

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: P244156

Luminaire Tested: **LSR8B40D010 EC8B40930 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244156
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 EC8B40930 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3841.7 lumens
Efficiency: N/A
Efficacy: 93.9 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

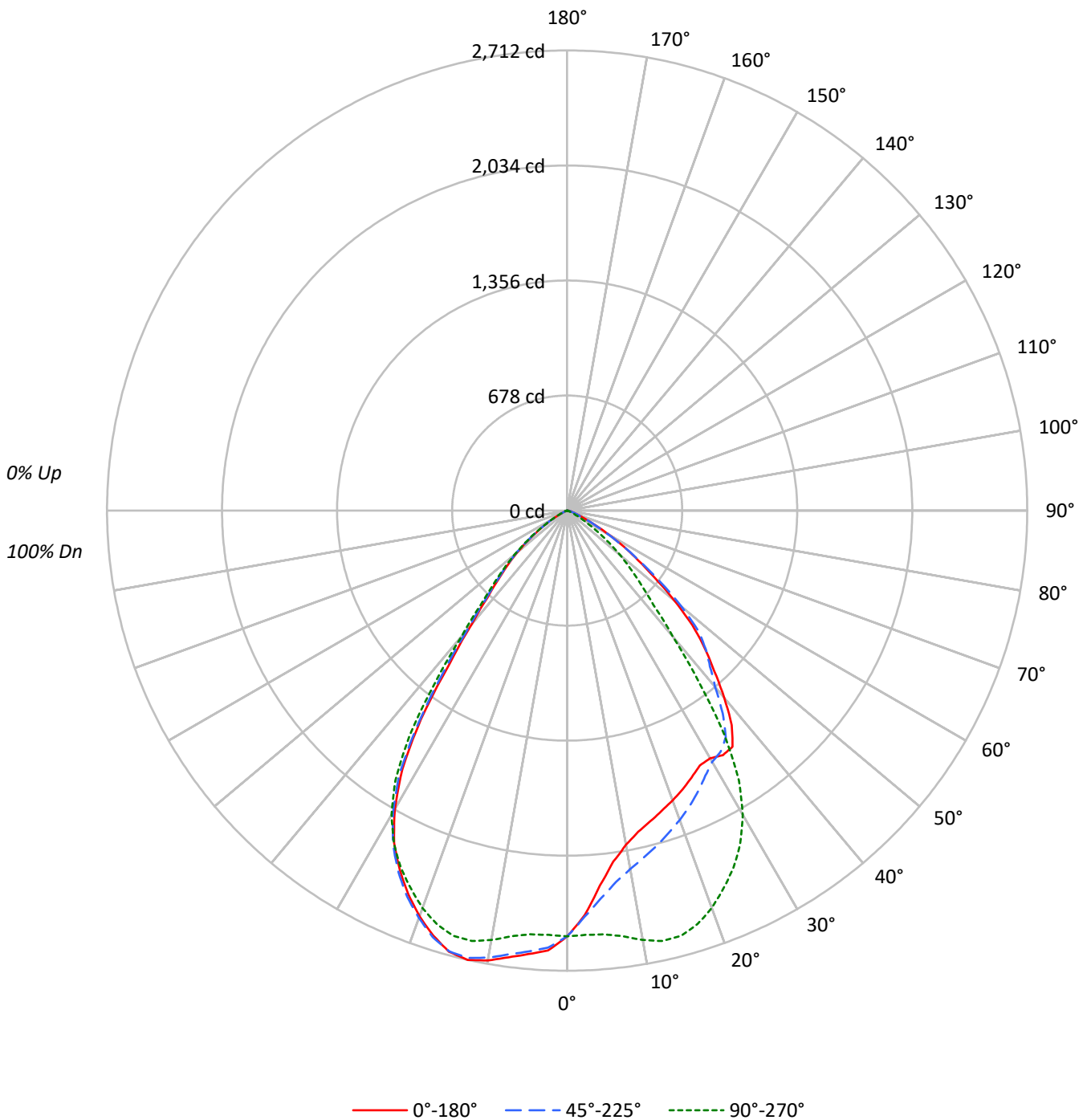
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P244156

