

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: P244655

Luminaire Tested: **LSR8B50D010 EC8B50927 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244655  
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 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4371.7 lumens  
Efficiency: N/A  
Efficacy: 82.5 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

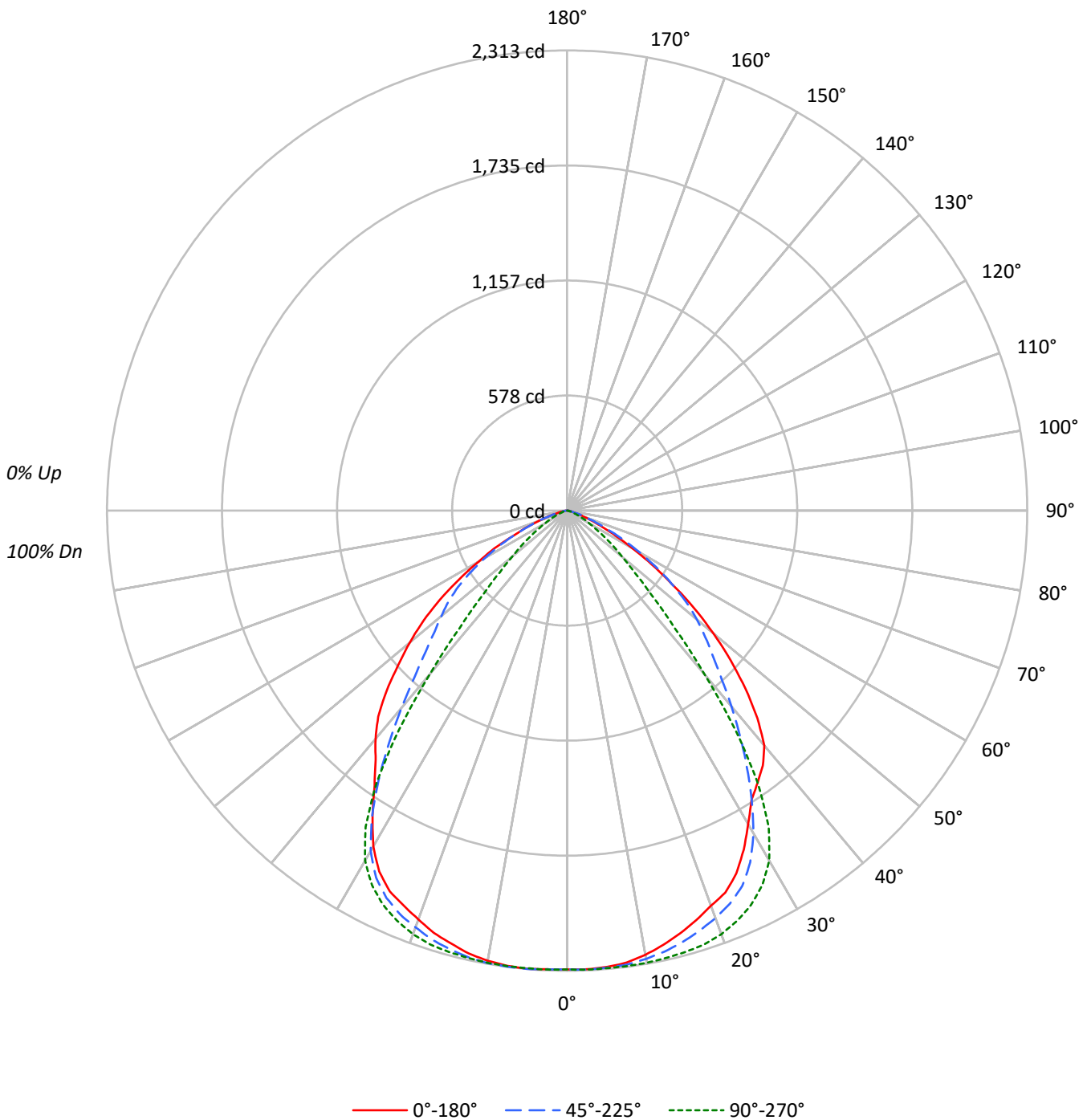
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	51	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°	220.1	5.0
10°-20°	639.3	14.6
20°-30°	970.3	22.2
30°-40°	1019.1	23.3
40°-50°	764.1	17.5
50°-60°	490.3	11.2
60°-70°	209.7	4.8
70°-80°	49.5	1.1
80°-90°	9.2	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°	1829.8	41.9
0°-40°	2848.9	65.2
0°-60°	4103.3	93.9
0°-90°	4371.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4371.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2307	2307	2307	2307	2307	
5°	2303	2307	2309	2313	2312	219
15°	2199	2245	2297	2282	2253	620
25°	2012	2082	2188	2148	2111	919
35°	1669	1576	1670	1650	1688	1047
45°	1268	1036	596	1007	1285	971
55°	641	641	222	669	781	582
65°	193	228	70	293	298	206
75°	30	35	10	59	58	43
85°	10	6	5	10	14	10
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°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2307.8	2310.3	2309.1	2309.1	2307.8	2309.1	2309.1	2311.5	2311.5	2309.1	2307.8
5°	2302.9	2305.4	2305.4	2302.9	2302.9	2309.1	2305.4	2307.8	2307.8	2306.6	2306.6
7.5°	2291.7	2291.7	2296.7	2293.0	2293.0	2296.7	2295.5	2297.9	2300.4	2301.6	2301.6
10°	2267.0	2269.5	2270.7	2270.7	2271.9	2275.6	2278.1	2283.1	2285.5	2288.0	2289.3
12.5°	2236.0	2239.8	2241.0	2239.8	2243.5	2248.4	2254.6	2260.8	2264.5	2269.5	2273.2
15°	2198.9	2198.9	2201.4	2205.1	2207.6	2215.0	2221.2	2228.6	2238.5	2244.7	2250.9
17.5°	2158.1	2160.6	2164.3	2164.3	2169.2	2181.6	2185.3	2196.5	2207.6	2213.8	2226.2
20°	2113.5	2115.9	2119.7	2122.2	2128.4	2138.3	2145.7	2155.6	2168.0	2179.1	2191.5
22.5°	2078.8	2073.8	2076.3	2078.8	2085.0	2093.6	2102.3	2114.7	2127.2	2138.3	2150.7
25°	2012.0	2013.2	2016.9	2019.4	2026.8	2034.2	2044.1	2059.0	2070.1	2082.5	2096.1
