

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: P246034

Luminaire Tested: **LSR8B40D010 EC8B40827 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246034  
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 EC8B40827 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4091.0 lumens  
Efficiency: N/A  
Efficacy: 100.0 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

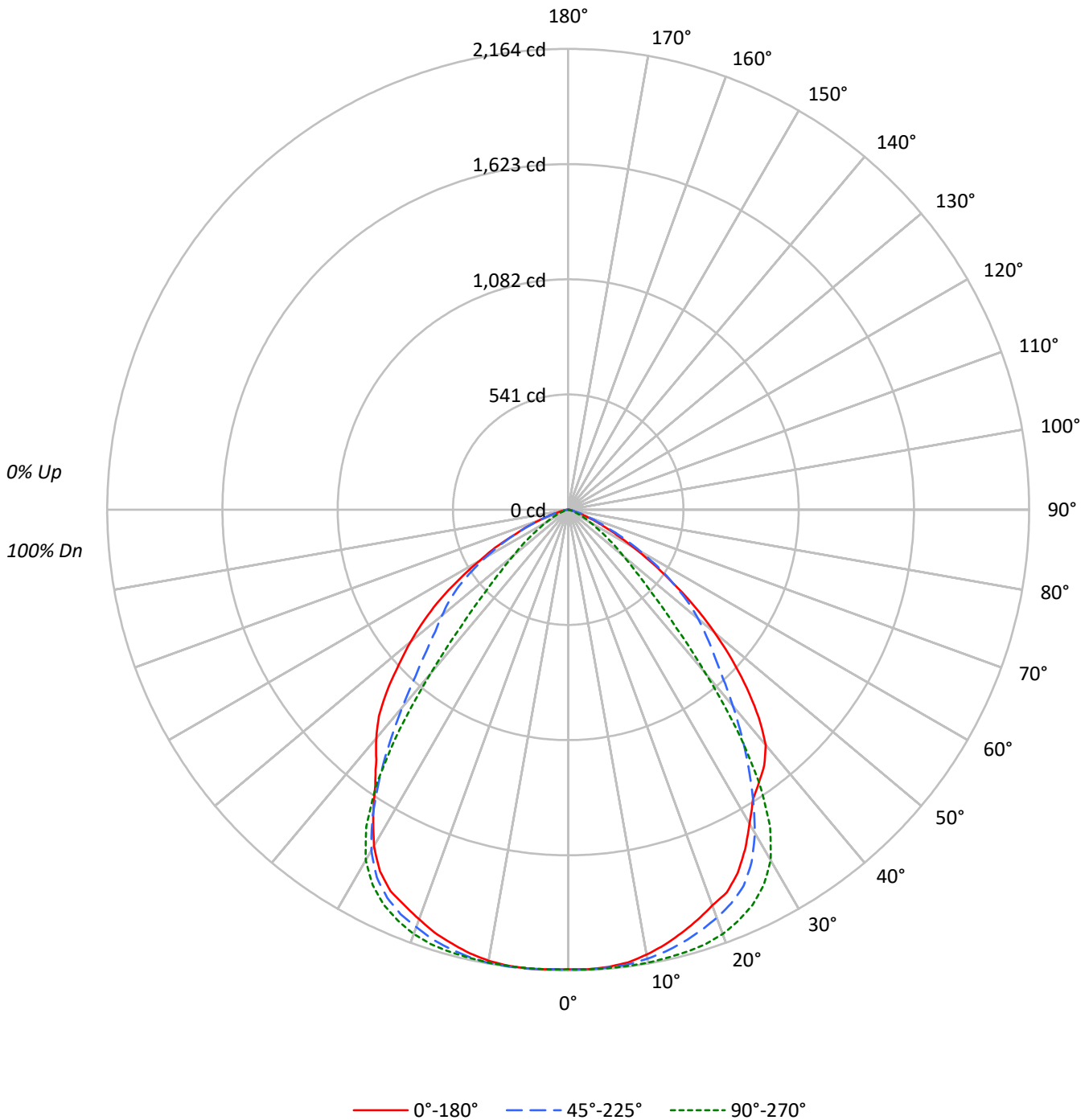
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	66560	66560	66560
5°	66706	66886	66957
10°	66425	67625	67333
15°	65690	68611	67318
20°	64902	69575	67143
25°	64057	69658	67211
30°	60603	67699	64936
35°	58793	58838	59448
40°	58066	40483	56432
45°	51738	24303	52444
50°	43022	16176	46356
55°	32268	11150	39305
60°	21863	7432	29652
65°	13192	4823	20372
70°	7312	2615	12532
75°	3312	1108	6493
80°	2877	1225	4528
85°	3290	1628	4529



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.0	5.0
10°-20°	598.2	14.6
20°-30°	908.0	22.2
30°-40°	953.7	23.3
40°-50°	715.0	17.5
50°-60°	458.8	11.2
60°-70°	196.3	4.8
70°-80°	46.4	1.1
80°-90°	8.6	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°	1712.3	41.9
0°-40°	2666.0	65.2
0°-60°	3839.8	93.9
0°-90°	4091.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4091.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2158	2158	2158	2158	2158	
5°	2155	2158	2161	2164	2163	205
15°	2058	2101	2149	2135	2109	580
25°	1883	1949	2047	2010	1975	860
35°	1562	1475	1563	1544	1579	980
45°	1186	970	557	942	1203	909
55°	600	600	207	626	731	544
65°	181	213	66	275	279	193
75°	28	32	9	56	54	41
85°	9	6	5	9	13	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°	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5
2.5°	2159.7	2162.0	2160.8	2160.8	2159.7	2160.8	2160.8	2163.1	2163.1	2160.8	2159.7
5°	2155.0	2157.3	2157.3	2155.0	2155.0	2160.8	2157.3	2159.7	2159.7	2158.5	2158.5
7.5°	2144.6	2144.6	2149.2	2145.8	2145.8	2149.2	2148.1	2150.4	2152.7	2153.9	2153.9
10°	2121.4	2123.7	2124.9	2124.9	2126.1	2129.5	2131.8	2136.5	2138.8	2141.1	2142.3
12.5°	2092.5	2095.9	2097.1	2095.9	2099.4	2104.0	2109.8	2115.6	2119.1	2123.7	2127.2
15°	2057.7	2057.7	2060.0	2063.5	2065.8	2072.8	2078.5	2085.5	2094.8	2100.6	2106.4
