

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: P246149

Luminaire Tested: **LSR8B50D010 EC8B50935 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246149
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 EC8B50935 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4212.0 lumens
Efficiency: N/A
Efficacy: 79.5 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

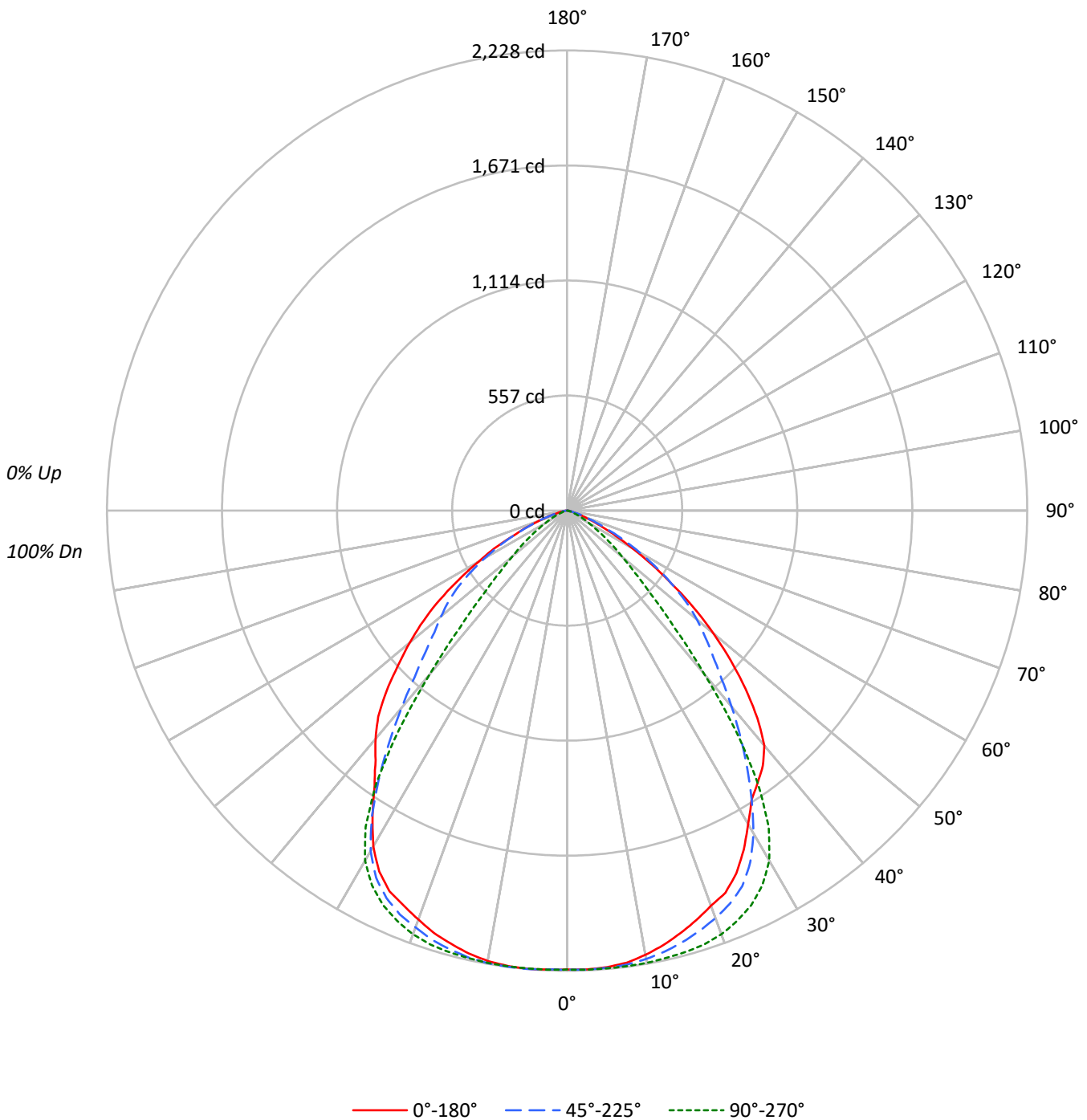
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	68528	68528	68528
5°	68678	68864	68938
10°	68392	69622	69325
15°	67631	70642	69310
20°	66822	71636	69129
25°	65952	71716	69202
30°	62397	69700	66855
35°	60532	60577	61206
40°	59781	41679	58103
45°	53269	25023	53997
50°	44293	16651	47728
55°	33219	11478	40466
60°	22511	7647	30534
65°	13579	4962	20977
70°	7528	2687	12902
75°	3407	1132	6684
80°	2966	1279	4653
85°	3361	1698	4635



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.1	5.0
10°-20°	615.9	14.6
20°-30°	934.9	22.2
30°-40°	981.9	23.3
40°-50°	736.2	17.5
50°-60°	472.3	11.2
60°-70°	202.1	4.8
70°-80°	47.7	1.1
80°-90°	8.9	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°	1762.9	41.9
0°-40°	2744.8	65.2
0°-60°	3953.3	93.9
0°-90°	4212.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4212.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2222	2222	2222	2222	2222	
5°	2219	2222	2225	2228	2227	211
15°	2118	2163	2213	2198	2171	598
25°	1938	2006	2108	2070	2034	886
35°	1608	1518	1609	1590	1626	1009
45°	1222	998	574	970	1238	935
55°	618	618	214	644	753	560
65°	186	220	68	283	288	199
75°	29	33	10	57	56	42
85°	10	6	5	10	13	10
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°	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3
2.5°	2223.5	2225.9	2224.7	2224.7	2223.5	2224.7	2224.7	2227.1	2227.1	2224.7	2223.5
5°	2218.7	2221.1	2221.1	2218.7	2218.7	2224.7	2221.1	2223.5	2223.5	2222.3	2222.3
7.5°	2208.0	2208.0	2212.8	2209.2	2209.2	2212.8	2211.6	2214.0	2216.4	2217.6	2217.6
10°	2184.2	2186.5	2187.7	2187.7	2188.9	2192.5	2194.9	2199.7	2202.0	2204.4	2205.6
12.5°	2154.4	2157.9	2159.1	2157.9	2161.5	2166.3	2172.2	2178.2	2181.8	2186.5	2190.1
15°	2118.5	2118.5	2120.9	2124.5	2126.9	2134.1	2140.0	2147.2	2156.7	2162.7	2168.7
