

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: P246040

Luminaire Tested: **LSR8B40D010 EC8B40830 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246040
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 EC8B40830 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4193.0 lumens
Efficiency: N/A
Efficacy: 102.5 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

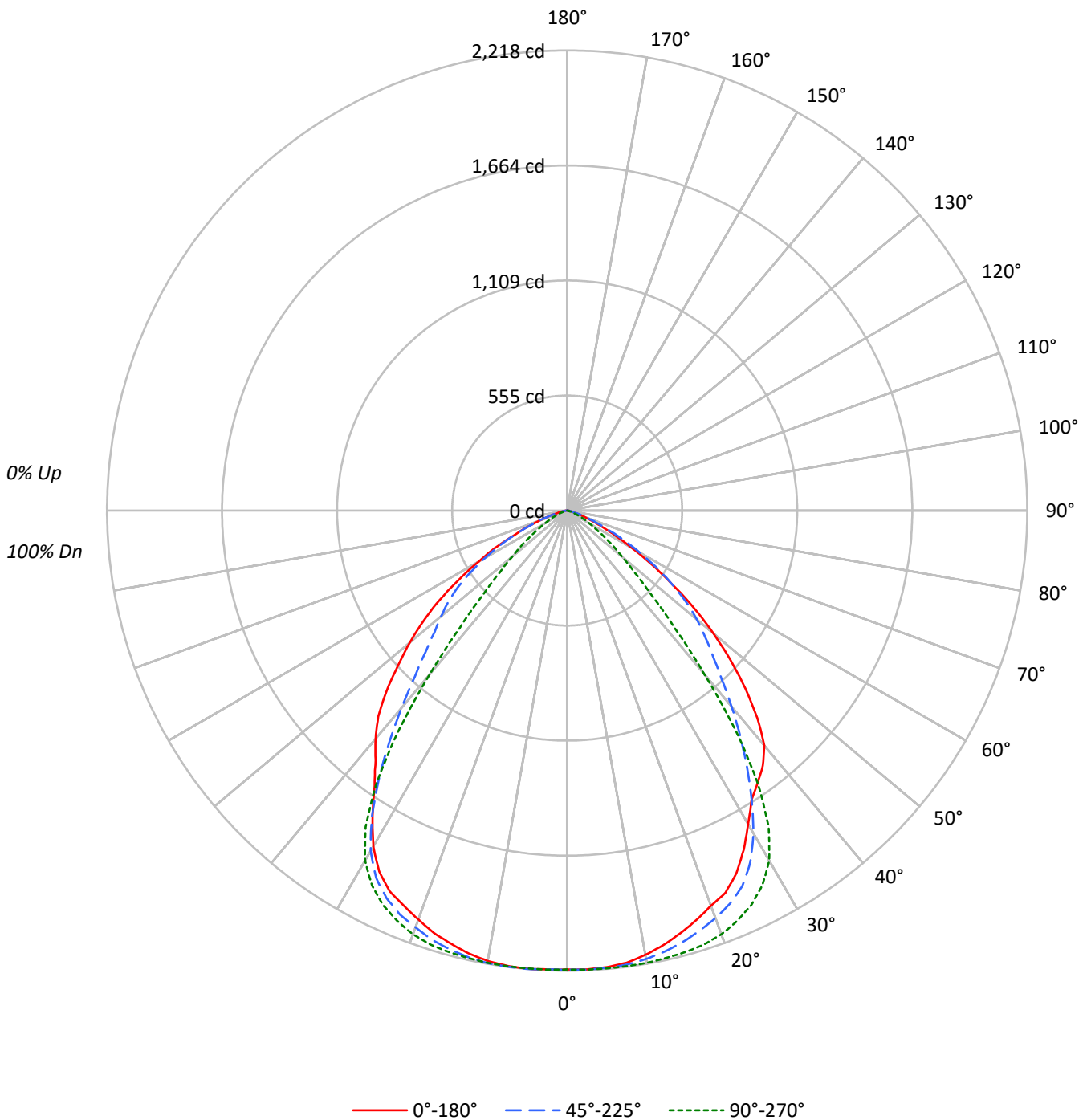
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P246040

