

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: P244594

Luminaire Tested: **LSR8B40D010 EC8B40827 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244594
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 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4185.0 lumens
Efficiency: N/A
Efficacy: 102.3 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

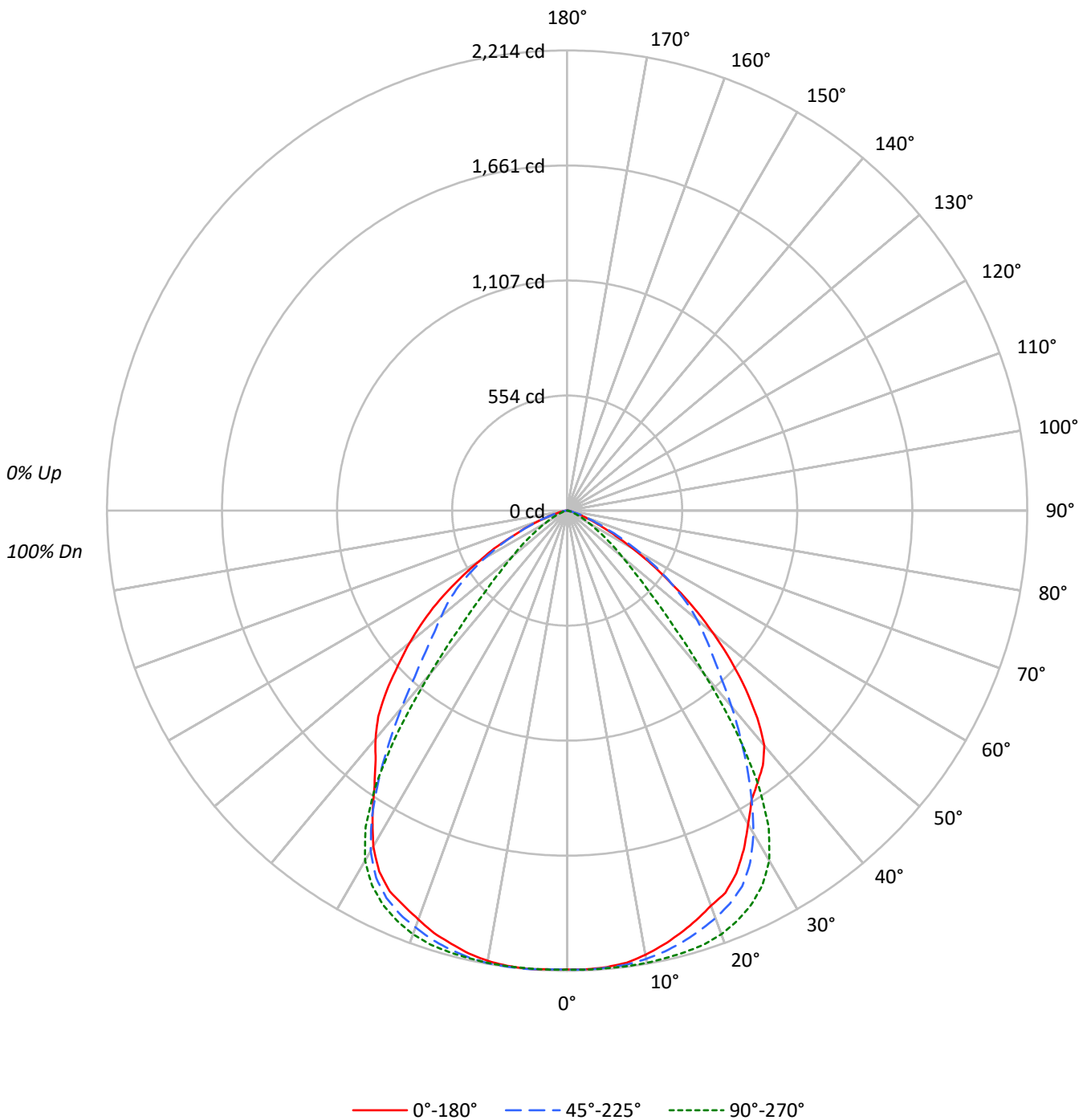
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	68090	68090	68090
5°	68238	68424	68495
10°	67953	69178	68880
15°	67200	70188	68863
20°	66392	71176	68686
25°	65530	71257	68756
30°	61995	69255	66428
35°	60144	60189	60814
40°	59399	41413	57728
45°	52928	24862	53652
50°	44010	16546	47421
55°	33004	11408	40208
60°	22369	7604	30337
65°	13491	4932	20839
70°	7483	2669	12821
75°	3384	1132	6636
80°	2948	1261	4635
85°	3361	1663	4599



