

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: P245519

Luminaire Tested: **LSR8B50D010 EC8B509727 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245519
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B50D010 EC8B509727 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE 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: 3916.0 lumens
Efficiency: N/A
Efficacy: 73.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

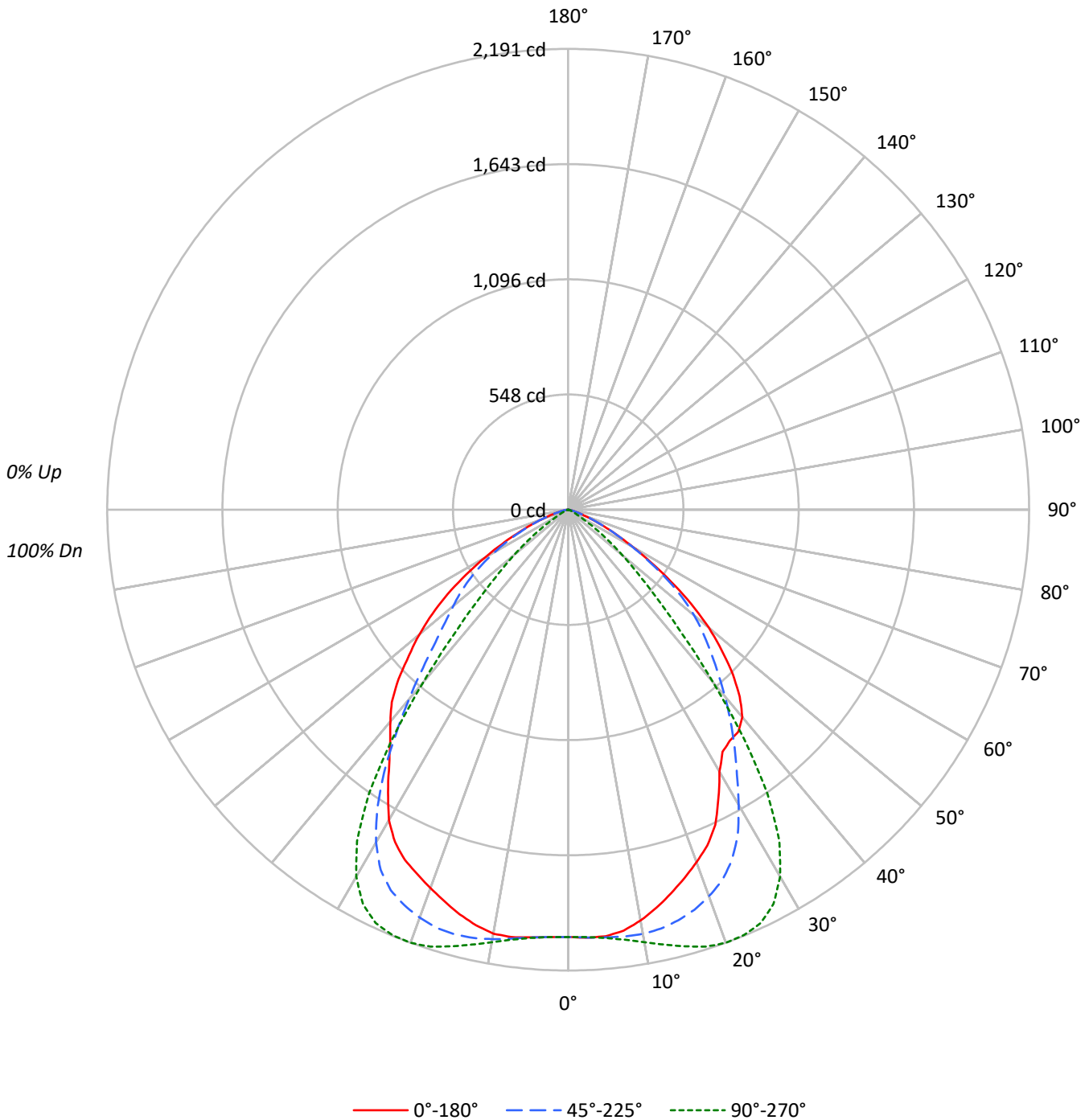
Input Watts (W): 53
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	92	90						
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79						
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70						
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62						
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56						
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50						
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45						
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41						
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38						
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34						

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°	195.4	5.0
10°-20°	578.7	14.8
20°-30°	882.9	22.5
30°-40°	921.4	23.5
40°-50°	692.1	17.7
50°-60°	425.8	10.9
60°-70°	173.3	4.4
70°-80°	40.8	1.0
80°-90°	5.6	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°	1657.0	42.3
0°-40°	2578.4	65.8
0°-60°	3696.3	94.4
0°-90°	3916.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3916.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2032	2032	2032	2032	2032	
5°	2036	2041	2043	2041	2041	193
15°	1888	2021	2149	2090	1992	532
25°	1654	1840	2167	1996	1837	752
35°	1340	1378	1651	1526	1483	846
45°	1106	958	597	892	1141	844
55°	597	567	156	567	700	537
65°	186	189	24	253	268	195
75°	32	32	4	57	59	39
85°	3	3	1	8	10	5
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°	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5
2.5°	2036.9	2033.6	2036.9	2036.9	2038.0	2035.8	2036.9	2038.0	2035.8	2035.8	2035.8
5°	2035.8	2033.6	2035.8	2034.7	2036.9	2036.9	2039.1	2039.1	2041.2	2041.2	2044.4
7.5°	2018.6	2014.3	2018.6	2021.8	2023.9	2028.3	2033.6	2038.0	2042.3	2046.6	2052.0