CATALOG NUMBER: LSR8B40D010 EC8B40930 8LBSW0LI

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	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°	233.9	6.1
10°-20°	675.6	17.6
20°-30°	980.6	25.5
30°-40°	965.8	25.1
40°-50°	605.4	15.8
50°-60°	292.1	7.6
60°-70°	70.7	1.8
70°-80°	14.3	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°	1890.1	49.2
0°-40°	2855.9	74.3
0°-60°	3753.4	97.7
0°-90°	3841.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3841.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2510	2510	2510	2510	2510	
5°	2218	2294	2506	2608	2624	205
15°	1895	2044	2594	2689	2691	536
25°	1736	1826	2321	2353	2336	803
35°	1699	1630	1620	1528	1503	1028
45°	1147	1155	613	587	570	877
55°	510	526	223	220	210	469
65°	119	118	33	28	25	136
75°	29	25	7	3	3	33
85°	8	7	1	0	0	9
90°	0	0	0	0	0	



TEST NUMBER: P244156

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7
2.5°	2385.7	2370.6	2342.2	2376.5	2376.5	2357.4	2395.6	2372.5	2391.0	2420.0	2394.2
5°	2218.2	2205.7	2181.9	2218.2	2222.8	2205.0	2251.2	2234.0	2261.1	2296.7	2293.5
7.5°	2085.7	2069.8	2048.1	2085.7	2092.9	2081.0	2125.3	2117.3	2153.0	2199.1	2207.0
10°	1999.3	1982.8	1963.7	1998.0	2003.2	1995.4	2040.2	2035.6	2070.5	2124.0	2145.0
12.5°	1938.0	1924.1	1903.0	1939.3	1945.3	1934.1	1976.2	1974.2	2010.5	2066.6	2092.9
15°	1895.2	1878.7	1859.5	1890.5	1898.4	1885.9	1926.1	1922.2	1959.1	2014.4	2044.1
17.5°	1854.9	1839.8	1819.9	1849.0	1856.8	1843.7	1883.3	1876.7	1908.3	1961.1	1991.3
20°	1817.4	1800.8	1783.1	1812.7	1817.4	1802.1	1841.7	1833.2	1861.5	1910.3	1940.0
22.5°	1778.4	1761.3	1742.8	1771.9	1776.4	1761.3	1797.5	1787.7	1814.0	1858.2	1885.2
25°	1735.5	1719.7	1701.2	1728.2	1732.3	1715.8	1754.0	1741.5	1764.6	1803.5	1825.9
27.5°	1692.7	1677.5	1657.1	1684.8	1686.8	1671.0	1705.8	1688.7	1707.8	1743.5	1762.5
30°	1685.4	1668.3	1647.2	1669.6	1670.3	1649.8	1682.8	1662.3	1672.9	1699.3	1710.5
32.5°	1708.5	1691.4	1669.6	1688.1	1686.1	1663.7	1695.3	1670.3	1673.5	1687.4	1684.8
35°	1699.3	1678.8	1653.1	1672.9	1672.9	1645.9	1677.5	1647.9	1644.5	1646.5	1630.0
37.5°	1594.4	1578.6	1554.2	1573.3	1571.3	1550.9	1575.3	1550.9	1539.7	1535.1	1505.4
40°	1440.1	1421.0	1402.6	1423.0	1425.0	1403.2	1434.9	1407.2	1403.8	1390.7	1355.7
42.5°	1283.9	1277.3	1259.4	1276.6	1285.8	1267.4	1293.7	1280.5	1282.5	1279.3	1246.2
45°	1147.3	1136.1	1122.9	1142.7	1148.7	1139.5	1165.8	1157.9	1165.8	1182.3	1155.3
47.5°	1000.3	989.1	974.6	995.7	1006.2	989.1	1011.5	1008.9	1020.8	1049.1	1046.5
50°	822.9	815.0	812.4	815.0	821.6	813.7	829.5	830.2	838.1	877.0	879.6
52.5°	651.5	649.5	640.3	648.8	648.8	636.3	652.2	644.9	652.8	679.2	696.4
55°	509.7	507.7	501.8	509.7	501.2	496.5	501.2	493.9	488.0	508.4	526.2
57.5°	396.9	390.3	383.2	386.4	385.7	375.9	381.1	372.5	367.9	375.2	391.0
60°	282.8	280.9	274.3	277.6	280.2	273.0	278.2	274.3	266.3	272.3	273.0
62.5°	187.9	189.2	185.3	186.0	184.0	182.6	186.0	187.9	186.0	183.3	184.0
65°	119.4	118.7	118.0	118.7	120.1	117.4	119.4	120.6	118.7	118.7	118.0
67.5°	79.1	77.1	75.2	76.5	77.8	75.8	77.8	77.1	77.8	77.1	75.2
70°	53.4	52.8	52.1	52.8	52.8	51.5	52.8	52.1	52.8	52.1	50.1
72.5°	38.9	38.9	38.2	38.9	38.9	37.6	38.2	36.9	37.6	36.9	35.6
75°	29.0	29.0	28.4	29.0	28.4	27.7	28.4	27.7	26.3	26.3	25.1
77.5°	21.1	21.1	21.1	21.1	21.1	20.4	20.4	19.7	19.2	18.5	18.5
80°	15.8	15.1	15.1	15.1	15.1	14.5	15.1	14.5	13.9	13.2	12.6
82.5°	11.2	11.9	11.2	11.2	11.2	10.5	11.2	10.5	10.5	9.9	8.5
85°	8.5	8.5	8.5	8.5	8.5	8.0	8.0	8.0	7.3	7.3	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



