

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: P246076

Luminaire Tested: **LSR8B40D010 EC8B40935 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246076  
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 EC8B40935 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 3500 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3719.0 lumens  
Efficiency: N/A  
Efficacy: 90.9 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

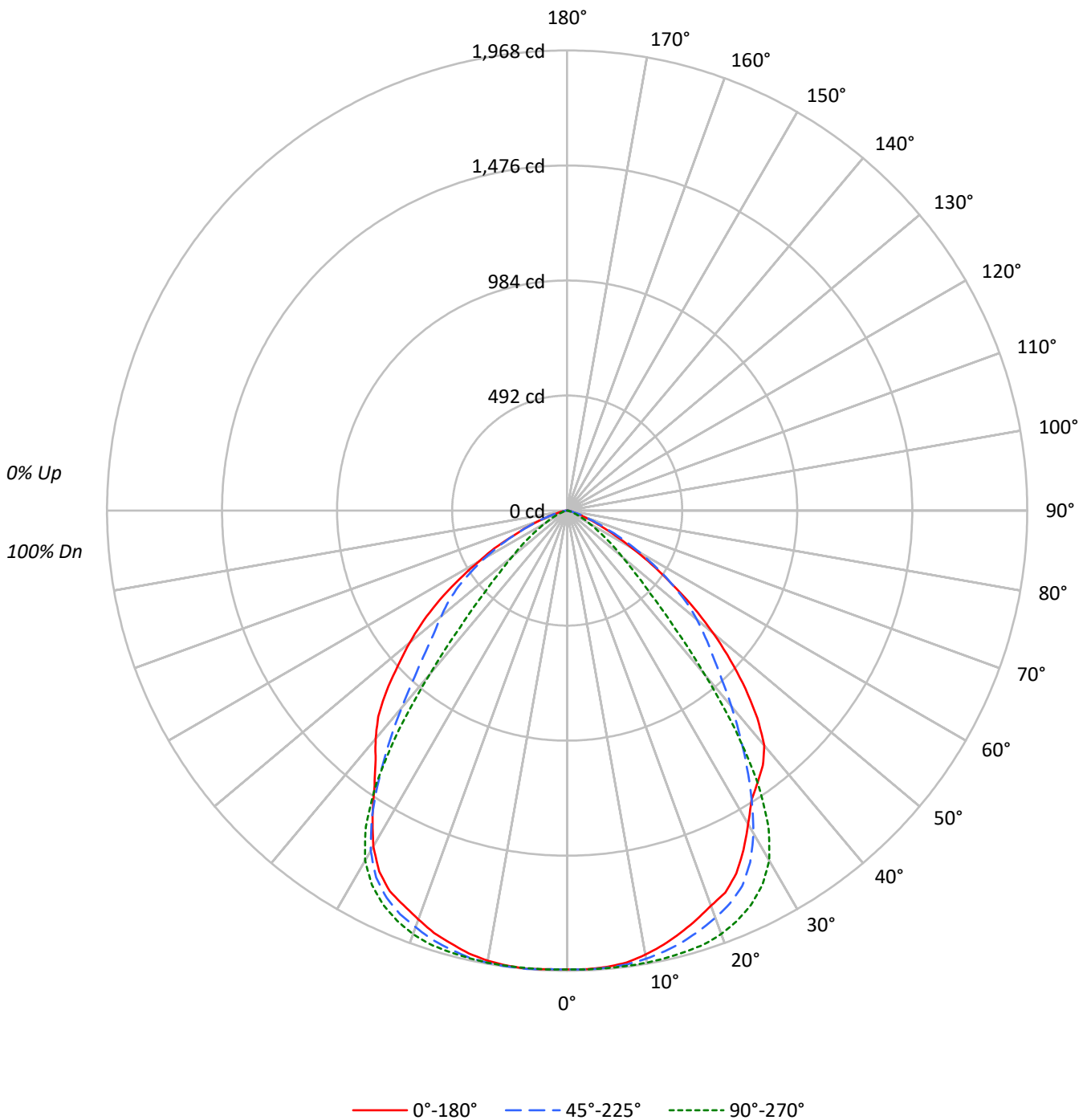
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	60507	60507	60507
5°	60639	60803	60868
10°	60385	61475	61209
15°	59717	62373	61195
20°	58999	63252	61040
25°	58232	63322	61100
30°	55091	61543	59029
35°	53447	53485	54042
40°	52785	36800	51304
45°	47032	22092	47678
50°	39107	14704	42139
55°	29332	10134	35730
60°	19877	6753	26957
65°	11988	4378	18519
70°	6645	2371	11396
75°	3014	1001	5898
80°	2610	1119	4120
85°	2972	1486	4104



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.3	5.0
10°-20°	543.8	14.6
20°-30°	825.5	22.2
30°-40°	867.0	23.3
40°-50°	650.0	17.5
50°-60°	417.1	11.2
60°-70°	178.4	4.8
70°-80°	42.2	1.1
80°-90°	7.8	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°	1556.6	41.9
0°-40°	2423.5	65.2
0°-60°	3490.6	93.9
0°-90°	3719.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3719.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1962	1962	1962	1962	1962	
5°	1959	1962	1964	1968	1966	186
15°	1871	1910	1954	1941	1917	528
25°	1712	1772	1861	1827	1796	782
35°	1420	1341	1421	1404	1436	891
45°	1078	882	507	856	1093	826
55°	546	546	188	569	665	495
65°	164	194	60	250	254	175
75°	25	30	8	51	50	37
85°	8	5	4	8	12	9
90°	0	0	0	0	0	



TEST NUMBER: P246076

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2
2.5°	1963.3	1965.4	1964.3	1964.3	1963.3	1964.3	1964.3	1966.4	1966.4	1964.3	1963.3
5°	1959.0	1961.2	1961.2	1959.0	1959.0	1964.3	1961.2	1963.3	1963.3	1962.2	1962.2
7.5°	1949.6	1949.6	1953.8	1950.6	1950.6	1953.8	1952.7	1954.8	1957.0	1958.0	1958.0
10°	1928.5	1930.6	1931.7	1931.7	1932.7	1935.9	1938.0	1942.2	1944.3	1946.4	1947.5
12.5°	1902.2	1905.3	1906.4	1905.3	1908.5	1912.7	1918.0	1923.3	1926.4	1930.6	1933.8