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.7	5.0
10°-20°	612.0	14.6
20°-30°	928.9	22.2
30°-40°	975.6	23.3
40°-50°	731.4	17.5
50°-60°	469.3	11.2
60°-70°	200.8	4.8
70°-80°	47.4	1.1
80°-90°	8.8	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°	1751.6	41.9
0°-40°	2727.2	65.2
0°-60°	3928.0	93.9
0°-90°	4185.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4185.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2208	2208	2208	2208	2208	
5°	2204	2208	2210	2214	2213	209
15°	2105	2149	2199	2184	2157	594
25°	1926	1994	2094	2056	2021	880
35°	1598	1509	1599	1580	1616	1003
45°	1214	992	570	964	1230	929
55°	614	614	212	640	748	557
65°	185	218	68	281	286	197
75°	28	33	10	57	56	41
85°	10	6	5	10	13	10
90°	0	0	0	0	0	



TEST NUMBER: P244594

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1
2.5°	2209.3	2211.7	2210.5	2210.5	2209.3	2210.5	2210.5	2212.8	2212.8	2210.5	2209.3
5°	2204.5	2206.9	2206.9	2204.5	2204.5	2210.5	2206.9	2209.3	2209.3	2208.1	2208.1
7.5°	2193.9	2193.9	2198.6	2195.1	2195.1	2198.6	2197.4	2199.8	2202.2	2203.4	2203.4
10°	2170.2	2172.5	2173.7	2173.7	2174.9	2178.4	2180.8	2185.6	2187.9	2190.3	2191.5
12.5°	2140.5	2144.1	2145.3	2144.1	2147.7	2152.4	2158.3	2164.2	2167.8	2172.5	2176.1
15°	2105.0	2105.0	2107.3	2110.9	2113.3	2120.4	2126.3	2133.4	2142.9	2148.8	2154.8
17.5°	2065.9	2068.2	2071.8	2071.8	2076.5	2088.4	2091.9	2102.6	2113.3	2119.2	2131.1
20°	2023.2	2025.6	2029.1	2031.5	2037.4	2046.9	2054.0	2063.5	2075.4	2086.0	2097.9
22.5°	1990.0	1985.3	1987.6	1990.0	1995.9	2004.2	2012.5	2024.4	2036.2	2046.9	2058.8
25°	1926.0	1927.2	1930.8	1933.1	1940.2	1947.3	1956.8	1971.0	1981.7	1993.6	2006.6
27.5°	1839.5	1840.7	1846.6	1846.6	1852.5	1864.4	1870.3	1882.1	1896.4	1908.2	1923.6
30°	1741.1	1743.5	1743.5	1748.2	1751.8	1757.7	1763.6	1775.5	1782.6	1793.3	1814.6
32.5°	1651.0	1653.4	1652.2	1651.0	1647.5	1646.3	1645.1	1647.5	1649.9	1653.4	1661.7
35°	1597.7	1591.8	1587.0	1578.7	1569.3	1557.4	1546.7	1532.5	1519.5	1508.8	1497.0
37.5°	1546.7	1545.5	1538.4	1526.6	1507.6	1486.3	1461.4	1430.6	1399.8	1366.6	1334.6
40°	1475.6	1472.0	1466.1	1449.5	1428.2	1402.1	1369.0	1331.0	1281.2	1230.3	1178.1
42.5°	1354.7	1355.9	1348.8	1335.7	1315.6	1290.7	1256.3	1214.9	1161.5	1101.1	1033.5
45°	1213.7	1213.7	1211.3	1200.6	1186.4	1166.3	1140.2	1105.8	1053.7	992.0	919.7
47.5°	1066.7	1067.9	1064.3	1062.0	1056.0	1043.0	1024.0	998.0	961.2	902.0	829.7
50°	917.4	917.4	923.3	922.1	922.1	917.4	909.1	893.7	861.7	814.3	746.7
52.5°	768.0	770.4	774.0	778.7	784.6	794.1	784.6	777.5	757.4	720.6	662.6
55°	613.9	616.3	622.2	630.5	637.7	647.2	649.5	649.5	638.8	613.9	570.1
57.5°	482.4	478.8	483.6	490.7	500.2	509.7	516.8	525.1	523.9	507.3	471.7
60°	362.7	363.9	367.4	374.5	381.6	389.9	399.4	406.5	410.1	401.8	379.3
62.5°	264.3	264.3	269.0	276.1	279.7	291.6	297.5	301.1	304.6	303.4	289.2
65°	184.9	187.3	189.6	193.2	196.7	203.8	207.4	214.5	216.9	218.1	207.4
67.5°	130.4	126.8	129.2	131.5	135.1	139.9	147.0	147.0	150.5	150.5	143.4
70°	83.0	83.0	84.2	87.7	90.1	91.3	93.6	96.0	99.6	98.4	98.4
72.5°	55.7	54.5	55.7	56.9	58.1	61.6	61.6	62.8	65.2	66.4	61.6
75°	28.4	29.6	32.0	30.8	34.4	32.0	33.2	36.7	35.6	33.2	33.2
77.5°	23.7	23.7	23.7	22.5	24.9	24.9	23.7	26.1	24.9	24.9	23.7
80°	16.6	17.8	16.6	15.4	16.6	15.4	15.4	15.4	15.4	15.4	14.2
82.5°	13.0	10.7	11.9	10.7	11.9	11.9	10.7	9.5	9.5	10.7	9.5
85°	9.5	7.1	8.3	8.3	7.1	7.1	7.1	7.1	7.1	5.9	5.9
87.5°	5.9	3.6	3.6	3.6	4.7	4.7	4.7	3.6	4.7	4.7	2.4
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: P244594