TEST NUMBER: P244156

CATALOG NUMBER: LSR8B40D010 EC8B40930 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7
2.5°	2428.5	2431.9	2424.6	2435.8	2479.3	2444.5	2458.9	2463.5	2496.5	2502.4	2498.5
5°	2336.3	2350.7	2360.0	2385.0	2433.2	2408.1	2433.8	2450.3	2492.5	2506.3	2509.7
7.5°	2263.7	2294.0	2316.4	2357.4	2414.1	2394.9	2433.8	2460.9	2512.3	2530.1	2538.7
10°	2209.6	2255.8	2294.7	2350.7	2414.7	2402.2	2453.0	2491.2	2548.6	2569.7	2580.2
12.5°	2168.8	2224.8	2276.9	2348.2	2417.3	2411.4	2472.7	2516.3	2577.0	2598.0	2610.6
15°	2124.0	2188.5	2249.2	2329.0	2403.5	2402.2	2468.1	2514.3	2576.3	2594.1	2606.0
17.5°	2070.5	2139.8	2206.4	2292.8	2366.5	2367.9	2434.5	2480.0	2540.6	2555.2	2563.1
20°	2016.5	2085.1	2151.6	2240.7	2313.2	2315.2	2380.4	2422.6	2480.7	2492.5	2494.6
22.5°	1959.1	2023.1	2089.7	2178.0	2247.9	2249.2	2313.9	2353.4	2402.9	2408.8	2414.1
25°	1893.8	1956.5	2019.0	2106.8	2173.4	2177.3	2236.1	2271.0	2316.4	2321.1	2323.0
27.5°	1825.9	1877.3	1937.3	2012.5	2079.8	2077.1	2132.5	2172.0	2213.0	2210.3	2209.6
30°	1757.3	1800.2	1837.1	1909.6	1959.1	1961.1	2013.2	2032.3	2075.1	2069.8	2069.3
32.5°	1709.2	1720.4	1730.3	1767.1	1814.0	1797.5	1833.2	1856.8	1886.5	1884.6	1885.2
35°	1620.9	1600.3	1570.7	1576.0	1604.4	1578.6	1597.8	1597.1	1627.4	1620.2	1628.7
37.5°	1469.9	1411.8	1345.9	1308.2	1313.5	1281.2	1274.6	1290.5	1301.0	1280.5	1287.8
40°	1308.9	1223.2	1120.3	1034.6	1030.0	989.7	982.6	966.6	987.2	970.0	975.3
42.5°	1190.2	1076.8	941.6	837.4	815.0	781.3	761.6	758.9	764.9	753.1	749.7
45°	1099.3	978.5	823.6	704.2	679.2	642.9	623.2	615.9	616.6	612.6	609.3
47.5°	992.4	871.0	714.1	592.1	563.8	529.4	509.7	505.1	507.7	502.4	498.5
50°	844.7	735.9	592.8	481.4	456.4	431.2	415.4	410.8	410.2	406.1	403.6
52.5°	685.8	595.5	471.5	378.4	356.0	331.7	320.5	314.6	315.2	311.2	307.3
55°	530.8	474.7	365.3	286.2	265.8	246.6	236.1	228.8	226.8	222.9	220.9
57.5°	394.9	357.4	273.6	206.4	194.5	176.1	165.5	156.9	155.6	153.7	153.0
60°	277.0	249.9	192.6	147.1	133.2	122.0	111.4	102.9	98.9	98.2	96.3
62.5°	179.4	162.9	126.6	98.2	87.7	79.8	69.3	63.3	60.6	58.1	58.7
65°	111.4	98.9	79.1	63.3	57.4	51.5	43.5	38.2	35.6	33.0	33.6
67.5°	69.3	62.0	50.1	40.9	36.9	32.3	26.3	22.4	20.4	18.5	17.2
70°	46.9	40.2	34.3	29.0	26.3	23.1	19.2	15.8	14.5	13.2	11.9
72.5°	33.0	29.7	25.1	21.7	19.7	17.2	14.5	12.6	11.2	9.9	8.5
75°	23.8	21.1	18.5	15.8	14.5	13.2	11.2	9.9	8.5	7.3	5.9
77.5°	17.2	15.1	13.2	11.9	11.2	9.2	8.0	7.3	6.6	5.3	3.9
80°	11.9	10.5	8.5	8.0	8.0	6.6	5.9	5.3	4.6	3.3	2.7
82.5°	8.0	7.3	6.6	5.9	5.3	4.6	4.6	3.3	2.7	2.0	1.3
85°	5.9	5.3	4.6	3.9	3.9	3.3	2.7	2.0	2.0	1.3	0.7
87.5°	3.3	3.3	2.7	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



