

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: P246167

Luminaire Tested: **LSR8B50D010 EC8B50927 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246167
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 EC8B50927 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3868.9 lumens
Efficiency: N/A
Efficacy: 73.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

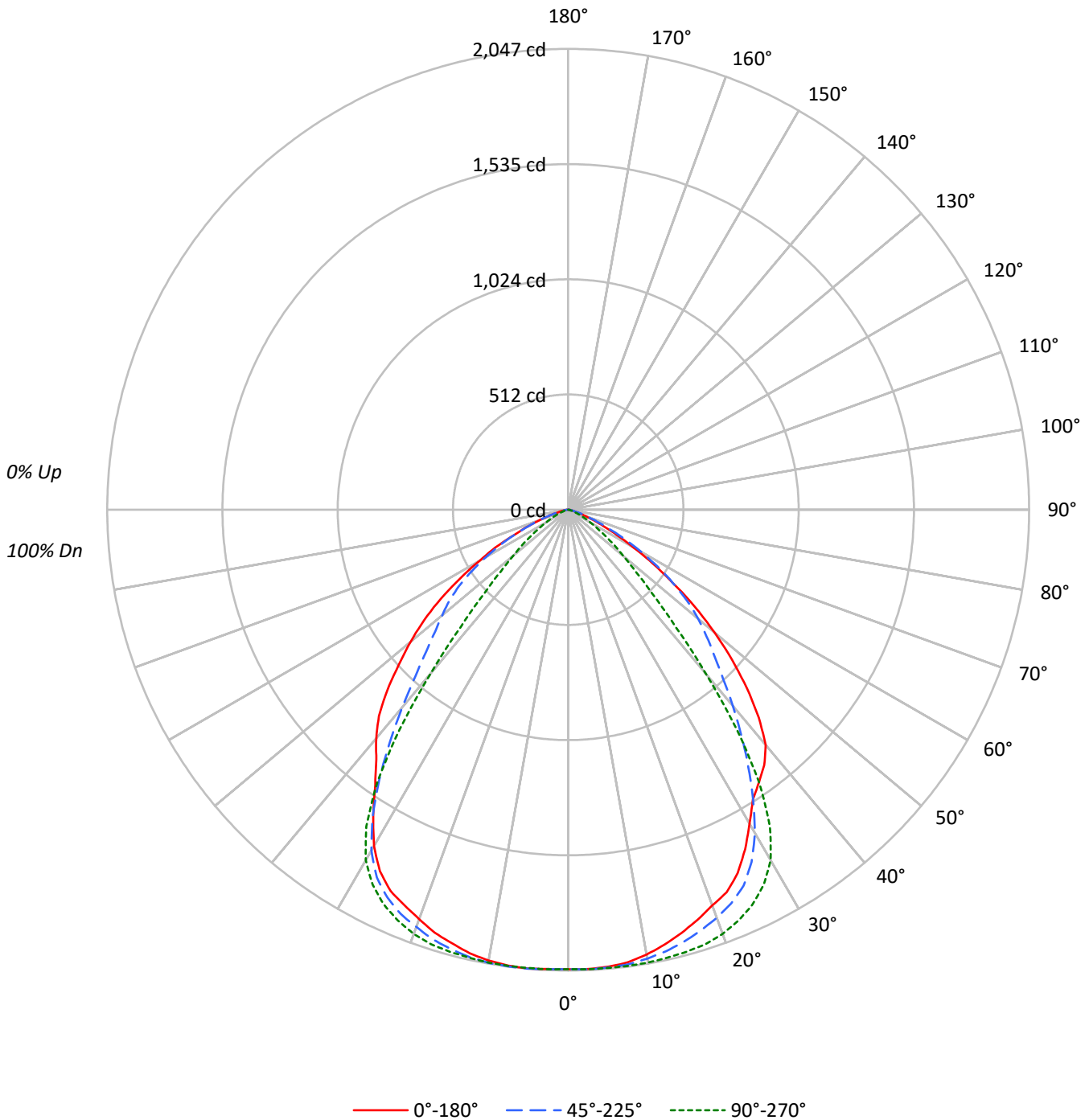
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	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°	194.8	5.0
10°-20°	565.8	14.6
20°-30°	858.7	22.2
30°-40°	901.9	23.3
40°-50°	676.2	17.5
50°-60°	433.9	11.2
60°-70°	185.6	4.8
70°-80°	43.8	1.1
80°-90°	8.1	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°	1619.3	41.9
0°-40°	2521.2	65.2
0°-60°	3631.3	93.9
0°-90°	3868.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3868.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2041	2041	2041	2041	2041	
5°	2038	2041	2043	2047	2046	194
15°	1946	1986	2032	2019	1994	549
25°	1780	1843	1936	1901	1868	813
35°	1477	1395	1478	1461	1493	927
45°	1122	917	527	891	1137	859
55°	568	568	196	592	691	515
65°	171	202	62	260	264	182
75°	26	31	9	53	52	38
85°	9	6	4	9	12	9
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°	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3
2.5°	2042.4	2044.6	2043.4	2043.4	2042.4	2043.4	2043.4	2045.7	2045.7	2043.4	2042.4
5°	2038.0	2040.2	2040.2	2038.0	2038.0	2043.4	2040.2	2042.4	2042.4	2041.3	2041.3
7.5°	2028.2	2028.2	2032.5	2029.3	2029.3	2032.5	2031.4	2033.7	2035.8	2036.9	2036.9
10°	2006.2	2008.5	2009.5	2009.5	2010.6	2013.9	2016.1	2020.5	2022.6	2024.9	2026.0
12.5°	1978.9	1982.1	1983.3	1982.1	1985.4	1989.8	1995.3	2000.8	2004.1	2008.5	2011.7
15°	1945.9	1945.9	1948.2	1951.4	1953.7	1960.2	1965.7	1972.2	1981.0	1986.5	1992.0
17.5°	1909.8	1912.0	1915.3	1915.3	1919.7	1930.6	1933.9	1943.8	1953.7	1959.1	1970.1
20°	1870.4	1872.6	1875.8	1878.1	1883.5	1892.2	1898.9	1907.7	1918.6	1928.5	1939.4
22.5°	1839.7	1835.3	1837.5	1839.7	1845.2	1852.9	1860.5	1871.4	1882.5	1892.2	1903.3
25°	1780.5	1781.7	1784.9	1787.1	1793.7	1800.2	1809.0	1822.2	1832.1	1843.0	1855.0
