

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: P246082

Luminaire Tested: **LSR8B40D010 EC8B40940 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246082
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 EC8B40940 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3884.0 lumens
Efficiency: N/A
Efficacy: 95.0 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

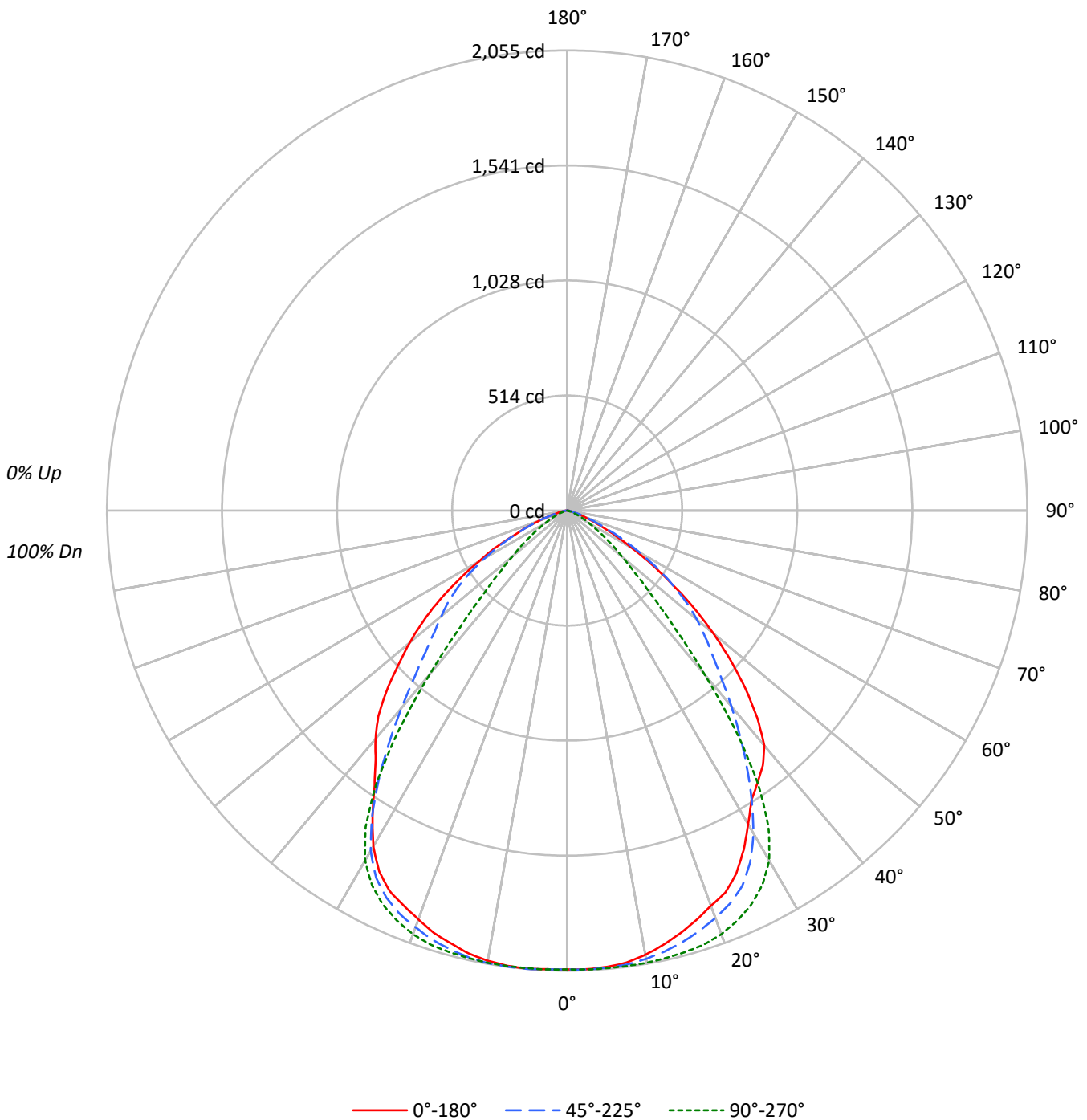
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	63193	63193	63193
5°	63332	63502	63570
10°	63066	64202	63927
15°	62367	65141	63912
20°	61617	66057	63747
25°	60818	66133	63812
30°	57537	64274	61649
35°	55819	55860	56440
40°	55128	38434	53578
45°	49121	23074	49793
50°	40844	15356	44010
55°	30633	10586	37316
60°	20759	7055	28154
65°	12521	4575	19343
70°	6942	2479	11901
75°	3145	1048	6160
80°	2735	1172	4297
85°	3114	1557	4281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.6	5.0
10°-20°	568.0	14.6
20°-30°	862.1	22.2
30°-40°	905.5	23.3
40°-50°	678.8	17.5
50°-60°	435.6	11.2
60°-70°	186.3	4.8
70°-80°	44.0	1.1
80°-90°	8.2	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°	1625.6	41.9
0°-40°	2531.1	65.2
0°-60°	3645.5	93.9
0°-90°	3884.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3884.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2049	2049	2049	2049	2049	
5°	2046	2049	2052	2055	2054	194
15°	1954	1994	2040	2027	2002	551
25°	1788	1850	1944	1908	1876	817
35°	1483	1400	1484	1466	1499	931
45°	1126	921	529	894	1142	863
55°	570	570	197	594	694	517
65°	172	202	63	261	265	183
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°	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3
2.5°	2050.4	2052.6	2051.5	2051.5	2050.4	2051.5	2051.5	2053.7	2053.7	2051.5	2050.4
5°	2046.0	2048.2	2048.2	2046.0	2046.0	2051.5	2048.2	2050.4	2050.4	2049.3	2049.3
7.5°	2036.1	2036.1	2040.5	2037.2	2037.2	2040.5	2039.4	2041.6	2043.8	2044.9	2044.9
10°	2014.1	2016.3	2017.4	2017.4	2018.5	2021.8	2024.0	2028.4	2030.6	2032.8	2033.9
12.5°	1986.6	1989.9	1991.0	1989.9	1993.2	1997.6	2003.1	2008.6	2011.9	2016.3	2019.6
15°	1953.6	1953.6	1955.8	1959.1	1961.3	1967.9	1973.4	1980.0	1988.8	1994.3	1999.8