CATALOG NUMBER: LSR8B40D010 EC8B40827 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1
2.5°	2211.7	2210.5	2212.8	2211.7	2211.7	2210.5	2211.7	2210.5	2212.8	2208.1	2209.3
5°	2211.7	2209.3	2210.5	2211.7	2212.8	2210.5	2210.5	2210.5	2212.8	2210.5	2211.7
7.5°	2206.9	2205.7	2209.3	2211.7	2210.5	2209.3	2211.7	2210.5	2212.8	2211.7	2214.0
10°	2197.4	2198.6	2201.0	2204.5	2205.7	2206.9	2209.3	2209.3	2212.8	2208.1	2210.5
12.5°	2183.2	2187.9	2193.9	2196.2	2201.0	2201.0	2203.4	2204.5	2206.9	2205.7	2209.3
15°	2165.4	2171.3	2178.4	2184.4	2190.3	2193.9	2197.4	2198.6	2202.2	2198.6	2199.8
17.5°	2144.1	2151.2	2161.9	2169.0	2178.4	2182.0	2186.7	2189.1	2192.7	2190.3	2191.5
20°	2114.4	2122.8	2134.6	2145.3	2151.2	2159.5	2165.4	2169.0	2171.3	2169.0	2170.2
22.5°	2073.0	2084.8	2100.2	2108.5	2120.4	2127.5	2128.7	2137.0	2142.9	2137.0	2139.4
25°	2024.4	2036.2	2048.1	2065.9	2076.5	2084.8	2093.1	2094.3	2100.2	2099.0	2097.9
27.5°	1943.8	1959.2	1979.3	1993.6	2007.8	2020.8	2030.3	2032.7	2038.6	2036.2	2037.4
30°	1833.5	1850.2	1869.1	1891.6	1911.8	1924.8	1936.7	1945.0	1950.9	1947.3	1946.2
32.5°	1677.1	1693.7	1713.9	1736.4	1760.1	1779.0	1793.3	1803.9	1811.0	1808.7	1802.7
35°	1498.1	1502.9	1515.9	1533.7	1553.8	1574.0	1587.0	1598.9	1607.2	1609.5	1609.5
37.5°	1314.4	1299.0	1289.5	1289.5	1301.4	1309.7	1321.5	1328.6	1341.7	1346.4	1350.0
40°	1136.6	1101.1	1067.9	1043.0	1026.4	1025.2	1025.2	1028.8	1040.6	1056.0	1070.3
42.5°	977.8	920.9	870.0	823.7	790.6	771.6	763.3	764.5	774.0	788.2	811.9
45°	851.0	779.9	715.9	660.2	615.1	585.5	571.3	570.1	577.2	593.8	619.9
47.5°	752.6	676.8	604.5	540.5	491.9	459.9	443.3	438.5	443.3	458.7	489.5
50°	670.8	592.6	518.0	451.6	399.4	366.2	350.8	344.9	350.8	363.9	394.7
52.5°	595.0	514.4	444.5	380.5	324.8	296.3	279.7	276.1	279.7	295.1	320.0
55°	507.3	438.5	369.8	305.8	257.2	228.8	215.7	212.2	215.7	229.9	256.0
57.5°	420.8	361.5	301.1	243.0	201.5	176.6	164.8	160.0	168.3	177.8	208.6
60°	340.2	292.8	241.8	190.8	156.5	133.9	124.4	123.3	125.6	137.5	158.8
62.5°	266.7	227.6	187.3	145.8	117.3	107.9	96.0	94.8	97.2	104.3	120.9
65°	192.0	167.1	136.3	106.7	84.2	71.1	66.4	67.6	69.9	74.7	90.1
67.5°	133.9	116.1	94.8	74.7	58.1	52.1	47.4	46.2	47.4	55.7	64.0
70°	90.1	79.4	64.0	56.9	40.3	32.0	33.2	29.6	34.4	34.4	41.5
72.5°	59.2	52.1	42.7	33.2	28.4	22.5	22.5	21.3	23.7	24.9	30.8
75°	30.8	23.7	23.7	16.6	11.9	5.9	10.7	9.5	8.3	9.5	11.9
77.5°	21.3	17.8	16.6	13.0	11.9	9.5	9.5	9.5	9.5	10.7	11.9
80°	13.0	13.0	9.5	8.3	7.1	5.9	7.1	7.1	7.1	7.1	8.3
82.5°	8.3	7.1	7.1	5.9	5.9	4.7	4.7	4.7	4.7	4.7	7.1
85°	7.1	4.7	4.7	3.6	4.7	8.3	3.6	4.7	4.7	4.7	3.6
87.5°	2.4	3.6	3.6	3.6	2.4	1.2	2.4	3.6	3.6	5.9	4.7
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: P244594