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0GPH

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°	68219	68219	68219
5°	68368	68554	68628
10°	68082	69309	69012
15°	67328	70322	68998
20°	66520	71311	68817
25°	65656	71393	68889
30°	62112	69387	66552
35°	60261	60302	60931
40°	59511	41490	57841
45°	53029	24910	53753
50°	44092	16579	47512
55°	33069	11430	40283
60°	22412	7617	30392
65°	13520	4940	20883
70°	7492	2678	12848
75°	3396	1132	6648
80°	2948	1261	4635
85°	3361	1663	4635



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.1	5.0
10°-20°	613.2	14.6
20°-30°	930.7	22.2
30°-40°	977.5	23.3
40°-50°	732.8	17.5
50°-60°	470.2	11.2
60°-70°	201.2	4.8
70°-80°	47.5	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°	1755.0	41.9
0°-40°	2732.4	65.2
0°-60°	3935.5	93.9
0°-90°	4193.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4193.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2212	2212	2212	2212	2212	
5°	2209	2212	2215	2218	2217	210
15°	2109	2153	2203	2189	2161	595
25°	1930	1997	2098	2060	2025	882
35°	1601	1512	1602	1583	1619	1005
45°	1216	994	571	965	1233	931
55°	615	615	213	641	749	558
65°	185	218	68	281	286	198
75°	28	33	10	57	56	41
85°	10	6	5	10	13	10
90°	0	0	0	0	0	



TEST NUMBER: P246040

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3
2.5°	2213.5	2215.9	2214.7	2214.7	2213.5	2214.7	2214.7	2217.1	2217.1	2214.7	2213.5
5°	2208.7	2211.1	2211.1	2208.7	2208.7	2214.7	2211.1	2213.5	2213.5	2212.3	2212.3
7.5°	2198.1	2198.1	2202.8	2199.3	2199.3	2202.8	2201.6	2204.0	2206.4	2207.6	2207.6
10°	2174.3	2176.7	2177.9	2177.9	2179.1	2182.6	2185.0	2189.8	2192.1	2194.5	2195.7
12.5°	2144.6	2148.2	2149.4	2148.2	2151.8	2156.5	2162.4	2168.4	2171.9	2176.7	2180.3
15°	2109.0	2109.0	2111.4	2114.9	2117.3	2124.4	2130.4	2137.5	2147.0	2152.9	2158.9
17.5°	2069.8	2072.2	2075.7	2075.7	2080.5	2092.4	2095.9	2106.6	2117.3	2123.3	2135.1
20°	2027.1	2029.4	2033.0	2035.4	2041.3	2050.8	2057.9	2067.4	2079.3	2090.0	2101.9
22.5°	1993.8	1989.1	1991.4	1993.8	1999.8	2008.1	2016.4	2028.2	2040.1	2050.8	2062.7
25°	1929.7	1930.9	1934.4	1936.8	1943.9	1951.1	1960.6	1974.8	1985.5	1997.4	2010.4
27.5°	1843.0	1844.2	1850.1	1850.1	1856.1	1867.9	1873.9	1885.7	1900.0	1911.9	1927.3
30°	1744.4	1746.8	1746.8	1751.6	1755.1	1761.1	1767.0	1778.9	1786.0	1796.7	1818.1
32.5°	1654.2	1656.6	1655.4	1654.2	1650.6	1649.4	1648.2	1650.6	1653.0	1656.6	1664.9
35°	1600.8	1594.8	1590.1	1581.8	1572.3	1560.4	1549.7	1535.4	1522.4	1511.7	1499.8
37.5°	1549.7	1548.5	1541.4	1529.5	1510.5	1489.1	1464.2	1433.3	1402.4	1369.2	1337.1
40°	1478.4	1474.9	1468.9	1452.3	1430.9	1404.8	1371.6	1333.6	1283.7	1232.6	1180.4
42.5°	1357.3	1358.5	1351.4	1338.3	1318.1	1293.2	1258.7	1217.2	1163.8	1103.2	1035.5
45°	1216.0	1216.0	1213.6	1202.9	1188.7	1168.5	1142.4	1107.9	1055.7	993.9	921.5
47.5°	1068.7	1069.9	1066.4	1064.0	1058.1	1045.0	1026.0	999.9	963.1	903.7	831.2
50°	919.1	919.1	925.1	923.9	923.9	919.1	910.8	895.4	863.3	815.8	748.1
52.5°	769.5	771.9	775.5	780.2	786.1	795.6	786.1	779.0	758.8	722.0	663.8
55°	615.1	617.5	623.4	631.7	638.9	648.4	650.7	650.7	640.1	615.1	571.2
57.5°	483.3	479.7	484.5	491.6	501.1	510.6	517.8	526.1	524.9	508.3	472.6
60°	363.4	364.6	368.1	375.3	382.4	390.7	400.2	407.3	410.9	402.6	380.0
62.5°	264.8	264.8	269.6	276.7	280.2	292.1	298.1	301.6	305.2	304.0	289.7
65°	185.3	187.6	190.0	193.6	197.1	204.2	207.8	214.9	217.3	218.5	207.8
67.5°	130.6	127.1	129.4	131.8	135.4	140.1	147.3	147.3	150.8	150.8	143.7
70°	83.1	83.1	84.3	87.9	90.2	91.4	93.8	96.2	99.7	98.6	98.6
72.5°	55.8	54.6	55.8	57.0	58.2	61.7	61.7	62.9	65.3	66.5	61.7
75°	28.5	29.7	32.0	30.9	34.4	32.0	33.2	36.8	35.6	33.2	33.2
77.5°	23.7	23.7	23.7	22.6	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°	13.1	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: P246040