27.5°	1921.6	1922.8	1929.0	1929.0	1935.2	1947.6	1953.8	1966.2	1981.0	1993.4	2009.5
30°	1818.8	1821.3	1821.3	1826.2	1829.9	1836.1	1842.3	1854.7	1862.1	1873.2	1895.6
32.5°	1724.7	1727.2	1726.0	1724.7	1721.0	1719.8	1718.6	1721.0	1723.5	1727.2	1735.9
35°	1669.0	1662.8	1657.8	1649.1	1639.2	1626.9	1615.7	1600.9	1587.3	1576.1	1563.8
37.5°	1615.7	1614.5	1607.1	1594.7	1574.9	1552.6	1526.6	1494.4	1462.2	1427.5	1394.1
40°	1541.5	1537.8	1531.6	1514.2	1492.0	1464.8	1430.0	1390.4	1338.4	1285.2	1230.8
42.5°	1415.1	1416.4	1409.0	1395.3	1374.3	1348.3	1312.4	1269.1	1213.4	1150.2	1079.7
45°	1267.9	1267.9	1265.4	1254.3	1239.4	1218.3	1191.0	1155.1	1100.7	1036.4	960.8
47.5°	1114.3	1115.6	1111.8	1109.4	1103.2	1089.6	1069.8	1042.5	1004.2	942.2	866.7
50°	958.3	958.3	964.5	963.2	963.2	958.3	949.6	933.5	900.1	850.6	780.1
52.5°	802.4	804.8	808.5	813.5	819.7	829.6	819.7	812.2	791.1	752.7	692.1
55°	641.4	643.8	650.0	658.7	666.1	676.0	678.5	678.5	667.4	641.4	595.6
57.5°	503.9	500.2	505.1	512.6	522.4	532.4	539.8	548.4	547.2	529.9	492.8
60°	378.9	380.1	383.8	391.3	398.7	407.4	417.3	424.7	428.4	419.7	396.2
62.5°	276.1	276.1	281.0	288.4	292.2	304.5	310.7	314.4	318.2	316.9	302.1
65°	193.2	195.6	198.1	201.8	205.5	213.0	216.7	224.1	226.6	227.8	216.7
67.5°	136.2	132.5	135.0	137.4	141.2	146.1	153.6	153.6	157.3	157.3	149.8
70°	86.6	86.6	87.9	91.6	94.0	95.3	97.9	100.2	104.0	102.7	102.7
72.5°	58.2	56.9	58.2	59.4	60.6	64.4	64.4	65.6	68.1	69.3	64.4
75°	29.7	30.9	33.4	32.2	35.9	33.4	34.6	38.4	37.1	34.6	34.6
77.5°	24.8	24.8	24.8	23.5	26.0	26.0	24.8	27.2	26.0	26.0	24.8
80°	17.3	18.6	17.3	16.1	17.3	16.1	16.1	16.1	16.1	16.1	14.8
82.5°	13.6	11.1	12.4	11.1	12.4	12.4	11.1	9.9	9.9	11.1	9.9
85°	9.9	7.4	8.7	8.7	7.4	7.4	7.4	7.4	7.4	6.2	6.2
87.5°	6.2	3.7	3.7	3.7	5.0	5.0	5.0	3.7	5.0	5.0	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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2310.3	2309.1	2311.5	2310.3	2310.3	2309.1	2310.3	2309.1	2311.5	2306.6	2307.8
5°	2310.3	2307.8	2309.1	2310.3	2311.5	2309.1	2309.1	2309.1	2311.5	2309.1	2310.3
7.5°	2305.4	2304.1	2307.8	2310.3	2309.1	2307.8	2310.3	2309.1	2311.5	2310.3	2312.8