17.5°	1917.3	1919.5	1922.8	1922.8	1927.2	1938.2	1941.5	1951.4	1961.3	1966.8	1977.8
20°	1877.7	1879.9	1883.2	1885.4	1890.9	1899.7	1906.3	1915.1	1926.1	1936.0	1947.0
22.5°	1846.9	1842.5	1844.7	1846.9	1852.4	1860.1	1867.8	1878.8	1889.8	1899.7	1910.7
25°	1787.5	1788.6	1791.9	1794.1	1800.7	1807.3	1816.1	1829.3	1839.2	1850.2	1862.3
27.5°	1707.2	1708.3	1713.8	1713.8	1719.3	1730.3	1735.8	1746.8	1760.0	1771.0	1785.3
30°	1615.9	1618.1	1618.1	1622.5	1625.8	1631.3	1636.8	1647.8	1654.4	1664.3	1684.1
32.5°	1532.3	1534.5	1533.4	1532.3	1529.0	1527.9	1526.8	1529.0	1531.2	1534.5	1542.2
35°	1482.8	1477.3	1472.9	1465.2	1456.4	1445.4	1435.5	1422.3	1410.2	1400.3	1389.3
37.5°	1435.5	1434.4	1427.8	1416.8	1399.2	1379.4	1356.3	1327.7	1299.1	1268.3	1238.6
40°	1369.5	1366.2	1360.7	1345.3	1325.5	1301.3	1270.5	1235.3	1189.1	1141.8	1093.4
42.5°	1257.3	1258.4	1251.8	1239.7	1221.0	1197.9	1166.0	1127.5	1078.0	1021.9	959.2
45°	1126.4	1126.4	1124.2	1114.3	1101.1	1082.4	1058.2	1026.3	977.9	920.7	853.6
47.5°	990.0	991.1	987.8	985.6	980.1	968.0	950.4	926.2	892.1	837.1	770.0
50°	851.4	851.4	856.9	855.8	855.8	851.4	843.7	829.4	799.7	755.7	693.0
52.5°	712.8	715.0	718.3	722.7	728.2	737.0	728.2	721.6	702.9	668.8	614.9
55°	569.8	572.0	577.5	585.2	591.8	600.6	602.8	602.8	592.9	569.8	529.1
57.5°	447.7	444.4	448.8	455.4	464.2	473.0	479.6	487.3	486.2	470.8	437.8
60°	336.6	337.7	341.0	347.6	354.2	361.9	370.7	377.3	380.6	372.9	352.0
62.5°	245.3	245.3	249.7	256.3	259.6	270.6	276.1	279.4	282.7	281.6	268.4
65°	171.6	173.8	176.0	179.3	182.6	189.2	192.5	199.1	201.3	202.4	192.5
67.5°	121.0	117.7	119.9	122.1	125.4	129.8	136.4	136.4	139.7	139.7	133.1
70°	77.0	77.0	78.1	81.4	83.6	84.7	86.9	89.1	92.4	91.3	91.3
72.5°	51.7	50.6	51.7	52.8	53.9	57.2	57.2	58.3	60.5	61.6	57.2
75°	26.4	27.5	29.7	28.6	31.9	29.7	30.8	34.1	33.0	30.8	30.8
77.5°	22.0	22.0	22.0	20.9	23.1	23.1	22.0	24.2	23.1	23.1	22.0
80°	15.4	16.5	15.4	14.3	15.4	14.3	14.3	14.3	14.3	14.3	13.2
82.5°	12.1	9.9	11.0	9.9	11.0	11.0	9.9	8.8	8.8	9.9	8.8
85°	8.8	6.6	7.7	7.7	6.6	6.6	6.6	6.6	6.6	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°	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3