27.5°	1700.6	1701.7	1707.1	1707.1	1712.6	1723.5	1729.0	1739.9	1753.1	1764.1	1778.3
30°	1609.6	1611.8	1611.8	1616.2	1619.4	1625.0	1630.4	1641.4	1647.9	1657.8	1677.5
32.5°	1526.3	1528.5	1527.4	1526.3	1523.0	1521.9	1520.8	1523.0	1525.3	1528.5	1536.2
35°	1477.0	1471.5	1467.1	1459.5	1450.7	1439.8	1429.9	1416.7	1404.7	1394.8	1383.9
37.5°	1429.9	1428.8	1422.2	1411.3	1393.8	1374.0	1351.0	1322.6	1294.0	1263.4	1233.8
40°	1364.2	1360.8	1355.4	1340.1	1320.3	1296.2	1265.5	1230.5	1184.4	1137.4	1089.1
42.5°	1252.4	1253.5	1247.0	1234.8	1216.2	1193.2	1161.4	1123.1	1073.8	1017.9	955.5
45°	1122.0	1122.0	1119.8	1109.9	1096.8	1078.2	1054.0	1022.3	974.1	917.1	850.3
47.5°	986.2	987.2	983.9	981.8	976.3	964.2	946.7	922.6	888.6	833.8	767.0
50°	848.1	848.1	853.5	852.4	852.4	848.1	840.4	826.2	796.6	752.7	690.3
52.5°	710.0	712.2	715.5	719.9	725.4	734.1	725.4	718.8	700.2	666.2	612.4
55°	567.6	569.8	575.2	582.9	589.5	598.3	600.4	600.4	590.6	567.6	527.1
57.5°	446.0	442.7	447.1	453.6	462.4	471.2	477.7	485.4	484.3	469.0	436.0
60°	335.2	336.4	339.6	346.3	352.8	360.4	369.2	375.9	379.1	371.5	350.7
62.5°	244.4	244.4	248.7	255.3	258.6	269.6	275.1	278.3	281.6	280.5	267.3
65°	170.9	173.1	175.3	178.6	181.9	188.4	191.7	198.3	200.5	201.6	191.7
67.5°	120.5	117.2	119.5	121.6	124.9	129.3	135.9	135.9	139.2	139.2	132.5
70°	76.7	76.7	77.9	81.1	83.2	84.4	86.6	88.8	92.0	90.9	90.9
72.5°	51.5	50.4	51.5	52.6	53.7	56.9	56.9	58.0	60.3	61.3	56.9
75°	26.3	27.4	29.6	28.5	31.7	29.6	30.7	34.0	32.8	30.7	30.7
77.5°	21.9	21.9	21.9	20.8	23.0	23.0	21.9	24.1	23.0	23.0	21.9
80°	15.3	16.4	15.3	14.3	15.3	14.3	14.3	14.3	14.3	14.3	13.2
82.5°	12.0	9.9	10.9	9.9	10.9	10.9	9.9	8.8	8.8	9.9	8.8
85°	8.8	6.5	7.6	7.6	6.5	6.5	6.5	6.5	6.5	5.5	5.5
87.5°	5.5	3.3	3.3	3.3	4.4	4.4	4.4	3.3	4.4	4.4	2.2
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°	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3
2.5°	2044.6	2043.4	2045.7	2044.6	2044.6	2043.4	2044.6	2043.4	2045.7	2041.3	2042.4
5°	2044.6	2042.4	2043.4	2044.6	2045.7	2043.4	2043.4	2043.4	2045.7	2043.4	2044.6
