

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: P244132

Luminaire Tested: **LSR8B40D010 EC8B40935 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244132
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 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3967.0 lumens
Efficiency: N/A
Efficacy: 97.0 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

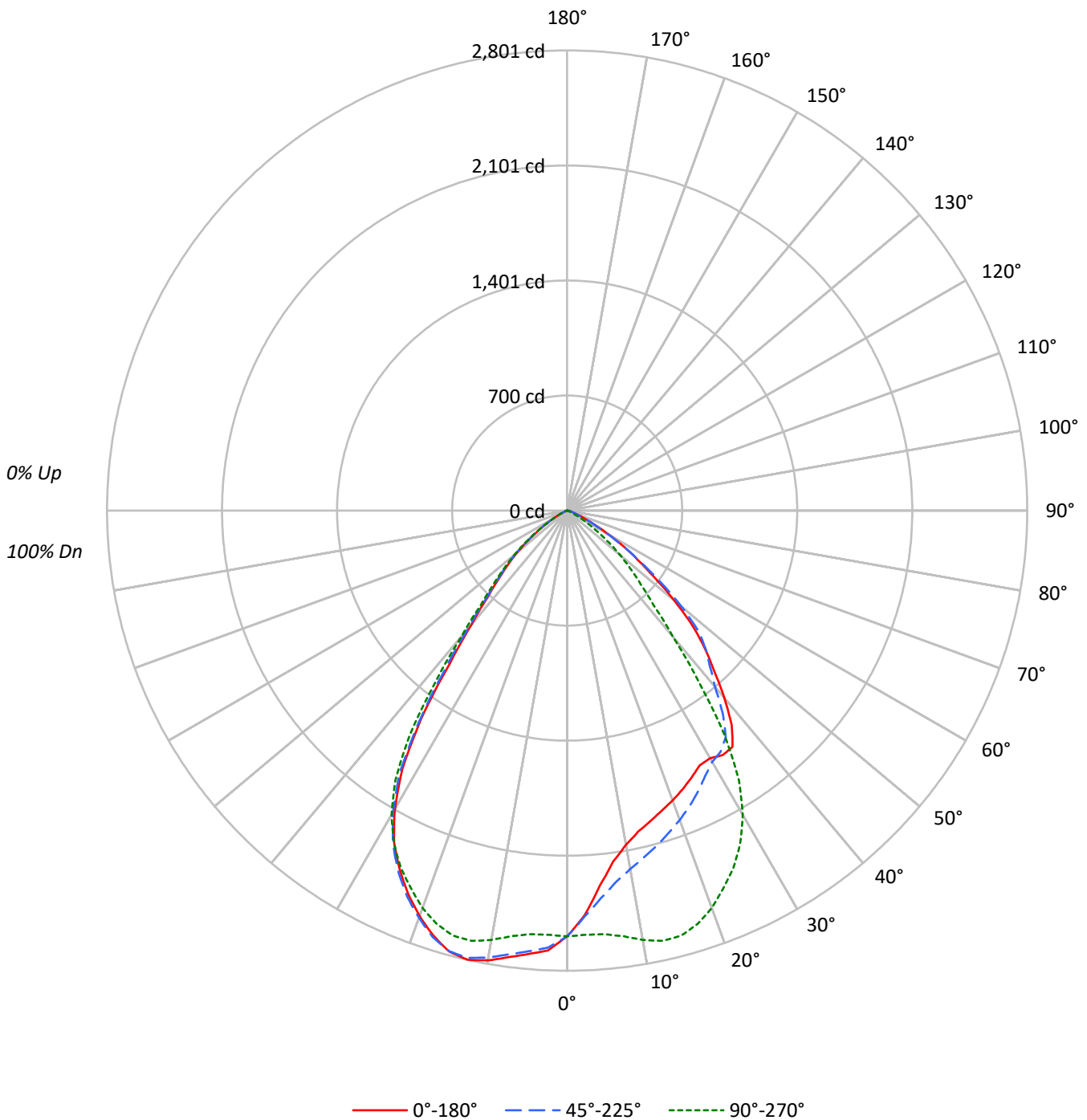
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	79915	79915	79915
5°	70903	80115	83867
10°	64644	83086	87054
15°	62472	85515	88711
20°	61581	84463	86206
25°	60978	81549	82059
30°	61970	76106	74699
35°	66054	62979	58416
40°	59862	40318	36510
45°	51668	27587	25686
50°	40767	20120	18944
55°	28295	12371	11639
60°	18015	6260	5588
65°	8989	2481	1890
70°	4977	1226	676
75°	3574	894	322
80°	2895	604	124
85°	3149	495	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.5	6.1
10°-20°	697.6	17.6
20°-30°	1012.6	25.5
30°-40°	997.3	25.1
40°-50°	625.2	15.8
50°-60°	301.7	7.6
60°-70°	73.0	1.8
70°-80°	14.8	0.4
80°-90°	3.4	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°	1951.8	49.2
0°-40°	2949.1	74.3
0°-60°	3875.9	97.7
0°-90°	3967.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3967.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2592	2592	2592	2592	2592	
5°	2291	2368	2588	2693	2709	212
15°	1957	2111	2679	2777	2779	553
25°	1792	1886	2397	2430	2412	829
35°	1755	1683	1673	1578	1552	1062
45°	1185	1193	633	606	589	906
55°	526	543	230	227	216	484
65°	123	122	34	29	26	141
75°	30	26	8	3	3	34
85°	9	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°	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6
2.5°	2463.5	2447.9	2418.6	2454.0	2454.0	2434.3	2473.8	2449.9	2469.0	2499.0	2472.4
5°	2290.6	2277.7	2253.1	2290.6	2295.4	2277.0	2324.6	2306.9	2334.9	2371.6	2368.2
7.5°	2153.7	2137.4	2114.9	2153.7	2161.2	2149.0	2194.6	2186.4	2223.2	2270.8	2279.0
10°	2064.5	2047.5	2027.8	2063.2	2068.6	2060.4	2106.7	2102.0	2138.1	2193.2	2215.0
12.5°	2001.2	1986.9	1965.1	2002.6	2008.7	1997.1	2040.7	2038.7	2076.1	2134.0	2161.2
15°	1956.9	1939.9	1920.2	1952.2	1960.4	1947.4	1989.0	1984.9	2023.0	2080.2	2110.8
17.5°	1915.4	1899.8	1879.3	1909.3	1917.5	1903.8	1944.7	1937.9	1970.6	2025.0	2056.4