17.5°	2079.2	2081.6	2085.2	2085.2	2089.9	2101.8	2105.4	2116.2	2126.9	2132.9	2144.8
20°	2036.3	2038.6	2042.2	2044.6	2050.6	2060.1	2067.3	2076.8	2088.7	2099.5	2111.4
22.5°	2002.8	1998.1	2000.4	2002.8	2008.8	2017.2	2025.5	2037.4	2049.4	2060.1	2072.0
25°	1938.4	1939.6	1943.2	1945.6	1952.8	1959.9	1969.5	1983.8	1994.5	2006.4	2019.5
27.5°	1851.4	1852.6	1858.5	1858.5	1864.5	1876.4	1882.4	1894.3	1908.6	1920.5	1936.1
30°	1752.4	1754.7	1754.7	1759.5	1763.1	1769.0	1775.0	1786.9	1794.1	1804.8	1826.3
32.5°	1661.7	1664.1	1662.9	1661.7	1658.1	1656.9	1655.7	1658.1	1660.5	1664.1	1672.4
35°	1608.0	1602.0	1597.3	1588.9	1579.4	1567.4	1556.7	1542.4	1529.3	1518.5	1506.6
37.5°	1556.7	1555.5	1548.4	1536.4	1517.3	1495.9	1470.8	1439.8	1408.8	1375.4	1343.2
40°	1485.1	1481.5	1475.6	1458.9	1437.4	1411.2	1377.8	1339.6	1289.5	1238.2	1185.7
42.5°	1363.5	1364.6	1357.5	1344.4	1324.1	1299.0	1264.4	1222.7	1169.0	1108.2	1040.2
45°	1221.5	1221.5	1219.1	1208.4	1194.1	1173.8	1147.5	1113.0	1060.5	998.4	925.7
47.5°	1073.6	1074.8	1071.2	1068.8	1062.8	1049.7	1030.7	1004.4	967.4	907.8	835.0
50°	923.3	923.3	929.3	928.1	928.1	923.3	915.0	899.4	867.2	819.5	751.5
52.5°	773.0	775.4	779.0	783.7	789.7	799.2	789.7	782.5	762.2	725.3	666.8
55°	617.9	620.3	626.3	634.6	641.8	651.3	653.7	653.7	643.0	617.9	573.8
57.5°	485.5	481.9	486.7	493.9	503.4	512.9	520.1	528.4	527.2	510.6	474.8
60°	365.0	366.2	369.8	377.0	384.1	392.5	402.0	409.2	412.7	404.4	381.7
62.5°	266.0	266.0	270.8	277.9	281.5	293.5	299.4	303.0	306.6	305.4	291.1
65°	186.1	188.5	190.9	194.4	198.0	205.2	208.8	215.9	218.3	219.5	208.8
67.5°	131.2	127.6	130.0	132.4	136.0	140.8	147.9	147.9	151.5	151.5	144.3
70°	83.5	83.5	84.7	88.3	90.7	91.9	94.2	96.6	100.2	99.0	99.0
72.5°	56.1	54.9	56.1	57.3	58.5	62.0	62.0	63.2	65.6	66.8	62.0
75°	28.6	29.8	32.2	31.0	34.6	32.2	33.4	37.0	35.8	33.4	33.4
77.5°	23.8	23.8	23.8	22.7	25.0	25.0	23.8	26.2	25.0	25.0	23.8
80°	16.7	17.9	16.7	15.5	16.7	15.5	15.5	15.5	15.5	15.5	14.3
82.5°	13.1	10.7	11.9	10.7	11.9	11.9	10.7	9.5	9.5	10.7	9.5
85°	9.5	7.2	8.3	8.3	7.2	7.2	7.2	7.2	7.2	6.0	6.0
87.5°	6.0	3.6	3.6	3.6	4.8	4.8	4.8	3.6	4.8	4.8	2.4
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3
