

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: P246130

Luminaire Tested: **LSR8B40D010 EC8B40850 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246130
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: LSR8B40D010 EC8B40850 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3999.0 lumens
Efficiency: N/A
Efficacy: 97.8 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

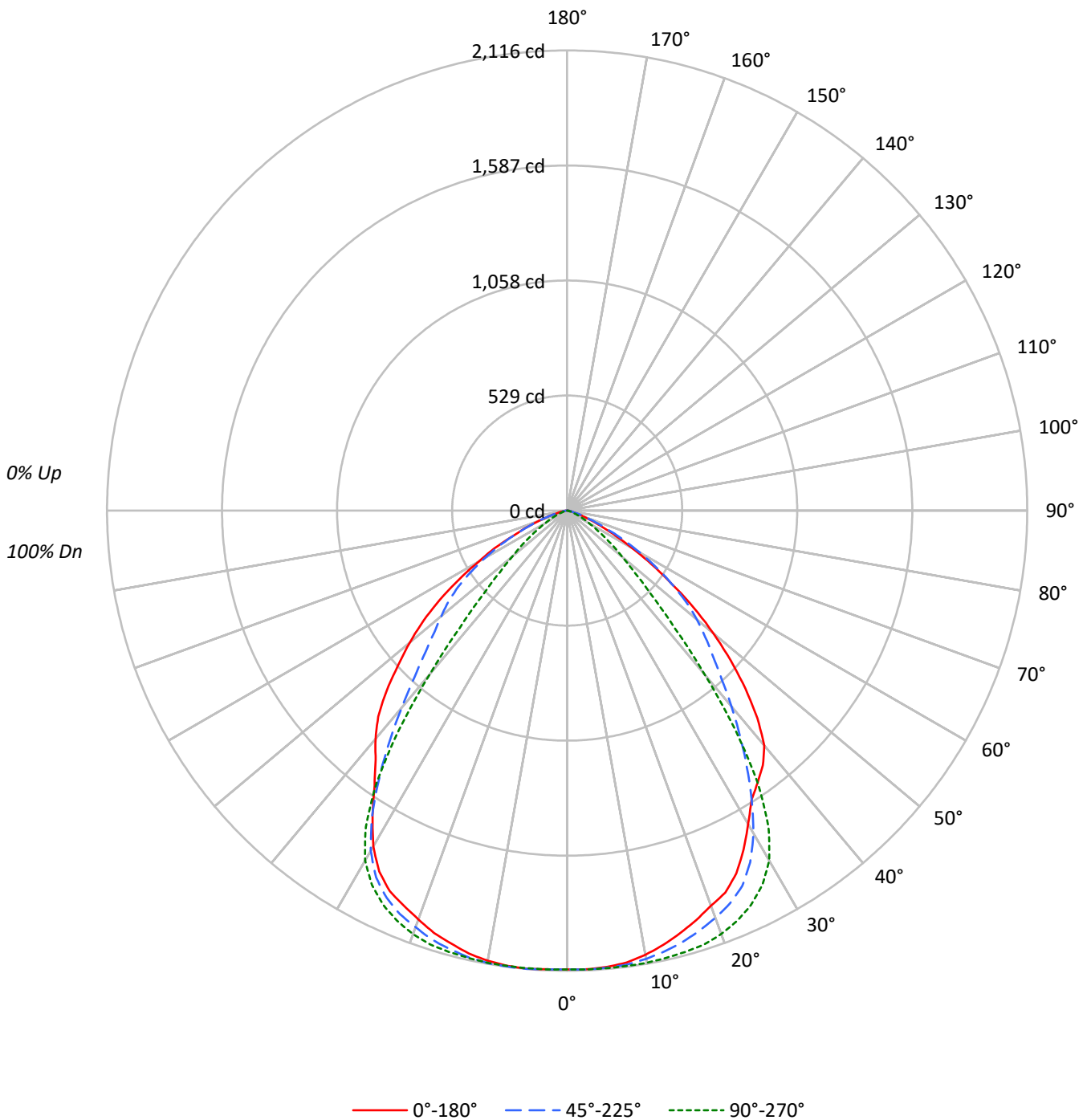
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P246130

