

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: P244222

Luminaire Tested: **LSR8B40D010 EC8B40927 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244222
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: LSR8B40D010 EC8B40927 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3621.4 lumens
Efficiency: N/A
Efficacy: 88.5 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

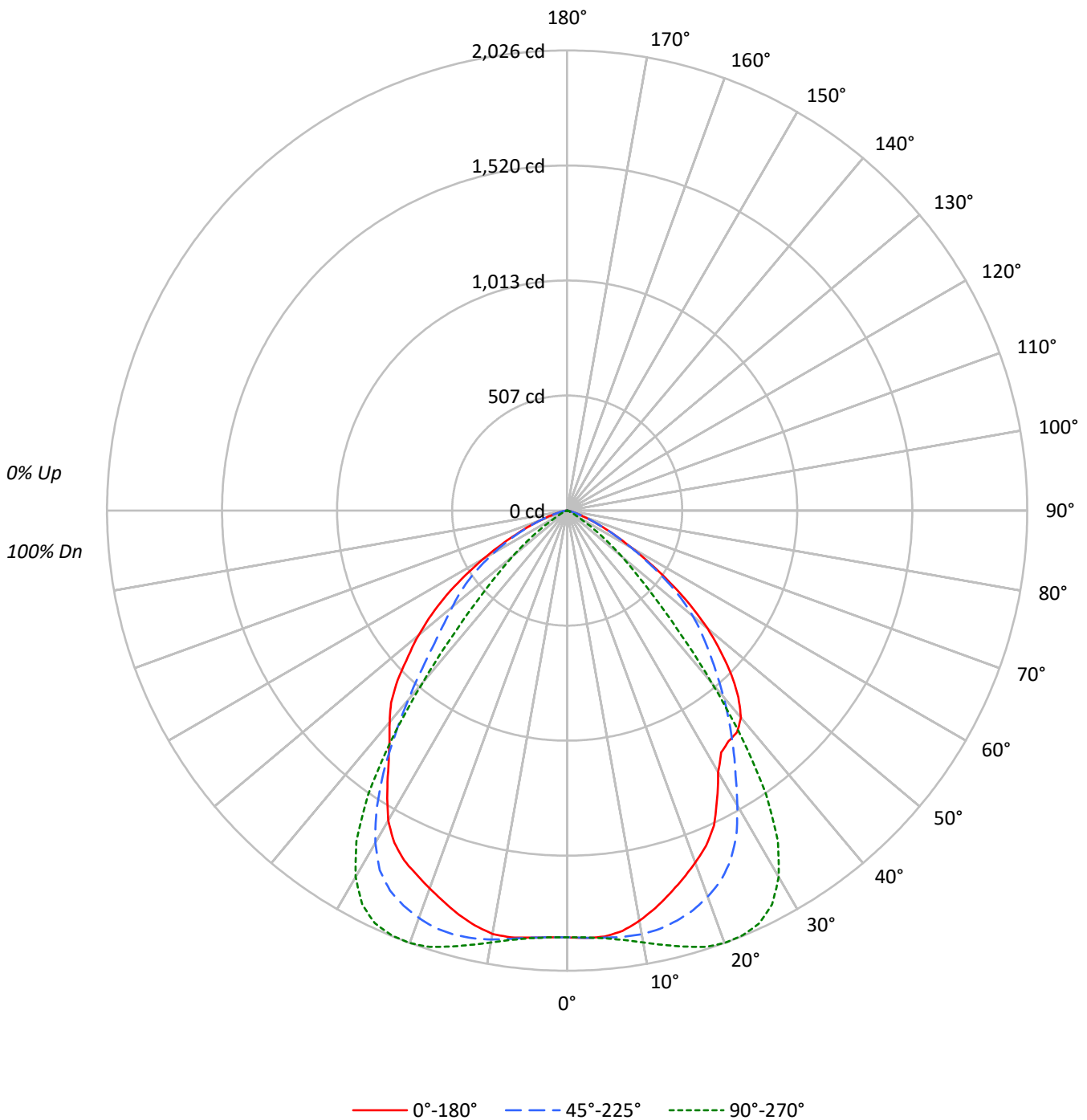
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	180.7	5.0
10°-20°	535.2	14.8
20°-30°	816.5	22.5
30°-40°	852.0	23.5
40°-50°	640.0	17.7
50°-60°	393.8	10.9
60°-70°	160.3	4.4
70°-80°	37.8	1.0
80°-90°	5.2	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°	1532.4	42.3
0°-40°	2384.4	65.8
0°-60°	3418.2	94.4
0°-90°	3621.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3621.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1879	1879	1879	1879	1879	
5°	1883	1888	1890	1888	1888	178
15°	1746	1869	1987	1932	1842	492
25°	1530	1701	2004	1846	1699	695
35°	1239	1274	1527	1411	1371	783
45°	1023	886	552	825	1055	781
55°	552	524	145	524	647	497
65°	172	174	22	234	248	180
75°	30	30	4	53	55	36
85°	3	3	1	7	9	4
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°	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6
2.5°	1883.6	1880.7	1883.6	1883.6	1884.6	1882.7	1883.6	1884.6	1882.7	1882.7	1882.7
5°	1882.7	1880.7	1882.7	1881.7	1883.6	1883.6	1885.6	1885.6	1887.6	1887.6	1890.7
7.5°	1866.7	1862.7	1866.7	1869.6	1871.7	1875.7	1880.7	1884.6	1888.6	1892.6	1897.6
10°	1833.8	1833.8	1836.8	1842.8	1848.7	1855.7	1864.7	1874.7	1884.6	1893.6	1902.6
12.5°	1792.9	1789.9	1795.8	1803.8	1812.8	1823.8	1837.8	1852.8	1868.7	1886.6	1900.6
15°	1746.0	1743.1	1750.0	1758.0	1769.0	1784.9	1801.9	1821.8	1844.8	1868.7	1891.6
17.5°	1698.2	1697.2	1704.2	1715.2	1724.1	1741.0	1763.0	1787.0	1812.8	1844.8	1874.7
20°	1649.4	1648.4	1655.3	1664.3	1676.2	1692.2	1714.2	1742.1	1773.0	1808.9	1843.8
22.5°	1598.4	1599.4	1605.4	1615.4	1625.4	1642.3	1665.2	1693.2	1727.1	1765.9	1804.8
25°	1529.7	1524.7	1532.6	1542.6	1559.6	1573.5	1595.5	1625.4	1660.3	1701.1	1747.0
