

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: P245428

Luminaire Tested: **LSR8B40D010 EC8B40935 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245428
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 EC8B40935 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3825.0 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

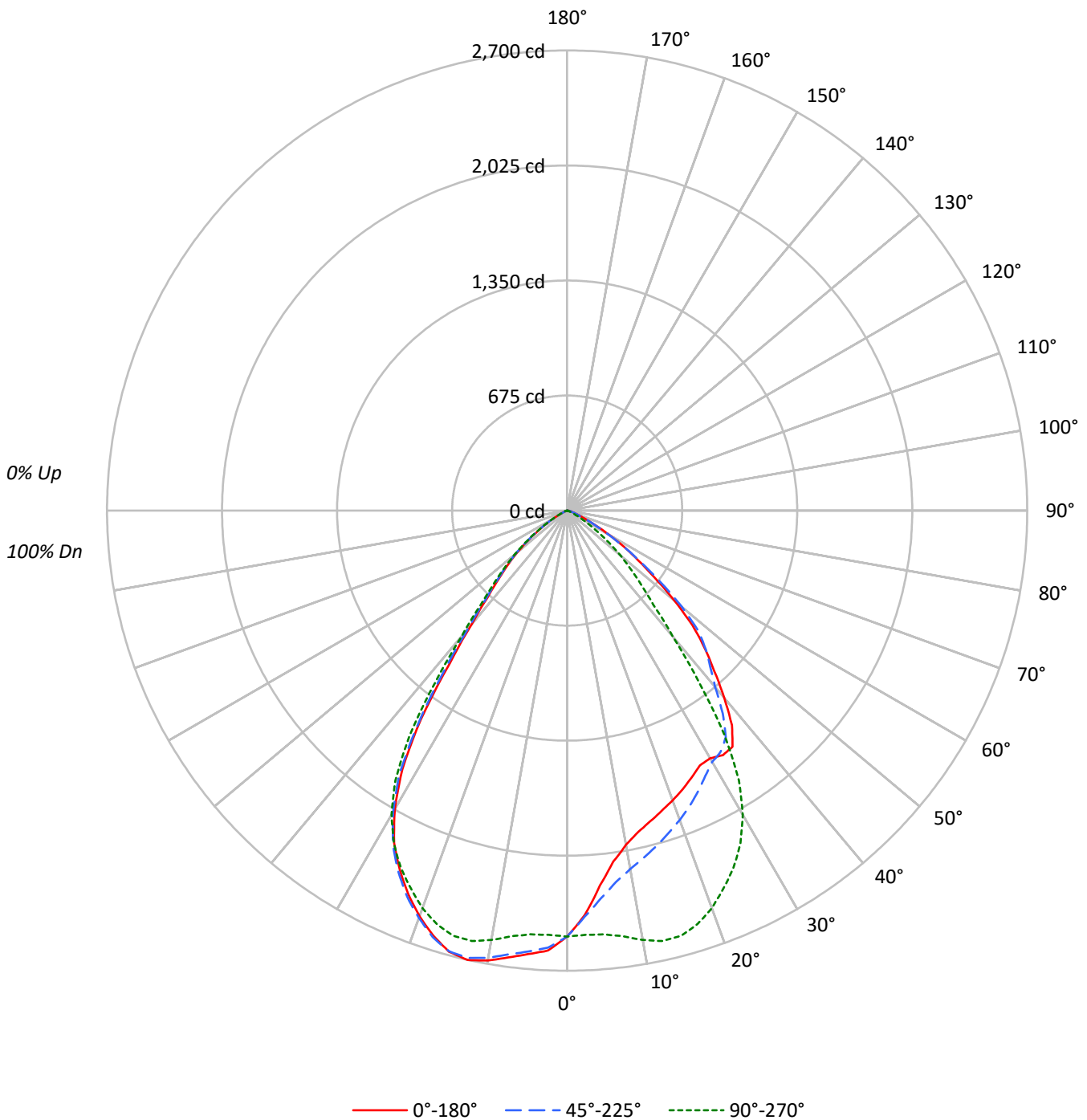
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	77054	77054	77054
5°	68365	77246	80865
10°	62330	80112	83938
15°	60238	82454	85534
20°	59376	81438	83118
25°	58794	78630	79123
30°	59752	73382	72025
35°	63690	60724	56327
40°	57720	38877	35202
45°	49819	26597	24766
50°	39309	19400	18268
55°	27284	11930	11225
60°	17373	6032	5384
65°	8668	2393	1817
70°	4796	1181	649
75°	3443	858	310
80°	2806	586	124
85°	3007	460	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.9	6.1
10°-20°	672.7	17.6
20°-30°	976.3	25.5
30°-40°	961.6	25.1
40°-50°	602.8	15.8
50°-60°	290.9	7.6
60°-70°	70.4	1.8
70°-80°	14.2	0.4
80°-90°	3.3	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°	1881.9	49.2
0°-40°	2843.5	74.3
0°-60°	3737.1	97.7
0°-90°	3825.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3825.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2499	2499	2499	2499	2499	
5°	2209	2283	2496	2597	2612	204
15°	1887	2035	2583	2677	2679	533
25°	1728	1818	2311	2342	2326	800
35°	1692	1623	1613	1521	1496	1024
45°	1142	1150	610	584	568	873
55°	508	524	222	219	209	467
65°	119	118	33	28	25	136
75°	29	25	7	3	3	32
85°	8	7	1	0	0	9
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°	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8
2.5°	2375.4	2360.3	2332.0	2366.2	2366.2	2347.1	2385.2	2362.2	2380.6	2409.5	2383.9
5°	2208.6	2196.1	2172.5	2208.6	2213.2	2195.5	2241.4	2224.4	2251.3	2286.7	2283.4
7.5°	2076.6	2060.9	2039.2	2076.6	2083.9	2072.0	2116.0	2108.2	2143.6	2189.6	2197.4
10°	1990.6	1974.2	1955.2	1989.3	1994.6	1986.7	2031.3	2026.7	2061.5	2114.7	2135.7
12.5°	1929.6	1915.8	1894.8	1930.9	1936.8	1925.6	1967.7	1965.7	2001.8	2057.6	2083.9
15°	1886.9	1870.5	1851.4	1882.3	1890.2	1877.7	1917.8	1913.8	1950.6	2005.7	2035.3
17.5°	1846.8	1831.7	1812.1	1840.9	1848.8	1835.7	1875.1	1868.5	1900.0	1952.6	1982.8