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3
2.5°	2215.9	2214.7	2217.1	2215.9	2215.9	2214.7	2215.9	2214.7	2217.1	2212.3	2213.5
5°	2215.9	2213.5	2214.7	2215.9	2217.1	2214.7	2214.7	2214.7	2217.1	2214.7	2215.9
7.5°	2211.1	2209.9	2213.5	2215.9	2214.7	2213.5	2215.9	2214.7	2217.1	2215.9	2218.2
10°	2201.6	2202.8	2205.2	2208.7	2209.9	2211.1	2213.5	2213.5	2217.1	2212.3	2214.7
12.5°	2187.4	2192.1	2198.1	2200.4	2205.2	2205.2	2207.6	2208.7	2211.1	2209.9	2213.5
15°	2169.6	2175.5	2182.6	2188.6	2194.5	2198.1	2201.6	2202.8	2206.4	2202.8	2204.0
17.5°	2148.2	2155.3	2166.0	2173.1	2182.6	2186.2	2190.9	2193.3	2196.9	2194.5	2195.7
20°	2118.5	2126.8	2138.7	2149.4	2155.3	2163.6	2169.6	2173.1	2175.5	2173.1	2174.3
22.5°	2076.9	2088.8	2104.2	2112.6	2124.4	2131.6	2132.8	2141.1	2147.0	2141.1	2143.4
25°	2028.2	2040.1	2052.0	2069.8	2080.5	2088.8	2097.1	2098.3	2104.2	2103.1	2101.9
27.5°	1947.5	1962.9	1983.1	1997.4	2011.6	2024.7	2034.2	2036.5	2042.5	2040.1	2041.3
30°	1837.0	1853.7	1872.7	1895.2	1915.4	1928.5	1940.4	1948.7	1954.6	1951.1	1949.9
32.5°	1680.3	1696.9	1717.1	1739.7	1763.4	1782.4	1796.7	1807.4	1814.5	1812.1	1806.2
35°	1501.0	1505.7	1518.8	1536.6	1556.8	1577.0	1590.1	1601.9	1610.2	1612.6	1612.6
37.5°	1316.9	1301.5	1292.0	1292.0	1303.9	1312.2	1324.1	1331.2	1344.3	1349.0	1352.6
40°	1138.8	1103.2	1069.9	1045.0	1028.4	1027.2	1027.2	1030.7	1042.6	1058.1	1072.3
42.5°	979.7	922.7	871.6	825.3	792.1	773.1	764.8	765.9	775.5	789.7	813.4
45°	852.6	781.4	717.3	661.4	616.3	586.6	572.4	571.2	578.3	594.9	621.1
47.5°	754.1	678.1	605.6	541.5	492.8	460.7	444.1	439.4	444.1	459.6	490.4
50°	672.1	593.8	518.9	452.4	400.2	366.9	351.5	345.6	351.5	364.6	395.4
52.5°	596.1	515.4	445.3	381.2	325.4	296.9	280.2	276.7	280.2	295.7	320.6
55°	508.3	439.4	370.5	306.4	257.7	229.2	216.1	212.6	216.1	230.4	256.5
57.5°	421.6	362.2	301.6	243.4	201.9	176.9	165.1	160.3	168.6	178.1	209.0
60°	340.8	293.3	242.2	191.2	156.8	134.2	124.7	123.5	125.9	137.8	159.1
62.5°	267.2	228.0	187.6	146.1	117.6	108.1	96.2	95.0	97.4	104.5	121.1
65°	192.4	167.5	136.6	106.9	84.3	71.2	66.5	67.7	70.1	74.8	90.2
67.5°	134.2	116.4	95.0	74.8	58.2	52.2	47.5	46.3	47.5	55.8	64.1
70°	90.2	79.6	64.1	57.0	40.4	32.0	33.2	29.7	34.4	34.4	41.6
72.5°	59.4	52.2	42.7	33.2	28.5	22.6	22.6	21.4	23.7	24.9	30.9
75°	30.9	23.7	23.7	16.6	11.9	5.9	10.7	9.5	8.3	9.5	11.9
77.5°	21.4	17.8	16.6	13.1	11.9	9.5	9.5	9.5	9.5	10.7	11.9
80°	13.1	13.1	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: P246040