CATALOG NUMBER: LSR8B40D010 EC8B40827 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1	2208.1
2.5°	2211.7	2212.8	2212.8	2211.7	2211.7	2209.3	2214.0	2210.5	2211.7	2216.4	2212.8
5°	2214.0	2215.2	2215.2	2214.0	2214.0	2214.0	2215.2	2215.2	2214.0	2212.8	2215.2
7.5°	2218.8	2217.6	2217.6	2215.2	2215.2	2212.8	2215.2	2211.7	2214.0	2211.7	2215.2
10°	2212.8	2214.0	2212.8	2211.7	2211.7	2210.5	2210.5	2206.9	2208.1	2204.5	2206.9
12.5°	2209.3	2208.1	2208.1	2205.7	2203.4	2201.0	2199.8	2196.2	2196.2	2187.9	2191.5
15°	2199.8	2201.0	2197.4	2192.7	2190.3	2184.4	2182.0	2177.3	2172.5	2166.6	2167.8
17.5°	2191.5	2187.9	2183.2	2178.4	2169.0	2164.2	2159.5	2152.4	2150.0	2142.9	2140.5
20°	2166.6	2164.2	2158.3	2150.0	2144.1	2133.4	2128.7	2121.6	2115.6	2108.5	2105.0
22.5°	2134.6	2132.2	2125.1	2116.8	2107.3	2102.6	2097.9	2084.8	2078.9	2071.8	2070.6
25°	2094.3	2090.8	2083.6	2074.2	2069.4	2056.4	2051.6	2042.1	2039.8	2032.7	2031.5
27.5°	2032.7	2027.9	2019.6	2007.8	1999.5	1991.2	1986.5	1979.3	1977.0	1969.8	1968.7
30°	1940.2	1934.3	1917.7	1913.0	1898.7	1890.4	1890.4	1881.0	1882.1	1877.4	1877.4
32.5°	1794.5	1785.0	1771.9	1762.4	1753.0	1748.2	1748.2	1744.7	1747.0	1747.0	1749.4
35°	1601.2	1588.2	1581.1	1575.2	1575.2	1579.9	1594.1	1597.7	1604.8	1610.7	1615.5
37.5°	1353.5	1352.4	1360.7	1367.8	1385.5	1405.7	1430.6	1451.9	1472.0	1486.3	1500.5
40°	1085.7	1115.3	1139.0	1172.2	1199.4	1238.6	1283.6	1320.3	1354.7	1379.6	1405.7
42.5°	847.4	885.4	935.2	983.7	1032.3	1085.7	1144.9	1195.9	1240.9	1275.3	1302.6
45°	660.2	712.3	772.8	834.4	897.2	963.6	1025.2	1077.4	1124.8	1160.3	1187.6
47.5°	532.2	589.1	657.8	725.4	796.5	866.4	935.2	980.2	1019.3	1047.7	1072.7
50°	439.7	500.2	572.5	649.5	720.6	790.6	849.8	893.7	925.7	950.6	966.0
52.5°	367.4	431.4	508.5	585.5	656.6	720.6	774.0	807.1	833.2	851.0	865.2
55°	303.4	365.1	437.4	509.7	579.6	640.0	683.9	708.8	728.9	739.6	747.9
57.5°	247.7	304.6	371.0	437.4	497.8	547.6	582.0	606.8	616.3	624.6	623.4
60°	194.4	247.7	308.2	365.1	417.2	457.5	482.4	496.6	503.7	507.3	504.9
62.5°	152.9	201.5	247.7	297.5	335.4	369.8	393.5	393.5	397.0	398.2	401.8
65°	113.8	150.5	190.8	227.6	258.4	280.9	294.0	297.5	302.2	301.1	298.7
67.5°	84.2	111.4	141.0	168.3	189.6	203.8	213.3	221.7	220.5	218.1	216.9
70°	58.1	75.9	101.9	118.5	133.9	148.2	150.5	151.7	152.9	154.1	151.7
72.5°	40.3	53.3	67.6	81.8	91.3	97.2	103.1	104.3	104.3	104.3	103.1
75°	20.2	27.3	40.3	46.2	54.5	56.9	61.6	61.6	65.2	60.4	59.2
77.5°	17.8	21.3	28.4	33.2	36.7	40.3	41.5	45.0	43.8	41.5	42.7
80°	10.7	13.0	17.8	20.2	24.9	26.1	27.3	28.4	27.3	28.4	28.4
82.5°	8.3	9.5	11.9	11.9	15.4	15.4	16.6	16.6	17.8	17.8	17.8
85°	4.7	8.3	7.1	14.2	9.5	9.5	11.9	14.2	11.9	11.9	14.2
87.5°	4.7	4.7	3.6	4.7	4.7	4.7	5.9	7.1	7.1	8.3	7.1
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: P244594