2.5°	2052.6	2051.5	2053.7	2052.6	2052.6	2051.5	2052.6	2051.5	2053.7	2049.3	2050.4
5°	2052.6	2050.4	2051.5	2052.6	2053.7	2051.5	2051.5	2051.5	2053.7	2051.5	2052.6
7.5°	2048.2	2047.1	2050.4	2052.6	2051.5	2050.4	2052.6	2051.5	2053.7	2052.6	2054.8
10°	2039.4	2040.5	2042.7	2046.0	2047.1	2048.2	2050.4	2050.4	2053.7	2049.3	2051.5
12.5°	2026.2	2030.6	2036.1	2038.3	2042.7	2042.7	2044.9	2046.0	2048.2	2047.1	2050.4
15°	2009.7	2015.2	2021.8	2027.3	2032.8	2036.1	2039.4	2040.5	2043.8	2040.5	2041.6
17.5°	1989.9	1996.5	2006.4	2013.0	2021.8	2025.1	2029.5	2031.7	2035.0	2032.8	2033.9
20°	1962.4	1970.1	1981.1	1991.0	1996.5	2004.2	2009.7	2013.0	2015.2	2013.0	2014.1
22.5°	1923.9	1934.9	1949.2	1956.9	1967.9	1974.5	1975.6	1983.3	1988.8	1983.3	1985.5
25°	1878.8	1889.8	1900.8	1917.3	1927.2	1934.9	1942.6	1943.7	1949.2	1948.1	1947.0
27.5°	1804.0	1818.3	1837.0	1850.2	1863.4	1875.5	1884.3	1886.5	1892.0	1889.8	1890.9
30°	1701.7	1717.1	1734.7	1755.6	1774.3	1786.4	1797.4	1805.1	1810.6	1807.3	1806.2
32.5°	1556.5	1571.9	1590.6	1611.5	1633.5	1651.1	1664.3	1674.2	1680.8	1678.6	1673.1
35°	1390.4	1394.8	1406.9	1423.4	1442.1	1460.8	1472.9	1483.9	1491.6	1493.8	1493.8
37.5°	1219.9	1205.6	1196.8	1196.8	1207.8	1215.5	1226.5	1233.1	1245.2	1249.6	1252.9
40°	1054.9	1021.9	991.1	968.0	952.6	951.5	951.5	954.8	965.8	980.1	993.3
42.5°	907.5	854.7	807.4	764.5	733.7	716.1	708.4	709.5	718.3	731.5	753.5
45°	789.8	723.8	664.4	612.7	570.9	543.4	530.2	529.1	535.7	551.1	575.3
47.5°	698.5	628.1	561.0	501.6	456.5	426.8	411.4	407.0	411.4	425.7	454.3
50°	622.6	550.0	480.7	419.1	370.7	339.9	325.6	320.1	325.6	337.7	366.3
52.5°	552.2	477.4	412.5	353.1	301.4	275.0	259.6	256.3	259.6	273.9	297.0
55°	470.8	407.0	343.2	283.8	238.7	212.3	200.2	196.9	200.2	213.4	237.6
57.5°	390.5	335.5	279.4	225.5	187.0	163.9	152.9	148.5	156.2	165.0	193.6
60°	315.7	271.7	224.4	177.1	145.2	124.3	115.5	114.4	116.6	127.6	147.4
62.5°	247.5	211.2	173.8	135.3	108.9	100.1	89.1	88.0	90.2	96.8	112.2
65°	178.2	155.1	126.5	99.0	78.1	66.0	61.6	62.7	64.9	69.3	83.6
67.5°	124.3	107.8	88.0	69.3	53.9	48.4	44.0	42.9	44.0	51.7	59.4
70°	83.6	73.7	59.4	52.8	37.4	29.7	30.8	27.5	31.9	31.9	38.5