10°	2295.5	2296.7	2299.2	2302.9	2304.1	2305.4	2307.8	2307.8	2311.5	2306.6	2309.1
12.5°	2280.6	2285.5	2291.7	2294.2	2299.2	2299.2	2301.6	2302.9	2305.4	2304.1	2307.8
15°	2262.0	2268.2	2275.6	2281.8	2288.0	2291.7	2295.5	2296.7	2300.4	2296.7	2297.9
17.5°	2239.8	2247.2	2258.3	2265.8	2275.6	2279.4	2284.3	2286.8	2290.5	2288.0	2289.3
20°	2208.8	2217.5	2229.9	2241.0	2247.2	2255.8	2262.0	2265.8	2268.2	2265.8	2267.0
22.5°	2165.5	2177.9	2194.0	2202.6	2215.0	2222.4	2223.7	2232.3	2238.5	2232.3	2234.8
25°	2114.7	2127.2	2139.5	2158.1	2169.2	2177.9	2186.5	2187.8	2194.0	2192.7	2191.5
27.5°	2030.5	2046.6	2067.6	2082.5	2097.3	2111.1	2121.0	2123.3	2129.6	2127.2	2128.4
30°	1915.3	1932.8	1952.6	1976.1	1997.1	2010.7	2023.1	2031.8	2037.9	2034.2	2033.0
32.5°	1752.0	1769.3	1790.3	1813.8	1838.6	1858.4	1873.2	1884.5	1891.8	1889.3	1883.1
35°	1565.0	1569.9	1583.6	1602.1	1623.1	1644.2	1657.8	1670.2	1678.8	1681.3	1681.3
37.5°	1373.1	1357.0	1347.1	1347.1	1359.4	1368.1	1380.5	1387.9	1401.5	1406.5	1410.2
40°	1187.3	1150.2	1115.6	1089.6	1072.2	1071.0	1071.0	1074.7	1087.1	1103.2	1118.0
42.5°	1021.5	962.0	908.8	860.5	825.9	806.1	797.4	798.6	808.5	823.4	848.1
45°	889.0	814.7	747.8	689.6	642.6	611.7	596.8	595.6	603.0	620.3	647.6
47.5°	786.3	706.9	631.5	564.5	513.8	480.4	463.0	458.1	463.0	479.1	511.3
50°	700.8	619.1	541.0	471.7	417.3	382.6	366.5	360.3	366.5	380.1	412.3
52.5°	621.6	537.3	464.3	397.5	339.2	309.5	292.2	288.4	292.2	308.2	334.3
55°	529.9	458.1	386.3	319.4	268.7	239.0	225.3	221.6	225.3	240.2	267.4
57.5°	439.5	377.7	314.4	253.8	210.5	184.5	172.1	167.2	175.8	185.7	217.9
60°	355.3	305.8	252.6	199.4	163.5	140.0	130.0	128.7	131.3	143.7	165.9
62.5°	278.6	237.7	195.6	152.3	122.6	112.6	100.2	99.1	101.5	108.9	126.3
65°	200.6	174.6	142.4	111.4	87.9	74.2	69.3	70.5	73.0	78.0	94.0
67.5°	140.0	121.3	99.1	78.0	60.6	54.4	49.5	48.3	49.5	58.2	66.8
70°	94.0	82.9	66.8	59.4	42.1	33.4	34.6	30.9	35.9	35.9	43.3
72.5°	61.9	54.4	44.6	34.6	29.7	23.5	23.5	22.3	24.8	26.0	32.2
75°	32.2	24.8	24.8	17.3	12.4	6.2	11.1	9.9	8.7	9.9	12.4
77.5°	22.3	18.6	17.3	13.6	12.4	9.9	9.9	9.9	9.9	11.1	12.4
