

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: P246161

Luminaire Tested: **LSR8B50D010 EC8B50950 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246161
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 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4555.0 lumens
Efficiency: N/A
Efficacy: 85.9 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

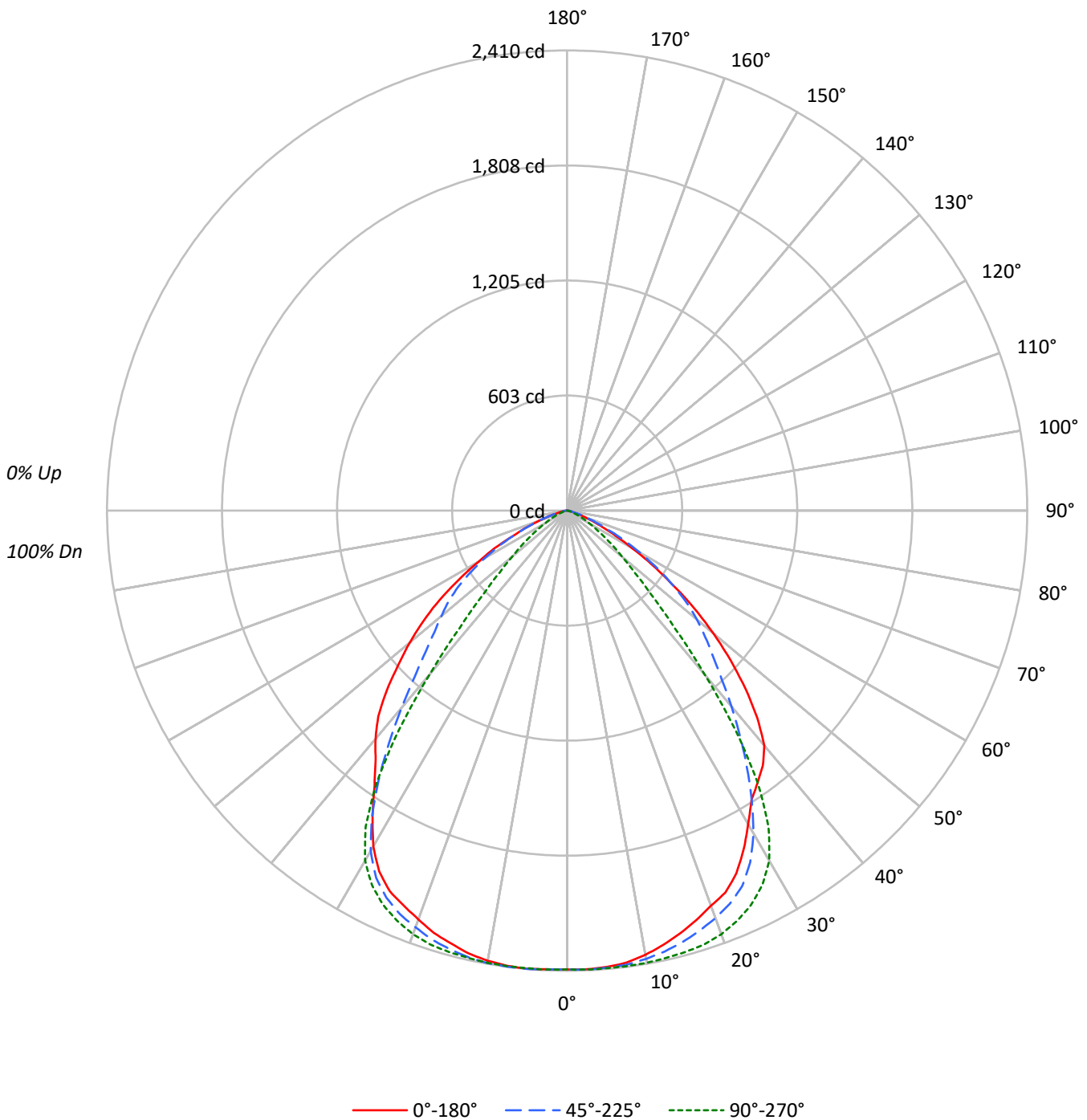
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	74109	74109	74109
5°	74271	74472	74553
10°	73959	75293	74970
15°	73141	76394	74951
20°	72263	77467	74760
25°	71325	77558	74836
30°	67478	75376	72299
35°	65463	65508	66190
40°	64652	45072	62832
45°	57608	27059	58393
50°	47901	18009	51614
55°	35923	12414	43762
60°	24342	8276	33020
65°	14688	5363	22685
70°	8141	2912	13957
75°	3693	1227	7220
80°	3214	1367	5043
85°	3644	1804	5024



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.4	5.0
10°-20°	666.1	14.6
20°-30°	1011.0	22.2
30°-40°	1061.9	23.3
40°-50°	796.1	17.5
50°-60°	510.8	11.2
60°-70°	218.5	4.8
70°-80°	51.6	1.1
80°-90°	9.6	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°	1906.5	41.9
0°-40°	2968.3	65.2
0°-60°	4275.3	93.9
0°-90°	4555.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4555.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2403	2403	2403	2403	2403	
5°	2399	2403	2406	2410	2408	228
15°	2291	2339	2393	2378	2348	646
25°	2096	2170	2280	2238	2200	958
35°	1739	1642	1740	1720	1758	1091
45°	1321	1080	620	1049	1339	1012
55°	668	668	231	697	814	606
65°	201	237	74	306	311	215
75°	31	36	10	62	61	45
85°	10	6	5	10	14	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°	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3
2.5°	2404.6	2407.2	2405.9	2405.9	2404.6	2405.9	2405.9	2408.5	2408.5	2405.9	2404.6
5°	2399.4	2402.0	2402.0	2399.4	2399.4	2405.9	2402.0	2404.6	2404.6	2403.3	2403.3
7.5°	2387.8	2387.8	2393.0	2389.1	2389.1	2393.0	2391.7	2394.3	2396.9	2398.2	2398.2
10°	2362.0	2364.6	2365.9	2365.9	2367.2	2371.0	2373.6	2378.8	2381.4	2384.0	2385.3
12.5°	2329.8	2333.6	2334.9	2333.6	2337.5	2342.7	2349.1	2355.6	2359.5	2364.6	2368.5
15°	2291.1	2291.1	2293.7	2297.5	2300.1	2307.9	2314.3	2322.0	2332.4	2338.8	2345.3