27.5°	1429.9	1429.0	1436.0	1444.8	1459.8	1476.8	1500.8	1531.7	1568.6	1613.4	1658.2
30°	1330.2	1332.2	1335.1	1344.1	1354.2	1371.1	1395.0	1421.0	1455.9	1498.7	1546.6
32.5°	1262.4	1262.4	1266.4	1272.4	1279.4	1288.4	1305.3	1324.2	1351.1	1381.0	1415.9
35°	1239.4	1235.5	1239.4	1240.4	1241.4	1243.5	1246.4	1252.5	1261.4	1274.4	1287.3
37.5°	1229.5	1226.5	1226.5	1222.5	1217.5	1211.5	1203.5	1194.6	1184.6	1171.7	1161.7
40°	1190.6	1188.6	1186.6	1182.6	1171.7	1159.6	1146.7	1125.8	1102.8	1070.9	1039.0
42.5°	1115.9	1113.9	1112.9	1104.9	1094.9	1080.9	1065.9	1044.0	1015.1	974.2	928.4
45°	1023.1	1019.1	1016.1	1009.1	1002.2	990.2	976.3	956.2	927.3	885.5	830.6
47.5°	915.4	913.4	912.4	909.4	902.5	895.4	886.5	870.5	844.5	804.7	747.9
50°	806.7	802.7	804.7	803.7	800.8	795.7	789.8	778.8	758.8	722.9	671.1
52.5°	682.1	682.1	681.1	684.0	685.0	684.0	685.0	673.1	656.1	629.2	585.3
55°	552.4	552.4	555.4	559.5	563.4	564.4	563.4	558.4	546.4	524.5	485.7
57.5°	430.8	428.7	434.8	440.8	444.7	448.8	445.7	441.8	434.8	416.8	386.9
60°	328.0	328.0	332.1	336.0	340.0	344.0	343.0	342.0	336.0	324.1	300.2
62.5°	241.3	242.3	242.3	245.2	249.3	253.2	256.3	253.2	250.3	242.3	226.4
65°	172.5	171.5	172.5	175.5	178.5	182.5	184.5	183.5	180.5	174.5	162.6
67.5°	115.6	114.6	118.7	119.7	121.6	125.7	124.6	125.7	124.6	119.7	109.7
70°	75.8	73.8	75.8	74.8	77.7	78.8	80.8	81.8	80.8	77.7	74.8
72.5°	46.9	45.9	46.9	47.9	48.8	49.8	51.9	51.9	50.8	48.8	44.9
75°	29.9	26.9	27.9	26.0	27.9	27.9	29.9	30.9	29.9	29.9	27.9
77.5°	18.0	18.0	18.0	18.0	18.0	18.0	18.0	19.0	19.9	18.0	17.0
80°	9.0	9.0	10.0	10.0	10.0	11.0	10.0	10.0	10.0	11.0	8.0
82.5°	7.0	6.0	6.0	6.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0
85°	3.0	3.9	3.0	2.0	3.0	3.0	3.9	3.0	3.0	3.0	3.9
87.5°	1.0	1.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	2.0	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°	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6
2.5°	1883.6	1881.7	1881.7	1880.7	1882.7	1880.7	1881.7	1880.7	1880.7	1882.7	1880.7
5°	1890.7	1891.6	1889.7	1888.6	1891.6	1891.6	1891.6	1889.7	1889.7	1890.7	1889.7