72.5°	55.0	48.4	39.6	30.8	26.4	20.9	20.9	19.8	22.0	23.1	28.6
75°	28.6	22.0	22.0	15.4	11.0	5.5	9.9	8.8	7.7	8.8	11.0
77.5°	19.8	16.5	15.4	12.1	11.0	8.8	8.8	8.8	8.8	9.9	11.0
80°	12.1	12.1	8.8	7.7	6.6	5.5	6.6	6.6	6.6	6.6	7.7
82.5°	7.7	6.6	6.6	5.5	5.5	4.4	4.4	4.4	4.4	4.4	6.6
85°	6.6	4.4	4.4	3.3	4.4	7.7	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°	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3	2049.3
2.5°	2052.6	2053.7	2053.7	2052.6	2052.6	2050.4	2054.8	2051.5	2052.6	2057.0	2053.7
5°	2054.8	2055.9	2055.9	2054.8	2054.8	2054.8	2055.9	2055.9	2054.8	2053.7	2055.9
7.5°	2059.2	2058.1	2058.1	2055.9	2055.9	2053.7	2055.9	2052.6	2054.8	2052.6	2055.9
10°	2053.7	2054.8	2053.7	2052.6	2052.6	2051.5	2051.5	2048.2	2049.3	2046.0	2048.2
12.5°	2050.4	2049.3	2049.3	2047.1	2044.9	2042.7	2041.6	2038.3	2038.3	2030.6	2033.9
15°	2041.6	2042.7	2039.4	2035.0	2032.8	2027.3	2025.1	2020.7	2016.3	2010.8	2011.9
17.5°	2033.9	2030.6	2026.2	2021.8	2013.0	2008.6	2004.2	1997.6	1995.4	1988.8	1986.6
20°	2010.8	2008.6	2003.1	1995.4	1989.9	1980.0	1975.6	1969.0	1963.5	1956.9	1953.6
22.5°	1981.1	1978.9	1972.3	1964.6	1955.8	1951.4	1947.0	1934.9	1929.4	1922.8	1921.7
25°	1943.7	1940.4	1933.8	1925.0	1920.6	1908.5	1904.1	1895.3	1893.1	1886.5	1885.4
27.5°	1886.5	1882.1	1874.4	1863.4	1855.7	1848.0	1843.6	1837.0	1834.8	1828.2	1827.1
30°	1800.7	1795.2	1779.8	1775.4	1762.2	1754.5	1754.5	1745.7	1746.8	1742.4	1742.4
32.5°	1665.4	1656.6	1644.5	1635.7	1626.9	1622.5	1622.5	1619.2	1621.4	1621.4	1623.6
35°	1486.1	1474.0	1467.4	1461.9	1461.9	1466.3	1479.5	1482.8	1489.4	1494.9	1499.3
37.5°	1256.2	1255.1	1262.8	1269.4	1285.9	1304.6	1327.7	1347.5	1366.2	1379.4	1392.6
40°	1007.6	1035.1	1057.1	1087.9	1113.2	1149.5	1191.3	1225.4	1257.3	1280.4	1304.6
42.5°	786.5	821.7	867.9	913.0	958.1	1007.6	1062.6	1109.9	1151.7	1183.6	1208.9
45°	612.7	661.1	717.2	774.4	832.7	894.3	951.5	999.9	1043.9	1076.9	1102.2
47.5°	493.9	546.7	610.5	673.2	739.2	804.1	867.9	909.7	946.0	972.4	995.5
50°	408.1	464.2	531.3	602.8	668.8	733.7	788.7	829.4	859.1	882.2	896.5
52.5°	341.0	400.4	471.9	543.4	609.4	668.8	718.3	749.1	773.3	789.8	803.0
55°	281.6	338.8	405.9	473.0	537.9	594.0	634.7	657.8	676.5	686.4	694.1