TEST NUMBER: P244156

CATALOG NUMBER: LSR8B40D010 EC8B40930 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7
2.5°	2532.1	2534.1	2545.3	2536.7	2558.5	2574.3	2566.4	2584.2	2578.3	2577.0	2597.4
5°	2549.3	2553.9	2569.0	2561.1	2584.8	2602.0	2594.1	2613.8	2607.9	2606.7	2627.7
7.5°	2582.2	2586.8	2600.0	2593.4	2618.4	2633.7	2623.8	2645.6	2637.6	2636.9	2657.4
10°	2623.8	2630.3	2641.5	2635.0	2658.0	2671.2	2661.4	2682.4	2675.2	2671.9	2694.3
12.5°	2654.8	2659.3	2670.6	2665.3	2687.7	2697.6	2689.1	2709.5	2700.3	2697.6	2717.4
15°	2647.5	2652.1	2661.4	2656.8	2677.8	2687.0	2675.8	2698.2	2689.1	2683.8	2701.6
17.5°	2601.4	2604.0	2610.6	2606.0	2628.4	2634.4	2621.8	2644.2	2635.6	2626.4	2643.5
20°	2533.5	2532.1	2536.0	2534.1	2552.5	2555.9	2547.9	2564.4	2554.5	2549.3	2559.1
22.5°	2449.0	2447.7	2450.3	2445.0	2463.5	2465.5	2453.6	2473.4	2463.5	2453.6	2470.1
25°	2355.3	2348.2	2346.8	2348.8	2361.3	2363.3	2350.7	2365.3	2352.8	2344.8	2360.7
27.5°	2240.0	2230.8	2228.8	2230.8	2243.2	2234.0	2223.5	2234.0	2221.5	2214.3	2224.2
30°	2097.5	2084.4	2078.4	2074.5	2087.6	2084.4	2059.9	2071.8	2052.1	2041.5	2048.7
32.5°	1905.7	1898.4	1882.6	1873.4	1885.9	1860.9	1845.6	1845.6	1837.8	1819.9	1823.9
35°	1639.2	1628.0	1613.6	1605.6	1607.6	1574.0	1548.9	1554.2	1527.8	1523.2	1525.2
37.5°	1302.3	1283.9	1278.6	1262.1	1266.1	1236.4	1202.0	1202.7	1188.9	1174.4	1169.8
40°	978.5	975.3	970.0	956.1	961.4	929.1	915.9	916.5	907.3	896.8	902.1
42.5°	756.3	745.8	742.4	737.8	739.2	733.9	716.8	718.8	710.8	708.2	705.6
45°	614.5	603.3	595.5	599.4	599.4	593.5	586.8	590.9	586.8	581.6	584.3
47.5°	506.5	495.8	491.9	491.2	495.8	491.9	485.3	486.6	486.0	484.0	482.7
50°	404.2	401.5	398.3	396.3	398.3	396.9	391.0	394.4	396.3	389.7	391.7
52.5°	307.9	307.9	307.3	302.7	306.6	302.7	302.0	303.3	301.3	298.7	298.1
55°	225.5	223.5	220.3	219.6	220.9	219.6	218.3	218.9	220.3	213.7	213.7
57.5°	154.2	153.0	151.0	151.0	153.7	150.3	148.4	151.0	148.4	145.7	145.7
60°	98.9	98.2	96.3	96.3	96.3	95.6	93.6	94.3	95.6	91.7	92.4
62.5°	59.3	57.4	56.7	56.0	56.7	56.0	56.0	55.4	54.7	54.7	52.8
65°	32.3	30.9	29.7	30.4	30.4	29.7	29.7	29.7	28.4	27.7	27.0
67.5°	16.5	15.1	15.1	14.5	14.5	14.5	14.5	13.9	13.9	13.9	13.2
70°	10.5	9.9	9.2	9.2	9.2	8.5	8.5	8.5	8.5	8.5	8.0
72.5°	7.3	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	2.7	2.7	2.7	2.7	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: P244156