7.5°	2040.2	2039.1	2042.4	2044.6	2043.4	2042.4	2044.6	2043.4	2045.7	2044.6	2046.7
10°	2031.4	2032.5	2034.7	2038.0	2039.1	2040.2	2042.4	2042.4	2045.7	2041.3	2043.4
12.5°	2018.2	2022.6	2028.2	2030.3	2034.7	2034.7	2036.9	2038.0	2040.2	2039.1	2042.4
15°	2001.8	2007.3	2013.9	2019.4	2024.9	2028.2	2031.4	2032.5	2035.8	2032.5	2033.7
17.5°	1982.1	1988.7	1998.6	2005.1	2013.9	2017.2	2021.5	2023.8	2027.0	2024.9	2026.0
20°	1954.7	1962.4	1973.4	1983.3	1988.7	1996.3	2001.8	2005.1	2007.3	2005.1	2006.2
22.5°	1916.4	1927.4	1941.6	1949.3	1960.2	1966.8	1967.8	1975.5	1981.0	1975.5	1977.8
25°	1871.4	1882.5	1893.4	1909.8	1919.7	1927.4	1935.0	1936.1	1941.6	1940.5	1939.4
27.5°	1797.0	1811.2	1829.8	1843.0	1856.1	1868.2	1877.0	1879.1	1884.6	1882.5	1883.5
30°	1695.0	1710.4	1727.9	1748.7	1767.4	1779.4	1790.3	1798.1	1803.5	1800.2	1799.1
32.5°	1550.5	1565.8	1584.4	1605.1	1627.1	1644.6	1657.8	1667.7	1674.2	1672.1	1666.6
35°	1385.0	1389.4	1401.4	1417.8	1436.5	1455.1	1467.1	1478.1	1485.8	1487.9	1487.9
37.5°	1215.1	1200.9	1192.2	1192.2	1203.1	1210.7	1221.8	1228.3	1240.3	1244.7	1248.0
40°	1050.8	1017.9	987.2	964.2	948.9	947.8	947.8	951.1	962.0	976.3	989.4
42.5°	903.9	851.4	804.3	761.5	730.8	713.4	705.6	706.7	715.5	728.7	750.6
45°	786.7	721.0	661.8	610.3	568.7	541.2	528.2	527.1	533.6	548.9	573.1
47.5°	695.8	625.6	558.8	499.6	454.7	425.1	409.8	405.4	409.8	424.0	452.5
50°	620.2	547.9	478.8	417.5	369.2	338.6	324.3	318.8	324.3	336.4	364.8
52.5°	550.0	475.5	410.8	351.7	300.3	273.9	258.6	255.3	258.6	272.8	295.9
55°	469.0	405.4	341.9	282.7	237.8	211.5	199.5	196.1	199.5	212.6	236.7
57.5°	389.0	334.2	278.3	224.7	186.3	163.2	152.3	147.9	155.6	164.4	192.8
60°	314.4	270.7	223.5	176.4	144.7	123.9	115.1	114.0	116.1	127.1	146.8
62.5°	246.6	210.4	173.1	134.8	108.4	99.7	88.8	87.6	89.9	96.4	111.8
65°	177.5	154.5	126.0	98.7	77.9	65.7	61.3	62.4	64.7	69.1	83.2
67.5°	123.9	107.3	87.6	69.1	53.7	48.2	43.9	42.8	43.9	51.5	59.2
70°	83.2	73.5	59.2	52.6	37.2	29.6	30.7	27.4	31.7	31.7	38.4
72.5°	54.8	48.2	39.5	30.7	26.3	20.8	20.8	19.7	21.9	23.0	28.5
75°	28.5	21.9	21.9	15.3	10.9	5.5	9.9	8.8	7.6	8.8	10.9
77.5°	19.7	16.4	15.3	12.0	10.9	8.8	8.8	8.8	8.8	9.9	10.9
