.8	2650.2	2653.0	2651.6	2655.9
15°	2603.2	2610.3	2618.8	2626.0	2633.1	2637.4	2641.6	2643.1	2647.3	2643.1	2644.5
17.5°	2577.5	2586.1	2598.9	2607.4	2618.8	2623.1	2628.8	2631.7	2635.9	2633.1	2634.5
20°	2541.9	2551.9	2566.1	2578.9	2586.1	2596.0	2603.2	2607.4	2610.3	2607.4	2608.9
22.5°	2492.0	2506.3	2524.8	2534.8	2549.0	2557.6	2559.0	2569.0	2576.1	2569.0	2571.8
25°	2433.6	2447.9	2462.1	2483.5	2496.3	2506.3	2516.3	2517.7	2524.8	2523.4	2521.9
27.5°	2336.7	2355.3	2379.5	2396.6	2413.7	2429.3	2440.7	2443.6	2450.7	2447.9	2449.3
30°	2204.2	2224.2	2247.0	2274.0	2298.3	2313.9	2328.2	2338.1	2345.3	2341.0	2339.6
32.5°	2016.1	2036.1	2060.3	2087.4	2115.9	2138.7	2155.8	2168.6	2177.1	2174.3	2167.2
35°	1801.0	1806.7	1822.4	1843.7	1867.9	1892.2	1907.9	1922.1	1932.1	1934.9	1934.9
37.5°	1580.1	1561.6	1550.2	1550.2	1564.5	1574.4	1588.7	1597.2	1612.9	1618.6	1622.9
40°	1366.4	1323.7	1283.8	1253.9	1233.9	1232.5	1232.5	1236.7	1251.0	1269.5	1286.6
42.5°	1175.5	1107.1	1045.8	990.3	950.4	927.6	917.6	919.0	930.4	947.5	976.0
45°	1023.0	937.5	860.6	793.6	739.5	703.9	686.8	685.3	693.9	713.8	745.2
47.5°	904.8	813.6	726.7	649.7	591.3	552.8	532.9	527.2	532.9	551.4	588.5
50°	806.5	712.4	622.7	542.9	480.2	440.3	421.7	414.6	421.7	437.4	474.5
52.5°	715.3	618.4	534.3	457.4	390.4	356.2	336.3	332.0	336.3	354.8	384.7
55°	609.8	527.2	444.5	367.6	309.2	275.0	259.3	255.1	259.3	276.4	307.8
57.5°	505.8	434.6	361.9	292.1	242.2	212.3	198.1	192.3	202.3	213.7	250.8
60°	408.9	351.9	290.7	229.4	188.1	161.0	149.6	148.2	151.0	165.3	190.9
62.5°	320.6	273.6	225.1	175.3	141.1	129.7	115.4	114.0	116.8	125.4	145.3
65°	230.8	200.9	163.9	128.2	101.2	85.5	79.8	81.2	84.1	89.8	108.3
67.5°	161.0	139.6	114.0	89.8	69.8	62.7	57.0	55.6	57.0	67.0	76.9
70°	108.3	95.5	76.9	68.4	48.5	38.5	39.9	35.6	41.3	41.3	49.9
72.5°	71.2	62.7	51.3	39.9	34.2	27.1	27.1	25.7	28.5	29.9	37.1
75°	37.1	28.5	28.5	19.9	14.3	7.1	12.8	11.4	10.0	11.4	14.3
77.5°	25.7	21.4	19.9	15.7	14.3	11.4	11.4	11.4	11.4	12.8	14.3
80°	15.7	15.7	11.4	10.0	8.5	7.1	8.5	8.5	8.5	8.5	10.0
82.5°	10.0	8.5	8.5	7.1	7.1	5.7	5.7	5.7	5.7	5.7	8.5
85°	8.5	5.7	5.7	4.3	5.7	10.0	4.3	5.7	5.7	5.7	4.3
87.5°	2.9	4.3	4.3	4.3	2.9	1.4	2.9	4.3	4.3	7.1	5.7
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5	2654.5
2.5°	2658.7	2660.2	2660.2	2658.7	2658.7	2655.9	2661.6	2657.3	2658.7	2664.4	2660.2
5°	2661.6	2663.0	2663.0	2661.6	2661.6	2661.6	2663.0	2663.0	2661.6	2660.2	2663.0
7.5°	2667.3	2665.9	2665.9	2663.0	2663.0	2660.2	2663.0	2658.7	2661.6	2658.7	2663.0
10°	2660.2	2661.6	2660.2	2658.7	2658.7	2657.3	2657.3	2653.0	2654.5	2650.2	2653.0
12.5°	2655.9	2654.5	2654.5	2651.6	2648.8	2645.9	2644.5	2640.2	2640.2	2630.2	2634.5
15°	2644.5	2645.9	2641.6	2635.9	2633.1	2626.0	2623.1	2617.4	2611.7	2604.6	2606.0
17.5°	2634.5	2630.2	2624.5	2618.8	2607.4	2601.7	2596.0	2587.5	2584.6	2576.1	2573.3
20°	2604.6	2601.7	2594.6	2584.6	2577.5	2564.7	2559.0	2550.5	2543.3	2534.8	2530.5
22.5°	2566.1	2563.3	2554.7	2544.7	2533.3	2527.7	2521.9	2506.3	2499.1	2490.6	2489.2
25°	2517.7	2513.4	2504.9	2493.5	2487.7	2472.1	2466.4	2455.0	2452.1	2443.6	2442.2
