

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: P246113

Luminaire Tested: **LSR8B50D010 EC8B50830 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246113
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 EC8B50830 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4750.0 lumens
Efficiency: N/A
Efficacy: 89.6 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

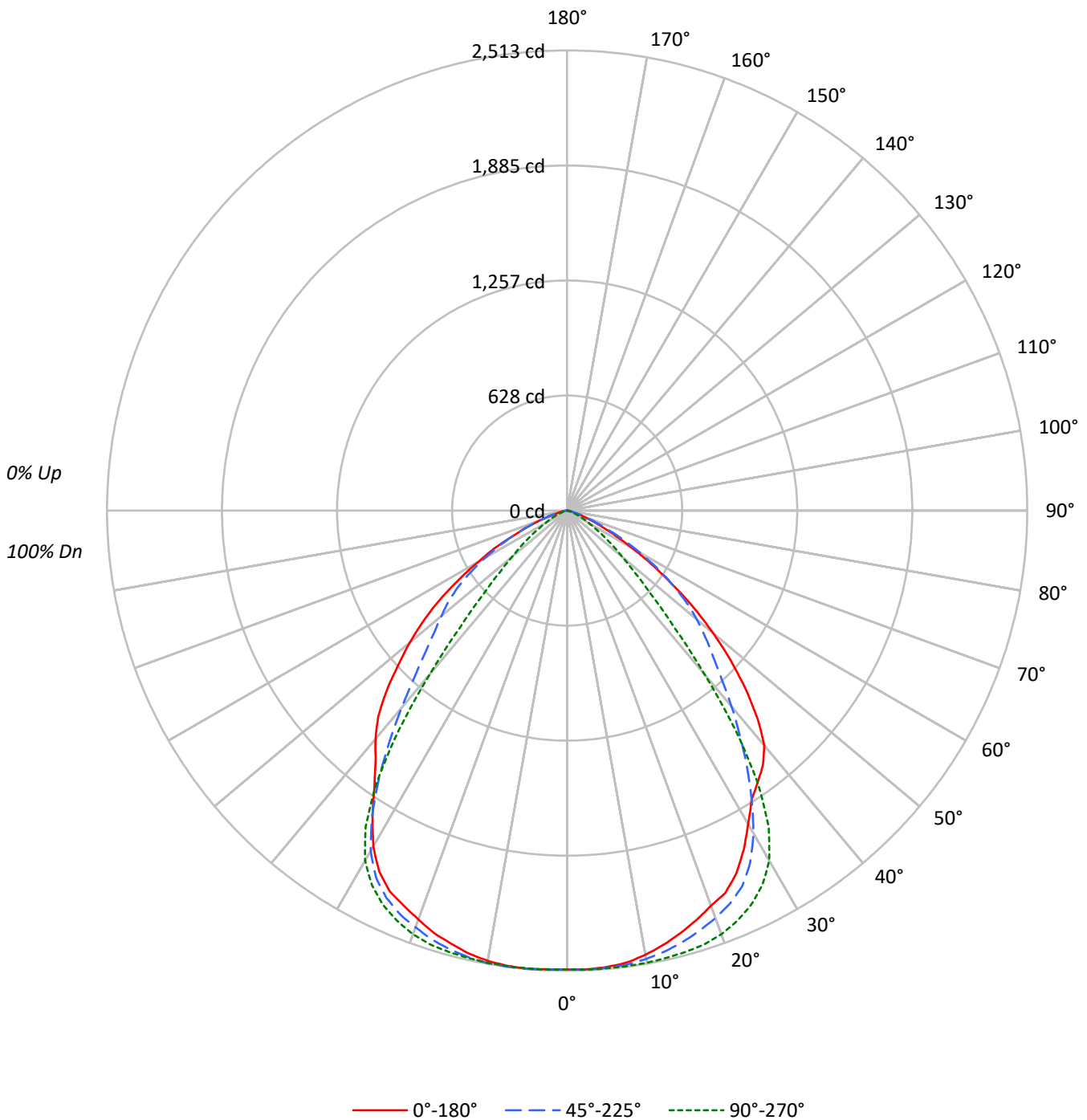
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	77282	77282	77282
5°	77450	77661	77744
10°	77125	78515	78180
15°	76270	79663	78163
20°	75357	80785	77959
25°	74377	80879	78041
30°	70366	78602	75394
35°	68264	68313	69024
40°	67417	47005	65525
45°	60072	28219	60896
50°	49949	18781	53821
55°	37461	12946	45633
60°	25384	8628	34432
65°	15315	5596	23655
70°	8493	3029	14552
75°	3848	1287	7530
80°	3338	1438	5256
85°	3821	1911	5236



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.2	5.0
10°-20°	694.6	14.6
20°-30°	1054.3	22.2
30°-40°	1107.3	23.3
40°-50°	830.2	17.5
50°-60°	532.7	11.2
60°-70°	227.9	4.8
70°-80°	53.8	1.1
80°-90°	10.0	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°	1988.1	41.9
0°-40°	3095.4	65.2
0°-60°	4458.3	93.9
0°-90°	4750.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4750.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2506	2506	2506	2506	2506	
5°	2502	2506	2509	2513	2512	238
15°	2389	2439	2495	2479	2448	674
25°	2186	2263	2377	2334	2294	999
35°	1813	1712	1815	1793	1834	1138
45°	1378	1126	647	1094	1396	1055
55°	697	697	241	726	849	632
65°	210	248	77	319	324	224
75°	32	38	11	65	63	47
85°	11	7	5	11	15	11
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°	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2
2.5°	2507.5	2510.2	2508.9	2508.9	2507.5	2508.9	2508.9	2511.6	2511.6	2508.9	2507.5
5°	2502.1	2504.8	2504.8	2502.1	2502.1	2508.9	2504.8	2507.5	2507.5	2506.2	2506.2
7.5°	2490.1	2490.1	2495.4	2491.4	2491.4	2495.4	2494.1	2496.8	2499.5	2500.8	2500.8
10°	2463.1	2465.8	2467.2	2467.2	2468.5	2472.6	2475.3	2480.6	2483.3	2486.0	2487.4
12.5°	2429.5	2433.5	2434.9	2433.5	2437.6	2443.0	2449.7	2456.4	2460.5	2465.8	2469.9
15°	2389.1	2389.1	2391.8	2395.9	2398.6	2406.7	2413.4	2421.4	2432.2	2438.9	2445.7