2.5°	2225.9	2224.7	2227.1	2225.9	2225.9	2224.7	2225.9	2224.7	2227.1	2222.3	2223.5
5°	2225.9	2223.5	2224.7	2225.9	2227.1	2224.7	2224.7	2224.7	2227.1	2224.7	2225.9
7.5°	2221.1	2219.9	2223.5	2225.9	2224.7	2223.5	2225.9	2224.7	2227.1	2225.9	2228.3
10°	2211.6	2212.8	2215.2	2218.7	2219.9	2221.1	2223.5	2223.5	2227.1	2222.3	2224.7
12.5°	2197.3	2202.0	2208.0	2210.4	2215.2	2215.2	2217.6	2218.7	2221.1	2219.9	2223.5
15°	2179.4	2185.4	2192.5	2198.5	2204.4	2208.0	2211.6	2212.8	2216.4	2212.8	2214.0
17.5°	2157.9	2165.1	2175.8	2183.0	2192.5	2196.1	2200.9	2203.2	2206.8	2204.4	2205.6
20°	2128.1	2136.5	2148.4	2159.1	2165.1	2173.4	2179.4	2183.0	2185.4	2183.0	2184.2
22.5°	2086.3	2098.3	2113.8	2122.1	2134.1	2141.2	2142.4	2150.8	2156.7	2150.8	2153.2
25°	2037.4	2049.4	2061.3	2079.2	2089.9	2098.3	2106.6	2107.8	2113.8	2112.6	2111.4
27.5°	1956.3	1971.8	1992.1	2006.4	2020.7	2033.9	2043.4	2045.8	2051.8	2049.4	2050.6
30°	1845.4	1862.1	1881.2	1903.8	1924.1	1937.2	1949.2	1957.5	1963.5	1959.9	1958.7
32.5°	1687.9	1704.6	1724.9	1747.6	1771.4	1790.5	1804.8	1815.6	1822.7	1820.3	1814.4
35°	1507.8	1512.6	1525.7	1543.6	1563.9	1584.1	1597.3	1609.2	1617.5	1619.9	1619.9
37.5°	1322.9	1307.4	1297.9	1297.9	1309.8	1318.1	1330.1	1337.2	1350.3	1355.1	1358.7
40°	1144.0	1108.2	1074.8	1049.7	1033.0	1031.8	1031.8	1035.4	1047.3	1062.8	1077.2
42.5°	984.1	926.9	875.6	829.1	795.7	776.6	768.2	769.4	779.0	793.3	817.1
45°	856.5	784.9	720.5	664.4	619.1	589.3	575.0	573.8	580.9	597.6	623.9
47.5°	757.5	681.1	608.4	543.9	495.1	462.8	446.1	441.4	446.1	461.6	492.7
50°	675.2	596.5	521.3	454.5	402.0	368.6	353.1	347.1	353.1	366.2	397.2
52.5°	598.8	517.7	447.3	382.9	326.8	298.2	281.5	277.9	281.5	297.0	322.1
55°	510.6	441.4	372.2	307.8	258.9	230.2	217.1	213.5	217.1	231.4	257.7
57.5°	423.5	363.8	303.0	244.5	202.8	177.7	165.8	161.0	169.4	178.9	209.9
60°	342.3	294.7	243.3	192.1	157.5	134.8	125.2	124.0	126.4	138.4	159.8
62.5°	268.4	229.0	188.5	146.7	118.1	108.5	96.6	95.4	97.8	105.0	121.7
65°	193.3	168.2	137.2	107.4	84.7	71.6	66.8	68.0	70.4	75.2	90.7
67.5°	134.8	116.9	95.4	75.2	58.5	52.5	47.7	46.5	47.7	56.1	64.4
70°	90.7	79.9	64.4	57.3	40.6	32.2	33.4	29.8	34.6	34.6	41.7
72.5°	59.6	52.5	42.9	33.4	28.6	22.7	22.7	21.5	23.8	25.0	31.0