7.5°	1900.6	1902.6	1903.6	1904.6	1906.5	1907.6	1907.6	1906.5	1905.5	1908.6	1904.6
10°	1911.6	1914.5	1920.5	1923.5	1928.5	1928.5	1930.5	1930.5	1928.5	1930.5	1929.5
12.5°	1907.6	1925.6	1935.4	1942.4	1949.4	1955.5	1957.4	1958.4	1957.4	1961.4	1957.4
15°	1914.5	1929.5	1945.5	1957.4	1970.4	1977.4	1979.3	1987.3	1989.3	1990.4	1984.4
17.5°	1903.6	1930.5	1947.5	1965.4	1984.4	1997.3	2009.2	2014.3	2015.3	2017.2	2009.2
20°	1878.6	1908.6	1934.4	1960.4	1982.4	2002.3	2012.3	2026.2	2022.3	2030.2	2019.3
22.5°	1844.8	1878.6	1911.6	1945.5	1968.4	1992.4	2013.3	2023.2	2028.3	2028.3	2016.2
25°	1790.9	1830.8	1866.7	1901.6	1936.5	1965.4	1989.3	2004.3	2007.3	2006.3	1992.4
27.5°	1707.2	1750.0	1791.9	1831.8	1874.7	1908.6	1936.5	1954.5	1959.4	1959.4	1944.4
30°	1591.4	1637.3	1678.3	1726.1	1770.0	1807.9	1846.8	1862.7	1871.7	1871.7	1854.7
32.5°	1453.8	1492.8	1530.7	1577.5	1625.4	1668.3	1705.2	1727.1	1738.0	1737.0	1722.2
35°	1304.3	1323.2	1352.1	1387.0	1429.9	1469.8	1505.7	1526.6	1545.6	1544.6	1530.7
37.5°	1154.7	1149.8	1152.7	1165.7	1192.6	1220.5	1248.4	1268.4	1284.3	1291.4	1288.4
40°	1008.1	982.2	957.3	948.3	950.3	960.3	975.3	990.2	1008.1	1017.1	1021.0
42.5°	876.5	832.6	788.7	755.9	736.9	730.9	737.9	742.8	753.9	766.8	779.7
45°	770.8	712.0	654.2	603.3	571.4	552.4	548.4	552.4	558.4	571.4	588.4
47.5°	684.0	615.3	550.5	493.5	446.7	421.8	414.8	412.9	418.8	430.8	453.7
50°	607.3	538.4	466.6	400.8	352.0	324.1	314.1	310.2	317.1	326.0	347.0
52.5°	523.5	455.7	381.9	318.0	267.2	238.3	227.4	221.4	225.3	237.4	258.3
55°	432.8	369.9	303.2	237.4	188.4	161.5	148.6	144.6	148.6	161.5	182.5
57.5°	342.0	289.1	233.3	171.5	127.6	100.7	87.8	83.8	94.7	99.7	121.6
60°	267.2	224.3	176.5	125.7	87.8	66.8	53.9	50.8	55.8	64.8	82.8
62.5°	200.5	173.5	135.6	89.8	64.8	42.9	35.9	33.0	35.9	42.9	56.8
65°	145.6	124.6	94.7	65.8	43.9	32.0	24.0	21.9	25.0	29.9	41.8
67.5°	99.7	83.8	65.8	45.9	29.9	19.9	17.0	17.0	18.0	21.9	30.9
70°	64.8	54.9	41.8	29.9	19.9	15.0	12.9	11.0	12.9	16.0	20.9
72.5°	40.8	34.9	26.9	20.9	15.0	11.0	9.0	8.0	10.0	11.9	16.0
75°	25.0	19.0	14.0	11.0	8.0	8.0	8.0	3.9	5.0	8.0	10.0