CATALOG NUMBER: LSR8B40D010 EC8B40827 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2208.1	2208.1	2208.1	2208.1
2.5°	2211.7	2214.0	2210.5	2209.3
5°	2215.2	2215.2	2212.8	2212.8
7.5°	2215.2	2215.2	2211.7	2209.3
10°	2205.7	2205.7	2202.2	2199.8
12.5°	2187.9	2187.9	2186.7	2183.2
15°	2165.4	2165.4	2160.7	2157.1
17.5°	2134.6	2137.0	2131.1	2131.1
20°	2101.4	2100.2	2095.5	2093.1
22.5°	2067.1	2064.7	2063.5	2056.4
25°	2030.3	2027.9	2024.4	2020.8
27.5°	1967.5	1966.3	1962.7	1958.0
30°	1871.5	1870.3	1865.6	1865.6
32.5°	1747.0	1745.8	1741.1	1742.3
35°	1617.8	1622.6	1620.2	1615.5
37.5°	1510.0	1513.5	1515.9	1513.5
40°	1419.9	1430.6	1431.8	1434.1
42.5°	1323.9	1338.1	1342.9	1345.2
45°	1208.9	1222.0	1232.6	1230.3
47.5°	1091.6	1101.1	1110.6	1103.4
50°	979.0	984.9	988.5	988.5
52.5°	872.3	872.3	871.2	872.3
55°	750.2	750.2	745.5	747.9
57.5°	622.2	624.6	621.1	615.1
60°	503.7	497.8	495.4	491.9
62.5°	392.3	392.3	384.0	394.7
65°	294.0	290.4	286.8	285.6
67.5°	213.3	212.2	208.6	207.4
70°	150.5	145.8	144.6	142.2
72.5°	100.7	100.7	98.4	98.4
75°	61.6	55.7	54.5	55.7
77.5°	42.7	41.5	41.5	40.3
80°	28.4	27.3	29.6	26.1
82.5°	17.8	19.0	17.8	19.0
85°	11.9	14.2	13.0	13.0
87.5°	7.1	7.1	7.1	7.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)