80°	13.6	13.6	9.9	8.7	7.4	6.2	7.4	7.4	7.4	7.4	8.7
82.5°	8.7	7.4	7.4	6.2	6.2	5.0	5.0	5.0	5.0	5.0	7.4
85°	7.4	5.0	5.0	3.7	5.0	8.7	3.7	5.0	5.0	5.0	3.7
87.5°	2.5	3.7	3.7	3.7	2.5	1.2	2.5	3.7	3.7	6.2	5.0
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°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2310.3	2311.5	2311.5	2310.3	2310.3	2307.8	2312.8	2309.1	2310.3	2315.2	2311.5
5°	2312.8	2314.0	2314.0	2312.8	2312.8	2312.8	2314.0	2314.0	2312.8	2311.5	2314.0
7.5°	2317.7	2316.5	2316.5	2314.0	2314.0	2311.5	2314.0	2310.3	2312.8	2310.3	2314.0
10°	2311.5	2312.8	2311.5	2310.3	2310.3	2309.1	2309.1	2305.4	2306.6	2302.9	2305.4
12.5°	2307.8	2306.6	2306.6	2304.1	2301.6	2299.2	2297.9	2294.2	2294.2	2285.5	2289.3
15°	2297.9	2299.2	2295.5	2290.5	2288.0	2281.8	2279.4	2274.4	2269.5	2263.3	2264.5
17.5°	2289.3	2285.5	2280.6	2275.6	2265.8	2260.8	2255.8	2248.4	2246.0	2238.5	2236.0
20°	2263.3	2260.8	2254.6	2246.0	2239.8	2228.6	2223.7	2216.2	2210.1	2202.6	2198.9
22.5°	2229.9	2227.4	2220.0	2211.3	2201.4	2196.5	2191.5	2177.9	2171.7	2164.3	2163.0
25°	2187.8	2184.1	2176.6	2166.8	2161.8	2148.2	2143.1	2133.2	2130.9	2123.3	2122.2
27.5°	2123.3	2118.4	2109.7	2097.3	2088.7	2080.0	2075.1	2067.6	2065.2	2057.7	2056.5
30°	2026.8	2020.6	2003.3	1998.3	1983.5	1974.8	1974.8	1964.9	1966.2	1961.2	1961.2
32.5°	1874.5	1864.6	1851.0	1841.1	1831.2	1826.2	1826.2	1822.5	1825.0	1825.0	1827.4
35°	1672.6	1659.2	1651.6	1645.4	1645.4	1650.4	1665.2	1669.0	1676.5	1682.7	1687.6
37.5°	1413.9	1412.7	1421.3	1428.8	1447.3	1468.5	1494.4	1516.7	1537.8	1552.6	1567.5
40°	1134.1	1165.0	1189.8	1224.6	1252.9	1293.9	1340.9	1379.2	1415.1	1441.2	1468.5
42.5°	885.3	924.9	976.8	1027.7	1078.4	1134.1	1196.0	1249.3	1296.3	1332.2	1360.7
45°	689.6	744.1	807.3	871.6	937.2	1006.6	1071.0	1125.4	1175.0	1212.1	1240.6
47.5°	555.9	615.4	687.2	757.7	832.0	905.1	976.8	1024.0	1064.8	1094.5	1120.5
50°	459.3	522.4	598.1	678.5	752.7	825.9	887.7	933.5	966.9	992.9	1009.0
52.5°	383.8	450.7	531.1	611.7	685.9	752.7	808.5	843.2	870.4	889.0	903.8
55°	316.9	381.4	456.9	532.4	605.5	668.6	714.4	740.4	761.4	772.5	781.2
57.5°	258.8	318.2	387.6	456.9	520.0	572.1	607.9	633.9	643.8	652.5	651.3