77.5°	15.0	12.9	11.0	9.0	7.0	3.9	3.9	3.9	5.0	6.0	9.0
80°	8.0	7.0	5.0	5.0	3.9	3.0	3.9	3.0	2.0	5.0	6.0
82.5°	5.0	3.9	3.9	3.9	5.0	2.0	3.0	2.0	3.0	3.9	3.0
85°	3.0	3.0	3.0	2.0	5.0	2.0	2.0	1.0	1.0	2.0	2.0
87.5°	0.0	1.0	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6	1878.6
2.5°	1881.7	1880.7	1881.7	1880.7	1880.7	1880.7	1881.7	1881.7	1880.7	1880.7	1882.7
5°	1889.7	1889.7	1889.7	1888.6	1887.6	1887.6	1889.7	1889.7	1886.6	1889.7	1889.7
7.5°	1906.5	1903.6	1906.5	1902.6	1900.6	1901.6	1902.6	1900.6	1898.6	1899.6	1899.6
10°	1928.5	1925.6	1925.6	1922.5	1919.6	1917.6	1915.5	1910.6	1905.5	1904.6	1900.6
12.5°	1954.5	1949.4	1946.5	1940.5	1935.4	1928.5	1922.5	1914.5	1904.6	1897.6	1890.7
15°	1980.3	1972.4	1965.4	1955.5	1944.4	1932.5	1919.6	1906.5	1890.7	1876.6	1864.7
17.5°	2001.3	1990.4	1977.4	1961.4	1945.5	1927.5	1908.6	1889.7	1866.7	1848.7	1834.8
20°	2008.2	1992.4	1975.4	1954.5	1933.5	1908.6	1884.6	1859.7	1833.8	1814.8	1798.9
22.5°	1999.4	1980.3	1959.4	1937.5	1909.6	1882.7	1854.7	1825.8	1802.8	1776.9	1762.0
25°	1974.4	1951.4	1928.5	1902.6	1875.7	1845.8	1815.9	1785.9	1758.0	1744.1	1725.1
27.5°	1923.5	1898.6	1873.7	1846.8	1815.9	1785.9	1755.0	1726.1	1702.1	1683.2	1672.2
30°	1833.8	1804.8	1775.9	1747.0	1720.1	1689.2	1660.3	1636.3	1612.4	1597.5	1586.5
32.5°	1696.2	1670.3	1641.4	1613.4	1588.5	1562.5	1538.7	1517.7	1500.8	1490.7	1482.8
35°	1510.6	1484.8	1462.8	1442.9	1421.9	1411.0	1396.0	1384.1	1377.1	1373.1	1372.0
37.5°	1277.3	1262.4	1255.4	1251.4	1247.4	1244.5	1246.4	1251.4	1255.4	1262.4	1270.4
40°	1028.0	1041.1	1045.0	1059.0	1071.9	1088.9	1107.9	1129.8	1147.7	1170.7	1186.6
42.5°	800.8	824.6	852.5	882.4	914.4	945.3	983.2	1018.1	1050.0	1078.9	1103.9
45°	615.3	652.2	694.0	736.9	779.7	824.6	870.5	913.4	951.3	982.2	1008.1
47.5°	479.6	520.5	574.4	627.2	679.1	731.9	782.8	827.7	859.5	889.4	912.4
50°	379.9	426.8	485.7	546.4	603.3	659.1	712.9	754.9	786.7	810.7	827.7
52.5°	294.2	350.0	409.8	473.6	534.5	595.4	645.2	684.0	710.0	730.9	743.8
55°	219.4	274.3	338.1	403.9	465.6	524.5	571.4	605.2	628.2	640.1	647.1
57.5°	158.5	208.5	272.2	338.1	393.9	449.8	487.6	518.5	531.4	538.4	541.5