20°	1809.4	1793.0	1775.3	1804.8	1809.4	1794.3	1833.7	1825.2	1853.4	1902.0	1931.5
22.5°	1770.7	1753.6	1735.2	1764.1	1768.7	1753.6	1789.7	1779.9	1806.1	1850.1	1877.1
25°	1728.0	1712.3	1693.9	1720.8	1724.7	1708.3	1746.4	1733.9	1756.9	1795.6	1818.0
27.5°	1685.3	1670.2	1649.9	1677.5	1679.4	1663.7	1698.5	1681.4	1700.4	1735.9	1754.9
30°	1678.1	1661.0	1640.0	1662.4	1663.0	1642.7	1675.5	1655.1	1665.6	1691.9	1703.1
32.5°	1701.1	1684.0	1662.4	1680.7	1678.8	1656.5	1688.0	1663.0	1666.3	1680.1	1677.5
35°	1691.9	1671.6	1645.9	1665.6	1665.6	1638.7	1670.2	1640.7	1637.4	1639.4	1623.0
37.5°	1587.5	1571.8	1547.5	1566.5	1564.5	1544.2	1568.5	1544.2	1533.0	1528.4	1498.9
40°	1433.9	1414.8	1396.5	1416.8	1418.8	1397.1	1428.6	1401.1	1397.8	1384.6	1349.8
42.5°	1278.3	1271.7	1254.0	1271.1	1280.3	1261.9	1288.1	1275.0	1277.0	1273.7	1240.9
45°	1142.4	1131.2	1118.1	1137.8	1143.7	1134.5	1160.8	1152.9	1160.8	1177.2	1150.3
47.5°	996.0	984.8	970.4	991.4	1001.9	984.8	1007.1	1004.5	1016.3	1044.6	1041.9
50°	819.4	811.5	808.9	811.5	818.1	810.2	825.9	826.6	834.5	873.2	875.8
52.5°	648.7	646.7	637.5	646.0	646.0	633.6	649.3	642.1	650.0	676.2	693.3
55°	507.5	505.5	499.6	507.5	499.0	494.4	499.0	491.7	485.8	506.2	523.9
57.5°	395.2	388.7	381.5	384.7	384.1	374.2	379.5	370.9	366.3	373.6	389.3
60°	281.7	279.7	273.1	276.4	279.0	271.8	277.1	273.1	265.2	271.2	271.8
62.5°	187.1	188.4	184.5	185.1	183.2	181.9	185.1	187.1	185.1	182.5	183.2
65°	118.8	118.2	117.5	118.2	119.5	116.9	118.8	120.1	118.2	118.2	117.5
67.5°	78.8	76.8	74.8	76.2	77.5	75.5	77.5	76.8	77.5	76.8	74.8
70°	53.2	52.5	51.9	52.5	52.5	51.2	52.5	51.9	52.5	51.9	49.9
72.5°	38.7	38.7	38.1	38.7	38.7	37.4	38.1	36.8	37.4	36.8	35.5
75°	28.9	28.9	28.2	28.9	28.2	27.6	28.2	27.6	26.3	26.3	24.9
77.5°	21.0	21.0	21.0	21.0	21.0	20.4	20.4	19.7	19.0	18.4	18.4
80°	15.8	15.1	15.1	15.1	15.1	14.4	15.1	14.4	13.8	13.1	12.5
82.5°	11.2	11.8	11.2	11.2	11.2	10.5	11.2	10.5	10.5	9.8	8.5
85°	8.5	8.5	8.5	8.5	8.5	7.9	7.9	7.9	7.2	7.2	6.6
87.5°	4.6	4.6	4.6	5.3	4.6	4.6	4.6	3.9	3.9	3.3	3.3
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8
2.5°	2418.0	2421.3	2414.1	2425.3	2468.6	2433.8	2448.2	2452.8	2485.7	2491.6	2487.6
5°	2326.1	2340.6	2349.8	2374.7	2422.6	2397.7	2423.3	2439.7	2481.7	2495.5	2498.8