CATALOG NUMBER: LSR8B40D010 EC8B40930 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7	2509.7
2.5°	2590.2	2584.8	2588.2	2612.6	2602.0	2598.7	2571.0	2595.5
5°	2621.1	2617.2	2617.2	2644.9	2632.3	2629.6	2602.6	2623.8
7.5°	2650.2	2646.2	2646.8	2675.2	2665.3	2661.4	2634.4	2655.4
10°	2687.7	2685.1	2685.7	2712.8	2702.3	2698.2	2670.6	2692.3
12.5°	2710.1	2706.2	2706.2	2735.2	2723.4	2717.4	2691.1	2712.1
15°	2693.0	2687.0	2687.0	2716.1	2702.8	2694.3	2671.2	2691.1
17.5°	2634.4	2628.4	2628.4	2653.4	2643.5	2631.0	2607.2	2625.7
20°	2552.5	2545.3	2543.3	2572.4	2558.5	2547.2	2526.2	2544.0
22.5°	2460.3	2456.9	2451.0	2480.0	2467.4	2455.7	2433.2	2447.0
25°	2349.5	2344.1	2338.3	2366.5	2354.1	2342.2	2324.4	2335.6
27.5°	2211.6	2212.3	2209.0	2231.5	2218.9	2212.3	2190.5	2209.0
30°	2044.8	2037.5	2035.0	2061.3	2049.4	2040.9	2013.8	2031.6
32.5°	1827.2	1816.7	1802.8	1832.5	1812.0	1804.8	1781.7	1807.4
35°	1510.7	1507.4	1494.9	1520.0	1508.8	1495.5	1481.1	1502.8
37.5°	1167.7	1170.4	1169.1	1175.7	1169.1	1160.6	1144.8	1136.8
40°	891.5	884.9	879.6	891.5	877.6	877.6	868.4	878.3
42.5°	698.9	696.4	702.9	705.6	697.6	696.4	695.0	694.3
45°	577.0	577.0	578.3	580.9	578.3	577.0	573.1	570.4
47.5°	475.4	478.1	475.4	484.0	479.3	478.1	470.1	473.4
50°	385.1	381.8	385.1	387.8	388.4	384.4	380.5	382.5
52.5°	298.7	293.5	292.1	296.1	293.5	293.5	290.8	290.1
55°	210.3	212.3	209.1	212.3	211.0	209.1	207.0	209.7
57.5°	142.5	143.0	141.8	143.7	140.5	141.1	140.5	139.8
60°	92.4	89.7	89.7	91.7	88.3	88.3	87.7	87.7
62.5°	52.8	52.1	52.1	51.5	50.8	50.8	50.8	49.4
65°	27.0	26.3	25.7	25.7	25.7	25.7	25.1	25.1
67.5°	13.2	12.6	12.6	13.2	12.6	12.6	12.6	12.6
70°	8.0	8.0	7.3	8.0	7.3	7.3	7.3	7.3
72.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
75°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
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)