

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: P246100

Luminaire Tested: **LSR8B40D010 EC8B40930 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246100
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 EC8B40930 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3600.6 lumens
Efficiency: N/A
Efficacy: 88.0 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

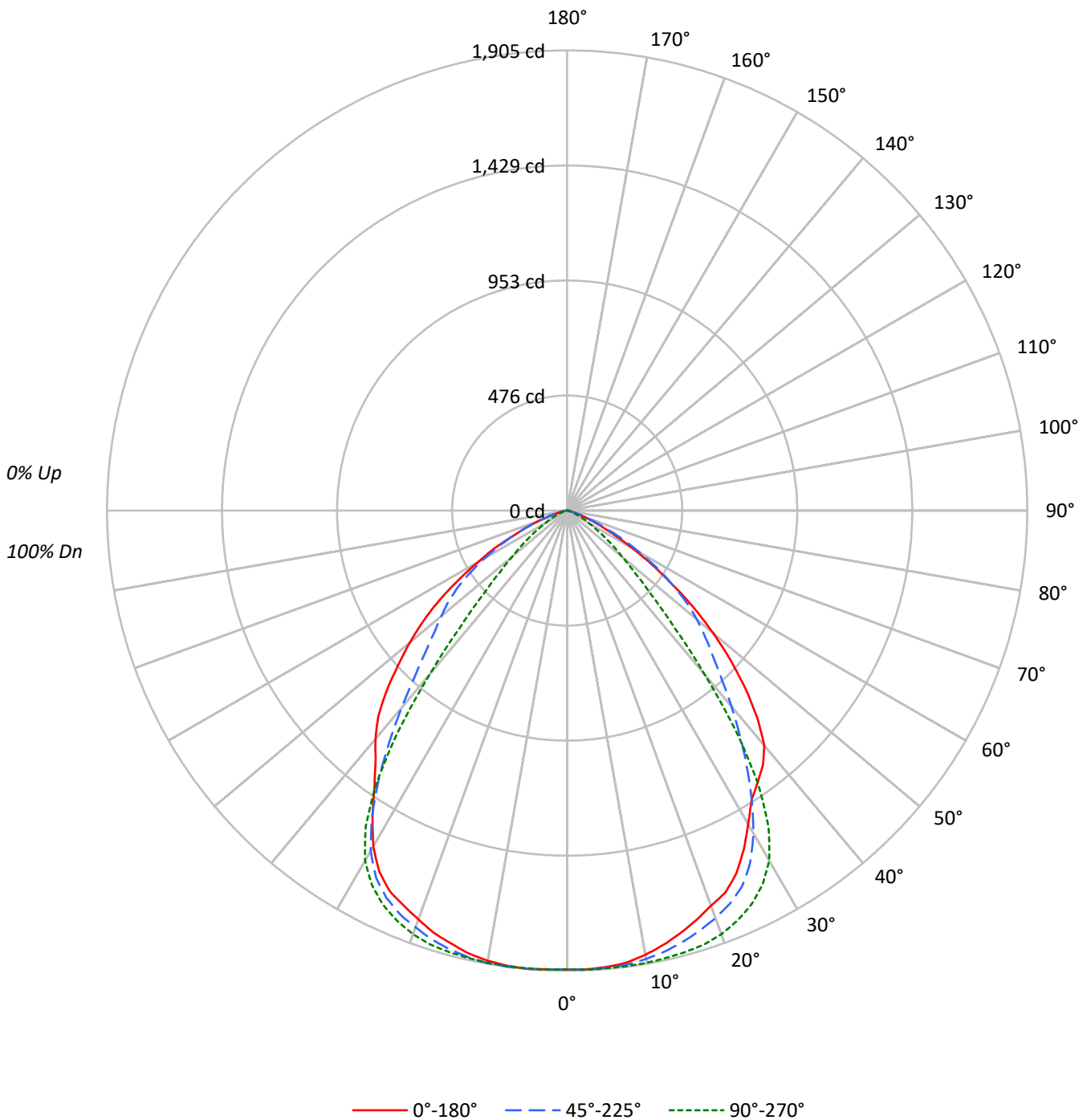
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	52	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°	181.3	5.0
10°-20°	526.5	14.6
20°-30°	799.2	22.2
30°-40°	839.4	23.3
40°-50°	629.3	17.5
50°-60°	403.8	11.2
60°-70°	172.7	4.8
70°-80°	40.8	1.1
80°-90°	7.6	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°	1507.0	41.9
0°-40°	2346.4	65.2
0°-60°	3379.5	93.9
0°-90°	3600.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3600.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1900	1900	1900	1900	1900	
5°	1897	1900	1902	1905	1904	180
15°	1811	1849	1892	1879	1856	511
25°	1657	1715	1802	1769	1739	757
35°	1375	1298	1376	1359	1390	863
45°	1044	854	490	829	1058	800
55°	528	528	182	551	644	479
65°	159	188	58	242	246	170
75°	24	29	8	49	48	36
85°	8	5	4	8	11	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°	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8
2.5°	1900.8	1902.9	1901.8	1901.8	1900.8	1901.8	1901.8	1903.9	1903.9	1901.8	1900.8
5°	1896.7	1898.7	1898.7	1896.7	1896.7	1901.8	1898.7	1900.8	1900.8	1899.8	1899.8
7.5°	1887.5	1887.5	1891.6	1888.5	1888.5	1891.6	1890.6	1892.6	1894.7	1895.7	1895.7
10°	1867.1	1869.2	1870.2	1870.2	1871.3	1874.3	1876.3	1880.4	1882.4	1884.5	1885.5
12.5°	1841.7	1844.7	1845.7	1844.7	1847.7	1851.9	1856.9	1862.1	1865.1	1869.2	1872.3
15°	1811.1	1811.1	1813.1	1816.1	1818.3	1824.3	1829.4	1835.5	1843.7	1848.8	1853.9
17.5°	1777.5	1779.5	1782.5	1782.5	1786.6	1796.7	1799.9	1809.1	1818.3	1823.3	1833.5
20°	1740.7	1742.7	1745.8	1747.9	1752.9	1761.1	1767.3	1775.3	1785.5	1794.7	1804.9
22.5°	1712.1	1708.1	1710.1	1712.1	1717.3	1724.4	1731.5	1741.7	1751.9	1761.1	1771.3
25°	1657.1	1658.1	1661.2	1663.2	1669.3	1675.4	1683.6	1695.8	1705.0	1715.2	1726.5