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0B

Luminous Intensity Polar Plot





TEST NUMBER: P246130

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0B

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°	65065	65065	65065
5°	65205	65381	65452
10°	64932	66103	65818
15°	64212	67069	65805
20°	63442	68013	65634
25°	62618	68089	65701
30°	59239	66175	63473
35°	57471	57513	58111
40°	56758	39570	55164
45°	50574	23758	51267
50°	42053	15812	45315
55°	31542	10897	38418
60°	21376	7265	28986
65°	12893	4714	19912
70°	7150	2552	12253
75°	3241	1084	6338
80°	2824	1208	4422
85°	3220	1592	4423



TEST NUMBER: P246130

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.4	5.0
10°-20°	584.8	14.6
20°-30°	887.6	22.2
30°-40°	932.3	23.3
40°-50°	698.9	17.5
50°-60°	448.5	11.2
60°-70°	191.8	4.8
70°-80°	45.3	1.1
80°-90°	8.4	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°	1673.8	41.9
0°-40°	2606.0	65.2
0°-60°	3753.4	93.9
0°-90°	3999.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3999.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2110	2110	2110	2110	2110	
5°	2106	2110	2112	2116	2114	200
15°	2011	2053	2101	2087	2061	567
25°	1840	1905	2001	1965	1931	841
35°	1527	1442	1528	1510	1544	958
45°	1160	948	545	921	1176	888
55°	587	587	203	612	715	532
65°	177	208	65	268	273	189
75°	27	32	9	54	53	40
85°	9	6	4	9	12	10
90°	0	0	0	0	0	



TEST NUMBER: P246130

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0B

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0
2.5°	2111.1	2113.4	2112.2	2112.2	2111.1	2112.2	2112.2	2114.5	2114.5	2112.2	2111.1
5°	2106.5	2108.8	2108.8	2106.5	2106.5	2112.2	2108.8	2111.1	2111.1	2110.0	2110.0
7.5°	2096.4	2096.4	2100.9	2097.5	2097.5	2100.9	2099.8	2102.0	2104.3	2105.4	2105.4
10°	2073.7	2076.0	2077.1	2077.1	2078.2	2081.6	2083.9	2088.4	2090.7	2093.0	2094.1
12.5°	2045.4	2048.8	2049.9	2048.8	2052.2	2056.7	2062.4	2068.1	2071.5	2076.0	2079.4
15°	2011.4	2011.4	2013.7	2017.1	2019.4	2026.2	2031.8	2038.6	2047.7	2053.3	2059.0
17.5°	1974.1	1976.3	1979.7	1979.7	1984.2	1995.6	1999.0	2009.2	2019.4	2025.0	2036.3
20°	1933.3	1935.5	1938.9	1941.2	1946.9	1955.9	1962.7	1971.8	1983.1	1993.3	2004.6
22.5°	1901.6	1897.0	1899.3	1901.6	1907.2	1915.2	1923.1	1934.4	1945.7	1955.9	1967.3
25°	1840.4	1841.5	1844.9	1847.2	1854.0	1860.8	1869.9	1883.4	1893.6	1905.0	1917.4
27.5°	1757.7	1758.9	1764.5	1764.5	1770.2	1781.5	1787.2	1798.5	1812.1	1823.4	1838.2
30°	1663.7	1666.0	1666.0	1670.5	1673.9	1679.6	1685.2	1696.6	1703.4	1713.6	1734.0
32.5°	1577.7	1579.9	1578.8	1577.7	1574.3	1573.1	1572.0	1574.3	1576.5	1579.9	1587.8
35°	1526.7	1521.0	1516.5	1508.6	1499.5	1488.2	1478.0	1464.4	1451.9	1441.7	1430.4
37.5°	1478.0	1476.8	1470.1	1458.7	1440.6	1420.2	1396.5	1367.0	1337.5	1305.8	1275.3
40°	1410.0	1406.6	1401.0	1385.1	1364.7	1339.8	1308.1	1271.9	1224.3	1175.6	1125.8
42.5°	1294.5	1295.6	1288.8	1276.4	1257.1	1233.3	1200.5	1160.9	1109.9	1052.1	987.6
45°	1159.7	1159.7	1157.5	1147.3	1133.7	1114.4	1089.5	1056.7	1006.9	947.9	878.9
47.5°	1019.3	1020.4	1017.0	1014.8	1009.1	996.7	978.5	953.6	918.5	861.9	792.8
50°	876.6	876.6	882.3	881.1	881.1	876.6	868.7	853.9	823.4	778.1	713.5
52.5°	733.9	736.2	739.6	744.1	749.7	758.8	749.7	743.0	723.7	688.6	633.1
55°	586.7	588.9	594.6	602.5	609.3	618.4	620.6	620.6	610.4	586.7	544.8
57.5°	461.0	457.6	462.1	468.9	477.9	487.0	493.8	501.7	500.6	484.7	450.8
60°	346.6	347.7	351.1	357.9	364.7	372.6	381.7	388.5	391.9	383.9	362.4
62.5°	252.6	252.6	257.1	263.9	267.3	278.6	284.3	287.7	291.1	289.9	276.3
65°	176.7	178.9	181.2	184.6	188.0	194.8	198.2	205.0	207.3	208.4	198.2
67.5°	124.6	121.2	123.5	125.7	129.1	133.7	140.4	140.4	143.8	143.8	137.0
70°	79.3	79.3	80.4	83.8	86.1	87.2	89.5	91.7	95.1	94.0	94.0
72.5°	53.2	52.1	53.2	54.4	55.5	58.9	58.9	60.0	62.3	63.4	58.9
75°	27.2	28.3	30.6	29.5	32.8	30.6	31.7	35.1	34.0	31.7	31.7
77.5°	22.6	22.6	22.6	21.5	23.8	23.8	22.6	24.9	23.8	23.8	22.6
80°	15.9	17.0	15.9	14.7	15.9	14.7	14.7	14.7	14.7	14.7	13.6
82.5°	12.5	10.2	11.3	10.2	11.3	11.3	10.2	9.1	9.1	10.2	9.1
85°	9.1	6.8	7.9	7.9	6.8	6.8	6.8	6.8	6.8	5.7	5.7
87.5°	5.7	3.4	3.4	3.4	4.5	4.5	4.5	3.4	4.5	4.5	2.3
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: P246130