17.5°	2248.5	2251.1	2255.0	2255.0	2260.1	2273.0	2276.9	2288.5	2300.1	2306.6	2319.5
20°	2202.1	2204.6	2208.5	2211.1	2217.5	2227.9	2235.6	2245.9	2258.8	2270.5	2283.3
22.5°	2165.9	2160.8	2163.4	2165.9	2172.4	2181.4	2190.5	2203.3	2216.3	2227.9	2240.8
25°	2096.3	2097.6	2101.5	2104.0	2111.8	2119.5	2129.8	2145.3	2156.9	2169.8	2184.0
27.5°	2002.1	2003.4	2009.9	2009.9	2016.3	2029.2	2035.6	2048.6	2064.0	2076.9	2093.7
30°	1895.1	1897.6	1897.6	1902.8	1906.6	1913.1	1919.5	1932.5	1940.2	1951.8	1975.0
32.5°	1797.0	1799.6	1798.3	1797.0	1793.1	1791.8	1790.5	1793.1	1795.7	1799.6	1808.6
35°	1739.0	1732.5	1727.3	1718.3	1708.0	1695.1	1683.5	1668.0	1653.8	1642.2	1629.3
37.5°	1683.5	1682.2	1674.4	1661.5	1640.9	1617.7	1590.6	1557.1	1523.5	1487.4	1452.6
40°	1606.1	1602.2	1595.8	1577.7	1554.5	1526.1	1490.0	1448.7	1394.5	1339.0	1282.3
42.5°	1474.5	1475.8	1468.0	1453.8	1431.9	1404.8	1367.4	1322.3	1264.2	1198.4	1124.9
45°	1321.0	1321.0	1318.4	1306.8	1291.3	1269.4	1241.0	1203.6	1146.8	1079.7	1001.0
47.5°	1161.0	1162.3	1158.4	1155.9	1149.4	1135.2	1114.6	1086.2	1046.2	981.7	903.0
50°	998.5	998.5	1004.9	1003.6	1003.6	998.5	989.5	972.7	937.9	886.2	812.7
52.5°	835.9	838.5	842.4	847.5	854.0	864.3	854.0	846.3	824.3	784.3	721.1
55°	668.2	670.8	677.3	686.3	694.0	704.4	706.9	706.9	695.3	668.2	620.5
57.5°	525.0	521.2	526.3	534.1	544.4	554.7	562.5	571.5	570.2	552.1	513.4
60°	394.7	396.0	399.9	407.7	415.4	424.4	434.7	442.5	446.4	437.3	412.8
62.5°	287.7	287.7	292.8	300.6	304.4	317.4	323.8	327.7	331.5	330.2	314.8
65°	201.3	203.8	206.4	210.3	214.1	221.9	225.8	233.5	236.1	237.4	225.8
67.5°	141.9	138.0	140.6	143.2	147.1	152.2	160.0	160.0	163.8	163.8	156.1
70°	90.3	90.3	91.6	95.5	98.0	99.3	101.9	104.5	108.4	107.1	107.1
72.5°	60.6	59.3	60.6	61.9	63.2	67.1	67.1	68.4	71.0	72.3	67.1
75°	31.0	32.3	34.8	33.6	37.4	34.8	36.1	40.0	38.7	36.1	36.1
77.5°	25.8	25.8	25.8	24.5	27.1	27.1	25.8	28.4	27.1	27.1	25.8
80°	18.1	19.3	18.1	16.8	18.1	16.8	16.8	16.8	16.8	16.8	15.5
82.5°	14.2	11.6	12.9	11.6	12.9	12.9	11.6	10.3	10.3	11.6	10.3
85°	10.3	7.7	9.0	9.0	7.7	7.7	7.7	7.7	7.7	6.4	6.4
87.5°	6.4	3.9	3.9	3.9	5.1	5.1	5.1	3.9	5.1	5.1	2.6
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°	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3