27.5°	1582.6	1583.6	1588.8	1588.8	1593.8	1604.0	1609.2	1619.4	1631.6	1641.8	1655.0
30°	1498.0	1500.0	1500.0	1504.2	1507.2	1512.2	1517.4	1527.6	1533.6	1542.8	1561.2
32.5°	1420.5	1422.5	1421.5	1420.5	1417.4	1416.4	1415.4	1417.4	1419.5	1422.5	1429.6
35°	1374.6	1369.5	1365.5	1358.3	1350.1	1339.9	1330.7	1318.5	1307.3	1298.1	1287.9
37.5°	1330.7	1329.7	1323.7	1313.4	1297.1	1278.7	1257.3	1230.9	1204.3	1175.7	1148.2
40°	1269.5	1266.5	1261.5	1247.1	1228.7	1206.3	1177.8	1145.2	1102.3	1058.4	1013.6
42.5°	1165.5	1166.6	1160.5	1149.2	1131.9	1110.5	1080.9	1045.2	999.4	947.4	889.2
45°	1044.2	1044.2	1042.2	1033.0	1020.8	1003.4	981.0	951.4	906.6	853.5	791.3
47.5°	917.8	918.8	915.7	913.7	908.6	897.4	881.1	858.6	827.0	776.1	713.9
50°	789.3	789.3	794.3	793.3	793.3	789.3	782.1	768.9	741.3	700.5	642.4
52.5°	660.8	662.8	665.9	670.0	675.1	683.2	675.1	668.9	651.6	620.0	570.0
55°	528.2	530.2	535.4	542.5	548.6	556.8	558.8	558.8	549.6	528.2	490.5
57.5°	415.0	412.0	416.1	422.2	430.4	438.5	444.6	451.8	450.8	436.4	405.9
60°	312.1	313.1	316.1	322.3	328.3	335.5	343.7	349.8	352.9	345.7	326.3
62.5°	227.5	227.5	231.5	237.5	240.7	250.9	255.9	259.1	262.1	261.1	248.9
65°	159.1	161.1	163.1	166.2	169.3	175.4	178.5	184.5	186.6	187.7	178.5
67.5°	112.2	109.1	111.2	113.2	116.2	120.4	126.4	126.4	129.5	129.5	123.4
70°	71.4	71.4	72.4	75.4	77.5	78.5	80.6	82.6	85.6	84.6	84.6
72.5°	48.0	46.9	48.0	49.0	50.0	53.0	53.0	54.0	56.0	57.1	53.0
75°	24.4	25.4	27.6	26.6	29.6	27.6	28.6	31.6	30.6	28.6	28.6
77.5°	20.4	20.4	20.4	19.4	21.4	21.4	20.4	22.4	21.4	21.4	20.4
80°	14.2	15.2	14.2	13.2	14.2	13.2	13.2	13.2	13.2	13.2	12.2
82.5°	11.2	9.2	10.2	9.2	10.2	10.2	9.2	8.2	8.2	9.2	8.2
85°	8.2	6.2	7.2	7.2	6.2	6.2	6.2	6.2	6.2	5.0	5.0
87.5°	5.0	3.0	3.0	3.0	4.0	4.0	4.0	3.0	4.0	4.0	2.0
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°	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8
2.5°	1902.9	1901.8	1903.9	1902.9	1902.9	1901.8	1902.9	1901.8	1903.9	1899.8	1900.8
5°	1902.9	1900.8	1901.8	1902.9	1903.9	1901.8	1901.8	1901.8	1903.9	1901.8	1902.9