10°	1983.0	1983.0	1986.2	1992.7	1999.1	2006.7	2016.4	2027.2	2038.0	2047.7	2057.4
12.5°	1938.8	1935.5	1942.0	1950.6	1960.3	1972.2	1987.3	2003.5	2020.7	2040.1	2055.2
15°	1888.1	1884.8	1892.4	1901.0	1912.9	1930.1	1948.5	1970.0	1994.8	2020.7	2045.5
17.5°	1836.3	1835.2	1842.8	1854.7	1864.4	1882.7	1906.4	1932.3	1960.3	1994.8	2027.2
20°	1783.5	1782.4	1790.0	1799.7	1812.6	1829.9	1853.6	1883.8	1917.2	1956.0	1993.8
22.5°	1728.5	1729.6	1736.0	1746.8	1757.6	1775.9	1800.7	1830.9	1867.6	1909.6	1951.7
25°	1654.1	1648.7	1657.3	1668.1	1686.4	1701.5	1725.3	1757.6	1795.3	1839.6	1889.2
27.5°	1546.3	1545.2	1552.7	1562.4	1578.6	1596.9	1622.8	1656.3	1696.1	1744.7	1793.2
30°	1438.4	1440.6	1443.8	1453.5	1464.3	1482.6	1508.5	1536.6	1574.3	1620.7	1672.4
32.5°	1365.1	1365.1	1369.4	1375.9	1383.4	1393.1	1411.5	1432.0	1461.1	1493.4	1531.2
35°	1340.3	1336.0	1340.3	1341.4	1342.5	1344.6	1347.8	1354.3	1364.0	1378.1	1392.1
37.5°	1329.5	1326.3	1326.3	1322.0	1316.6	1310.1	1301.5	1291.8	1281.0	1267.0	1256.2
40°	1287.5	1285.3	1283.2	1278.9	1267.0	1254.1	1240.0	1217.4	1192.6	1158.1	1123.6
42.5°	1206.6	1204.5	1203.4	1194.7	1184.0	1168.9	1152.7	1129.0	1097.7	1053.5	1003.9
45°	1106.3	1102.0	1098.8	1091.2	1083.7	1070.7	1055.6	1034.1	1002.8	957.5	898.2
47.5°	989.9	987.7	986.6	983.4	975.9	968.3	958.6	941.4	913.3	870.2	808.7
50°	872.3	868.0	870.2	869.1	865.9	860.5	854.0	842.1	820.6	781.8	725.7
52.5°	737.5	737.5	736.5	739.7	740.8	739.7	740.8	727.9	709.5	680.4	633.0
55°	597.4	597.4	600.6	604.9	609.2	610.3	609.2	603.8	590.9	567.2	525.1
57.5°	465.8	463.7	470.1	476.6	480.9	485.2	482.0	477.7	470.1	450.7	418.4
60°	354.8	354.8	359.1	363.4	367.7	372.0	370.9	369.8	363.4	350.4	324.6
62.5°	260.9	262.0	262.0	265.3	269.6	273.9	277.1	273.9	270.6	262.0	244.8
65°	186.5	185.5	186.5	189.8	193.0	197.3	199.5	198.4	195.2	188.7	175.8
67.5°	125.1	124.0	128.3	129.4	131.6	135.9	134.8	135.9	134.8	129.4	118.6
70°	81.9	79.8	81.9	80.9	84.1	85.2	87.3	88.4	87.3	84.1	80.9
72.5°	50.7	49.6	50.7	51.8	52.8	53.9	56.1	56.1	55.0	52.8	48.5
75°	32.3	29.1	30.2	28.0	30.2	30.2	32.3	33.4	32.3	32.3	30.2
77.5°	19.4	19.4	19.4	19.4	19.4	19.4	19.4	20.5	21.6	19.4	18.3
80°	9.7	9.7	10.8	10.8	10.8	11.9	10.8	10.8	10.8	11.9	8.6
82.5°	7.5	6.5	6.5	6.5	7.5	6.5	6.5	6.5	6.5	6.5	6.5