20°	1876.6	1859.6	1841.2	1871.8	1876.6	1860.9	1901.8	1892.9	1922.2	1972.6	2003.3
22.5°	1836.4	1818.7	1799.7	1829.6	1834.4	1818.7	1856.2	1846.0	1873.2	1918.8	1946.7
25°	1792.2	1775.8	1756.8	1784.7	1788.8	1771.7	1811.2	1798.3	1822.1	1862.3	1885.5
27.5°	1747.9	1732.2	1711.1	1739.7	1741.8	1725.4	1761.5	1743.8	1763.6	1800.3	1820.1
30°	1740.4	1722.7	1700.9	1724.1	1724.8	1703.6	1737.7	1716.6	1727.5	1754.7	1766.3
32.5°	1764.2	1746.5	1724.1	1743.1	1741.1	1717.9	1750.6	1724.8	1728.2	1742.5	1739.7
35°	1754.7	1733.6	1707.1	1727.5	1727.5	1699.6	1732.2	1701.6	1698.2	1700.2	1683.2
37.5°	1646.5	1630.1	1604.9	1624.7	1622.6	1601.5	1626.7	1601.5	1589.9	1585.2	1554.5
40°	1487.1	1467.4	1448.3	1469.4	1471.5	1449.0	1481.7	1453.1	1449.7	1436.0	1400.0
42.5°	1325.7	1318.9	1300.5	1318.3	1327.8	1308.7	1336.0	1322.3	1324.4	1321.0	1286.9
45°	1184.8	1173.2	1159.6	1180.0	1186.2	1176.6	1203.9	1195.7	1203.9	1220.9	1193.0
47.5°	1032.9	1021.4	1006.4	1028.2	1039.1	1021.4	1044.5	1041.8	1054.1	1083.3	1080.6
50°	849.8	841.6	838.9	841.6	848.4	840.2	856.6	857.3	865.4	905.6	908.3
52.5°	672.7	670.7	661.2	670.0	670.0	657.1	673.4	665.9	674.1	701.3	719.0
55°	526.3	524.3	518.2	526.3	517.5	512.7	517.5	510.0	503.9	525.0	543.4
57.5°	409.9	403.1	395.6	399.0	398.3	388.1	393.6	384.7	380.0	387.4	403.8
60°	292.1	290.1	283.3	286.7	289.4	281.9	287.3	283.3	275.1	281.2	281.9
62.5°	194.1	195.4	191.3	192.0	190.0	188.6	192.0	194.1	192.0	189.3	190.0
65°	123.2	122.6	121.9	122.6	123.9	121.2	123.2	124.6	122.6	122.6	121.9
67.5°	81.7	79.7	77.6	79.0	80.3	78.3	80.3	79.7	80.3	79.7	77.6
70°	55.2	54.5	53.8	54.5	54.5	53.1	54.5	53.8	54.5	53.8	51.7
72.5°	40.2	40.2	39.5	40.2	40.2	38.8	39.5	38.1	38.8	38.1	36.8
75°	30.0	30.0	29.3	30.0	29.3	28.6	29.3	28.6	27.2	27.2	25.9
77.5°	21.8	21.8	21.8	21.8	21.8	21.1	21.1	20.4	19.7	19.1	19.1
80°	16.3	15.7	15.7	15.7	15.7	15.0	15.7	15.0	14.3	13.6	12.9
82.5°	11.6	12.3	11.6	11.6	11.6	10.9	11.6	10.9	10.9	10.2	8.9
85°	8.9	8.9	8.9	8.9	8.9	8.2	8.2	8.2	7.5	7.5	6.8
87.5°	4.8	4.8	4.8	5.4	4.8	4.8	4.8	4.1	4.1	3.4	3.4
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°	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6
2.5°	2507.8	2511.2	2503.7	2515.3	2560.2	2524.2	2539.1	2543.9	2577.9	2584.1	2580.0
5°	2412.5	2427.5	2437.0	2462.9	2512.6	2486.7	2513.3	2530.3	2573.9	2588.2	2591.6
