

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: P245446

Luminaire Tested: **LSR8B40D010 EC8B40927 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245446
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B40D010 EC8B40927 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3513.4 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

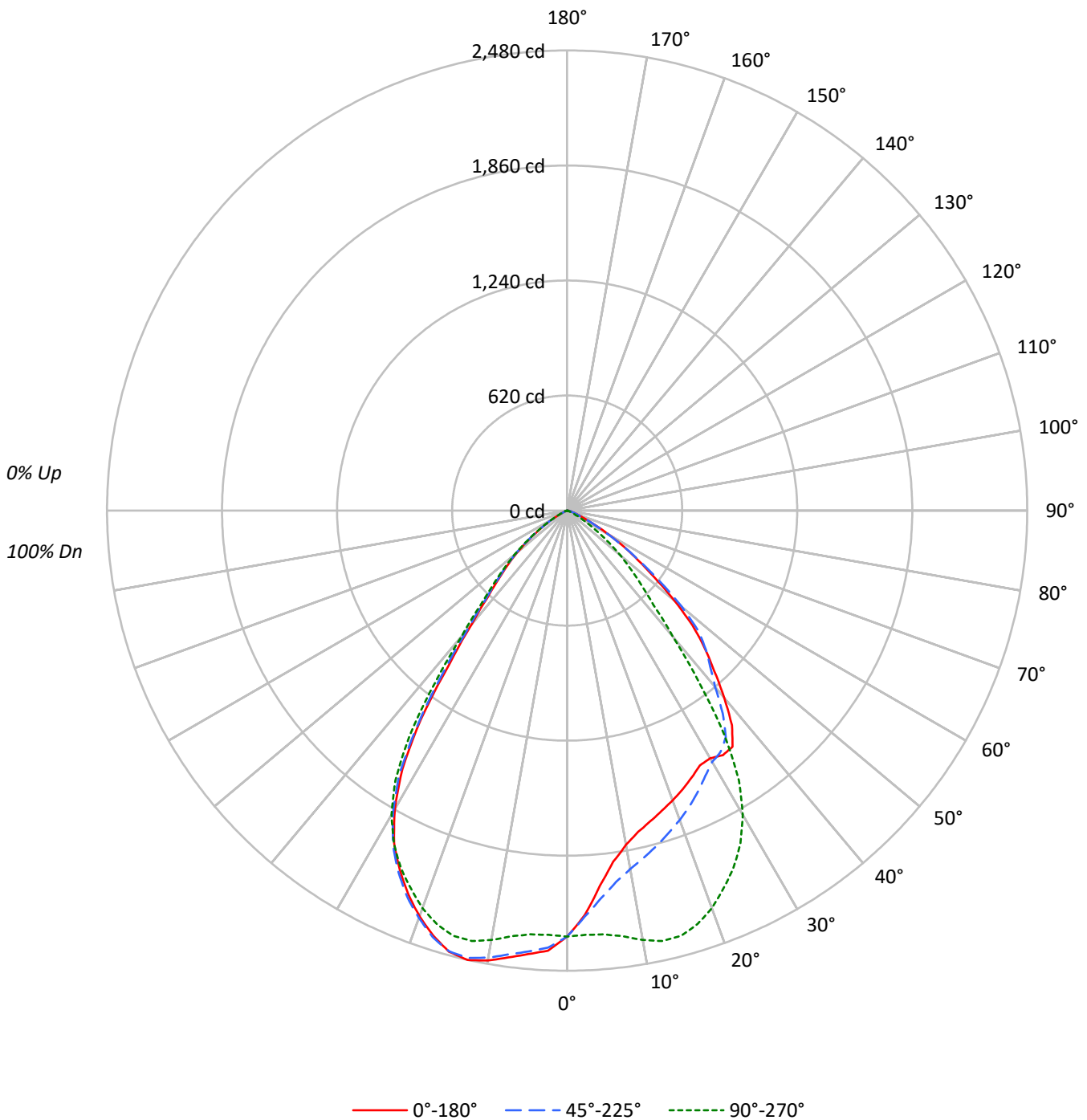
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82					82			
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67					67			
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39					39			

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°	213.9	6.1
10°-20°	617.9	17.6
20°-30°	896.8	25.5
30°-40°	883.2	25.1
40°-50°	553.7	15.8
50°-60°	267.2	7.6
60°-70°	64.7	1.8
70°-80°	13.1	0.4
80°-90°	3.0	0.1
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°	1728.6	49.2
0°-40°	2611.8	74.3
0°-60°	3432.7	97.7
0°-90°	3513.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3513.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2295	2295	2295	2295	2295	
5°	2029	2098	2292	2385	2400	188
15°	1733	1869	2372	2459	2461	490
25°	1587	1670	2123	2152	2136	735
35°	1554	1491	1482	1397	1374	940
45°	1049	1057	560	537	522	802
55°	466	481	204	201	192	429
65°	109	108	30	26	23	125
75°	27	23	7	3	2	30
85°	8	6	1	0	0	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2
2.5°	2181.8	2168.0	2142.0	2173.4	2173.4	2156.0	2190.9	2169.8	2186.7	2213.2	2189.7
5°	2028.7	2017.2	1995.5	2028.7	2032.9	2016.6	2058.9	2043.1	2067.9	2100.4	2097.5
7.5°	1907.4	1892.9	1873.1	1907.4	1914.1	1903.3	1943.7	1936.4	1969.0	2011.2	2018.4
10°	1828.5	1813.4	1795.8	1827.2	1832.1	1824.9	1865.8	1861.6	1893.6	1942.4	1961.8
12.5°	1772.3	1759.7	1740.4	1773.6	1779.0	1768.7	1807.3	1805.5	1838.7	1890.0	1914.1
15°	1733.2	1718.1	1700.7	1728.9	1736.2	1724.7	1761.5	1757.9	1791.7	1842.3	1869.4
17.5°	1696.4	1682.6	1664.4	1691.0	1698.2	1686.2	1722.3	1716.3	1745.2	1793.5	1821.3
20°	1662.0	1646.9	1630.7	1657.8	1662.0	1648.1	1684.4	1676.5	1702.5	1747.0	1774.1
22.5°	1626.4	1610.8	1593.9	1620.4	1624.6	1610.8	1644.0	1634.9	1659.0	1699.4	1724.2
25°	1587.3	1572.8	1555.9	1580.6	1584.2	1569.1	1604.1	1592.7	1613.8	1649.4	1669.8