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3	2212.3
2.5°	2215.9	2217.1	2217.1	2215.9	2215.9	2213.5	2218.2	2214.7	2215.9	2220.6	2217.1
5°	2218.2	2219.4	2219.4	2218.2	2218.2	2218.2	2219.4	2219.4	2218.2	2217.1	2219.4
7.5°	2223.0	2221.8	2221.8	2219.4	2219.4	2217.1	2219.4	2215.9	2218.2	2215.9	2219.4
10°	2217.1	2218.2	2217.1	2215.9	2215.9	2214.7	2214.7	2211.1	2212.3	2208.7	2211.1
12.5°	2213.5	2212.3	2212.3	2209.9	2207.6	2205.2	2204.0	2200.4	2200.4	2192.1	2195.7
15°	2204.0	2205.2	2201.6	2196.9	2194.5	2188.6	2186.2	2181.4	2176.7	2170.8	2171.9
17.5°	2195.7	2192.1	2187.4	2182.6	2173.1	2168.4	2163.6	2156.5	2154.1	2147.0	2144.6
20°	2170.8	2168.4	2162.4	2154.1	2148.2	2137.5	2132.8	2125.6	2119.7	2112.6	2109.0
22.5°	2138.7	2136.3	2129.2	2120.9	2111.4	2106.6	2101.9	2088.8	2082.9	2075.7	2074.6
25°	2098.3	2094.7	2087.6	2078.1	2073.4	2060.3	2055.6	2046.1	2043.7	2036.5	2035.4
27.5°	2036.5	2031.8	2023.5	2011.6	2003.3	1995.0	1990.3	1983.1	1980.8	1973.6	1972.4
30°	1943.9	1938.0	1921.4	1916.6	1902.4	1894.1	1894.1	1884.6	1885.7	1881.0	1881.0
32.5°	1797.9	1788.4	1775.3	1765.8	1756.3	1751.6	1751.6	1748.0	1750.4	1750.4	1752.8
35°	1604.3	1591.3	1584.1	1578.2	1578.2	1582.9	1597.2	1600.8	1607.9	1613.8	1618.6
37.5°	1356.1	1354.9	1363.3	1370.4	1388.2	1408.4	1433.3	1454.7	1474.9	1489.1	1503.4
40°	1087.7	1117.4	1141.2	1174.5	1201.7	1240.9	1286.1	1322.9	1357.3	1382.3	1408.4
42.5°	849.1	887.1	936.9	985.6	1034.3	1087.7	1147.1	1198.2	1243.3	1277.7	1305.1
45°	661.4	713.7	774.3	836.0	898.9	965.4	1027.2	1079.4	1126.9	1162.6	1189.9
47.5°	533.2	590.2	659.1	726.8	798.0	868.1	936.9	982.1	1021.2	1049.7	1074.7
50°	440.6	501.1	573.6	650.7	722.0	792.1	851.4	895.4	927.4	952.4	967.8
52.5°	368.1	432.2	509.4	586.6	657.9	722.0	775.5	808.7	834.8	852.6	866.9
55°	304.0	365.8	438.2	510.6	580.7	641.2	685.2	710.1	730.3	741.0	749.3
57.5°	248.2	305.2	371.7	438.2	498.7	548.6	583.1	608.0	617.5	625.8	624.6
60°	194.8	248.2	308.8	365.8	418.0	458.4	483.3	497.6	504.7	508.3	505.9
62.5°	153.2	201.9	248.2	298.1	336.1	370.5	394.3	394.3	397.8	399.0	402.6
65°	114.0	150.8	191.2	228.0	258.9	281.4	294.5	298.1	302.8	301.6	299.2
67.5°	84.3	111.6	141.3	168.6	190.0	204.2	213.7	222.1	220.9	218.5	217.3
70°	58.2	76.0	102.1	118.8	134.2	148.4	150.8	152.0	153.2	154.4	152.0
72.5°	40.4	53.4	67.7	81.9	91.4	97.4	103.3	104.5	104.5	104.5	103.3
75°	20.2	27.3	40.4	46.3	54.6	57.0	61.7	61.7	65.3	60.6	59.4
77.5°	17.8	21.4	28.5	33.2	36.8	40.4	41.6	45.1	43.9	41.6	42.7
80°	10.7	13.1	17.8	20.2	24.9	26.1	27.3	28.5	27.3	28.5	28.5
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: P246040