17.5°	2344.8	2347.5	2351.5	2351.5	2356.9	2370.3	2374.4	2386.5	2398.6	2405.3	2418.8
20°	2296.4	2299.0	2303.1	2305.8	2312.5	2323.2	2331.3	2342.1	2355.5	2367.6	2381.1
22.5°	2258.7	2253.3	2256.0	2258.7	2265.4	2274.8	2284.2	2297.7	2311.1	2323.2	2336.7
25°	2186.0	2187.4	2191.4	2194.1	2202.2	2210.2	2221.0	2237.1	2249.3	2262.7	2277.5
27.5°	2087.8	2089.2	2095.9	2095.9	2102.6	2116.1	2122.8	2136.3	2152.4	2165.8	2183.4
30°	1976.2	1978.8	1978.8	1984.2	1988.3	1995.0	2001.7	2015.2	2023.2	2035.4	2059.6
32.5°	1873.9	1876.6	1875.3	1873.9	1869.9	1868.5	1867.2	1869.9	1872.6	1876.6	1886.0
35°	1813.4	1806.7	1801.3	1791.9	1781.1	1767.7	1755.5	1739.4	1724.6	1712.5	1699.1
37.5°	1755.5	1754.2	1746.1	1732.7	1711.1	1686.9	1658.7	1623.7	1588.7	1551.1	1514.8
40°	1674.8	1670.8	1664.1	1645.2	1621.0	1591.4	1553.8	1510.7	1454.2	1396.4	1337.2
42.5°	1537.6	1539.0	1530.9	1516.1	1493.2	1465.0	1426.0	1378.9	1318.4	1249.7	1173.1
45°	1377.5	1377.5	1374.8	1362.7	1346.6	1323.7	1294.1	1255.1	1195.9	1126.0	1043.9
47.5°	1210.7	1212.1	1208.0	1205.4	1198.6	1183.8	1162.3	1132.7	1091.0	1023.7	941.7
50°	1041.2	1041.2	1047.9	1046.6	1046.6	1041.2	1031.8	1014.3	978.0	924.2	847.5
52.5°	871.7	874.4	878.5	883.8	890.5	901.3	890.5	882.5	859.6	817.9	752.0
55°	696.8	699.5	706.2	715.7	723.8	734.5	737.2	737.2	725.1	696.8	647.1
57.5°	547.5	543.5	548.9	556.9	567.7	578.5	586.5	595.9	594.6	575.8	535.4
60°	411.6	413.0	417.0	425.1	433.2	442.6	453.4	461.4	465.5	456.1	430.5
62.5°	300.0	300.0	305.4	313.4	317.5	330.9	337.7	341.7	345.7	344.4	328.2
65°	209.9	212.5	215.2	219.3	223.3	231.4	235.4	243.5	246.2	247.5	235.4
67.5°	148.0	143.9	146.6	149.3	153.4	158.8	166.8	166.8	170.8	170.8	162.8
70°	94.2	94.2	95.5	99.5	102.2	103.6	106.3	109.0	113.0	111.7	111.7
72.5°	63.2	61.9	63.2	64.6	65.9	69.9	69.9	71.3	74.0	75.3	69.9
75°	32.3	33.6	36.3	35.0	39.0	36.3	37.7	41.7	40.4	37.7	37.7
77.5°	26.9	26.9	26.9	25.6	28.2	28.2	26.9	29.6	28.2	28.2	26.9
80°	18.8	20.2	18.8	17.5	18.8	17.5	17.5	17.5	17.5	17.5	16.1
82.5°	14.8	12.1	13.5	12.1	13.5	13.5	12.1	10.8	10.8	12.1	10.8
85°	10.8	8.1	9.4	9.4	8.1	8.1	8.1	8.1	8.1	6.7	6.7
87.5°	6.7	4.0	4.0	4.0	5.4	5.4	5.4	4.0	5.4	5.4	2.7
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2