57.5°	229.9	282.7	344.3	405.9	462.0	508.2	540.1	563.2	572.0	579.7	578.6
60°	180.4	229.9	286.0	338.8	387.2	424.6	447.7	460.9	467.5	470.8	468.6
62.5°	141.9	187.0	229.9	276.1	311.3	343.2	365.2	365.2	368.5	369.6	372.9
65°	105.6	139.7	177.1	211.2	239.8	260.7	272.8	276.1	280.5	279.4	277.2
67.5°	78.1	103.4	130.9	156.2	176.0	189.2	198.0	205.7	204.6	202.4	201.3
70°	53.9	70.4	94.6	110.0	124.3	137.5	139.7	140.8	141.9	143.0	140.8
72.5°	37.4	49.5	62.7	75.9	84.7	90.2	95.7	96.8	96.8	96.8	95.7
75°	18.7	25.3	37.4	42.9	50.6	52.8	57.2	57.2	60.5	56.1	55.0
77.5°	16.5	19.8	26.4	30.8	34.1	37.4	38.5	41.8	40.7	38.5	39.6
80°	9.9	12.1	16.5	18.7	23.1	24.2	25.3	26.4	25.3	26.4	26.4
82.5°	7.7	8.8	11.0	11.0	14.3	14.3	15.4	15.4	16.5	16.5	16.5
85°	4.4	7.7	6.6	13.2	8.8	8.8	11.0	13.2	11.0	11.0	13.2
87.5°	4.4	4.4	3.3	4.4	4.4	4.4	5.5	6.6	6.6	7.7	6.6
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: P246082

CATALOG NUMBER: LSR8B40D010 EC8B40940 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2049.3	2049.3	2049.3	2049.3
2.5°	2052.6	2054.8	2051.5	2050.4
5°	2055.9	2055.9	2053.7	2053.7
7.5°	2055.9	2055.9	2052.6	2050.4
10°	2047.1	2047.1	2043.8	2041.6
12.5°	2030.6	2030.6	2029.5	2026.2
15°	2009.7	2009.7	2005.3	2002.0
17.5°	1981.1	1983.3	1977.8	1977.8
20°	1950.3	1949.2	1944.8	1942.6
22.5°	1918.4	1916.2	1915.1	1908.5
25°	1884.3	1882.1	1878.8	1875.5
27.5°	1826.0	1824.9	1821.6	1817.2
30°	1736.9	1735.8	1731.4	1731.4
32.5°	1621.4	1620.3	1615.9	1617.0
35°	1501.5	1505.9	1503.7	1499.3
37.5°	1401.4	1404.7	1406.9	1404.7
40°	1317.8	1327.7	1328.8	1331.0
42.5°	1228.7	1241.9	1246.3	1248.5
45°	1122.0	1134.1	1144.0	1141.8
47.5°	1013.1	1021.9	1030.7	1024.1
50°	908.6	914.1	917.4	917.4
52.5°	809.6	809.6	808.5	809.6
55°	696.3	696.3	691.9	694.1
57.5°	577.5	579.7	576.4	570.9
60°	467.5	462.0	459.8	456.5
62.5°	364.1	364.1	356.4	366.3
65°	272.8	269.5	266.2	265.1
67.5°	198.0	196.9	193.6	192.5
70°	139.7	135.3	134.2	132.0
72.5°	93.5	93.5	91.3	91.3
75°	57.2	51.7	50.6	51.7
77.5°	39.6	38.5	38.5	37.4
80°	26.4	25.3	27.5	24.2
82.5°	16.5	17.6	16.5	17.6
85°	11.0	13.2	12.1	12.1
87.5°	6.6	6.6	6.6	6.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)