7.5°	1898.7	1897.7	1900.8	1902.9	1901.8	1900.8	1902.9	1901.8	1903.9	1902.9	1904.9
10°	1890.6	1891.6	1893.7	1896.7	1897.7	1898.7	1900.8	1900.8	1903.9	1899.8	1901.8
12.5°	1878.3	1882.4	1887.5	1889.6	1893.7	1893.7	1895.7	1896.7	1898.7	1897.7	1900.8
15°	1863.1	1868.1	1874.3	1879.4	1884.5	1887.5	1890.6	1891.6	1894.7	1891.6	1892.6
17.5°	1844.7	1850.8	1860.0	1866.1	1874.3	1877.3	1881.4	1883.5	1886.5	1884.5	1885.5
20°	1819.2	1826.3	1836.5	1845.7	1850.8	1857.9	1863.1	1866.1	1868.1	1866.1	1867.1
22.5°	1783.5	1793.7	1806.9	1814.1	1824.3	1830.5	1831.5	1838.6	1843.7	1838.6	1840.7
25°	1741.7	1751.9	1762.1	1777.5	1786.6	1793.7	1800.9	1801.9	1806.9	1805.9	1804.9
27.5°	1672.4	1685.6	1702.9	1715.2	1727.5	1738.7	1746.9	1748.9	1753.9	1751.9	1752.9
30°	1577.6	1591.8	1608.2	1627.5	1644.8	1656.1	1666.3	1673.4	1678.5	1675.4	1674.4
32.5°	1443.0	1457.2	1474.6	1494.0	1514.4	1530.6	1542.8	1552.0	1558.2	1556.2	1551.0
35°	1288.9	1293.1	1304.3	1319.5	1336.9	1354.2	1365.5	1375.6	1382.8	1384.8	1384.8
37.5°	1130.9	1117.6	1109.5	1109.5	1119.7	1126.8	1137.0	1143.1	1154.4	1158.4	1161.5
40°	978.0	947.4	918.8	897.4	883.1	882.1	882.1	885.1	895.3	908.6	920.8
42.5°	841.3	792.3	748.5	708.7	680.2	663.9	656.7	657.7	665.9	678.1	698.5
45°	732.1	671.0	615.9	568.0	529.2	503.8	491.6	490.5	496.6	510.8	533.4
47.5°	647.5	582.2	520.0	465.0	423.2	395.6	381.4	377.3	381.4	394.6	421.2
50°	577.2	509.8	445.6	388.5	343.7	315.1	301.9	296.7	301.9	313.1	339.6
52.5°	511.8	442.6	382.4	327.3	279.4	254.9	240.7	237.5	240.7	253.9	275.3
55°	436.4	377.3	318.1	263.1	221.3	196.8	185.6	182.5	185.6	197.9	220.3
57.5°	362.0	311.0	259.1	209.1	173.3	151.9	141.7	137.7	144.8	152.9	179.5
60°	292.7	251.9	208.1	164.2	134.6	115.2	107.1	106.0	108.1	118.3	136.6
62.5°	229.5	195.8	161.1	125.4	101.0	92.8	82.6	81.6	83.6	89.7	104.0
65°	165.2	143.8	117.3	91.8	72.4	61.2	57.1	58.2	60.2	64.2	77.5
67.5°	115.2	99.9	81.6	64.2	50.0	44.8	40.8	39.8	40.8	48.0	55.0
70°	77.5	68.3	55.0	49.0	34.6	27.6	28.6	25.4	29.6	29.6	35.6
72.5°	51.0	44.8	36.7	28.6	24.4	19.4	19.4	18.4	20.4	21.4	26.6
75°	26.6	20.4	20.4	14.2	10.2	5.0	9.2	8.2	7.2	8.2	10.2
77.5°	18.4	15.2	14.2	11.2	10.2	8.2	8.2	8.2	8.2	9.2	10.2