27.5°	1548.0	1534.2	1515.5	1540.8	1542.6	1528.1	1560.1	1544.4	1562.0	1594.5	1612.0
30°	1541.4	1525.7	1506.4	1527.0	1527.5	1508.9	1539.0	1520.3	1529.9	1554.1	1564.3
32.5°	1562.5	1546.9	1527.0	1543.8	1542.0	1521.4	1550.5	1527.5	1530.6	1543.2	1540.8
35°	1554.1	1535.4	1511.9	1529.9	1529.9	1505.2	1534.2	1507.0	1504.0	1505.8	1490.7
37.5°	1458.2	1443.7	1421.4	1438.9	1437.1	1418.4	1440.7	1418.4	1408.2	1403.9	1376.8
40°	1317.0	1299.6	1282.7	1301.4	1303.2	1283.3	1312.2	1286.9	1283.9	1271.8	1239.9
42.5°	1174.2	1168.1	1151.8	1167.5	1176.0	1159.1	1183.2	1171.1	1172.9	1169.9	1139.7
45°	1049.3	1039.0	1027.0	1045.1	1050.5	1042.1	1066.2	1059.0	1066.2	1081.2	1056.6
47.5°	914.8	904.6	891.3	910.6	920.2	904.6	925.1	922.7	933.5	959.4	957.0
50°	752.6	745.4	742.9	745.4	751.4	744.2	758.6	759.3	766.5	802.0	804.5
52.5°	595.8	594.0	585.6	593.4	593.4	582.0	596.4	589.8	597.0	621.1	636.9
55°	466.2	464.4	458.9	466.2	458.3	454.0	458.3	451.7	446.3	465.0	481.3
57.5°	363.0	357.0	350.3	353.4	352.8	343.7	348.5	340.8	336.5	343.1	357.6
60°	258.8	257.0	250.9	253.9	256.3	249.6	254.5	250.9	243.7	249.1	249.6
62.5°	171.9	173.0	169.4	170.1	168.3	167.1	170.1	171.9	170.1	167.6	168.3
65°	109.1	108.6	108.0	108.6	109.8	107.3	109.1	110.4	108.6	108.6	108.0
67.5°	72.3	70.5	68.7	70.0	71.2	69.3	71.2	70.5	71.2	70.5	68.7
70°	48.8	48.3	47.6	48.3	48.3	47.0	48.3	47.6	48.3	47.6	45.8
72.5°	35.6	35.6	35.0	35.6	35.6	34.4	35.0	33.8	34.4	33.8	32.5
75°	26.6	26.6	25.9	26.6	25.9	25.3	25.9	25.3	24.1	24.1	23.0
77.5°	19.3	19.3	19.3	19.3	19.3	18.7	18.7	18.1	17.4	16.9	16.9
80°	14.5	13.8	13.8	13.8	13.8	13.3	13.8	13.3	12.7	12.0	11.5
82.5°	10.2	10.8	10.2	10.2	10.2	9.7	10.2	9.7	9.7	9.0	7.9
85°	7.9	7.9	7.9	7.9	7.9	7.2	7.2	7.2	6.6	6.6	6.1
87.5°	4.3	4.3	4.3	4.8	4.3	4.3	4.3	3.6	3.6	3.0	3.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2
2.5°	2221.1	2224.0	2217.4	2227.7	2267.4	2235.5	2248.8	2253.0	2283.2	2288.6	2285.0
5°	2136.6	2149.9	2158.3	2181.3	2225.2	2202.3	2225.8	2240.9	2279.6	2292.2	2295.2
7.5°	2070.2	2098.0	2118.5	2156.0	2207.8	2190.3	2225.8	2250.6	2297.6	2313.9	2321.8
10°	2020.8	2063.0	2098.6	2149.9	2208.4	2196.9	2243.4	2278.4	2330.8	2350.1	2359.7