80°	12.0	12.0	8.8	7.6	6.5	5.5	6.5	6.5	6.5	6.5	7.6
82.5°	7.6	6.5	6.5	5.5	5.5	4.4	4.4	4.4	4.4	4.4	6.5
85°	6.5	4.4	4.4	3.3	4.4	7.6	3.3	4.4	4.4	4.4	3.3
87.5°	2.2	3.3	3.3	3.3	2.2	1.1	2.2	3.3	3.3	5.5	4.4
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°	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3	2041.3
2.5°	2044.6	2045.7	2045.7	2044.6	2044.6	2042.4	2046.7	2043.4	2044.6	2049.0	2045.7
5°	2046.7	2047.8	2047.8	2046.7	2046.7	2046.7	2047.8	2047.8	2046.7	2045.7	2047.8
7.5°	2051.2	2050.1	2050.1	2047.8	2047.8	2045.7	2047.8	2044.6	2046.7	2044.6	2047.8
10°	2045.7	2046.7	2045.7	2044.6	2044.6	2043.4	2043.4	2040.2	2041.3	2038.0	2040.2
12.5°	2042.4	2041.3	2041.3	2039.1	2036.9	2034.7	2033.7	2030.3	2030.3	2022.6	2026.0
15°	2033.7	2034.7	2031.4	2027.0	2024.9	2019.4	2017.2	2012.8	2008.5	2003.0	2004.1
17.5°	2026.0	2022.6	2018.2	2013.9	2005.1	2000.8	1996.3	1989.8	1987.6	1981.0	1978.9
20°	2003.0	2000.8	1995.3	1987.6	1982.1	1972.2	1967.8	1961.3	1955.8	1949.3	1945.9
22.5°	1973.4	1971.1	1964.6	1956.9	1948.2	1943.8	1939.4	1927.4	1921.8	1915.3	1914.2
25°	1936.1	1932.9	1926.2	1917.4	1913.1	1901.0	1896.6	1887.9	1885.7	1879.1	1878.1
27.5°	1879.1	1874.7	1867.0	1856.1	1848.5	1840.8	1836.4	1829.8	1827.7	1821.0	1820.0
30°	1793.7	1788.2	1772.9	1768.5	1755.3	1747.7	1747.7	1738.9	1739.9	1735.6	1735.6
32.5°	1658.9	1650.2	1638.1	1629.3	1620.6	1616.2	1616.2	1612.9	1615.0	1615.0	1617.3
35°	1480.3	1468.2	1461.7	1456.2	1456.2	1460.6	1473.8	1477.0	1483.5	1489.0	1493.4
37.5°	1251.3	1250.2	1257.9	1264.5	1280.9	1299.5	1322.6	1342.2	1360.8	1374.0	1387.1
40°	1003.6	1031.1	1053.0	1083.7	1108.8	1145.0	1186.6	1220.6	1252.4	1275.4	1299.5
42.5°	783.4	818.4	864.6	909.4	954.3	1003.6	1058.5	1105.5	1147.2	1179.0	1204.2
45°	610.3	658.5	714.4	771.4	829.5	890.8	947.8	996.0	1039.8	1072.7	1097.9
47.5°	492.0	544.6	608.1	670.6	736.3	801.0	864.6	906.2	942.3	968.6	991.6
50°	406.5	462.4	529.2	600.4	666.2	730.8	785.6	826.2	855.8	878.7	893.0
52.5°	339.6	398.8	470.0	541.2	607.1	666.2	715.5	746.2	770.3	786.7	799.9
55°	280.5	337.5	404.3	471.2	535.8	591.6	632.2	655.2	673.9	683.7	691.4