17.5°	2019.5	2021.8	2025.3	2025.3	2029.9	2041.5	2045.0	2055.4	2065.8	2071.6	2083.2
20°	1977.8	1980.1	1983.5	1985.9	1991.7	2000.9	2007.9	2017.1	2028.7	2039.2	2050.7
22.5°	1945.3	1940.7	1943.0	1945.3	1951.1	1959.2	1967.3	1978.9	1990.5	2000.9	2012.5
25°	1882.7	1883.9	1887.4	1889.7	1896.7	1903.6	1912.9	1926.8	1937.2	1948.8	1961.5
27.5°	1798.2	1799.3	1805.1	1805.1	1810.9	1822.5	1828.3	1839.9	1853.8	1865.4	1880.4
30°	1702.0	1704.3	1704.3	1709.0	1712.4	1718.2	1724.0	1735.6	1742.6	1753.0	1773.8
32.5°	1614.0	1616.3	1615.1	1614.0	1610.5	1609.3	1608.1	1610.5	1612.8	1616.3	1624.4
35°	1561.8	1556.0	1551.4	1543.3	1534.0	1522.4	1512.0	1498.1	1485.3	1474.9	1463.3
37.5°	1512.0	1510.8	1503.9	1492.3	1473.7	1452.9	1428.6	1398.4	1368.3	1335.9	1304.6
40°	1442.5	1439.0	1433.2	1417.0	1396.1	1370.6	1338.2	1301.1	1252.4	1202.6	1151.7
42.5°	1324.3	1325.4	1318.5	1305.7	1286.1	1261.7	1228.1	1187.6	1135.4	1076.3	1010.3
45°	1186.4	1186.4	1184.1	1173.7	1159.8	1140.1	1114.6	1081.0	1030.0	969.7	899.1
47.5°	1042.7	1043.9	1040.4	1038.1	1032.3	1019.6	1001.0	975.6	939.6	881.7	811.0
50°	896.8	896.8	902.6	901.4	901.4	896.8	888.7	873.6	842.3	796.0	729.9
52.5°	750.8	753.1	756.6	761.2	767.0	776.3	767.0	760.0	740.3	704.4	647.7
55°	600.2	602.5	608.3	616.4	623.3	632.6	634.9	634.9	624.5	600.2	557.3
57.5°	471.6	468.1	472.7	479.7	488.9	498.2	505.2	513.3	512.1	495.9	461.1
60°	354.5	355.7	359.2	366.1	373.1	381.2	390.5	397.4	400.9	392.8	370.8
62.5°	258.4	258.4	263.0	269.9	273.4	285.0	290.8	294.3	297.8	296.6	282.7
65°	180.8	183.1	185.4	188.9	192.3	199.3	202.8	209.7	212.0	213.2	202.8
67.5°	127.5	124.0	126.3	128.6	132.1	136.7	143.7	143.7	147.1	147.1	140.2
70°	81.1	81.1	82.3	85.7	88.1	89.2	91.5	93.8	97.3	96.2	96.2
72.5°	54.5	53.3	54.5	55.6	56.8	60.2	60.2	61.4	63.7	64.9	60.2
75°	27.8	29.0	31.3	30.1	33.6	31.3	32.4	35.9	34.8	32.4	32.4
77.5°	23.2	23.2	23.2	22.0	24.3	24.3	23.2	25.5	24.3	24.3	23.2
80°	16.2	17.4	16.2	15.1	16.2	15.1	15.1	15.1	15.1	15.1	13.9
82.5°	12.8	10.4	11.6	10.4	11.6	11.6	10.4	9.3	9.3	10.4	9.3
85°	9.3	6.9	8.1	8.1	6.9	6.9	6.9	6.9	6.9	5.8	5.8
87.5°	5.8	3.5	3.5	3.5	4.6	4.6	4.6	3.5	4.6	4.6	2.3
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°	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5