7.5°	2253.9	2284.1	2306.4	2347.1	2403.6	2384.6	2423.3	2450.2	2501.4	2519.1	2527.7
10°	2200.1	2246.0	2284.8	2340.6	2404.3	2391.8	2442.3	2480.4	2537.5	2558.5	2569.0
12.5°	2159.4	2215.2	2267.0	2337.9	2406.9	2401.0	2462.0	2505.4	2565.8	2586.8	2599.2
15°	2114.7	2179.1	2239.5	2318.9	2393.1	2391.8	2457.4	2503.4	2565.1	2582.8	2594.6
17.5°	2061.5	2130.5	2196.8	2282.8	2356.3	2357.6	2423.9	2469.3	2529.7	2544.1	2552.0
20°	2007.7	2076.0	2142.3	2230.9	2303.1	2305.1	2370.1	2412.1	2469.9	2481.7	2483.7
22.5°	1950.6	2014.3	2080.6	2168.6	2238.1	2239.5	2303.8	2343.2	2392.4	2398.3	2403.6
25°	1885.6	1948.0	2010.3	2097.6	2164.0	2167.9	2226.3	2261.1	2306.4	2311.0	2313.0
27.5°	1818.0	1869.2	1928.9	2003.8	2070.7	2068.1	2123.3	2162.6	2203.4	2200.7	2200.1
30°	1749.7	1792.4	1829.1	1901.3	1950.6	1952.6	2004.4	2023.5	2066.1	2060.9	2060.2
32.5°	1701.8	1712.9	1722.8	1759.5	1806.1	1789.7	1825.2	1848.8	1878.4	1876.4	1877.1
35°	1613.8	1593.4	1563.9	1569.1	1597.4	1571.8	1590.8	1590.1	1620.3	1613.1	1621.7
37.5°	1463.4	1405.7	1340.0	1302.6	1307.8	1275.7	1269.1	1284.9	1295.4	1275.0	1282.2
40°	1303.2	1217.9	1115.5	1030.1	1025.5	985.5	978.2	962.5	982.8	965.8	971.0
42.5°	1185.1	1072.1	937.5	833.8	811.5	778.0	758.3	755.7	761.6	749.8	746.5
45°	1094.5	974.3	820.0	701.2	676.2	640.1	620.4	613.2	613.9	609.9	606.6
47.5°	988.1	867.3	711.0	589.6	561.3	527.2	507.5	502.9	505.5	500.3	496.3
50°	841.0	732.7	590.2	479.3	454.3	429.4	413.6	409.0	408.4	404.4	401.8
52.5°	682.8	592.9	469.4	376.9	354.5	330.2	319.1	313.2	313.8	309.9	305.9
55°	528.5	472.7	363.7	284.9	264.6	245.5	235.0	227.8	225.9	221.9	219.9
57.5°	393.3	355.8	272.5	205.5	193.7	175.3	164.8	156.3	154.9	153.0	152.3
60°	275.7	248.8	191.7	146.4	132.6	121.5	111.0	102.4	98.5	97.8	95.9
62.5°	178.6	162.2	126.1	97.8	87.3	79.4	68.9	63.0	60.4	57.8	58.4
65°	111.0	98.5	78.8	63.0	57.1	51.2	43.3	38.1	35.5	32.8	33.5
67.5°	68.9	61.7	49.9	40.7	36.8	32.2	26.3	22.3	20.4	18.4	17.1
70°	46.6	40.0	34.1	28.9	26.3	23.0	19.0	15.8	14.4	13.1	11.8
72.5°	32.8	29.5	24.9	21.7	19.7	17.1	14.4	12.5	11.2	9.8	8.5
75°	23.6	21.0	18.4	15.8	14.4	13.1	11.2	9.8	8.5	7.2	5.9
77.5°	17.1	15.1	13.1	11.8	11.2	9.2	7.9	7.2	6.6	5.3	3.9
80°	11.8	10.5	8.5	7.9	7.9	6.6	5.9	5.3	4.6	3.3	2.6
82.5°	7.9	7.2	6.6	5.9	5.3	4.6	4.6	3.3	2.6	2.0	1.3