57.5°	229.0	281.6	342.9	404.3	460.2	506.2	538.0	561.0	569.8	577.5	576.3
60°	179.7	229.0	284.8	337.5	385.7	422.9	446.0	459.1	465.6	469.0	466.8
62.5°	141.3	186.3	229.0	275.1	310.0	341.9	363.8	363.8	367.1	368.2	371.5
65°	105.2	139.2	176.4	210.4	238.8	259.7	271.8	275.1	279.4	278.3	276.1
67.5°	77.9	103.0	130.4	155.6	175.3	188.4	197.2	204.9	203.8	201.6	200.5
70°	53.7	70.1	94.3	109.6	123.9	137.0	139.2	140.3	141.3	142.4	140.3
72.5°	37.2	49.3	62.4	75.6	84.4	89.9	95.3	96.4	96.4	96.4	95.3
75°	18.7	25.2	37.2	42.8	50.4	52.6	56.9	56.9	60.3	55.9	54.8
77.5°	16.4	19.7	26.3	30.7	34.0	37.2	38.4	41.6	40.5	38.4	39.5
80°	9.9	12.0	16.4	18.7	23.0	24.1	25.2	26.3	25.2	26.3	26.3
82.5°	7.6	8.8	10.9	10.9	14.3	14.3	15.3	15.3	16.4	16.4	16.4
85°	4.4	7.6	6.5	13.2	8.8	8.8	10.9	13.2	10.9	10.9	13.2
87.5°	4.4	4.4	3.3	4.4	4.4	4.4	5.5	6.5	6.5	7.6	6.5
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: P246167

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2041.3	2041.3	2041.3	2041.3
2.5°	2044.6	2046.7	2043.4	2042.4
5°	2047.8	2047.8	2045.7	2045.7
7.5°	2047.8	2047.8	2044.6	2042.4
10°	2039.1	2039.1	2035.8	2033.7
12.5°	2022.6	2022.6	2021.5	2018.2
15°	2001.8	2001.8	1997.4	1994.2
17.5°	1973.4	1975.5	1970.1	1970.1
20°	1942.6	1941.6	1937.2	1935.0
22.5°	1910.9	1908.7	1907.7	1901.0
25°	1877.0	1874.7	1871.4	1868.2
27.5°	1818.9	1817.8	1814.5	1810.1
30°	1730.1	1729.0	1724.6	1724.6
32.5°	1615.0	1613.9	1609.6	1610.7
35°	1495.6	1500.1	1497.8	1493.4
37.5°	1395.9	1399.3	1401.4	1399.3
40°	1312.6	1322.6	1323.6	1325.8
42.5°	1223.9	1237.0	1241.4	1243.6
45°	1117.6	1129.7	1139.5	1137.4
47.5°	1009.1	1017.9	1026.7	1020.2
50°	905.1	910.6	913.8	913.8
52.5°	806.4	806.4	805.4	806.4
55°	693.6	693.6	689.2	691.4
57.5°	575.2	577.5	574.1	568.7
60°	465.6	460.2	458.0	454.7
62.5°	362.7	362.7	355.0	364.8
65°	271.8	268.4	265.2	264.0
67.5°	197.2	196.1	192.8	191.7
70°	139.2	134.8	133.6	131.5
72.5°	93.1	93.1	90.9	90.9
75°	56.9	51.5	50.4	51.5
77.5°	39.5	38.4	38.4	37.2
80°	26.3	25.2	27.4	24.1
82.5°	16.4	17.6	16.4	17.6
85°	10.9	13.2	12.0	12.0
87.5°	6.5	6.5	6.5	6.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)