

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: P246095

Luminaire Tested: **LSR8B50D010 EC8B50927 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246095  
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: LSR8B50D010 EC8B50927 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4273.9 lumens  
Efficiency: N/A  
Efficacy: 80.6 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

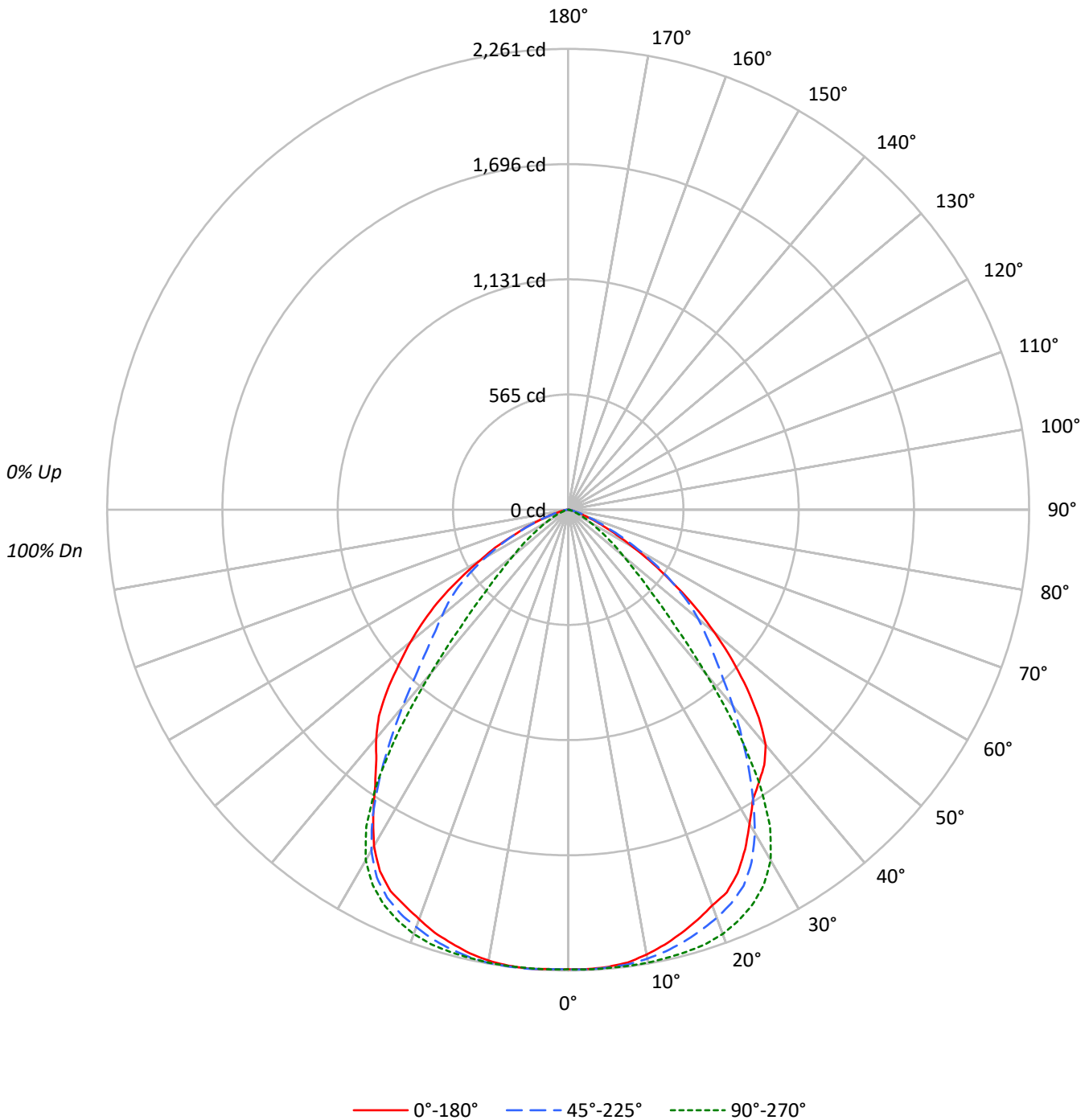
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P246095

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0GPH

### Luminous Intensity Polar Plot





TEST NUMBER: P246095

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0GPH

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				50				30				10				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90	90	90	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79	79	79	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70	70	70	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62	62	62	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55	55	55	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50	50	50	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45	45	45	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41	41	41	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37	37	37	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34	34	34	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°			