12.5°	1983.5	2034.7	2082.4	2147.5	2210.7	2205.3	2261.5	2301.3	2356.8	2376.0	2387.5
15°	1942.4	2001.5	2057.1	2130.0	2198.1	2196.9	2257.2	2299.4	2356.1	2372.4	2383.3
17.5°	1893.6	1956.9	2017.8	2096.8	2164.4	2165.5	2226.5	2268.1	2323.6	2336.8	2344.0
20°	1844.1	1906.9	1967.7	2049.2	2115.6	2117.4	2177.0	2215.6	2268.7	2279.6	2281.4
22.5°	1791.7	1850.2	1911.0	1991.9	2055.8	2057.1	2116.1	2152.2	2197.6	2203.0	2207.8
25°	1731.9	1789.2	1846.6	1926.8	1987.6	1991.2	2044.9	2076.9	2118.5	2122.8	2124.6
27.5°	1669.8	1716.9	1771.8	1840.5	1902.0	1899.6	1950.3	1986.4	2023.9	2021.4	2020.8
30°	1607.2	1646.3	1680.1	1746.4	1791.7	1793.5	1841.1	1858.6	1897.8	1892.9	1892.4
32.5°	1563.1	1573.3	1582.4	1616.2	1659.0	1644.0	1676.5	1698.2	1725.3	1723.5	1724.2
35°	1482.3	1463.6	1436.5	1441.4	1467.2	1443.7	1461.1	1460.6	1488.4	1481.7	1489.5
37.5°	1344.1	1291.2	1230.9	1196.4	1201.3	1171.7	1165.7	1180.1	1189.8	1171.1	1177.8
40°	1197.1	1118.7	1024.5	946.2	942.0	905.2	898.5	884.0	902.8	887.1	891.9
42.5°	1088.6	984.8	861.2	765.9	745.4	714.6	696.5	694.1	699.5	688.7	685.7
45°	1005.3	894.9	753.2	644.1	621.1	587.9	569.9	563.3	563.8	560.2	557.2
47.5°	907.5	796.6	653.1	541.6	515.6	484.2	466.2	461.9	464.4	459.6	456.0
50°	772.5	673.0	542.1	440.2	417.3	394.4	379.9	375.8	375.1	371.5	369.1
52.5°	627.2	544.5	431.2	346.2	325.7	303.3	293.1	287.7	288.2	284.6	281.0
55°	485.4	434.2	334.1	261.7	243.0	225.6	215.9	209.2	207.4	203.8	202.0
57.5°	361.2	326.8	250.3	188.8	177.9	161.0	151.3	143.5	142.3	140.5	140.0
60°	253.2	228.6	176.1	134.4	121.8	111.6	101.9	94.0	90.4	89.9	88.1
62.5°	164.0	149.0	115.8	89.9	80.2	73.0	63.3	57.9	55.5	53.1	53.7
65°	101.9	90.4	72.3	57.9	52.4	47.0	39.8	35.0	32.5	30.2	30.7
67.5°	63.3	56.7	45.8	37.4	33.8	29.6	24.1	20.5	18.7	16.9	15.6
70°	42.9	36.8	31.4	26.6	24.1	21.2	17.4	14.5	13.3	12.0	10.8
72.5°	30.2	27.1	23.0	19.9	18.1	15.6	13.3	11.5	10.2	9.0	7.9
75°	21.7	19.3	16.9	14.5	13.3	12.0	10.2	9.0	7.9	6.6	5.4
77.5°	15.6	13.8	12.0	10.8	10.2	8.4	7.2	6.6	6.1	4.8	3.6
80°	10.8	9.7	7.9	7.2	7.2	6.1	5.4	4.8	4.3	3.0	2.4
82.5°	7.2	6.6	6.1	5.4	4.8	4.3	4.3	3.0	2.4	1.8	1.2
85°	5.4	4.8	4.3	3.6	3.6	3.0	2.4	1.8	1.8	1.2	0.6
87.5°	3.0	3.0	2.4	1.8	1.8	1.2	1.2	0.6	0.6	0.6	0.6
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2