85°	3.2	4.3	3.2	2.2	3.2	3.2	4.3	3.2	3.2	3.2	4.3
87.5°	1.1	1.1	0.0	0.0	0.0	1.1	0.0	1.1	1.1	2.2	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5
2.5°	2036.9	2034.7	2034.7	2033.6	2035.8	2033.6	2034.7	2033.6	2033.6	2035.8	2033.6
5°	2044.4	2045.5	2043.4	2042.3	2045.5	2045.5	2045.5	2043.4	2043.4	2044.4	2043.4
7.5°	2055.2	2057.4	2058.4	2059.5	2061.7	2062.8	2062.8	2061.7	2060.6	2063.9	2059.5
10°	2067.1	2070.3	2076.8	2080.0	2085.4	2085.4	2087.6	2087.6	2085.4	2087.6	2086.5
12.5°	2062.8	2082.2	2093.0	2100.5	2108.0	2114.5	2116.7	2117.8	2116.7	2121.0	2116.7
15°	2070.3	2086.5	2103.7	2116.7	2130.7	2138.2	2140.4	2149.0	2151.2	2152.3	2145.8
17.5°	2058.4	2087.6	2105.9	2125.3	2145.8	2159.8	2172.7	2178.2	2179.2	2181.4	2172.7
20°	2031.5	2063.9	2091.9	2119.9	2143.6	2165.2	2176.0	2191.1	2186.8	2195.4	2183.5
22.5°	1994.8	2031.5	2067.1	2103.7	2128.5	2154.4	2177.1	2187.8	2193.2	2193.2	2180.3
25°	1936.6	1979.7	2018.6	2056.3	2094.0	2125.3	2151.2	2167.4	2170.6	2169.5	2154.4
27.5°	1846.0	1892.4	1937.7	1980.8	2027.2	2063.9	2094.0	2113.4	2118.8	2118.8	2102.7
30°	1720.9	1770.5	1814.8	1866.5	1914.0	1954.9	1997.0	2014.3	2023.9	2023.9	2005.6
32.5°	1572.1	1614.2	1655.2	1705.9	1757.6	1804.0	1843.9	1867.6	1879.5	1878.4	1862.2
35°	1410.4	1430.9	1462.2	1499.9	1546.3	1589.4	1628.2	1650.9	1671.3	1670.3	1655.2
37.5°	1248.6	1243.3	1246.5	1260.5	1289.6	1319.8	1350.0	1371.6	1388.8	1396.4	1393.1
40°	1090.2	1062.1	1035.1	1025.5	1027.6	1038.4	1054.6	1070.7	1090.2	1099.9	1104.2
42.5°	947.8	900.4	852.9	817.3	796.8	790.4	797.9	803.3	815.2	829.2	843.2
45°	833.5	769.9	707.4	652.4	617.9	597.4	593.1	597.4	603.8	617.9	636.2
47.5°	739.7	665.3	595.2	533.7	483.1	456.1	448.6	446.4	452.9	465.8	490.6
50°	656.7	582.3	504.6	433.5	380.6	350.4	339.7	335.3	342.9	352.6	375.2
52.5°	566.1	492.8	413.0	344.0	289.0	257.7	245.8	239.4	243.7	256.6	279.3
55°	468.0	400.0	327.8	256.6	203.8	174.7	160.7	156.4	160.7	174.7	197.3
57.5°	369.8	312.7	252.3	185.5	138.0	108.9	94.9	90.6	102.4	107.8	131.6
60°	289.0	242.6	190.9	135.9	94.9	72.2	58.2	55.0	60.4	70.1	89.5
62.5°	216.7	187.6	146.6	97.0	70.1	46.4	38.8	35.6	38.8	46.4	61.5
65°	157.4	134.8	102.4	71.2	47.4	34.5	25.9	23.7	27.0	32.3	45.3
67.5°	107.8	90.6	71.2	49.6	32.3	21.6	18.3	18.3	19.4	23.7	33.4