TEST NUMBER: P246095

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0GPH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.2	5.0
10°-20°	625.0	14.6
20°-30°	948.6	22.2
30°-40°	996.3	23.3
40°-50°	747.0	17.5
50°-60°	479.3	11.2
60°-70°	205.0	4.8
70°-80°	48.4	1.1
80°-90°	9.0	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°	1788.8	41.9
0°-40°	2785.1	65.2
0°-60°	4011.4	93.9
0°-90°	4273.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4273.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2255	2255	2255	2255	2255	
5°	2251	2255	2257	2261	2260	214
15°	2150	2194	2245	2231	2203	606
25°	1967	2036	2139	2100	2064	899
35°	1632	1541	1633	1614	1650	1024
45°	1239	1013	582	984	1256	949
55°	627	627	217	654	764	569
65°	189	223	69	287	292	202
75°	29	34	10	58	57	42
85°	10	6	5	10	13	10
90°	0	0	0	0	0	



TEST NUMBER: P246095

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0GPH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0
2.5°	2256.2	2258.7	2257.4	2257.4	2256.2	2257.4	2257.4	2259.8	2259.8	2257.4	2256.2
5°	2251.4	2253.7	2253.7	2251.4	2251.4	2257.4	2253.7	2256.2	2256.2	2255.0	2255.0
7.5°	2240.4	2240.4	2245.3	2241.7	2241.7	2245.3	2244.0	2246.5	2249.0	2250.1	2250.1
10°	2216.2	2218.7	2219.8	2219.8	2221.1	2224.7	2227.2	2232.0	2234.4	2236.8	2238.1
12.5°	2186.0	2189.6	2190.8	2189.6	2193.3	2198.1	2204.2	2210.2	2213.9	2218.7	2222.3
15°	2149.6	2149.6	2152.1	2155.7	2158.2	2165.4	2171.5	2178.7	2188.4	2194.4	2200.5
17.5°	2109.7	2112.2	2115.8	2115.8	2120.6	2132.8	2136.4	2147.3	2158.2	2164.2	2176.3
20°	2066.2	2068.5	2072.2	2074.6	2080.7	2090.4	2097.7	2107.4	2119.4	2130.3	2142.5
22.5°	2032.3	2027.5	2029.8	2032.3	2038.4	2046.8	2055.3	2067.4	2079.5	2090.4	2102.5
25°	1967.0	1968.1	1971.8	1974.2	1981.5	1988.7	1998.3	2012.8	2023.8	2035.9	2049.2
27.5°	1878.5	1879.8	1885.8	1885.8	1891.8	1904.0	1910.0	1922.2	1936.7	1948.7	1964.5
30°	1778.1	1780.5	1780.5	1785.4	1789.0	1795.0	1801.1	1813.2	1820.5	1831.4	1853.1
32.5°	1686.2	1688.5	1687.3	1686.2	1682.4	1681.2	1680.1	1682.4	1684.9	1688.5	1697.0
35°	1631.6	1625.5	1620.8	1612.2	1602.6	1590.5	1579.6	1565.1	1551.7	1540.8	1528.8
37.5°	1579.6	1578.4	1571.1	1559.0	1539.7	1517.9	1492.4	1460.9	1429.4	1395.6	1362.9
40°	1506.9	1503.3	1497.3	1480.3	1458.6	1431.9	1398.0	1359.3	1308.5	1256.4	1203.2
42.5°	1383.5	1384.6	1377.4	1364.1	1343.6	1318.2	1283.1	1240.6	1186.2	1124.4	1055.5
45°	1239.4	1239.4	1237.0	1226.1	1211.6	1191.0	1164.4	1129.3	1076.1	1013.1	939.3
47.5°	1089.3	1090.6	1087.0	1084.5	1078.4	1065.1	1045.8	1019.1	981.7	921.2	847.2
50°	936.9	936.9	942.9	941.7	941.7	936.9	928.4	912.6	880.0	831.6	762.5
52.5°	784.4	786.7	790.4	795.3	801.2	811.0	801.2	794.0	773.4	735.9	676.6
55°	627.0	629.4	635.4	643.9	651.3	660.9	663.3	663.3	652.4	627.0	582.2
57.5°	492.6	489.0	493.9	501.1	510.8	520.5	527.7	536.2	535.1	518.1	481.7
60°	370.3	371.6	375.2	382.5	389.7	398.2	407.9	415.1	418.8	410.3	387.3
62.5°	269.9	269.9	274.7	282.0	285.6	297.8	303.9	307.5	311.1	309.8	295.3
65°	188.9	191.2	193.6	197.3	200.9	208.1	211.8	219.0	221.5	222.8	211.8
67.5°	133.2	129.5	132.0	134.3	138.0	142.9	150.1	150.1	153.7	153.7	146.5
70°	84.7	84.7	86.0	89.6	92.0	93.1	95.6	98.0	101.7	100.5	100.5
72.5°	56.9	55.7	56.9	58.2	59.3	62.9	62.9	64.1	66.6	67.8	62.9
75°	29.0	30.3	32.6	31.5	35.1	32.6	33.9	37.6	36.3	33.9	33.9
77.5°	24.2	24.2	24.2	23.1	25.4	25.4	24.2	26.7	25.4	25.4	24.2
80°	17.0	18.1	17.0	15.8	17.0	15.8	15.8	15.8	15.8	15.8	14.5
82.5°	13.3	10.9	12.2	10.9	12.2	12.2	10.9	9.7	9.7	10.9	9.7
85°	9.7	7.3	8.4	8.4	7.3	7.3	7.3	7.3	7.3	6.1	6.1
87.5°	6.1	3.6	3.6	3.6	4.8	4.8	4.8	3.6	4.8	4.8	2.5
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: P246095