2.5°	2315.7	2317.5	2327.7	2320.0	2339.9	2354.3	2347.1	2363.4	2357.9	2356.8	2375.4
5°	2331.5	2335.6	2349.5	2342.2	2364.0	2379.6	2372.4	2390.5	2385.1	2383.9	2403.1
7.5°	2361.6	2365.8	2377.8	2371.8	2394.7	2408.6	2399.5	2419.4	2412.2	2411.5	2430.3
10°	2399.5	2405.6	2415.8	2409.8	2430.9	2442.9	2433.9	2453.2	2446.5	2443.6	2464.1
12.5°	2427.9	2432.1	2442.4	2437.5	2458.0	2467.1	2459.2	2477.9	2469.5	2467.1	2485.1
15°	2421.2	2425.5	2433.9	2429.7	2449.0	2457.5	2447.2	2467.7	2459.2	2454.4	2470.7
17.5°	2379.0	2381.4	2387.5	2383.3	2403.8	2409.2	2397.7	2418.2	2410.4	2402.0	2417.6
20°	2316.9	2315.7	2319.3	2317.5	2334.4	2337.4	2330.2	2345.3	2336.2	2331.5	2340.5
22.5°	2239.8	2238.5	2240.9	2236.2	2253.0	2254.8	2243.9	2262.0	2253.0	2243.9	2259.0
25°	2154.2	2147.5	2146.3	2148.1	2159.5	2161.4	2149.9	2163.2	2151.7	2144.5	2158.9
27.5°	2048.5	2040.1	2038.3	2040.1	2051.5	2043.1	2033.4	2043.1	2031.6	2025.0	2034.1
30°	1918.4	1906.2	1900.8	1897.2	1909.2	1906.2	1883.9	1894.8	1876.7	1867.0	1873.7
32.5°	1742.8	1736.2	1721.7	1713.3	1724.7	1701.8	1688.0	1688.0	1680.8	1664.4	1668.0
35°	1499.2	1488.9	1475.7	1468.5	1470.3	1439.4	1416.6	1421.4	1397.2	1393.1	1394.9
37.5°	1191.0	1174.2	1169.3	1154.2	1157.9	1130.7	1099.4	1099.9	1087.3	1074.0	1069.8
40°	894.9	891.9	887.1	874.5	879.3	849.7	837.7	838.2	829.8	820.1	825.0
42.5°	691.6	682.1	679.1	674.8	676.0	671.2	655.5	657.3	650.1	647.7	645.3
45°	562.1	551.8	544.5	548.2	548.2	542.7	536.7	540.3	536.7	531.9	534.3
47.5°	463.2	453.5	449.9	449.3	453.5	449.9	443.8	445.0	444.5	442.7	441.4
50°	369.7	367.3	364.3	362.5	364.3	363.0	357.6	360.7	362.5	356.4	358.2
52.5°	281.6	281.6	281.0	276.8	280.5	276.8	276.2	277.4	275.6	273.2	272.6
55°	206.2	204.4	201.4	200.8	202.0	200.8	199.6	200.2	201.4	195.4	195.4
57.5°	141.1	140.0	138.2	138.2	140.5	137.5	135.7	138.2	135.7	133.3	133.3
60°	90.4	89.9	88.1	88.1	88.1	87.4	85.6	86.3	87.4	83.8	84.4
62.5°	54.2	52.4	51.9	51.3	51.9	51.3	51.3	50.6	50.1	50.1	48.3
65°	29.6	28.4	27.1	27.8	27.8	27.1	27.1	27.1	25.9	25.3	24.8
67.5°	15.1	13.8	13.8	13.3	13.3	13.3	13.3	12.7	12.7	12.7	12.0
70°	9.7	9.0	8.4	8.4	8.4	7.9	7.9	7.9	7.9	7.9	7.2
72.5°	6.6	6.1	5.4	5.4	5.4	4.8	4.8	4.8	4.8	4.3	4.3