85°	5.9	5.3	4.6	3.9	3.9	3.3	2.6	2.0	2.0	1.3	0.7
87.5°	3.3	3.3	2.6	2.0	2.0	1.3	1.3	0.7	0.7	0.7	0.7
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°	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8
2.5°	2521.1	2523.1	2534.2	2525.7	2547.4	2563.1	2555.3	2573.0	2567.1	2565.8	2586.1
5°	2538.2	2542.8	2557.9	2550.0	2573.6	2590.7	2582.8	2602.5	2596.6	2595.3	2616.3
7.5°	2571.0	2575.6	2588.7	2582.2	2607.1	2622.2	2612.4	2634.0	2626.2	2625.5	2645.9
10°	2612.4	2618.9	2630.1	2623.5	2646.5	2659.6	2649.8	2670.8	2663.6	2660.3	2682.6
12.5°	2643.2	2647.8	2659.0	2653.7	2676.1	2685.9	2677.4	2697.7	2688.5	2685.9	2705.6
15°	2636.0	2640.6	2649.8	2645.2	2666.2	2675.4	2664.2	2686.6	2677.4	2672.1	2689.8
17.5°	2590.1	2592.7	2599.2	2594.6	2617.0	2622.9	2610.4	2632.7	2624.2	2615.0	2632.1
20°	2522.4	2521.1	2525.1	2523.1	2541.5	2544.8	2536.9	2553.3	2543.4	2538.2	2548.0
22.5°	2438.4	2437.1	2439.7	2434.5	2452.8	2454.8	2443.0	2462.7	2452.8	2443.0	2459.4
25°	2345.2	2337.9	2336.6	2338.6	2351.1	2353.0	2340.6	2355.0	2342.5	2334.7	2350.4
27.5°	2230.3	2221.1	2219.1	2221.1	2233.6	2224.4	2213.9	2224.4	2211.9	2204.7	2214.5
30°	2088.5	2075.3	2069.4	2065.5	2078.6	2075.3	2051.0	2062.9	2043.2	2032.7	2039.9
32.5°	1897.4	1890.2	1874.4	1865.2	1877.7	1852.8	1837.7	1837.7	1829.8	1812.1	1816.0
35°	1632.2	1621.0	1606.6	1598.7	1600.6	1567.2	1542.2	1547.5	1521.2	1516.6	1518.6
37.5°	1296.7	1278.3	1273.0	1256.6	1260.6	1231.0	1196.9	1197.5	1183.7	1169.3	1164.7
40°	974.3	971.0	965.8	952.0	957.2	925.1	911.9	912.6	903.4	892.9	898.1
42.5°	753.1	742.5	739.3	734.7	736.0	730.7	713.7	715.6	707.8	705.1	702.5
45°	611.9	600.7	592.9	596.8	596.8	590.9	584.3	588.3	584.3	579.1	581.7
47.5°	504.2	493.7	489.8	489.1	493.7	489.8	483.2	484.5	483.9	481.9	480.6
50°	402.5	399.8	396.6	394.6	396.6	395.2	389.3	392.6	394.6	388.0	390.0
52.5°	306.6	306.6	305.9	301.4	305.3	301.4	300.7	302.0	300.0	297.4	296.8
55°	224.5	222.6	219.3	218.6	219.9	218.6	217.3	218.0	219.3	212.7	212.7
57.5°	153.6	152.3	150.3	150.3	153.0	149.7	147.7	150.3	147.7	145.1	145.1
60°	98.5	97.8	95.9	95.9	95.9	95.2	93.2	93.9	95.2	91.3	91.9
62.5°	59.1	57.1	56.5	55.8	56.5	55.8	55.8	55.1	54.5	54.5	52.5
65°	32.2	30.9	29.5	30.2	30.2	29.5	29.5	29.5	28.2	27.6	26.9