2.5°	2407.2	2405.9	2408.5	2407.2	2407.2	2405.9	2407.2	2405.9	2408.5	2403.3	2404.6
5°	2407.2	2404.6	2405.9	2407.2	2408.5	2405.9	2405.9	2405.9	2408.5	2405.9	2407.2
7.5°	2402.0	2400.7	2404.6	2407.2	2405.9	2404.6	2407.2	2405.9	2408.5	2407.2	2409.7
10°	2391.7	2393.0	2395.6	2399.4	2400.7	2402.0	2404.6	2404.6	2408.5	2403.3	2405.9
12.5°	2376.2	2381.4	2387.8	2390.4	2395.6	2395.6	2398.2	2399.4	2402.0	2400.7	2404.6
15°	2356.9	2363.3	2371.0	2377.5	2384.0	2387.8	2391.7	2393.0	2396.9	2393.0	2394.3
17.5°	2333.6	2341.4	2353.0	2360.7	2371.0	2374.9	2380.1	2382.7	2386.5	2384.0	2385.3
20°	2301.4	2310.4	2323.3	2334.9	2341.4	2350.4	2356.9	2360.7	2363.3	2360.7	2362.0
22.5°	2256.2	2269.2	2285.9	2294.9	2307.9	2315.6	2316.9	2325.9	2332.4	2325.9	2328.5
25°	2203.3	2216.3	2229.2	2248.5	2260.1	2269.2	2278.2	2279.5	2285.9	2284.6	2283.3
27.5°	2115.6	2132.4	2154.3	2169.8	2185.3	2199.5	2209.8	2212.4	2218.8	2216.3	2217.5
30°	1995.6	2013.7	2034.4	2058.9	2080.8	2095.0	2107.9	2116.9	2123.4	2119.5	2118.2
32.5°	1825.4	1843.4	1865.4	1889.9	1915.7	1936.3	1951.8	1963.4	1971.2	1968.6	1962.1
35°	1630.6	1635.7	1650.0	1669.3	1691.2	1713.1	1727.3	1740.2	1749.3	1751.8	1751.8
37.5°	1430.6	1413.9	1403.6	1403.6	1416.4	1425.5	1438.4	1446.1	1460.3	1465.5	1469.3
40°	1237.1	1198.4	1162.3	1135.2	1117.2	1115.9	1115.9	1119.7	1132.6	1149.4	1164.9
42.5°	1064.3	1002.3	946.9	896.6	860.5	839.8	830.8	832.1	842.4	857.9	883.7
45°	926.2	848.8	779.2	718.5	669.5	637.3	621.8	620.5	628.2	646.3	674.7
47.5°	819.2	736.6	657.9	588.2	535.4	500.5	482.5	477.3	482.5	499.2	532.8
50°	730.2	645.0	563.7	491.5	434.7	398.6	381.8	375.4	381.8	396.0	429.6
52.5°	647.6	559.9	483.8	414.1	353.5	322.5	304.4	300.6	304.4	321.2	348.3
55°	552.1	477.3	402.5	332.8	279.9	249.0	234.8	230.9	234.8	250.3	278.7
57.5°	458.0	393.5	327.7	264.4	219.3	192.2	179.3	174.1	183.2	193.5	227.0
60°	370.2	318.6	263.2	207.7	170.3	145.8	135.4	134.2	136.7	149.6	172.8
62.5°	290.3	247.7	203.8	158.7	127.7	117.4	104.5	103.2	105.8	113.5	131.6
65°	209.0	181.9	148.4	116.1	91.6	77.4	72.3	73.5	76.1	81.3	98.0
67.5°	145.8	126.4	103.2	81.3	63.2	56.8	51.6	50.3	51.6	60.6	69.7
70°	98.0	86.4	69.7	61.9	43.9	34.8	36.1	32.3	37.4	37.4	45.1