70°	70.1	59.3	45.3	32.3	21.6	16.2	14.0	11.9	14.0	17.3	22.6
72.5°	44.2	37.7	29.1	22.6	16.2	11.9	9.7	8.6	10.8	12.9	17.3
75°	27.0	20.5	15.1	11.9	8.6	8.6	8.6	4.3	5.4	8.6	10.8
77.5°	16.2	14.0	11.9	9.7	7.5	4.3	4.3	4.3	5.4	6.5	9.7
80°	8.6	7.5	5.4	5.4	4.3	3.2	4.3	3.2	2.2	5.4	6.5
82.5°	5.4	4.3	4.3	4.3	5.4	2.2	3.2	2.2	3.2	4.3	3.2
85°	3.2	3.2	3.2	2.2	5.4	2.2	2.2	1.1	1.1	2.2	2.2
87.5°	0.0	1.1	1.1	0.0	1.1	0.0	1.1	1.1	1.1	1.1	1.1
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°	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5	2031.5
2.5°	2034.7	2033.6	2034.7	2033.6	2033.6	2033.6	2034.7	2034.7	2033.6	2033.6	2035.8
5°	2043.4	2043.4	2043.4	2042.3	2041.2	2041.2	2043.4	2043.4	2040.1	2043.4	2043.4
7.5°	2061.7	2058.4	2061.7	2057.4	2055.2	2056.3	2057.4	2055.2	2053.1	2054.1	2054.1
10°	2085.4	2082.2	2082.2	2078.9	2075.7	2073.5	2071.4	2066.0	2060.6	2059.5	2055.2
12.5°	2113.4	2108.0	2104.8	2098.3	2093.0	2085.4	2078.9	2070.3	2059.5	2052.0	2044.4
15°	2141.5	2132.8	2125.3	2114.5	2102.7	2089.7	2075.7	2061.7	2044.4	2029.3	2016.4
17.5°	2164.1	2152.3	2138.2	2121.0	2103.7	2084.3	2063.9	2043.4	2018.6	1999.1	1984.0
20°	2171.7	2154.4	2136.1	2113.4	2090.8	2063.9	2038.0	2011.0	1983.0	1962.5	1945.2
22.5°	2162.0	2141.5	2118.8	2095.1	2064.9	2035.8	2005.6	1974.3	1949.5	1921.5	1905.3
25°	2135.0	2110.2	2085.4	2057.4	2028.3	1995.9	1963.6	1931.2	1901.0	1885.9	1865.4
27.5°	2080.0	2053.1	2026.1	1997.0	1963.6	1931.2	1897.8	1866.5	1840.6	1820.1	1808.3
30°	1983.0	1951.7	1920.4	1889.2	1860.0	1826.6	1795.3	1769.5	1743.6	1727.4	1715.6
32.5°	1834.2	1806.1	1774.9	1744.7	1717.7	1689.7	1663.8	1641.2	1622.8	1612.0	1603.4
35°	1633.6	1605.6	1581.8	1560.3	1537.6	1525.8	1509.6	1496.7	1489.1	1484.8	1483.7
37.5°	1381.3	1365.1	1357.6	1353.3	1348.9	1345.7	1347.8	1353.3	1357.6	1365.1	1373.7
40°	1111.7	1125.7	1130.0	1145.1	1159.2	1177.5	1198.0	1221.7	1241.1	1265.9	1283.2
42.5°	865.9	891.7	921.9	954.3	988.8	1022.2	1063.2	1100.9	1135.4	1166.7	1193.7
45°	665.3	705.2	750.5	796.8	843.2	891.7	941.4	987.7	1028.7	1062.1	1090.2
47.5°	518.7	562.9	621.1	678.3	734.3	791.5	846.4	895.0	929.5	961.8	986.6
50°	410.8	461.5	525.1	590.9	652.4	712.7	771.0	816.3	850.8	876.7	895.0
52.5°	318.1	378.5	443.2	512.2	578.0	643.7	697.6	739.7	767.7	790.4	804.4