67.5°	16.4	15.1	15.1	14.4	14.4	14.4	14.4	13.8	13.8	13.8	13.1
70°	10.5	9.8	9.2	9.2	9.2	8.5	8.5	8.5	8.5	8.5	7.9
72.5°	7.2	6.6	5.9	5.9	5.9	5.3	5.3	5.3	5.3	4.6	4.6
75°	5.3	4.6	3.9	3.9	3.9	3.3	3.3	3.3	3.3	3.3	3.3
77.5°	3.3	2.6	2.6	2.6	2.6	2.0	2.0	2.0	2.0	2.0	1.3
80°	2.0	2.0	1.3	1.3	1.3	1.3	0.7	0.7	0.7	0.7	0.7
82.5°	1.3	1.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0
87.5°	0.7	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: P245428

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8	2498.8
2.5°	2578.9	2573.6	2576.9	2601.2	2590.7	2587.4	2559.9	2584.1
5°	2609.8	2605.8	2605.8	2633.4	2620.9	2618.3	2591.4	2612.4
7.5°	2638.6	2634.7	2635.4	2663.6	2653.7	2649.8	2622.9	2643.9
10°	2676.1	2673.4	2674.1	2701.0	2690.5	2686.6	2659.0	2680.7
12.5°	2698.4	2694.4	2694.4	2723.3	2711.5	2705.6	2679.3	2700.4
15°	2681.3	2675.4	2675.4	2704.3	2691.2	2682.6	2659.6	2679.3
17.5°	2622.9	2617.0	2617.0	2641.9	2632.1	2619.6	2596.0	2614.3
20°	2541.5	2534.2	2532.3	2561.2	2547.4	2536.2	2515.2	2532.9
22.5°	2449.6	2446.3	2440.4	2469.3	2456.8	2445.0	2422.6	2436.4
25°	2339.3	2334.0	2328.1	2356.3	2343.9	2332.0	2314.3	2325.5
27.5°	2202.0	2202.7	2199.4	2221.7	2209.3	2202.7	2181.0	2199.4
30°	2035.9	2028.7	2026.1	2052.3	2040.5	2032.0	2005.1	2022.8
32.5°	1819.3	1808.8	1795.0	1824.5	1804.2	1797.0	1774.0	1799.6
35°	1504.1	1500.9	1488.4	1513.3	1502.2	1489.0	1474.6	1496.3
37.5°	1162.7	1165.4	1164.0	1170.6	1164.0	1155.5	1139.8	1131.9
40°	887.6	881.1	875.8	887.6	873.9	873.9	864.7	874.5
42.5°	695.9	693.3	699.9	702.5	694.6	693.3	692.0	691.3
45°	574.5	574.5	575.8	578.4	575.8	574.5	570.5	567.9
47.5°	473.4	476.0	473.4	481.9	477.3	476.0	468.1	471.4
50°	383.4	380.1	383.4	386.0	386.7	382.8	378.8	380.8
52.5°	297.4	292.2	290.8	294.8	292.2	292.2	289.5	288.9
55°	209.4	211.4	208.1	211.4	210.1	208.1	206.2	208.8
57.5°	141.8	142.5	141.2	143.1	139.8	140.5	139.8	139.2
60°	91.9	89.3	89.3	91.3	88.0	88.0	87.3	87.3
62.5°	52.5	51.9	51.9	51.2	50.6	50.6	50.6	49.2
65°	26.9	26.3	25.6	25.6	25.6	25.6	24.9	24.9
67.5°	13.1	12.5	12.5	13.1	12.5	12.5	12.5	12.5
70°	7.9	7.9	7.2	7.9	7.2	7.2	7.2	7.2
72.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
75°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
77.5°	2.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)