72.5°	64.5	56.8	46.4	36.1	31.0	24.5	24.5	23.2	25.8	27.1	33.6
75°	33.6	25.8	25.8	18.1	12.9	6.4	11.6	10.3	9.0	10.3	12.9
77.5°	23.2	19.3	18.1	14.2	12.9	10.3	10.3	10.3	10.3	11.6	12.9
80°	14.2	14.2	10.3	9.0	7.7	6.4	7.7	7.7	7.7	7.7	9.0
82.5°	9.0	7.7	7.7	6.4	6.4	5.1	5.1	5.1	5.1	5.1	7.7
85°	7.7	5.1	5.1	3.9	5.1	9.0	3.9	5.1	5.1	5.1	3.9
87.5°	2.6	3.9	3.9	3.9	2.6	1.3	2.6	3.9	3.9	6.4	5.1
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°	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3	2403.3
2.5°	2407.2	2408.5	2408.5	2407.2	2407.2	2404.6	2409.7	2405.9	2407.2	2412.3	2408.5
5°	2409.7	2411.0	2411.0	2409.7	2409.7	2409.7	2411.0	2411.0	2409.7	2408.5	2411.0
7.5°	2414.9	2413.6	2413.6	2411.0	2411.0	2408.5	2411.0	2407.2	2409.7	2407.2	2411.0
10°	2408.5	2409.7	2408.5	2407.2	2407.2	2405.9	2405.9	2402.0	2403.3	2399.4	2402.0
12.5°	2404.6	2403.3	2403.3	2400.7	2398.2	2395.6	2394.3	2390.4	2390.4	2381.4	2385.3
15°	2394.3	2395.6	2391.7	2386.5	2384.0	2377.5	2374.9	2369.8	2364.6	2358.2	2359.5
17.5°	2385.3	2381.4	2376.2	2371.0	2360.7	2355.6	2350.4	2342.7	2340.1	2332.4	2329.8
20°	2358.2	2355.6	2349.1	2340.1	2333.6	2322.0	2316.9	2309.1	2302.7	2294.9	2291.1
22.5°	2323.3	2320.7	2313.0	2304.0	2293.7	2288.5	2283.3	2269.2	2262.7	2255.0	2253.7
25°	2279.5	2275.6	2267.9	2257.5	2252.4	2238.2	2233.0	2222.7	2220.1	2212.4	2211.1
27.5°	2212.4	2207.2	2198.2	2185.3	2176.3	2167.2	2162.1	2154.3	2151.8	2144.0	2142.7
30°	2111.8	2105.3	2087.3	2082.1	2066.6	2057.6	2057.6	2047.3	2048.6	2043.4	2043.4
32.5°	1953.1	1942.8	1928.6	1918.3	1907.9	1902.8	1902.8	1898.9	1901.5	1901.5	1904.1
35°	1742.8	1728.6	1720.9	1714.4	1714.4	1719.6	1735.1	1739.0	1746.7	1753.1	1758.3
37.5°	1473.2	1471.9	1481.0	1488.7	1508.0	1530.0	1557.1	1580.3	1602.2	1617.7	1633.2
40°	1181.7	1213.9	1239.7	1275.8	1305.5	1348.1	1397.1	1437.1	1474.5	1501.6	1530.0
42.5°	922.4	963.6	1017.8	1070.7	1123.6	1181.7	1246.2	1301.6	1350.7	1388.1	1417.7
45°	718.5	775.3	841.1	908.2	976.5	1048.8	1115.9	1172.6	1224.2	1262.9	1292.6
47.5°	579.2	641.1	716.0	789.5	866.9	943.0	1017.8	1066.9	1109.4	1140.4	1167.5
50°	478.6	544.4	623.1	706.9	784.3	860.5	924.9	972.7	1007.5	1034.6	1051.4
52.5°	399.9	469.6	553.4	637.3	714.7	784.3	842.4	878.5	906.9	926.2	941.7