60°	203.1	258.8	321.9	381.4	435.8	477.9	503.9	518.7	526.2	529.9	527.4
62.5°	159.8	210.5	258.8	310.7	350.4	386.3	411.1	411.1	414.8	416.0	419.7
65°	118.8	157.3	199.4	237.7	269.9	293.4	307.0	310.7	315.8	314.4	312.0
67.5°	87.9	116.4	147.4	175.8	198.1	213.0	222.9	231.5	230.3	227.8	226.6
70°	60.6	79.2	106.5	123.9	140.0	154.8	157.3	158.5	159.8	161.0	158.5
72.5°	42.1	55.7	70.5	85.4	95.3	101.5	107.8	108.9	108.9	108.9	107.8
75°	21.0	28.5	42.1	48.3	56.9	59.4	64.4	64.4	68.1	63.1	61.9
77.5°	18.6	22.3	29.7	34.6	38.4	42.1	43.3	47.0	45.8	43.3	44.6
80°	11.1	13.6	18.6	21.0	26.0	27.2	28.5	29.7	28.5	29.7	29.7
82.5°	8.7	9.9	12.4	12.4	16.1	16.1	17.3	17.3	18.6	18.6	18.6
85°	5.0	8.7	7.4	14.8	9.9	9.9	12.4	14.8	12.4	12.4	14.8
87.5°	5.0	5.0	3.7	5.0	5.0	5.0	6.2	7.4	7.4	8.7	7.4
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: P244655

CATALOG NUMBER: LSR8B50D010 EC8B50927 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2306.6	2306.6	2306.6	2306.6
2.5°	2310.3	2312.8	2309.1	2307.8
5°	2314.0	2314.0	2311.5	2311.5
7.5°	2314.0	2314.0	2310.3	2307.8
10°	2304.1	2304.1	2300.4	2297.9
12.5°	2285.5	2285.5	2284.3	2280.6
15°	2262.0	2262.0	2257.1	2253.4
17.5°	2229.9	2232.3	2226.2	2226.2
20°	2195.2	2194.0	2189.0	2186.5
22.5°	2159.3	2156.8	2155.6	2148.2
25°	2121.0	2118.4	2114.7	2111.1
27.5°	2055.3	2054.0	2050.3	2045.4
30°	1955.0	1953.8	1948.8	1948.8
32.5°	1825.0	1823.7	1818.8	1820.0
35°	1690.0	1695.0	1692.6	1687.6
37.5°	1577.4	1581.1	1583.6	1581.1
40°	1483.3	1494.4	1495.7	1498.2
42.5°	1383.0	1397.8	1402.8	1405.2
45°	1262.9	1276.5	1287.7	1285.2
47.5°	1140.3	1150.2	1160.1	1152.7
50°	1022.7	1028.9	1032.6	1032.6
52.5°	911.2	911.2	910.0	911.2
55°	783.7	783.7	778.8	781.2
57.5°	650.0	652.5	648.8	642.6
60°	526.2	520.0	517.5	513.8
62.5°	409.8	409.8	401.2	412.3
65°	307.0	303.3	299.6	298.3
67.5°	222.9	221.6	217.9	216.7
70°	157.3	152.3	151.1	148.6
72.5°	105.3	105.3	102.7	102.7
75°	64.4	58.2	56.9	58.2
77.5°	44.6	43.3	43.3	42.1
80°	29.7	28.5	30.9	27.2
82.5°	18.6	19.8	18.6	19.8
85°	12.4	14.8	13.6	13.6
87.5°	7.4	7.4	7.4	7.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)