2.5°	2162.0	2160.8	2163.1	2162.0	2162.0	2160.8	2162.0	2160.8	2163.1	2158.5	2159.7
5°	2162.0	2159.7	2160.8	2162.0	2163.1	2160.8	2160.8	2160.8	2163.1	2160.8	2162.0
7.5°	2157.3	2156.2	2159.7	2162.0	2160.8	2159.7	2162.0	2160.8	2163.1	2162.0	2164.3
10°	2148.1	2149.2	2151.5	2155.0	2156.2	2157.3	2159.7	2159.7	2163.1	2158.5	2160.8
12.5°	2134.2	2138.8	2144.6	2146.9	2151.5	2151.5	2153.9	2155.0	2157.3	2156.2	2159.7
15°	2116.8	2122.6	2129.5	2135.3	2141.1	2144.6	2148.1	2149.2	2152.7	2149.2	2150.4
17.5°	2095.9	2102.9	2113.3	2120.2	2129.5	2133.0	2137.6	2140.0	2143.4	2141.1	2142.3
20°	2067.0	2075.1	2086.7	2097.1	2102.9	2111.0	2116.8	2120.2	2122.6	2120.2	2121.4
22.5°	2026.4	2038.0	2053.1	2061.2	2072.8	2079.7	2080.9	2089.0	2094.8	2089.0	2091.3
25°	1978.9	1990.5	2002.1	2019.5	2029.9	2038.0	2046.1	2047.3	2053.1	2051.9	2050.7
27.5°	1900.1	1915.2	1934.9	1948.8	1962.7	1975.4	1984.7	1987.0	1992.8	1990.5	1991.7
30°	1792.4	1808.6	1827.1	1849.1	1868.8	1881.6	1893.2	1901.3	1907.1	1903.6	1902.4
32.5°	1639.4	1655.7	1675.4	1697.4	1720.6	1739.1	1753.0	1763.4	1770.4	1768.0	1762.3
35°	1464.5	1469.1	1481.9	1499.3	1518.9	1538.6	1551.4	1563.0	1571.1	1573.4	1573.4
37.5°	1284.9	1269.9	1260.6	1260.6	1272.1	1280.3	1291.9	1298.8	1311.6	1316.2	1319.7
40°	1111.1	1076.3	1043.9	1019.6	1003.4	1002.2	1002.2	1005.7	1017.3	1032.3	1046.2
42.5°	955.9	900.2	850.4	805.2	772.8	754.3	746.2	747.3	756.6	770.5	793.6
45°	831.9	762.4	699.8	645.3	601.3	572.3	558.5	557.3	564.2	580.5	606.0
47.5°	735.7	661.6	590.9	528.3	480.8	449.5	433.3	428.7	433.3	448.4	478.5
50°	655.8	579.3	506.3	441.4	390.5	358.0	342.9	337.2	342.9	355.7	385.8
52.5°	581.6	502.8	434.5	371.9	317.5	289.6	273.4	269.9	273.4	288.5	312.8
55°	495.9	428.7	361.5	298.9	251.4	223.6	210.9	207.4	210.9	224.8	250.3
57.5°	411.3	353.4	294.3	237.5	197.0	172.6	161.1	156.4	164.5	173.8	203.9
60°	332.5	286.2	236.3	186.5	152.9	130.9	121.6	120.5	122.8	134.4	155.2
62.5°	260.7	222.5	183.1	142.5	114.7	105.4	93.8	92.7	95.0	101.9	118.2
65°	187.7	163.4	133.2	104.3	82.3	69.5	64.9	66.1	68.4	73.0	88.1
67.5°	130.9	113.5	92.7	73.0	56.8	51.0	46.4	45.2	46.4	54.5	62.6
70°	88.1	77.6	62.6	55.6	39.4	31.3	32.4	29.0	33.6	33.6	40.5