15°	1870.6	1870.6	1872.7	1875.9	1878.0	1884.3	1889.5	1895.9	1904.3	1909.6	1914.8
17.5°	1835.8	1837.9	1841.1	1841.1	1845.3	1855.8	1859.0	1868.5	1878.0	1883.2	1893.8
20°	1797.9	1800.0	1803.2	1805.3	1810.6	1819.0	1825.3	1833.7	1844.3	1853.7	1864.3
22.5°	1768.4	1764.2	1766.3	1768.4	1773.7	1781.1	1788.4	1799.0	1809.5	1819.0	1829.5
25°	1711.5	1712.6	1715.8	1717.9	1724.2	1730.5	1738.9	1751.6	1761.0	1771.6	1783.2
27.5°	1634.7	1635.7	1641.0	1641.0	1646.2	1656.8	1662.0	1672.6	1685.2	1695.7	1709.4
30°	1547.2	1549.3	1549.3	1553.6	1556.7	1562.0	1567.2	1577.8	1584.1	1593.6	1612.5
32.5°	1467.2	1469.3	1468.2	1467.2	1464.0	1463.0	1461.9	1464.0	1466.1	1469.3	1476.7
35°	1419.8	1414.5	1410.3	1402.9	1394.5	1384.0	1374.5	1361.9	1350.3	1340.8	1330.3
37.5°	1374.5	1373.4	1367.1	1356.6	1339.7	1320.8	1298.7	1271.3	1243.9	1214.4	1186.0
40°	1311.3	1308.1	1302.9	1288.1	1269.2	1246.0	1216.5	1182.8	1138.6	1093.3	1046.9
42.5°	1203.9	1204.9	1198.6	1187.0	1169.1	1147.0	1116.4	1079.6	1032.2	978.5	918.4
45°	1078.5	1078.5	1076.4	1066.9	1054.3	1036.4	1013.2	982.7	936.4	881.6	817.3
47.5°	947.9	949.0	945.8	943.7	938.4	926.9	910.0	886.8	854.2	801.5	737.3
50°	815.2	815.2	820.5	819.4	819.4	815.2	807.9	794.1	765.7	723.6	663.6
52.5°	682.5	684.6	687.8	692.0	697.2	705.7	697.2	690.9	673.0	640.4	588.8
55°	545.6	547.7	553.0	560.3	566.7	575.1	577.2	577.2	567.7	545.6	506.6
57.5°	428.7	425.5	429.7	436.1	444.5	452.9	459.2	466.6	465.5	450.8	419.2
60°	322.3	323.4	326.5	332.8	339.2	346.5	355.0	361.3	364.4	357.1	337.0
62.5°	234.9	234.9	239.1	245.4	248.6	259.1	264.4	267.5	270.7	269.6	257.0
65°	164.3	166.4	168.5	171.7	174.8	181.1	184.3	190.6	192.7	193.8	184.3
67.5°	115.9	112.7	114.8	116.9	120.1	124.3	130.6	130.6	133.8	133.8	127.4
70°	73.7	73.7	74.8	77.9	80.0	81.1	83.2	85.3	88.5	87.4	87.4
72.5°	49.5	48.5	49.5	50.6	51.6	54.8	54.8	55.8	57.9	59.0	54.8
75°	25.3	26.3	28.4	27.4	30.5	28.4	29.5	32.7	31.6	29.5	29.5
77.5°	21.1	21.1	21.1	20.0	22.1	22.1	21.1	23.2	22.1	22.1	21.1
80°	14.7	15.8	14.7	13.7	14.7	13.7	13.7	13.7	13.7	13.7	12.6
82.5°	11.6	9.5	10.5	9.5	10.5	10.5	9.5	8.4	8.4	9.5	8.4
85°	8.4	6.3	7.4	7.4	6.3	6.3	6.3	6.3	6.3	5.3	5.3
87.5°	5.3	3.2	3.2	3.2	4.2	4.2	4.2	3.2	4.2	4.2	2.1