7.5°	2337.6	2368.9	2392.1	2434.3	2492.8	2473.1	2513.3	2541.2	2594.3	2612.7	2621.5
10°	2281.7	2329.4	2369.6	2427.5	2493.5	2480.6	2533.0	2572.5	2631.7	2653.5	2664.4
12.5°	2239.5	2297.4	2351.2	2424.7	2496.2	2490.1	2553.4	2598.4	2661.0	2682.8	2695.7
15°	2193.2	2260.0	2322.6	2405.0	2481.9	2480.6	2548.7	2596.3	2660.3	2678.7	2691.0
17.5°	2138.1	2209.6	2278.3	2367.5	2443.8	2445.2	2513.9	2560.9	2623.6	2638.5	2646.7
20°	2082.2	2153.1	2221.8	2313.7	2388.6	2390.7	2458.1	2501.7	2561.6	2573.9	2575.9
22.5°	2023.0	2089.0	2157.8	2249.1	2321.2	2322.6	2389.3	2430.2	2481.3	2487.4	2492.8
25°	1955.6	2020.3	2085.0	2175.5	2244.3	2248.4	2309.0	2345.1	2392.1	2396.8	2398.9
27.5°	1885.5	1938.6	2000.5	2078.2	2147.6	2144.9	2202.1	2242.9	2285.1	2282.4	2281.7
30°	1814.6	1858.9	1897.0	1971.9	2023.0	2025.0	2078.8	2098.6	2142.8	2137.4	2136.7
32.5°	1764.9	1776.5	1786.7	1824.9	1873.2	1856.2	1892.9	1917.5	1948.1	1946.1	1946.7
35°	1673.7	1652.6	1621.9	1627.4	1656.7	1630.1	1649.9	1649.2	1680.5	1673.0	1681.9
37.5°	1517.8	1457.8	1389.7	1350.9	1356.4	1323.0	1316.2	1332.5	1343.4	1322.3	1329.8
40°	1351.6	1263.1	1156.9	1068.4	1063.6	1022.1	1014.6	998.2	1019.3	1001.6	1007.1
42.5°	1229.1	1111.9	972.3	864.8	841.6	806.9	786.5	783.7	789.9	777.6	774.2
45°	1135.1	1010.5	850.5	727.2	701.3	663.9	643.5	636.0	636.7	632.6	629.2
47.5°	1024.8	899.5	737.4	611.5	582.2	546.8	526.3	521.6	524.3	518.9	514.8
50°	872.3	759.9	612.1	497.1	471.2	445.3	429.0	424.2	423.5	419.4	416.7
52.5°	708.2	614.9	486.9	390.8	367.7	342.5	330.9	324.8	325.5	321.4	317.3
55°	548.1	490.3	377.2	295.5	274.4	254.7	243.8	236.3	234.2	230.1	228.1
57.5°	407.9	369.1	282.6	213.1	200.9	181.8	170.9	162.1	160.7	158.7	158.0
60°	286.0	258.1	198.8	151.8	137.5	126.0	115.1	106.2	102.1	101.5	99.4
62.5°	185.2	168.2	130.7	101.5	90.6	82.4	71.5	65.4	62.6	59.9	60.6
65°	115.1	102.1	81.7	65.4	59.2	53.1	44.9	39.5	36.8	34.0	34.7
67.5°	71.5	64.0	51.7	42.2	38.1	33.4	27.2	23.2	21.1	19.1	17.7
70°	48.3	41.5	35.4	30.0	27.2	23.8	19.7	16.3	15.0	13.6	12.3
72.5°	34.0	30.6	25.9	22.5	20.4	17.7	15.0	12.9	11.6	10.2	8.9
75°	24.5	21.8	19.1	16.3	15.0	13.6	11.6	10.2	8.9	7.5	6.1
77.5°	17.7	15.7	13.6	12.3	11.6	9.5	8.2	7.5	6.8	5.4	4.1
80°	12.3	10.9	8.9	8.2	8.2	6.8	6.1	5.4	4.8	3.4	2.7