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2212.3	2212.3	2212.3	2212.3
2.5°	2215.9	2218.2	2214.7	2213.5
5°	2219.4	2219.4	2217.1	2217.1
7.5°	2219.4	2219.4	2215.9	2213.5
10°	2209.9	2209.9	2206.4	2204.0
12.5°	2192.1	2192.1	2190.9	2187.4
15°	2169.6	2169.6	2164.8	2161.3
17.5°	2138.7	2141.1	2135.1	2135.1
20°	2105.4	2104.2	2099.5	2097.1
22.5°	2071.0	2068.6	2067.4	2060.3
25°	2034.2	2031.8	2028.2	2024.7
27.5°	1971.3	1970.1	1966.5	1961.8
30°	1875.1	1873.9	1869.1	1869.1
32.5°	1750.4	1749.2	1744.4	1745.6
35°	1620.9	1625.7	1623.3	1618.6
37.5°	1512.9	1516.4	1518.8	1516.4
40°	1422.6	1433.3	1434.5	1436.9
42.5°	1326.4	1340.7	1345.4	1347.8
45°	1211.2	1224.3	1235.0	1232.6
47.5°	1093.7	1103.2	1112.7	1105.6
50°	980.9	986.8	990.4	990.4
52.5°	874.0	874.0	872.8	874.0
55°	751.7	751.7	746.9	749.3
57.5°	623.4	625.8	622.2	616.3
60°	504.7	498.7	496.4	492.8
62.5°	393.1	393.1	384.8	395.4
65°	294.5	290.9	287.4	286.2
67.5°	213.7	212.6	209.0	207.8
70°	150.8	146.1	144.9	142.5
72.5°	100.9	100.9	98.6	98.6
75°	61.7	55.8	54.6	55.8
77.5°	42.7	41.6	41.6	40.4
80°	28.5	27.3	29.7	26.1
82.5°	17.8	19.0	17.8	19.0
85°	11.9	14.2	13.1	13.1
87.5°	7.1	7.1	7.1	7.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)