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0
2.5°	2258.7	2257.4	2259.8	2258.7	2258.7	2257.4	2258.7	2257.4	2259.8	2255.0	2256.2
5°	2258.7	2256.2	2257.4	2258.7	2259.8	2257.4	2257.4	2257.4	2259.8	2257.4	2258.7
7.5°	2253.7	2252.6	2256.2	2258.7	2257.4	2256.2	2258.7	2257.4	2259.8	2258.7	2261.0
10°	2244.0	2245.3	2247.8	2251.4	2252.6	2253.7	2256.2	2256.2	2259.8	2255.0	2257.4
12.5°	2229.5	2234.4	2240.4	2242.9	2247.8	2247.8	2250.1	2251.4	2253.7	2252.6	2256.2
15°	2211.4	2217.5	2224.7	2230.8	2236.8	2240.4	2244.0	2245.3	2249.0	2245.3	2246.5
17.5°	2189.6	2196.9	2207.8	2215.0	2224.7	2228.4	2233.2	2235.6	2239.2	2236.8	2238.1
20°	2159.3	2167.9	2179.9	2190.8	2196.9	2205.3	2211.4	2215.0	2217.5	2215.0	2216.2
22.5°	2117.0	2129.1	2144.8	2153.4	2165.4	2172.7	2173.8	2182.4	2188.4	2182.4	2184.8
25°	2067.4	2079.5	2091.6	2109.7	2120.6	2129.1	2137.6	2138.8	2144.8	2143.6	2142.5
27.5°	1985.1	2000.8	2021.4	2035.9	2050.4	2063.7	2073.4	2075.8	2081.9	2079.5	2080.7
30°	1872.4	1889.4	1908.8	1931.8	1952.4	1965.7	1977.8	1986.3	1992.3	1988.7	1987.5
32.5°	1712.7	1729.7	1750.3	1773.2	1797.4	1816.8	1831.4	1842.2	1849.5	1847.0	1841.1
35°	1530.0	1534.8	1548.1	1566.2	1586.8	1607.4	1620.8	1632.8	1641.3	1643.7	1643.7
37.5°	1342.4	1326.6	1316.9	1316.9	1329.0	1337.5	1349.6	1356.9	1370.1	1375.0	1378.7
40°	1160.8	1124.4	1090.6	1065.1	1048.3	1047.0	1047.0	1050.6	1062.8	1078.4	1093.0
42.5°	998.6	940.5	888.4	841.3	807.3	787.9	779.5	780.8	790.4	804.9	829.1
45°	869.1	796.5	731.1	674.2	628.2	597.9	583.4	582.2	589.5	606.4	633.0
47.5°	768.6	691.1	617.3	551.9	502.3	469.6	452.7	447.9	452.7	468.4	500.0
50°	685.1	605.2	529.0	461.1	407.9	374.1	358.3	352.2	358.3	371.6	403.1
52.5°	607.6	525.3	453.9	388.6	331.7	302.6	285.6	282.0	285.6	301.4	326.8
55°	518.1	447.9	377.7	312.3	262.7	233.7	220.3	216.7	220.3	234.8	261.4
57.5°	429.8	369.2	307.5	248.2	205.8	180.3	168.3	163.4	171.9	181.6	213.1
60°	347.4	299.0	246.9	194.8	159.8	136.8	127.1	125.9	128.2	140.4	162.2
62.5°	272.4	232.4	191.2	148.8	119.8	110.1	98.0	96.9	99.2	106.5	123.5
65°	196.1	170.7	139.2	108.9	86.0	72.7	67.8	69.0	71.4	76.3	92.0
67.5°	136.8	118.6	96.9	76.3	59.3	53.2	48.4	47.2	48.4	56.9	65.4
70°	92.0	81.1	65.4	58.2	41.2	32.6	33.9	30.3	35.1	35.1	42.3
72.5°	60.5	53.2	43.5	33.9	29.0	23.1	23.1	21.8	24.2	25.4	31.5
75°	31.5	24.2	24.2	17.0	12.2	6.1	10.9	9.7	8.4	9.7	12.2
77.5°	21.8	18.1	17.0	13.3	12.2	9.7	9.7	9.7	9.7	10.9	12.2
80°	13.3	13.3	9.7	8.4	7.3	6.1	7.3	7.3	7.3	7.3	8.4
82.5°	8.4	7.3	7.3	6.1	6.1	4.8	4.8	4.8	4.8	4.8	7.3
85°	7.3	4.8	4.8	3.6	4.8	8.4	3.6	4.8	4.8	4.8	3.6
87.5°	2.5	3.6	3.6	3.6	2.5	1.2	2.5	3.6	3.6	6.1	4.8
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: P246095