82.5°	8.2	7.5	6.8	6.1	5.4	4.8	4.8	3.4	2.7	2.0	1.4
85°	6.1	5.4	4.8	4.1	4.1	3.4	2.7	2.0	2.0	1.4	0.7
87.5°	3.4	3.4	2.7	2.0	2.0	1.4	1.4	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°	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6
2.5°	2614.7	2616.8	2628.3	2619.5	2641.9	2658.3	2650.1	2668.5	2662.4	2661.0	2682.1
5°	2632.4	2637.2	2652.8	2644.7	2669.2	2686.9	2678.7	2699.1	2693.0	2691.7	2713.4
7.5°	2666.5	2671.2	2684.8	2678.0	2703.9	2719.6	2709.4	2731.8	2723.7	2723.0	2744.1
10°	2709.4	2716.2	2727.7	2720.9	2744.8	2758.4	2748.2	2770.0	2762.5	2759.1	2782.2
12.5°	2741.4	2746.1	2757.7	2752.3	2775.4	2785.6	2776.8	2797.9	2788.3	2785.6	2806.0
15°	2733.9	2738.6	2748.2	2743.4	2765.2	2774.7	2763.2	2786.3	2776.8	2771.3	2789.7
17.5°	2686.2	2688.9	2695.7	2691.0	2714.1	2720.3	2707.3	2730.5	2721.6	2712.1	2729.8
20°	2616.1	2614.7	2618.8	2616.8	2635.8	2639.2	2631.1	2648.1	2637.9	2632.4	2642.6
22.5°	2528.9	2527.6	2530.3	2524.8	2543.9	2545.9	2533.7	2554.1	2543.9	2533.7	2550.7
25°	2432.2	2424.7	2423.4	2425.4	2438.4	2440.4	2427.5	2442.4	2429.5	2421.3	2437.7
27.5°	2313.1	2303.5	2301.5	2303.5	2316.5	2306.9	2296.0	2306.9	2294.0	2286.5	2296.7
30°	2166.0	2152.4	2146.2	2142.2	2155.8	2152.4	2127.2	2139.4	2119.0	2108.1	2115.6
32.5°	1967.8	1960.4	1944.0	1934.5	1947.4	1921.5	1905.9	1905.9	1897.7	1879.3	1883.4
35°	1692.8	1681.2	1666.2	1658.0	1660.1	1625.3	1599.5	1604.9	1577.7	1572.9	1575.0
37.5°	1344.8	1325.7	1320.3	1303.3	1307.4	1276.7	1241.3	1242.0	1227.7	1212.7	1207.9
40°	1010.5	1007.1	1001.6	987.3	992.8	959.4	945.8	946.5	936.9	926.0	931.5
42.5°	781.0	770.1	766.7	761.9	763.3	757.9	740.2	742.2	734.0	731.3	728.6
45°	634.6	623.0	614.9	619.0	619.0	612.8	606.0	610.1	606.0	600.6	603.3
47.5°	522.9	512.0	508.0	507.3	512.0	508.0	501.2	502.5	501.8	499.8	498.4
50°	417.4	414.7	411.3	409.2	411.3	409.9	403.8	407.2	409.2	402.4	404.5
52.5°	318.0	318.0	317.3	312.5	316.6	312.5	311.9	313.2	311.2	308.5	307.8
55°	232.9	230.8	227.4	226.7	228.1	226.7	225.4	226.1	227.4	220.6	220.6
57.5°	159.3	158.0	155.9	155.9	158.7	155.2	153.2	155.9	153.2	150.5	150.5
60°	102.1	101.5	99.4	99.4	99.4	98.7	96.7	97.4	98.7	94.6	95.3
62.5°	61.3	59.2	58.6	57.9	58.6	57.9	57.9	57.2	56.5	56.5	54.5
65°	33.4	32.0	30.6	31.3	31.3	30.6	30.6	30.6	29.3	28.6	27.9