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: P246076

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2
2.5°	1965.4	1964.3	1966.4	1965.4	1965.4	1964.3	1965.4	1964.3	1966.4	1962.2	1963.3
5°	1965.4	1963.3	1964.3	1965.4	1966.4	1964.3	1964.3	1964.3	1966.4	1964.3	1965.4
7.5°	1961.2	1960.1	1963.3	1965.4	1964.3	1963.3	1965.4	1964.3	1966.4	1965.4	1967.5
10°	1952.7	1953.8	1955.9	1959.0	1960.1	1961.2	1963.3	1963.3	1966.4	1962.2	1964.3
12.5°	1940.1	1944.3	1949.6	1951.7	1955.9	1955.9	1958.0	1959.0	1961.2	1960.1	1963.3
15°	1924.3	1929.6	1935.9	1941.2	1946.4	1949.6	1952.7	1953.8	1957.0	1953.8	1954.8
17.5°	1905.3	1911.7	1921.1	1927.5	1935.9	1939.0	1943.3	1945.4	1948.5	1946.4	1947.5
20°	1879.0	1886.4	1896.9	1906.4	1911.7	1919.0	1924.3	1927.5	1929.6	1927.5	1928.5
22.5°	1842.1	1852.7	1866.4	1873.7	1884.3	1890.6	1891.7	1899.0	1904.3	1899.0	1901.1
25°	1799.0	1809.5	1820.0	1835.8	1845.3	1852.7	1860.1	1861.1	1866.4	1865.3	1864.3
27.5°	1727.3	1741.0	1758.9	1771.6	1784.2	1795.8	1804.2	1806.3	1811.6	1809.5	1810.6
30°	1629.4	1644.1	1661.0	1681.0	1698.9	1710.5	1721.0	1728.4	1733.7	1730.5	1729.4
32.5°	1490.4	1505.1	1523.0	1543.0	1564.1	1580.9	1593.6	1603.1	1609.4	1607.3	1602.0
35°	1331.3	1335.5	1347.1	1362.9	1380.8	1398.7	1410.3	1420.8	1428.2	1430.3	1430.3
37.5°	1168.1	1154.4	1146.0	1146.0	1156.5	1163.8	1174.4	1180.7	1192.3	1196.5	1199.7
40°	1010.1	978.5	949.0	926.9	912.1	911.1	911.1	914.2	924.8	938.4	951.1
42.5°	868.9	818.4	773.1	732.0	702.5	685.7	678.3	679.4	687.8	700.4	721.5
45°	756.2	693.0	636.2	586.7	546.6	520.3	507.7	506.6	512.9	527.7	550.9
47.5°	668.8	601.4	537.2	480.3	437.1	408.7	393.9	389.7	393.9	407.6	435.0
50°	596.1	526.6	460.3	401.3	355.0	325.5	311.8	306.5	311.8	323.4	350.7
52.5°	528.7	457.1	395.0	338.1	288.6	263.3	248.6	245.4	248.6	262.3	284.4
55°	450.8	389.7	328.6	271.7	228.6	203.3	191.7	188.5	191.7	204.3	227.5
57.5°	373.9	321.2	267.5	215.9	179.1	156.9	146.4	142.2	149.6	158.0	185.4
60°	302.3	260.2	214.9	169.6	139.0	119.0	110.6	109.5	111.6	122.2	141.1
62.5°	237.0	202.2	166.4	129.6	104.3	95.8	85.3	84.3	86.4	92.7	107.4
65°	170.6	148.5	121.1	94.8	74.8	63.2	59.0	60.0	62.1	66.4	80.0
67.5°	119.0	103.2	84.3	66.4	51.6	46.3	42.1	41.1	42.1	49.5	56.9