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0	2255.0
2.5°	2258.7	2259.8	2259.8	2258.7	2258.7	2256.2	2261.0	2257.4	2258.7	2263.5	2259.8
5°	2261.0	2262.3	2262.3	2261.0	2261.0	2261.0	2262.3	2262.3	2261.0	2259.8	2262.3
7.5°	2265.9	2264.6	2264.6	2262.3	2262.3	2259.8	2262.3	2258.7	2261.0	2258.7	2262.3
10°	2259.8	2261.0	2259.8	2258.7	2258.7	2257.4	2257.4	2253.7	2255.0	2251.4	2253.7
12.5°	2256.2	2255.0	2255.0	2252.6	2250.1	2247.8	2246.5	2242.9	2242.9	2234.4	2238.1
15°	2246.5	2247.8	2244.0	2239.2	2236.8	2230.8	2228.4	2223.5	2218.7	2212.6	2213.9
17.5°	2238.1	2234.4	2229.5	2224.7	2215.0	2210.2	2205.3	2198.1	2195.7	2188.4	2186.0
20°	2212.6	2210.2	2204.2	2195.7	2189.6	2178.7	2173.8	2166.6	2160.6	2153.4	2149.6
22.5°	2179.9	2177.5	2170.2	2161.8	2152.1	2147.3	2142.5	2129.1	2123.0	2115.8	2114.5
25°	2138.8	2135.1	2127.9	2118.3	2113.3	2100.0	2095.2	2085.5	2083.2	2075.8	2074.6
27.5°	2075.8	2071.0	2062.6	2050.4	2042.0	2033.4	2028.6	2021.4	2018.9	2011.7	2010.5
30°	1981.5	1975.4	1958.4	1953.6	1939.0	1930.6	1930.6	1920.9	1922.2	1917.3	1917.3
32.5°	1832.5	1822.8	1809.6	1799.9	1790.2	1785.4	1785.4	1781.7	1784.1	1784.1	1786.6
35°	1635.3	1621.9	1614.7	1608.6	1608.6	1613.5	1628.0	1631.6	1638.9	1645.0	1649.8
37.5°	1382.3	1381.0	1389.6	1396.8	1414.9	1435.5	1460.9	1482.8	1503.3	1517.9	1532.4
40°	1108.7	1139.0	1163.1	1197.1	1224.9	1264.8	1310.9	1348.4	1383.5	1409.0	1435.5
42.5°	865.5	904.2	955.0	1004.6	1054.2	1108.7	1169.2	1221.3	1267.3	1302.4	1330.2
45°	674.2	727.4	789.2	852.1	916.3	984.0	1047.0	1100.2	1148.6	1185.0	1212.9
47.5°	543.5	601.5	671.7	740.8	813.4	884.8	955.0	1001.0	1041.0	1070.0	1095.4
50°	449.1	510.8	584.7	663.3	735.9	807.3	867.8	912.6	945.3	970.8	986.5
52.5°	375.2	440.6	519.3	597.9	670.5	735.9	790.4	824.3	851.0	869.1	883.6
55°	309.8	372.8	446.6	520.5	591.9	653.6	698.4	723.8	744.4	755.3	763.8
57.5°	253.0	311.1	378.9	446.6	508.4	559.2	594.3	619.8	629.4	637.9	636.6
60°	198.6	253.0	314.7	372.8	426.0	467.2	492.6	507.2	514.5	518.1	515.6
62.5°	156.2	205.8	253.0	303.9	342.6	377.7	401.8	401.8	405.4	406.7	410.3
65°	116.2	153.7	194.8	232.4	263.8	286.9	300.2	303.9	308.7	307.5	305.0
67.5°	86.0	113.7	144.0	171.9	193.6	208.1	217.9	226.4	225.1	222.8	221.5
70°	59.3	77.5	104.1	121.0	136.8	151.3	153.7	154.9	156.2	157.4	154.9
72.5°	41.2	54.4	69.0	83.5	93.1	99.2	105.3	106.5	106.5	106.5	105.3
75°	20.6	27.8	41.2	47.2	55.7	58.2	62.9	62.9	66.6	61.8	60.5
77.5°	18.1	21.8	29.0	33.9	37.6	41.2	42.3	46.0	44.8	42.3	43.5
80°	10.9	13.3	18.1	20.6	25.4	26.7	27.8	29.0	27.8	29.0	29.0
82.5°	8.4	9.7	12.2	12.2	15.8	15.8	17.0	17.0	18.1	18.1	18.1
85°	4.8	8.4	7.3	14.5	9.7	9.7	12.2	14.5	12.2	12.2	14.5
87.5°	4.8	4.8	3.6	4.8	4.8	4.8	6.1	7.3	7.3	8.4	7.3
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: P246095