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0
2.5°	2113.4	2112.2	2114.5	2113.4	2113.4	2112.2	2113.4	2112.2	2114.5	2110.0	2111.1
5°	2113.4	2111.1	2112.2	2113.4	2114.5	2112.2	2112.2	2112.2	2114.5	2112.2	2113.4
7.5°	2108.8	2107.7	2111.1	2113.4	2112.2	2111.1	2113.4	2112.2	2114.5	2113.4	2115.6
10°	2099.8	2100.9	2103.2	2106.5	2107.7	2108.8	2111.1	2111.1	2114.5	2110.0	2112.2
12.5°	2086.2	2090.7	2096.4	2098.6	2103.2	2103.2	2105.4	2106.5	2108.8	2107.7	2111.1
15°	2069.2	2074.8	2081.6	2087.3	2093.0	2096.4	2099.8	2100.9	2104.3	2100.9	2102.0
17.5°	2048.8	2055.6	2065.8	2072.6	2081.6	2085.0	2089.6	2091.8	2095.2	2093.0	2094.1
20°	2020.5	2028.4	2039.7	2049.9	2055.6	2063.5	2069.2	2072.6	2074.8	2072.6	2073.7
22.5°	1980.8	1992.2	2006.9	2014.8	2026.2	2032.9	2034.1	2042.0	2047.7	2042.0	2044.3
25°	1934.4	1945.7	1957.1	1974.1	1984.2	1992.2	2000.1	2001.2	2006.9	2005.8	2004.6
27.5°	1857.4	1872.1	1891.4	1905.0	1918.5	1931.0	1940.1	1942.3	1948.0	1945.7	1946.9
30°	1752.1	1767.9	1786.1	1807.6	1826.8	1839.3	1850.6	1858.5	1864.2	1860.8	1859.7
32.5°	1602.6	1618.4	1637.7	1659.2	1681.9	1700.0	1713.6	1723.8	1730.5	1728.3	1722.6
35°	1431.6	1436.1	1448.6	1465.5	1484.8	1504.0	1516.5	1527.8	1535.7	1538.0	1538.0
37.5°	1256.0	1241.3	1232.2	1232.2	1243.5	1251.5	1262.8	1269.6	1282.1	1286.6	1290.0
40°	1086.1	1052.1	1020.4	996.7	980.8	979.7	979.7	983.0	994.4	1009.1	1022.7
42.5°	934.4	880.0	831.3	787.1	755.4	737.3	729.4	730.5	739.6	753.2	775.8
45°	813.2	745.2	684.1	630.8	587.8	559.5	545.9	544.8	551.5	567.4	592.3
47.5°	719.2	646.7	577.6	516.4	470.0	439.4	423.6	419.1	423.6	438.3	467.7
50°	641.0	566.3	494.9	431.5	381.7	350.0	335.2	329.6	335.2	347.7	377.1
52.5°	568.5	491.5	424.7	363.6	310.3	283.1	267.3	263.9	267.3	282.0	305.8
55°	484.7	419.1	353.4	292.2	245.8	218.6	206.1	202.7	206.1	219.7	244.6
57.5°	402.1	345.4	287.7	232.2	192.5	168.7	157.4	152.9	160.8	169.9	199.3
60°	325.0	279.8	231.0	182.3	149.5	128.0	118.9	117.8	120.0	131.4	151.8
62.5°	254.8	217.5	178.9	139.3	112.1	103.1	91.7	90.6	92.9	99.7	115.5
65°	183.5	159.7	130.2	101.9	80.4	67.9	63.4	64.6	66.8	71.4	86.1
67.5°	128.0	111.0	90.6	71.4	55.5	49.8	45.3	44.2	45.3	53.2	61.2
70°	86.1	75.9	61.2	54.4	38.5	30.6	31.7	28.3	32.8	32.8	39.6
72.5°	56.6	49.8	40.8	31.7	27.2	21.5	21.5	20.4	22.6	23.8	29.5
75°	29.5	22.6	22.6	15.9	11.3	5.7	10.2	9.1	7.9	9.1	11.3
77.5°	20.4	17.0	15.9	12.5	11.3	9.1	9.1	9.1	9.1	10.2	11.3
80°	12.5	12.5	9.1	7.9	6.8	5.7	6.8	6.8	6.8	6.8	7.9
82.5°	7.9	6.8	6.8	5.7	5.7	4.5	4.5	4.5	4.5	4.5	6.8
85°	6.8	4.5	4.5	3.4	4.5	7.9	3.4	4.5	4.5	4.5	3.4
87.5°	2.3	3.4	3.4	3.4	2.3	1.1	2.3	3.4	3.4	5.7	4.5
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: P246130