55°	330.2	397.3	476.0	554.7	630.8	696.6	744.3	771.4	793.3	805.0	814.0
57.5°	269.6	331.5	403.8	476.0	541.8	596.0	633.4	660.5	670.8	679.8	678.5
60°	211.6	269.6	335.4	397.3	454.1	497.9	525.0	540.5	548.2	552.1	549.5
62.5°	166.4	219.3	269.6	323.8	365.1	402.5	428.3	428.3	432.2	433.4	437.3
65°	123.8	163.8	207.7	247.7	281.2	305.7	319.9	323.8	329.0	327.7	325.1
67.5°	91.6	121.3	153.5	183.2	206.4	221.9	232.2	241.2	240.0	237.4	236.1
70°	63.2	82.6	110.9	129.0	145.8	161.3	163.8	165.1	166.4	167.7	165.1
72.5°	43.9	58.0	73.5	89.0	99.3	105.8	112.2	113.5	113.5	113.5	112.2
75°	21.9	29.7	43.9	50.3	59.3	61.9	67.1	67.1	71.0	65.8	64.5
77.5°	19.3	23.2	31.0	36.1	40.0	43.9	45.1	49.0	47.7	45.1	46.4
80°	11.6	14.2	19.3	21.9	27.1	28.4	29.7	31.0	29.7	31.0	31.0
82.5°	9.0	10.3	12.9	12.9	16.8	16.8	18.1	18.1	19.3	19.3	19.3
85°	5.1	9.0	7.7	15.5	10.3	10.3	12.9	15.5	12.9	12.9	15.5
87.5°	5.1	5.1	3.9	5.1	5.1	5.1	6.4	7.7	7.7	9.0	7.7
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: P246161

CATALOG NUMBER: LSR8B50D010 EC8B50950 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2403.3	2403.3	2403.3	2403.3
2.5°	2407.2	2409.7	2405.9	2404.6
5°	2411.0	2411.0	2408.5	2408.5
7.5°	2411.0	2411.0	2407.2	2404.6
10°	2400.7	2400.7	2396.9	2394.3
12.5°	2381.4	2381.4	2380.1	2376.2
15°	2356.9	2356.9	2351.7	2347.8
17.5°	2323.3	2325.9	2319.5	2319.5
20°	2287.2	2285.9	2280.8	2278.2
22.5°	2249.8	2247.2	2245.9	2238.2
25°	2209.8	2207.2	2203.3	2199.5
27.5°	2141.4	2140.2	2136.3	2131.1
30°	2036.9	2035.6	2030.5	2030.5
32.5°	1901.5	1900.2	1895.1	1896.3
35°	1760.9	1766.0	1763.5	1758.3
37.5°	1643.5	1647.4	1650.0	1647.4
40°	1545.4	1557.1	1558.4	1560.9
42.5°	1441.0	1456.4	1461.6	1464.2
45°	1315.8	1330.0	1341.6	1339.0
47.5°	1188.1	1198.4	1208.7	1201.0
50°	1065.6	1072.0	1075.9	1075.9
52.5°	949.5	949.5	948.2	949.5
55°	816.6	816.6	811.4	814.0
57.5°	677.3	679.8	676.0	669.5
60°	548.2	541.8	539.2	535.4
62.5°	427.0	427.0	418.0	429.6
65°	319.9	316.1	312.2	310.9
67.5°	232.2	230.9	227.0	225.8
70°	163.8	158.7	157.4	154.8
72.5°	109.7	109.7	107.1	107.1
75°	67.1	60.6	59.3	60.6
77.5°	46.4	45.1	45.1	43.9
80°	31.0	29.7	32.3	28.4
82.5°	19.3	20.6	19.3	20.6
85°	12.9	15.5	14.2	14.2
87.5°	7.7	7.7	7.7	7.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)