70°	80.0	70.6	56.9	50.6	35.8	28.4	29.5	26.3	30.5	30.5	36.9
72.5°	52.7	46.3	37.9	29.5	25.3	20.0	20.0	19.0	21.1	22.1	27.4
75°	27.4	21.1	21.1	14.7	10.5	5.3	9.5	8.4	7.4	8.4	10.5
77.5°	19.0	15.8	14.7	11.6	10.5	8.4	8.4	8.4	8.4	9.5	10.5
80°	11.6	11.6	8.4	7.4	6.3	5.3	6.3	6.3	6.3	6.3	7.4
82.5°	7.4	6.3	6.3	5.3	5.3	4.2	4.2	4.2	4.2	4.2	6.3
85°	6.3	4.2	4.2	3.2	4.2	7.4	3.2	4.2	4.2	4.2	3.2
87.5°	2.1	3.2	3.2	3.2	2.1	1.1	2.1	3.2	3.2	5.3	4.2
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2
2.5°	1965.4	1966.4	1966.4	1965.4	1965.4	1963.3	1967.5	1964.3	1965.4	1969.6	1966.4
5°	1967.5	1968.5	1968.5	1967.5	1967.5	1967.5	1968.5	1968.5	1967.5	1966.4	1968.5
7.5°	1971.7	1970.6	1970.6	1968.5	1968.5	1966.4	1968.5	1965.4	1967.5	1965.4	1968.5
10°	1966.4	1967.5	1966.4	1965.4	1965.4	1964.3	1964.3	1961.2	1962.2	1959.0	1961.2
12.5°	1963.3	1962.2	1962.2	1960.1	1958.0	1955.9	1954.8	1951.7	1951.7	1944.3	1947.5
15°	1954.8	1955.9	1952.7	1948.5	1946.4	1941.2	1939.0	1934.8	1930.6	1925.4	1926.4
17.5°	1947.5	1944.3	1940.1	1935.9	1927.5	1923.3	1919.0	1912.7	1910.6	1904.3	1902.2
20°	1925.4	1923.3	1918.0	1910.6	1905.3	1895.9	1891.7	1885.3	1880.1	1873.7	1870.6
22.5°	1896.9	1894.8	1888.5	1881.1	1872.7	1868.5	1864.3	1852.7	1847.4	1841.1	1840.0
25°	1861.1	1857.9	1851.6	1843.2	1839.0	1827.4	1823.2	1814.8	1812.7	1806.3	1805.3
27.5°	1806.3	1802.1	1794.8	1784.2	1776.8	1769.5	1765.3	1758.9	1756.8	1750.5	1749.5
30°	1724.2	1718.9	1704.2	1700.0	1687.3	1679.9	1679.9	1671.5	1672.6	1668.4	1668.4
32.5°	1594.6	1586.2	1574.6	1566.2	1557.8	1553.6	1553.6	1550.4	1552.5	1552.5	1554.6
35°	1422.9	1411.4	1405.0	1399.8	1399.8	1404.0	1416.6	1419.8	1426.1	1431.4	1435.6
37.5°	1202.8	1201.8	1209.1	1215.5	1231.3	1249.2	1271.3	1290.3	1308.1	1320.8	1333.4
40°	964.8	991.1	1012.2	1041.7	1065.9	1100.7	1140.7	1173.3	1203.9	1226.0	1249.2
42.5°	753.1	786.8	831.0	874.2	917.4	964.8	1017.5	1062.7	1102.8	1133.3	1157.5
45°	586.7	633.0	686.7	741.5	797.3	856.3	911.1	957.4	999.5	1031.1	1055.4
47.5°	472.9	523.5	584.5	644.6	707.8	769.9	831.0	871.1	905.8	931.1	953.2
50°	390.7	444.5	508.7	577.2	640.4	702.5	755.2	794.1	822.6	844.7	858.4
52.5°	326.5	383.4	451.9	520.3	583.5	640.4	687.8	717.3	740.4	756.2	768.9