75°	31.0	23.8	23.8	16.7	11.9	6.0	10.7	9.5	8.3	9.5	11.9
77.5°	21.5	17.9	16.7	13.1	11.9	9.5	9.5	9.5	9.5	10.7	11.9
80°	13.1	13.1	9.5	8.3	7.2	6.0	7.2	7.2	7.2	7.2	8.3
82.5°	8.3	7.2	7.2	6.0	6.0	4.8	4.8	4.8	4.8	4.8	7.2
85°	7.2	4.8	4.8	3.6	4.8	8.3	3.6	4.8	4.8	4.8	3.6
87.5°	2.4	3.6	3.6	3.6	2.4	1.2	2.4	3.6	3.6	6.0	4.8
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°	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3
2.5°	2225.9	2227.1	2227.1	2225.9	2225.9	2223.5	2228.3	2224.7	2225.9	2230.7	2227.1
5°	2228.3	2229.5	2229.5	2228.3	2228.3	2228.3	2229.5	2229.5	2228.3	2227.1	2229.5
7.5°	2233.1	2231.9	2231.9	2229.5	2229.5	2227.1	2229.5	2225.9	2228.3	2225.9	2229.5
10°	2227.1	2228.3	2227.1	2225.9	2225.9	2224.7	2224.7	2221.1	2222.3	2218.7	2221.1
12.5°	2223.5	2222.3	2222.3	2219.9	2217.6	2215.2	2214.0	2210.4	2210.4	2202.0	2205.6
15°	2214.0	2215.2	2211.6	2206.8	2204.4	2198.5	2196.1	2191.3	2186.5	2180.6	2181.8
17.5°	2205.6	2202.0	2197.3	2192.5	2183.0	2178.2	2173.4	2166.3	2163.9	2156.7	2154.4
20°	2180.6	2178.2	2172.2	2163.9	2157.9	2147.2	2142.4	2135.3	2129.3	2122.1	2118.5
22.5°	2148.4	2146.0	2138.8	2130.5	2120.9	2116.2	2111.4	2098.3	2092.3	2085.2	2084.0
25°	2107.8	2104.2	2097.1	2087.5	2082.8	2069.7	2064.9	2055.3	2053.0	2045.8	2044.6
27.5°	2045.8	2041.0	2032.7	2020.7	2012.4	2004.0	1999.3	1992.1	1989.7	1982.6	1981.4
30°	1952.8	1946.8	1930.1	1925.3	1911.0	1902.6	1902.6	1893.1	1894.3	1889.5	1889.5
32.5°	1806.0	1796.5	1783.3	1773.8	1764.3	1759.5	1759.5	1755.9	1758.3	1758.3	1760.7
35°	1611.6	1598.5	1591.3	1585.3	1585.3	1590.1	1604.4	1608.0	1615.2	1621.1	1625.9
37.5°	1362.3	1361.1	1369.4	1376.6	1394.5	1414.8	1439.8	1461.3	1481.5	1495.9	1510.2
40°	1092.7	1122.5	1146.4	1179.8	1207.2	1246.6	1291.9	1328.9	1363.5	1388.5	1414.8
42.5°	852.9	891.1	941.2	990.1	1039.0	1092.7	1152.3	1203.6	1248.9	1283.5	1311.0
45°	664.4	716.9	777.8	839.8	903.0	969.8	1031.8	1084.3	1132.1	1167.8	1195.3
47.5°	535.6	592.9	662.0	730.0	801.6	872.0	941.2	986.5	1025.9	1054.5	1079.6
50°	442.5	503.4	576.2	653.7	725.3	795.7	855.3	899.4	931.6	956.7	972.2
52.5°	369.8	434.2	511.8	589.3	660.8	725.3	779.0	812.4	838.6	856.5	870.8