55°	237.2	296.5	365.5	436.7	503.6	567.2	617.9	654.5	679.3	692.3	699.8
57.5°	171.4	225.4	294.4	365.5	425.9	486.3	527.3	560.7	574.7	582.3	585.5
60°	125.1	174.7	236.1	297.6	354.8	403.3	438.9	461.5	472.3	476.6	475.5
62.5°	91.7	134.8	187.6	239.4	285.7	325.6	353.7	368.8	374.2	376.3	373.1
65°	70.1	103.5	148.8	188.7	224.3	253.4	273.9	283.6	286.8	285.7	283.6
67.5°	51.8	77.6	111.1	141.3	167.1	189.8	200.6	209.2	211.3	208.1	204.9
70°	36.7	57.1	80.9	101.4	120.8	133.7	145.6	146.6	146.6	145.6	143.4
72.5°	25.9	39.9	55.0	69.0	80.9	90.6	94.9	98.1	97.0	96.0	93.8
75°	17.3	24.8	39.9	43.1	53.9	57.1	61.5	61.5	62.5	59.3	59.3
77.5°	10.8	17.3	23.7	28.0	32.3	36.7	38.8	38.8	39.9	38.8	38.8
80°	6.5	10.8	12.9	19.4	19.4	22.6	23.7	24.8	22.6	25.9	22.6
82.5°	4.3	6.5	9.7	9.7	11.9	14.0	14.0	15.1	15.1	14.0	14.0
85°	3.2	4.3	5.4	6.5	6.5	7.5	6.5	6.5	7.5	8.6	7.5
87.5°	1.1	2.2	1.1	2.2	2.2	4.3	3.2	3.2	3.2	4.3	4.3
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: P245519

CATALOG NUMBER: LSR8B50D010 EC8B509727 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2031.5	2031.5	2031.5	2031.5
2.5°	2033.6	2034.7	2033.6	2033.6
5°	2043.4	2042.3	2043.4	2041.2
7.5°	2050.9	2050.9	2049.8	2049.8
10°	2050.9	2046.6	2046.6	2046.6
12.5°	2034.7	2029.3	2026.1	2023.9
15°	2006.7	1997.0	1992.7	1991.6
17.5°	1970.0	1961.4	1956.0	1952.8
20°	1928.0	1919.4	1912.9	1914.0
22.5°	1891.3	1881.6	1877.3	1875.1
25°	1854.7	1842.8	1839.6	1837.4
27.5°	1795.3	1788.9	1785.6	1782.4
30°	1704.8	1701.5	1696.1	1703.7
32.5°	1600.2	1594.8	1590.5	1593.7
35°	1484.8	1481.6	1484.8	1482.6
37.5°	1379.1	1382.4	1386.7	1388.8
40°	1296.1	1308.0	1312.3	1314.4
42.5°	1213.1	1227.1	1235.7	1241.1
45°	1110.6	1124.6	1134.4	1140.8
47.5°	1005.0	1016.8	1026.5	1025.5
50°	909.0	915.5	919.8	924.1
52.5°	811.9	811.9	813.0	813.0
55°	702.0	699.8	698.7	699.8
57.5°	581.2	579.0	578.0	574.7
60°	471.2	464.8	460.4	460.4
62.5°	368.8	361.2	358.0	356.9
65°	277.1	276.0	269.6	268.5
67.5°	200.6	196.2	191.9	193.0
70°	141.3	134.8	134.8	132.6
72.5°	91.7	88.4	87.3	87.3
75°	57.1	57.1	55.0	59.3
77.5°	37.7	37.7	36.7	37.7
80°	22.6	22.6	22.6	21.6
82.5°	14.0	15.1	14.0	14.0
85°	7.5	8.6	6.5	9.7
87.5°	4.3	5.4	4.3	5.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)