27.5°	2443.6	2437.9	2427.9	2413.7	2403.7	2393.7	2388.0	2379.5	2376.6	2368.1	2366.7
30°	2332.5	2325.3	2305.4	2299.7	2282.6	2272.6	2272.6	2261.2	2262.6	2256.9	2256.9
32.5°	2157.2	2145.8	2130.1	2118.7	2107.3	2101.6	2101.6	2097.3	2100.2	2100.2	2103.1
35°	1924.9	1909.3	1900.7	1893.6	1893.6	1899.3	1916.4	1920.7	1929.2	1936.3	1942.1
37.5°	1627.1	1625.7	1635.7	1644.3	1665.6	1689.9	1719.8	1745.4	1769.6	1786.7	1803.8
40°	1305.1	1340.8	1369.3	1409.2	1441.9	1488.9	1543.1	1587.3	1628.6	1658.5	1689.9
42.5°	1018.7	1064.3	1124.2	1182.6	1241.0	1305.1	1376.4	1437.7	1491.8	1533.1	1565.9
45°	793.6	856.3	929.0	1003.1	1078.6	1158.4	1232.5	1295.2	1352.2	1394.9	1427.7
47.5°	639.7	708.1	790.8	872.0	957.5	1041.5	1124.2	1178.3	1225.3	1259.5	1289.5
50°	528.6	601.3	688.2	780.8	866.3	950.4	1021.6	1074.3	1112.8	1142.7	1161.2
52.5°	441.7	518.6	611.3	703.9	789.3	866.3	930.4	970.3	1001.7	1023.0	1040.1
55°	364.7	438.9	525.8	612.7	696.7	769.4	822.1	852.1	876.3	889.1	899.1
57.5°	297.8	366.2	446.0	525.8	598.4	658.3	699.6	729.5	740.9	750.9	749.5
60°	233.7	297.8	370.5	438.9	501.5	550.0	579.9	597.0	605.5	609.8	607.0
62.5°	183.8	242.2	297.8	357.6	403.2	444.5	473.1	473.1	477.3	478.7	483.0
65°	136.8	180.9	229.4	273.6	310.6	337.7	353.4	357.6	363.3	361.9	359.1
67.5°	101.2	133.9	169.5	202.3	228.0	245.1	256.5	266.5	265.0	262.2	260.7
70°	69.8	91.2	122.5	142.5	161.0	178.1	180.9	182.4	183.8	185.2	182.4
72.5°	48.5	64.1	81.2	98.3	109.7	116.8	124.0	125.4	125.4	125.4	124.0
75°	24.2	32.8	48.5	55.6	65.5	68.4	74.1	74.1	78.4	72.7	71.2
77.5°	21.4	25.7	34.2	39.9	44.2	48.5	49.9	54.1	52.7	49.9	51.3
80°	12.8	15.7	21.4	24.2	29.9	31.3	32.8	34.2	32.8	34.2	34.2
82.5°	10.0	11.4	14.3	14.3	18.5	18.5	19.9	19.9	21.4	21.4	21.4
85°	5.7	10.0	8.5	17.1	11.4	11.4	14.3	17.1	14.3	14.3	17.1
87.5°	5.7	5.7	4.3	5.7	5.7	5.7	7.1	8.5	8.5	10.0	8.5
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: P246089

CATALOG NUMBER: LSR8B50D010 EC8B50950 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2654.5	2654.5	2654.5	2654.5
2.5°	2658.7	2661.6	2657.3	2655.9
5°	2663.0	2663.0	2660.2	2660.2
7.5°	2663.0	2663.0	2658.7	2655.9
10°	2651.6	2651.6	2647.3	2644.5
12.5°	2630.2	2630.2	2628.8	2624.5
15°	2603.2	2603.2	2597.5	2593.2
17.5°	2566.1	2569.0	2561.9	2561.9
20°	2526.2	2524.8	2519.1	2516.3
22.5°	2484.9	2482.1	2480.6	2472.1
25°	2440.7	2437.9	2433.6	2429.3
27.5°	2365.2	2363.8	2359.5	2353.8
30°	2249.8	2248.4	2242.7	2242.7
32.5°	2100.2	2098.8	2093.1	2094.5
35°	1944.9	1950.6	1947.7	1942.1
37.5°	1815.2	1819.5	1822.4	1819.5
40°	1706.9	1719.8	1721.2	1724.1
42.5°	1591.5	1608.6	1614.3	1617.2
45°	1453.3	1469.0	1481.8	1479.0
47.5°	1312.3	1323.7	1335.1	1326.5
50°	1176.9	1184.0	1188.3	1188.3
52.5°	1048.7	1048.7	1047.3	1048.7
55°	901.9	901.9	896.2	899.1
57.5°	748.0	750.9	746.6	739.5
60°	605.5	598.4	595.6	591.3
62.5°	471.6	471.6	461.7	474.5
65°	353.4	349.1	344.8	343.4
67.5°	256.5	255.1	250.8	249.3
70°	180.9	175.3	173.8	171.0
72.5°	121.1	121.1	118.3	118.3
75°	74.1	67.0	65.5	67.0
77.5°	51.3	49.9	49.9	48.5
80°	34.2	32.8	35.6	31.3
82.5°	21.4	22.8	21.4	22.8
85°	14.3	17.1	15.7	15.7
87.5°	8.5	8.5	8.5	8.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)