75°	4.8	4.3	3.6	3.6	3.6	3.0	3.0	3.0	3.0	3.0	3.0
77.5°	3.0	2.4	2.4	2.4	2.4	1.8	1.8	1.8	1.8	1.8	1.2
80°	1.8	1.8	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6
82.5°	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
85°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0
87.5°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P245446

CATALOG NUMBER: LSR8B40D010 EC8B40927 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2
2.5°	2368.8	2364.0	2367.0	2389.3	2379.6	2376.7	2351.2	2373.6
5°	2397.2	2393.5	2393.5	2418.9	2407.4	2405.0	2380.3	2399.5
7.5°	2423.7	2420.1	2420.7	2446.5	2437.5	2433.9	2409.2	2428.5
10°	2458.0	2455.6	2456.2	2481.0	2471.3	2467.7	2442.4	2462.3
12.5°	2478.6	2474.9	2474.9	2501.4	2490.6	2485.1	2461.0	2480.4
15°	2462.8	2457.5	2457.5	2484.0	2472.0	2464.1	2442.9	2461.0
17.5°	2409.2	2403.8	2403.8	2426.7	2417.6	2406.2	2384.4	2401.3
20°	2334.4	2327.7	2325.9	2352.5	2339.9	2329.5	2310.3	2326.6
22.5°	2250.0	2247.0	2241.6	2268.1	2256.6	2245.7	2225.2	2238.0
25°	2148.6	2143.8	2138.4	2164.4	2152.9	2142.0	2125.8	2136.0
27.5°	2022.6	2023.2	2020.3	2040.8	2029.3	2023.2	2003.3	2020.3
30°	1870.1	1863.4	1861.0	1885.2	1874.2	1866.5	1841.7	1858.0
32.5°	1671.1	1661.4	1648.8	1675.9	1657.2	1650.6	1629.4	1653.0
35°	1381.6	1378.6	1367.1	1390.0	1379.8	1367.8	1354.5	1374.3
37.5°	1068.0	1070.4	1069.2	1075.3	1069.2	1061.3	1046.9	1039.6
40°	815.3	809.3	804.5	815.3	802.7	802.7	794.2	803.2
42.5°	639.2	636.9	642.8	645.3	638.0	636.9	635.6	635.1
45°	527.6	527.6	528.9	531.3	528.9	527.6	524.0	521.7
47.5°	434.8	437.2	434.8	442.7	438.4	437.2	430.0	433.0
50°	352.2	349.2	352.2	354.6	355.2	351.6	348.0	349.8
52.5°	273.2	268.3	267.2	270.8	268.3	268.3	266.0	265.4
55°	192.4	194.2	191.1	194.2	192.9	191.1	189.3	191.8
57.5°	130.3	130.8	129.6	131.5	128.5	129.0	128.5	127.8
60°	84.4	82.0	82.0	83.8	80.8	80.8	80.2	80.2
62.5°	48.3	47.6	47.6	47.0	46.5	46.5	46.5	45.2
65°	24.8	24.1	23.5	23.5	23.5	23.5	23.0	23.0
67.5°	12.0	11.5	11.5	12.0	11.5	11.5	11.5	11.5
70°	7.2	7.2	6.6	7.2	6.6	6.6	6.6	6.6
72.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
75°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
77.5°	1.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)