72.5°	57.9	51.0	41.7	32.4	27.8	22.0	22.0	20.9	23.2	24.3	30.1
75°	30.1	23.2	23.2	16.2	11.6	5.8	10.4	9.3	8.1	9.3	11.6
77.5°	20.9	17.4	16.2	12.8	11.6	9.3	9.3	9.3	9.3	10.4	11.6
80°	12.8	12.8	9.3	8.1	6.9	5.8	6.9	6.9	6.9	6.9	8.1
82.5°	8.1	6.9	6.9	5.8	5.8	4.6	4.6	4.6	4.6	4.6	6.9
85°	6.9	4.6	4.6	3.5	4.6	8.1	3.5	4.6	4.6	4.6	3.5
87.5°	2.3	3.5	3.5	3.5	2.3	1.2	2.3	3.5	3.5	5.8	4.6
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°	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5	2158.5
2.5°	2162.0	2163.1	2163.1	2162.0	2162.0	2159.7	2164.3	2160.8	2162.0	2166.6	2163.1
5°	2164.3	2165.4	2165.4	2164.3	2164.3	2164.3	2165.4	2165.4	2164.3	2163.1	2165.4
7.5°	2168.9	2167.8	2167.8	2165.4	2165.4	2163.1	2165.4	2162.0	2164.3	2162.0	2165.4
10°	2163.1	2164.3	2163.1	2162.0	2162.0	2160.8	2160.8	2157.3	2158.5	2155.0	2157.3
12.5°	2159.7	2158.5	2158.5	2156.2	2153.9	2151.5	2150.4	2146.9	2146.9	2138.8	2142.3
15°	2150.4	2151.5	2148.1	2143.4	2141.1	2135.3	2133.0	2128.4	2123.7	2118.0	2119.1
17.5°	2142.3	2138.8	2134.2	2129.5	2120.2	2115.6	2111.0	2104.0	2101.7	2094.8	2092.5
20°	2118.0	2115.6	2109.8	2101.7	2095.9	2085.5	2080.9	2073.9	2068.1	2061.2	2057.7
22.5°	2086.7	2084.3	2077.4	2069.3	2060.0	2055.4	2050.7	2038.0	2032.2	2025.3	2024.1
25°	2047.3	2043.8	2036.8	2027.6	2022.9	2010.2	2005.5	1996.3	1994.0	1987.0	1985.9
27.5°	1987.0	1982.4	1974.3	1962.7	1954.6	1946.5	1941.8	1934.9	1932.6	1925.6	1924.5
30°	1896.7	1890.8	1874.6	1870.0	1856.1	1848.0	1848.0	1838.7	1839.9	1835.3	1835.3
32.5°	1754.1	1744.9	1732.1	1722.8	1713.6	1709.0	1709.0	1705.5	1707.8	1707.8	1710.1
35°	1565.3	1552.6	1545.6	1539.8	1539.8	1544.4	1558.3	1561.8	1568.8	1574.6	1579.2
37.5°	1323.1	1322.0	1330.1	1337.0	1354.4	1374.1	1398.4	1419.3	1439.0	1452.9	1466.8
40°	1061.3	1090.3	1113.4	1145.9	1172.5	1210.7	1254.8	1290.7	1324.3	1348.6	1374.1
42.5°	828.4	865.5	914.2	961.6	1009.2	1061.3	1119.2	1169.0	1213.1	1246.7	1273.3
45°	645.3	696.3	755.4	815.7	877.1	942.0	1002.2	1053.2	1099.5	1134.3	1160.9
47.5°	520.2	575.8	643.0	709.1	778.6	846.9	914.2	958.2	996.4	1024.2	1048.6
50°	429.8	488.9	559.6	634.9	704.4	772.8	830.7	873.6	904.9	929.2	944.3
52.5°	359.2	421.7	497.0	572.3	641.9	704.4	756.6	789.0	814.5	831.9	845.8