60°	115.6	161.5	218.4	275.2	328.0	372.9	405.9	426.8	436.7	440.8	439.8
62.5°	84.7	124.6	173.5	221.4	264.3	301.2	327.0	341.0	346.0	348.0	345.0
65°	64.8	95.7	137.6	174.5	207.4	234.3	253.2	262.2	265.3	264.3	262.2
67.5°	47.9	71.8	102.7	130.6	154.6	175.5	185.5	193.5	195.4	192.5	189.5
70°	33.9	52.9	74.8	93.7	111.7	123.6	134.7	135.6	135.6	134.7	132.6
72.5°	24.0	36.9	50.8	63.8	74.8	83.8	87.8	90.8	89.8	88.8	86.7
75°	16.0	23.0	36.9	39.9	49.8	52.9	56.8	56.8	57.8	54.9	54.9
77.5°	10.0	16.0	21.9	26.0	29.9	33.9	35.9	35.9	36.9	35.9	35.9
80°	6.0	10.0	11.9	18.0	18.0	20.9	21.9	23.0	20.9	24.0	20.9
82.5°	3.9	6.0	9.0	9.0	11.0	12.9	12.9	14.0	14.0	12.9	12.9
85°	3.0	3.9	5.0	6.0	6.0	7.0	6.0	6.0	7.0	8.0	7.0
87.5°	1.0	2.0	1.0	2.0	2.0	3.9	3.0	3.0	3.0	3.9	3.9
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: P244222

CATALOG NUMBER: LSR8B40D010 EC8B40927 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1878.6	1878.6	1878.6	1878.6
2.5°	1880.7	1881.7	1880.7	1880.7
5°	1889.7	1888.6	1889.7	1887.6
7.5°	1896.6	1896.6	1895.6	1895.6
10°	1896.6	1892.6	1892.6	1892.6
12.5°	1881.7	1876.6	1873.7	1871.7
15°	1855.7	1846.8	1842.8	1841.7
17.5°	1821.8	1813.8	1808.9	1805.8
20°	1782.9	1774.9	1769.0	1770.0
22.5°	1749.0	1740.0	1736.1	1734.1
25°	1715.2	1704.2	1701.1	1699.2
27.5°	1660.3	1654.3	1651.3	1648.4
30°	1576.5	1573.5	1568.6	1575.6
32.5°	1479.8	1474.8	1470.8	1473.9
35°	1373.1	1370.1	1373.1	1371.1
37.5°	1275.4	1278.3	1282.4	1284.3
40°	1198.6	1209.6	1213.5	1215.6
42.5°	1121.9	1134.8	1142.8	1147.7
45°	1027.1	1040.1	1049.0	1055.0
47.5°	929.4	940.4	949.3	948.3
50°	840.6	846.6	850.6	854.6
52.5°	750.8	750.8	751.8	751.8
55°	649.1	647.1	646.2	647.1
57.5°	537.4	535.5	534.5	531.4
60°	435.7	429.8	425.8	425.8
62.5°	341.0	334.0	331.1	330.1
65°	256.3	255.3	249.3	248.3
67.5°	185.5	181.5	177.5	178.5
70°	130.6	124.6	124.6	122.6
72.5°	84.7	81.8	80.8	80.8
75°	52.9	52.9	50.8	54.9
77.5°	34.9	34.9	33.9	34.9
80°	20.9	20.9	20.9	19.9
82.5°	12.9	14.0	12.9	12.9
85°	7.0	8.0	6.0	9.0
87.5°	3.9	5.0	3.9	5.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)