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2255.0	2255.0	2255.0	2255.0
2.5°	2258.7	2261.0	2257.4	2256.2
5°	2262.3	2262.3	2259.8	2259.8
7.5°	2262.3	2262.3	2258.7	2256.2
10°	2252.6	2252.6	2249.0	2246.5
12.5°	2234.4	2234.4	2233.2	2229.5
15°	2211.4	2211.4	2206.6	2203.0
17.5°	2179.9	2182.4	2176.3	2176.3
20°	2146.0	2144.8	2140.0	2137.6
22.5°	2111.0	2108.5	2107.4	2100.0
25°	2073.4	2071.0	2067.4	2063.7
27.5°	2009.2	2008.0	2004.4	1999.6
30°	1911.3	1910.0	1905.2	1905.2
32.5°	1784.1	1782.9	1778.1	1779.3
35°	1652.2	1657.0	1654.6	1649.8
37.5°	1542.0	1545.6	1548.1	1545.6
40°	1450.0	1460.9	1462.2	1464.6
42.5°	1352.0	1366.5	1371.4	1373.9
45°	1234.6	1248.0	1258.9	1256.4
47.5°	1114.8	1124.4	1134.1	1126.9
50°	999.8	1005.9	1009.5	1009.5
52.5°	890.9	890.9	889.6	890.9
55°	766.2	766.2	761.4	763.8
57.5°	635.4	637.9	634.3	628.2
60°	514.5	508.4	505.9	502.3
62.5°	400.6	400.6	392.2	403.1
65°	300.2	296.6	293.0	291.7
67.5°	217.9	216.7	213.1	211.8
70°	153.7	148.8	147.7	145.2
72.5°	102.9	102.9	100.5	100.5
75°	62.9	56.9	55.7	56.9
77.5°	43.5	42.3	42.3	41.2
80°	29.0	27.8	30.3	26.7
82.5°	18.1	19.3	18.1	19.3
85°	12.2	14.5	13.3	13.3
87.5°	7.3	7.3	7.3	7.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)