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0	2110.0
2.5°	2113.4	2114.5	2114.5	2113.4	2113.4	2111.1	2115.6	2112.2	2113.4	2117.9	2114.5
5°	2115.6	2116.7	2116.7	2115.6	2115.6	2115.6	2116.7	2116.7	2115.6	2114.5	2116.7
7.5°	2120.1	2119.0	2119.0	2116.7	2116.7	2114.5	2116.7	2113.4	2115.6	2113.4	2116.7
10°	2114.5	2115.6	2114.5	2113.4	2113.4	2112.2	2112.2	2108.8	2110.0	2106.5	2108.8
12.5°	2111.1	2110.0	2110.0	2107.7	2105.4	2103.2	2102.0	2098.6	2098.6	2090.7	2094.1
15°	2102.0	2103.2	2099.8	2095.2	2093.0	2087.3	2085.0	2080.5	2076.0	2070.3	2071.5
17.5°	2094.1	2090.7	2086.2	2081.6	2072.6	2068.1	2063.5	2056.7	2054.4	2047.7	2045.4
20°	2070.3	2068.1	2062.4	2054.4	2048.8	2038.6	2034.1	2027.3	2021.6	2014.8	2011.4
22.5°	2039.7	2037.5	2030.7	2022.7	2013.7	2009.2	2004.6	1992.2	1986.5	1979.7	1978.6
25°	2001.2	1997.8	1991.0	1982.0	1977.4	1965.0	1960.4	1951.4	1949.1	1942.3	1941.2
27.5°	1942.3	1937.8	1929.9	1918.5	1910.6	1902.7	1898.2	1891.4	1889.1	1882.3	1881.2
30°	1854.0	1848.3	1832.5	1828.0	1814.3	1806.4	1806.4	1797.4	1798.5	1794.0	1794.0
32.5°	1714.7	1705.6	1693.2	1684.1	1675.0	1670.5	1670.5	1667.1	1669.4	1669.4	1671.7
35°	1530.1	1517.6	1510.8	1505.2	1505.2	1509.7	1523.3	1526.7	1533.5	1539.1	1543.7
37.5°	1293.4	1292.3	1300.2	1307.0	1324.0	1343.2	1367.0	1387.4	1406.6	1420.2	1433.8
40°	1037.4	1065.7	1088.4	1120.1	1146.1	1183.5	1226.6	1261.7	1294.5	1318.3	1343.2
42.5°	809.8	846.0	893.6	940.0	986.5	1037.4	1094.1	1142.8	1185.8	1218.6	1244.7
45°	630.8	680.7	738.4	797.3	857.3	920.8	979.7	1029.5	1074.8	1108.8	1134.8
47.5°	508.5	562.9	628.6	693.1	761.1	827.9	893.6	936.6	974.0	1001.2	1025.0
50°	420.2	477.9	547.0	620.6	688.6	755.4	812.0	853.9	884.5	908.3	923.0
52.5°	351.1	412.2	485.9	559.5	627.4	688.6	739.6	771.3	796.2	813.2	826.8
55°	289.9	348.8	417.9	487.0	553.8	611.6	653.5	677.3	696.5	706.7	714.6
57.5°	236.7	291.1	354.5	417.9	475.7	523.3	556.1	579.9	588.9	596.9	595.7
60°	185.8	236.7	294.5	348.8	398.7	437.2	461.0	474.5	481.3	484.7	482.5
62.5°	146.1	192.5	236.7	284.3	320.5	353.4	376.0	376.0	379.4	380.5	383.9
65°	108.7	143.8	182.3	217.5	246.9	268.4	280.9	284.3	288.8	287.7	285.4
67.5°	80.4	106.5	134.8	160.8	181.2	194.8	203.8	211.8	210.7	208.4	207.3
70°	55.5	72.5	97.4	113.3	128.0	141.6	143.8	145.0	146.1	147.2	145.0
72.5°	38.5	51.0	64.6	78.1	87.2	92.9	98.5	99.7	99.7	99.7	98.5
75°	19.3	26.0	38.5	44.2	52.1	54.4	58.9	58.9	62.3	57.8	56.6
77.5°	17.0	20.4	27.2	31.7	35.1	38.5	39.6	43.0	41.9	39.6	40.8
80°	10.2	12.5	17.0	19.3	23.8	24.9	26.0	27.2	26.0	27.2	27.2
82.5°	7.9	9.1	11.3	11.3	14.7	14.7	15.9	15.9	17.0	17.0	17.0
85°	4.5	7.9	6.8	13.6	9.1	9.1	11.3	13.6	11.3	11.3	13.6
87.5°	4.5	4.5	3.4	4.5	4.5	4.5	5.7	6.8	6.8	7.9	6.8
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: P246130