2.5°	2510.2	2508.9	2511.6	2510.2	2510.2	2508.9	2510.2	2508.9	2511.6	2506.2	2507.5
5°	2510.2	2507.5	2508.9	2510.2	2511.6	2508.9	2508.9	2508.9	2511.6	2508.9	2510.2
7.5°	2504.8	2503.5	2507.5	2510.2	2508.9	2507.5	2510.2	2508.9	2511.6	2510.2	2512.9
10°	2494.1	2495.4	2498.1	2502.1	2503.5	2504.8	2507.5	2507.5	2511.6	2506.2	2508.9
12.5°	2478.0	2483.3	2490.1	2492.7	2498.1	2498.1	2500.8	2502.1	2504.8	2503.5	2507.5
15°	2457.8	2464.5	2472.6	2479.3	2486.0	2490.1	2494.1	2495.4	2499.5	2495.4	2496.8
17.5°	2433.5	2441.6	2453.7	2461.8	2472.6	2476.6	2482.0	2484.7	2488.7	2486.0	2487.4
20°	2399.9	2409.4	2422.8	2434.9	2441.6	2451.0	2457.8	2461.8	2464.5	2461.8	2463.1
22.5°	2352.8	2366.3	2383.8	2393.2	2406.7	2414.7	2416.1	2425.5	2432.2	2425.5	2428.2
25°	2297.7	2311.1	2324.6	2344.8	2356.9	2366.3	2375.7	2377.1	2383.8	2382.4	2381.1
27.5°	2206.2	2223.7	2246.6	2262.7	2278.8	2293.7	2304.4	2307.1	2313.8	2311.1	2312.5
30°	2081.1	2099.9	2121.5	2147.0	2169.9	2184.7	2198.1	2207.5	2214.3	2210.2	2208.9
32.5°	1903.5	1922.4	1945.2	1970.8	1997.7	2019.2	2035.4	2047.5	2055.5	2052.8	2046.1
35°	1700.4	1705.8	1720.6	1740.8	1763.6	1786.5	1801.3	1814.7	1824.1	1826.8	1826.8
37.5°	1491.9	1474.4	1463.6	1463.6	1477.1	1486.5	1500.0	1508.0	1522.8	1528.2	1532.2
40°	1290.1	1249.7	1212.1	1183.8	1165.0	1163.6	1163.6	1167.7	1181.1	1198.6	1214.8
42.5°	1109.8	1045.2	987.4	934.9	897.3	875.8	866.3	867.7	878.5	894.6	921.5
45°	965.9	885.2	812.5	749.3	698.2	664.5	648.4	647.1	655.1	674.0	703.6
47.5°	854.2	768.1	686.1	613.4	558.3	521.9	503.1	497.8	503.1	520.6	555.6
50°	761.4	672.6	587.9	512.5	453.4	415.7	398.2	391.5	398.2	413.0	448.0
52.5°	675.3	583.8	504.5	431.8	368.6	336.3	317.5	313.4	317.5	335.0	363.2
55°	575.8	497.8	419.7	347.1	291.9	259.6	244.8	240.8	244.8	261.0	290.6
57.5°	477.6	410.3	341.7	275.8	228.7	200.4	187.0	181.6	191.0	201.8	236.8
60°	386.1	332.3	274.4	216.6	177.6	152.0	141.2	139.9	142.6	156.1	180.2
62.5°	302.7	258.3	212.5	165.5	133.2	122.4	109.0	107.6	110.3	118.4	137.2
65°	217.9	189.7	154.7	121.1	95.5	80.7	75.3	76.7	79.4	84.8	102.2
67.5°	152.0	131.8	107.6	84.8	65.9	59.2	53.8	52.5	53.8	63.2	72.6
70°	102.2	90.1	72.6	64.6	45.8	36.3	37.7	33.6	39.0	39.0	47.1
72.5°	67.2	59.2	48.4	37.7	32.3	25.6	25.6	24.2	26.9	28.2	35.0