67.5°	17.0	15.7	15.7	15.0	15.0	15.0	15.0	14.3	14.3	14.3	13.6
70°	10.9	10.2	9.5	9.5	9.5	8.9	8.9	8.9	8.9	8.9	8.2
72.5°	7.5	6.8	6.1	6.1	6.1	5.4	5.4	5.4	5.4	4.8	4.8
75°	5.4	4.8	4.1	4.1	4.1	3.4	3.4	3.4	3.4	3.4	3.4
77.5°	3.4	2.7	2.7	2.7	2.7	2.0	2.0	2.0	2.0	2.0	1.4
80°	2.0	2.0	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7
82.5°	1.4	1.4	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: P244132

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6	2591.6
2.5°	2674.6	2669.2	2672.6	2697.8	2686.9	2683.5	2654.9	2680.1
5°	2706.6	2702.5	2702.5	2731.1	2718.2	2715.5	2687.6	2709.4
7.5°	2736.6	2732.5	2733.2	2762.5	2752.3	2748.2	2720.3	2742.0
10°	2775.4	2772.7	2773.4	2801.3	2790.4	2786.3	2757.7	2780.2
12.5°	2798.6	2794.5	2794.5	2824.4	2812.2	2806.0	2778.8	2800.6
15°	2780.9	2774.7	2774.7	2804.7	2791.1	2782.2	2758.4	2778.8
17.5°	2720.3	2714.1	2714.1	2740.0	2729.8	2716.8	2692.3	2711.4
20°	2635.8	2628.3	2626.3	2656.2	2641.9	2630.4	2608.6	2627.0
22.5°	2540.5	2537.1	2531.0	2560.9	2548.0	2535.7	2512.6	2526.9
25°	2426.1	2420.7	2414.5	2443.8	2430.9	2418.6	2400.2	2411.8
27.5°	2283.8	2284.5	2281.1	2304.2	2291.3	2284.5	2262.0	2281.1
30°	2111.5	2104.0	2101.3	2128.5	2116.3	2107.4	2079.5	2097.9
32.5°	1886.8	1875.9	1861.6	1892.3	1871.2	1863.7	1839.8	1866.4
35°	1560.0	1556.6	1543.6	1569.5	1557.9	1544.3	1529.3	1551.8
37.5°	1205.9	1208.6	1207.3	1214.1	1207.3	1198.4	1182.1	1173.9
40°	920.6	913.8	908.3	920.6	906.3	906.3	896.8	907.0
42.5°	721.8	719.0	725.9	728.6	720.4	719.0	717.7	717.0
45°	595.8	595.8	597.2	599.9	597.2	595.8	591.7	589.0
47.5°	490.9	493.7	490.9	499.8	495.0	493.7	485.5	488.9
50°	397.7	394.2	397.7	400.4	401.1	397.0	392.9	394.9
52.5°	308.5	303.0	301.6	305.7	303.0	303.0	300.3	299.6
55°	217.2	219.3	215.8	219.3	217.9	215.8	213.8	216.5
57.5°	147.1	147.8	146.4	148.4	145.0	145.7	145.0	144.4
60°	95.3	92.6	92.6	94.6	91.2	91.2	90.6	90.6
62.5°	54.5	53.8	53.8	53.1	52.4	52.4	52.4	51.1
65°	27.9	27.2	26.6	26.6	26.6	26.6	25.9	25.9
67.5°	13.6	12.9	12.9	13.6	12.9	12.9	12.9	12.9
70°	8.2	8.2	7.5	8.2	7.5	7.5	7.5	7.5
72.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
75°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
77.5°	2.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4
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)