80°	11.2	11.2	8.2	7.2	6.2	5.0	6.2	6.2	6.2	6.2	7.2
82.5°	7.2	6.2	6.2	5.0	5.0	4.0	4.0	4.0	4.0	4.0	6.2
85°	6.2	4.0	4.0	3.0	4.0	7.2	3.0	4.0	4.0	4.0	3.0
87.5°	2.0	3.0	3.0	3.0	2.0	1.0	2.0	3.0	3.0	5.0	4.0
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°	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8	1899.8
2.5°	1902.9	1903.9	1903.9	1902.9	1902.9	1900.8	1904.9	1901.8	1902.9	1906.9	1903.9
5°	1904.9	1905.9	1905.9	1904.9	1904.9	1904.9	1905.9	1905.9	1904.9	1903.9	1905.9
7.5°	1909.0	1907.9	1907.9	1905.9	1905.9	1903.9	1905.9	1902.9	1904.9	1902.9	1905.9
10°	1903.9	1904.9	1903.9	1902.9	1902.9	1901.8	1901.8	1898.7	1899.8	1896.7	1898.7
12.5°	1900.8	1899.8	1899.8	1897.7	1895.7	1893.7	1892.6	1889.6	1889.6	1882.4	1885.5
15°	1892.6	1893.7	1890.6	1886.5	1884.5	1879.4	1877.3	1873.3	1869.2	1864.1	1865.1
17.5°	1885.5	1882.4	1878.3	1874.3	1866.1	1862.1	1857.9	1851.9	1849.8	1843.7	1841.7
20°	1864.1	1862.1	1856.9	1849.8	1844.7	1835.5	1831.5	1825.3	1820.3	1814.1	1811.1
22.5°	1836.5	1834.5	1828.4	1821.3	1813.1	1809.1	1804.9	1793.7	1788.7	1782.5	1781.5
25°	1801.9	1798.9	1792.7	1784.5	1780.5	1769.3	1765.1	1757.1	1754.9	1748.9	1747.9
27.5°	1748.9	1744.7	1737.7	1727.5	1720.3	1713.1	1709.1	1702.9	1700.9	1694.8	1693.8
30°	1669.3	1664.2	1649.9	1645.9	1633.6	1626.5	1626.5	1618.3	1619.4	1615.2	1615.2
32.5°	1543.8	1535.8	1524.6	1516.4	1508.2	1504.2	1504.2	1501.0	1503.1	1503.1	1505.2
35°	1377.7	1366.5	1360.3	1355.3	1355.3	1359.3	1371.5	1374.6	1380.7	1385.8	1389.9
37.5°	1164.5	1163.5	1170.7	1176.8	1192.1	1209.4	1230.9	1249.2	1266.5	1278.7	1290.9
40°	934.1	959.6	980.0	1008.6	1032.0	1065.6	1104.4	1136.0	1165.5	1187.0	1209.4
42.5°	729.1	761.7	804.5	846.4	888.2	934.1	985.1	1029.0	1067.6	1097.2	1120.7
45°	568.0	612.9	664.9	717.9	771.9	829.1	882.1	927.0	967.8	998.4	1021.8
47.5°	457.8	506.8	566.0	624.1	685.3	745.5	804.5	843.3	877.0	901.4	922.9
50°	378.3	430.4	492.6	558.8	620.0	680.2	731.1	768.9	796.5	817.9	831.1
52.5°	316.1	371.2	437.5	503.8	564.9	620.0	665.9	694.5	716.9	732.1	744.5
55°	261.1	314.1	376.3	438.5	498.6	550.6	588.4	609.8	627.1	636.3	643.5