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2110.0	2110.0	2110.0	2110.0
2.5°	2113.4	2115.6	2112.2	2111.1
5°	2116.7	2116.7	2114.5	2114.5
7.5°	2116.7	2116.7	2113.4	2111.1
10°	2107.7	2107.7	2104.3	2102.0
12.5°	2090.7	2090.7	2089.6	2086.2
15°	2069.2	2069.2	2064.6	2061.3
17.5°	2039.7	2042.0	2036.3	2036.3
20°	2008.0	2006.9	2002.4	2000.1
22.5°	1975.2	1972.9	1971.8	1965.0
25°	1940.1	1937.8	1934.4	1931.0
27.5°	1880.1	1878.9	1875.5	1871.0
30°	1788.3	1787.2	1782.6	1782.6
32.5°	1669.4	1668.3	1663.7	1664.9
35°	1545.9	1550.5	1548.2	1543.7
37.5°	1442.9	1446.3	1448.6	1446.3
40°	1356.8	1367.0	1368.1	1370.4
42.5°	1265.1	1278.7	1283.2	1285.4
45°	1155.2	1167.7	1177.9	1175.6
47.5°	1043.1	1052.1	1061.2	1054.4
50°	935.5	941.1	944.6	944.6
52.5°	833.6	833.6	832.4	833.6
55°	716.9	716.9	712.4	714.6
57.5°	594.6	596.9	593.4	587.8
60°	481.3	475.7	473.4	470.0
62.5°	374.9	374.9	367.0	377.1
65°	280.9	277.5	274.1	272.9
67.5°	203.8	202.7	199.3	198.2
70°	143.8	139.3	138.2	135.9
72.5°	96.3	96.3	94.0	94.0
75°	58.9	53.2	52.1	53.2
77.5°	40.8	39.6	39.6	38.5
80°	27.2	26.0	28.3	24.9
82.5°	17.0	18.1	17.0	18.1
85°	11.3	13.6	12.5	12.5
87.5°	6.8	6.8	6.8	6.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)