55°	296.6	356.9	427.5	498.2	566.6	625.6	668.5	692.9	712.5	723.0	731.1
57.5°	242.2	297.8	362.6	427.5	486.6	535.3	568.9	593.2	602.5	610.6	609.4
60°	190.0	242.2	301.2	356.9	407.8	447.2	471.6	485.5	492.4	495.9	493.6
62.5°	149.5	197.0	242.2	290.8	327.9	361.5	384.7	384.7	388.1	389.3	392.8
65°	111.2	147.1	186.5	222.5	252.6	274.6	287.3	290.8	295.5	294.3	292.0
67.5°	82.3	108.9	137.9	164.5	185.4	199.3	208.5	216.7	215.5	213.2	212.0
70°	56.8	74.2	99.6	115.9	130.9	144.8	147.1	148.3	149.5	150.6	148.3
72.5°	39.4	52.1	66.1	79.9	89.2	95.0	100.8	101.9	101.9	101.9	100.8
75°	19.7	26.6	39.4	45.2	53.3	55.6	60.2	60.2	63.7	59.1	57.9
77.5°	17.4	20.9	27.8	32.4	35.9	39.4	40.5	44.0	42.9	40.5	41.7
80°	10.4	12.8	17.4	19.7	24.3	25.5	26.6	27.8	26.6	27.8	27.8
82.5°	8.1	9.3	11.6	11.6	15.1	15.1	16.2	16.2	17.4	17.4	17.4
85°	4.6	8.1	6.9	13.9	9.3	9.3	11.6	13.9	11.6	11.6	13.9
87.5°	4.6	4.6	3.5	4.6	4.6	4.6	5.8	6.9	6.9	8.1	6.9
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: P246034

CATALOG NUMBER: LSR8B40D010 EC8B40827 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2158.5	2158.5	2158.5	2158.5
2.5°	2162.0	2164.3	2160.8	2159.7
5°	2165.4	2165.4	2163.1	2163.1
7.5°	2165.4	2165.4	2162.0	2159.7
10°	2156.2	2156.2	2152.7	2150.4
12.5°	2138.8	2138.8	2137.6	2134.2
15°	2116.8	2116.8	2112.1	2108.7
17.5°	2086.7	2089.0	2083.2	2083.2
20°	2054.2	2053.1	2048.4	2046.1
22.5°	2020.6	2018.3	2017.1	2010.2
25°	1984.7	1982.4	1978.9	1975.4
27.5°	1923.3	1922.1	1918.7	1914.0
30°	1829.4	1828.3	1823.7	1823.7
32.5°	1707.8	1706.6	1702.0	1703.2
35°	1581.5	1586.1	1583.8	1579.2
37.5°	1476.1	1479.6	1481.9	1479.6
40°	1388.0	1398.4	1399.6	1401.9
42.5°	1294.2	1308.1	1312.7	1315.0
45°	1181.8	1194.5	1205.0	1202.6
47.5°	1067.1	1076.3	1085.6	1078.7
50°	957.0	962.8	966.3	966.3
52.5°	852.7	852.7	851.6	852.7
55°	733.4	733.4	728.8	731.1
57.5°	608.3	610.6	607.1	601.3
60°	492.4	486.6	484.3	480.8
62.5°	383.5	383.5	375.4	385.8
65°	287.3	283.9	280.4	279.2
67.5°	208.5	207.4	203.9	202.8
70°	147.1	142.5	141.3	139.0
72.5°	98.5	98.5	96.2	96.2
75°	60.2	54.5	53.3	54.5
77.5°	41.7	40.5	40.5	39.4
80°	27.8	26.6	29.0	25.5
82.5°	17.4	18.5	17.4	18.5
85°	11.6	13.9	12.8	12.8
87.5°	6.9	6.9	6.9	6.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)