55°	269.6	324.4	388.7	452.9	515.0	568.8	607.7	629.9	647.7	657.2	664.6
57.5°	220.1	270.7	329.7	388.7	442.4	486.6	517.2	539.3	547.7	555.1	554.0
60°	172.7	220.1	273.8	324.4	370.7	406.5	428.7	441.3	447.6	450.8	448.7
62.5°	135.9	179.1	220.1	264.4	298.1	328.6	349.7	349.7	352.8	353.9	357.1
65°	101.1	133.8	169.6	202.2	229.6	249.6	261.2	264.4	268.6	267.5	265.4
67.5°	74.8	99.0	125.3	149.6	168.5	181.1	189.6	197.0	195.9	193.8	192.7
70°	51.6	67.4	90.6	105.3	119.0	131.7	133.8	134.8	135.9	136.9	134.8
72.5°	35.8	47.4	60.0	72.7	81.1	86.4	91.6	92.7	92.7	92.7	91.6
75°	17.9	24.2	35.8	41.1	48.5	50.6	54.8	54.8	57.9	53.7	52.7
77.5°	15.8	19.0	25.3	29.5	32.7	35.8	36.9	40.0	39.0	36.9	37.9
80°	9.5	11.6	15.8	17.9	22.1	23.2	24.2	25.3	24.2	25.3	25.3
82.5°	7.4	8.4	10.5	10.5	13.7	13.7	14.7	14.7	15.8	15.8	15.8
85°	4.2	7.4	6.3	12.6	8.4	8.4	10.5	12.6	10.5	10.5	12.6
87.5°	4.2	4.2	3.2	4.2	4.2	4.2	5.3	6.3	6.3	7.4	6.3
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: P246076

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1962.2	1962.2	1962.2	1962.2
2.5°	1965.4	1967.5	1964.3	1963.3
5°	1968.5	1968.5	1966.4	1966.4
7.5°	1968.5	1968.5	1965.4	1963.3
10°	1960.1	1960.1	1957.0	1954.8
12.5°	1944.3	1944.3	1943.3	1940.1
15°	1924.3	1924.3	1920.1	1916.9
17.5°	1896.9	1899.0	1893.8	1893.8
20°	1867.4	1866.4	1862.2	1860.1
22.5°	1836.9	1834.8	1833.7	1827.4
25°	1804.2	1802.1	1799.0	1795.8
27.5°	1748.4	1747.4	1744.2	1740.0
30°	1663.1	1662.0	1657.8	1657.8
32.5°	1552.5	1551.4	1547.2	1548.3
35°	1437.7	1441.9	1439.8	1435.6
37.5°	1341.8	1345.0	1347.1	1345.0
40°	1261.8	1271.3	1272.3	1274.5
42.5°	1176.5	1189.1	1193.3	1195.4
45°	1074.3	1085.9	1095.4	1093.3
47.5°	970.0	978.5	986.9	980.6
50°	870.0	875.3	878.4	878.4
52.5°	775.2	775.2	774.2	775.2
55°	666.7	666.7	662.5	664.6
57.5°	553.0	555.1	551.9	546.6
60°	447.6	442.4	440.3	437.1
62.5°	348.6	348.6	341.3	350.7
65°	261.2	258.1	254.9	253.8
67.5°	189.6	188.5	185.4	184.3
70°	133.8	129.6	128.5	126.4
72.5°	89.5	89.5	87.4	87.4
75°	54.8	49.5	48.5	49.5
77.5°	37.9	36.9	36.9	35.8
80°	25.3	24.2	26.3	23.2
82.5°	15.8	16.9	15.8	16.9
85°	10.5	12.6	11.6	11.6
87.5°	6.3	6.3	6.3	6.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)