75°	35.0	26.9	26.9	18.8	13.5	6.7	12.1	10.8	9.4	10.8	13.5
77.5°	24.2	20.2	18.8	14.8	13.5	10.8	10.8	10.8	10.8	12.1	13.5
80°	14.8	14.8	10.8	9.4	8.1	6.7	8.1	8.1	8.1	8.1	9.4
82.5°	9.4	8.1	8.1	6.7	6.7	5.4	5.4	5.4	5.4	5.4	8.1
85°	8.1	5.4	5.4	4.0	5.4	9.4	4.0	5.4	5.4	5.4	4.0
87.5°	2.7	4.0	4.0	4.0	2.7	1.3	2.7	4.0	4.0	6.7	5.4
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°	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2	2506.2
2.5°	2510.2	2511.6	2511.6	2510.2	2510.2	2507.5	2512.9	2508.9	2510.2	2515.6	2511.6
5°	2512.9	2514.3	2514.3	2512.9	2512.9	2512.9	2514.3	2514.3	2512.9	2511.6	2514.3
7.5°	2518.3	2517.0	2517.0	2514.3	2514.3	2511.6	2514.3	2510.2	2512.9	2510.2	2514.3
10°	2511.6	2512.9	2511.6	2510.2	2510.2	2508.9	2508.9	2504.8	2506.2	2502.1	2504.8
12.5°	2507.5	2506.2	2506.2	2503.5	2500.8	2498.1	2496.8	2492.7	2492.7	2483.3	2487.4
15°	2496.8	2498.1	2494.1	2488.7	2486.0	2479.3	2476.6	2471.2	2465.8	2459.1	2460.5
17.5°	2487.4	2483.3	2478.0	2472.6	2461.8	2456.4	2451.0	2443.0	2440.3	2432.2	2429.5
20°	2459.1	2456.4	2449.7	2440.3	2433.5	2421.4	2416.1	2408.0	2401.3	2393.2	2389.1
22.5°	2422.8	2420.1	2412.0	2402.6	2391.8	2386.5	2381.1	2366.3	2359.6	2351.5	2350.1
25°	2377.1	2373.0	2365.0	2354.2	2348.8	2334.0	2328.6	2317.8	2315.2	2307.1	2305.8
27.5°	2307.1	2301.7	2292.3	2278.8	2269.4	2260.0	2254.6	2246.6	2243.9	2235.8	2234.5
30°	2202.2	2195.4	2176.6	2171.2	2155.1	2145.7	2145.7	2134.9	2136.3	2130.9	2130.9
32.5°	2036.7	2025.9	2011.1	2000.4	1989.6	1984.2	1984.2	1980.2	1982.9	1982.9	1985.6
35°	1817.4	1802.6	1794.5	1787.8	1787.8	1793.2	1809.4	1813.4	1821.5	1828.2	1833.6
37.5°	1536.3	1534.9	1544.4	1552.4	1572.6	1595.5	1623.7	1647.9	1670.8	1686.9	1703.1
40°	1232.2	1265.9	1292.8	1330.5	1361.4	1405.8	1456.9	1498.6	1537.6	1565.9	1595.5
42.5°	961.8	1004.9	1061.4	1116.5	1171.7	1232.2	1299.5	1357.4	1408.5	1447.5	1478.4
45°	749.3	808.5	877.1	947.1	1018.4	1093.7	1163.6	1222.8	1276.6	1317.0	1347.9
47.5°	604.0	668.6	746.6	823.3	904.0	983.4	1061.4	1112.5	1156.9	1189.2	1217.5
50°	499.1	567.7	649.8	737.2	817.9	897.3	964.5	1014.3	1050.6	1078.9	1096.4
52.5°	417.0	489.7	577.1	664.5	745.3	817.9	878.5	916.1	945.7	965.9	982.0