55°	305.4	367.4	440.2	512.9	583.3	644.1	688.3	713.4	733.6	744.3	752.7
57.5°	249.3	306.6	373.4	440.2	501.0	551.1	585.7	610.8	620.3	628.6	627.5
60°	195.6	249.3	310.2	367.4	419.9	460.4	485.5	499.8	507.0	510.6	508.2
62.5°	153.9	202.8	249.3	299.4	337.6	372.2	396.0	396.0	399.6	400.8	404.4
65°	114.5	151.5	192.1	229.0	260.0	282.7	295.8	299.4	304.2	303.0	300.6
67.5°	84.7	112.1	141.9	169.4	190.9	205.2	214.7	223.1	221.9	219.5	218.3
70°	58.5	76.4	102.6	119.3	134.8	149.1	151.5	152.7	153.9	155.1	152.7
72.5°	40.6	53.7	68.0	82.3	91.9	97.8	103.8	105.0	105.0	105.0	103.8
75°	20.3	27.4	40.6	46.5	54.9	57.3	62.0	62.0	65.6	60.8	59.6
77.5°	17.9	21.5	28.6	33.4	37.0	40.6	41.7	45.3	44.1	41.7	42.9
80°	10.7	13.1	17.9	20.3	25.0	26.2	27.4	28.6	27.4	28.6	28.6
82.5°	8.3	9.5	11.9	11.9	15.5	15.5	16.7	16.7	17.9	17.9	17.9
85°	4.8	8.3	7.2	14.3	9.5	9.5	11.9	14.3	11.9	11.9	14.3
87.5°	4.8	4.8	3.6	4.8	4.8	4.8	6.0	7.2	7.2	8.3	7.2
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: P246149

CATALOG NUMBER: LSR8B50D010 EC8B50935 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2222.3	2222.3	2222.3	2222.3
2.5°	2225.9	2228.3	2224.7	2223.5
5°	2229.5	2229.5	2227.1	2227.1
7.5°	2229.5	2229.5	2225.9	2223.5
10°	2219.9	2219.9	2216.4	2214.0
12.5°	2202.0	2202.0	2200.9	2197.3
15°	2179.4	2179.4	2174.6	2171.1
17.5°	2148.4	2150.8	2144.8	2144.8
20°	2115.0	2113.8	2109.0	2106.6
22.5°	2080.4	2078.0	2076.8	2069.7
25°	2043.4	2041.0	2037.4	2033.9
27.5°	1980.2	1979.0	1975.4	1970.6
30°	1883.6	1882.4	1877.6	1877.6
32.5°	1758.3	1757.1	1752.4	1753.5
35°	1628.3	1633.1	1630.7	1625.9
37.5°	1519.7	1523.3	1525.7	1523.3
40°	1429.1	1439.8	1441.0	1443.4
42.5°	1332.5	1346.8	1351.5	1353.9
45°	1216.7	1229.9	1240.6	1238.2
47.5°	1098.6	1108.2	1117.7	1110.6
50°	985.3	991.3	994.9	994.9
52.5°	878.0	878.0	876.8	878.0
55°	755.1	755.1	750.3	752.7
57.5°	626.3	628.6	625.1	619.1
60°	507.0	501.0	498.6	495.1
62.5°	394.9	394.9	386.5	397.2
65°	295.8	292.3	288.7	287.5
67.5°	214.7	213.5	209.9	208.8
70°	151.5	146.7	145.5	143.1
72.5°	101.4	101.4	99.0	99.0
75°	62.0	56.1	54.9	56.1
77.5°	42.9	41.7	41.7	40.6
80°	28.6	27.4	29.8	26.2
82.5°	17.9	19.1	17.9	19.1
85°	11.9	14.3	13.1	13.1
87.5°	7.2	7.2	7.2	7.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)