57.5°	213.1	262.1	319.1	376.3	428.3	471.2	500.8	522.2	530.2	537.4	536.4
60°	167.3	213.1	265.1	314.1	358.9	393.6	415.0	427.2	433.4	436.4	434.4
62.5°	131.5	173.3	213.1	255.9	288.5	318.1	338.5	338.5	341.6	342.6	345.7
65°	97.9	129.5	164.2	195.8	222.3	241.7	252.9	255.9	260.1	259.1	256.9
67.5°	72.4	95.8	121.3	144.8	163.1	175.4	183.5	190.7	189.7	187.7	186.6
70°	50.0	65.2	87.7	102.0	115.2	127.5	129.5	130.5	131.5	132.6	130.5
72.5°	34.6	45.8	58.2	70.4	78.5	83.6	88.7	89.7	89.7	89.7	88.7
75°	17.4	23.4	34.6	39.8	46.9	49.0	53.0	53.0	56.0	52.0	51.0
77.5°	15.2	18.4	24.4	28.6	31.6	34.6	35.6	38.8	37.8	35.6	36.7
80°	9.2	11.2	15.2	17.4	21.4	22.4	23.4	24.4	23.4	24.4	24.4
82.5°	7.2	8.2	10.2	10.2	13.2	13.2	14.2	14.2	15.2	15.2	15.2
85°	4.0	7.2	6.2	12.2	8.2	8.2	10.2	12.2	10.2	10.2	12.2
87.5°	4.0	4.0	3.0	4.0	4.0	4.0	5.0	6.2	6.2	7.2	6.2
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: P246100

CATALOG NUMBER: LSR8B40D010 EC8B40930 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1899.8	1899.8	1899.8	1899.8
2.5°	1902.9	1904.9	1901.8	1900.8
5°	1905.9	1905.9	1903.9	1903.9
7.5°	1905.9	1905.9	1902.9	1900.8
10°	1897.7	1897.7	1894.7	1892.6
12.5°	1882.4	1882.4	1881.4	1878.3
15°	1863.1	1863.1	1859.0	1855.9
17.5°	1836.5	1838.6	1833.5	1833.5
20°	1807.9	1806.9	1802.9	1800.9
22.5°	1778.5	1776.3	1775.3	1769.3
25°	1746.9	1744.7	1741.7	1738.7
27.5°	1692.8	1691.7	1688.7	1684.6
30°	1610.2	1609.2	1605.0	1605.0
32.5°	1503.1	1502.0	1498.0	1499.0
35°	1391.9	1396.0	1394.0	1389.9
37.5°	1299.1	1302.3	1304.3	1302.3
40°	1221.7	1230.9	1231.9	1233.9
42.5°	1139.0	1151.3	1155.4	1157.4
45°	1040.2	1051.4	1060.6	1058.4
47.5°	939.2	947.4	955.5	949.4
50°	842.3	847.4	850.5	850.5
52.5°	750.5	750.5	749.5	750.5
55°	645.5	645.5	641.4	643.5
57.5°	535.4	537.4	534.4	529.2
60°	433.4	428.3	426.2	423.2
62.5°	337.5	337.5	330.4	339.6
65°	252.9	249.9	246.7	245.7
67.5°	183.5	182.5	179.5	178.5
70°	129.5	125.4	124.4	122.4
72.5°	86.7	86.7	84.6	84.6
75°	53.0	48.0	46.9	48.0
77.5°	36.7	35.6	35.6	34.6
80°	24.4	23.4	25.4	22.4
82.5°	15.2	16.4	15.2	16.4
85°	10.2	12.2	11.2	11.2
87.5°	6.2	6.2	6.2	6.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)