55°	344.4	414.3	496.4	578.5	657.8	726.4	776.2	804.5	827.3	839.4	848.8
57.5°	281.2	345.7	421.1	496.4	565.0	621.5	660.5	688.8	699.5	708.9	707.6
60°	220.6	281.2	349.8	414.3	473.5	519.3	547.5	563.7	571.7	575.8	573.1
62.5°	173.5	228.7	281.2	337.7	380.7	419.7	446.6	446.6	450.7	452.0	456.1
65°	129.1	170.8	216.6	258.3	293.2	318.8	333.6	337.7	343.1	341.7	339.0
67.5°	95.5	126.5	160.1	191.0	215.2	231.4	242.1	251.6	250.2	247.5	246.2
70°	65.9	86.1	115.7	134.5	152.0	168.2	170.8	172.2	173.5	174.9	172.2
72.5°	45.8	60.5	76.7	92.8	103.6	110.3	117.0	118.4	118.4	118.4	117.0
75°	22.9	30.9	45.8	52.5	61.9	64.6	69.9	69.9	74.0	68.6	67.2
77.5°	20.2	24.2	32.3	37.7	41.7	45.8	47.1	51.1	49.8	47.1	48.4
80°	12.1	14.8	20.2	22.9	28.2	29.6	30.9	32.3	30.9	32.3	32.3
82.5°	9.4	10.8	13.5	13.5	17.5	17.5	18.8	18.8	20.2	20.2	20.2
85°	5.4	9.4	8.1	16.1	10.8	10.8	13.5	16.1	13.5	13.5	16.1
87.5°	5.4	5.4	4.0	5.4	5.4	5.4	6.7	8.1	8.1	9.4	8.1
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: P246113

CATALOG NUMBER: LSR8B50D010 EC8B50830 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2506.2	2506.2	2506.2	2506.2
2.5°	2510.2	2512.9	2508.9	2507.5
5°	2514.3	2514.3	2511.6	2511.6
7.5°	2514.3	2514.3	2510.2	2507.5
10°	2503.5	2503.5	2499.5	2496.8
12.5°	2483.3	2483.3	2482.0	2478.0
15°	2457.8	2457.8	2452.4	2448.4
17.5°	2422.8	2425.5	2418.8	2418.8
20°	2385.1	2383.8	2378.4	2375.7
22.5°	2346.1	2343.4	2342.1	2334.0
25°	2304.4	2301.7	2297.7	2293.7
27.5°	2233.1	2231.8	2227.7	2222.4
30°	2124.1	2122.8	2117.4	2117.4
32.5°	1982.9	1981.5	1976.2	1977.5
35°	1836.3	1841.7	1839.0	1833.6
37.5°	1713.8	1717.9	1720.6	1717.9
40°	1611.6	1623.7	1625.1	1627.8
42.5°	1502.6	1518.8	1524.2	1526.8
45°	1372.1	1386.9	1399.1	1396.4
47.5°	1239.0	1249.7	1260.5	1252.4
50°	1111.2	1117.9	1121.9	1121.9
52.5°	990.1	990.1	988.8	990.1
55°	851.5	851.5	846.2	848.8
57.5°	706.2	708.9	704.9	698.2
60°	571.7	565.0	562.3	558.3
62.5°	445.3	445.3	435.9	448.0
65°	333.6	329.6	325.5	324.2
67.5°	242.1	240.8	236.8	235.4
70°	170.8	165.5	164.1	161.4
72.5°	114.4	114.4	111.7	111.7
75°	69.9	63.2	61.9	63.2
77.5°	48.4	47.1	47.1	45.8
80°	32.3	30.9	33.6	29.6
82.5°	20.2	21.5	20.2	21.5
85°	13.5	16.1	14.8	14.8
87.5°	8.1	8.1	8.1	8.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)