

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: P245452

Luminaire Tested: **LSR8B40D010 EC8B40930 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245452
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 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3703.8 lumens
Efficiency: N/A
Efficacy: 90.6 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

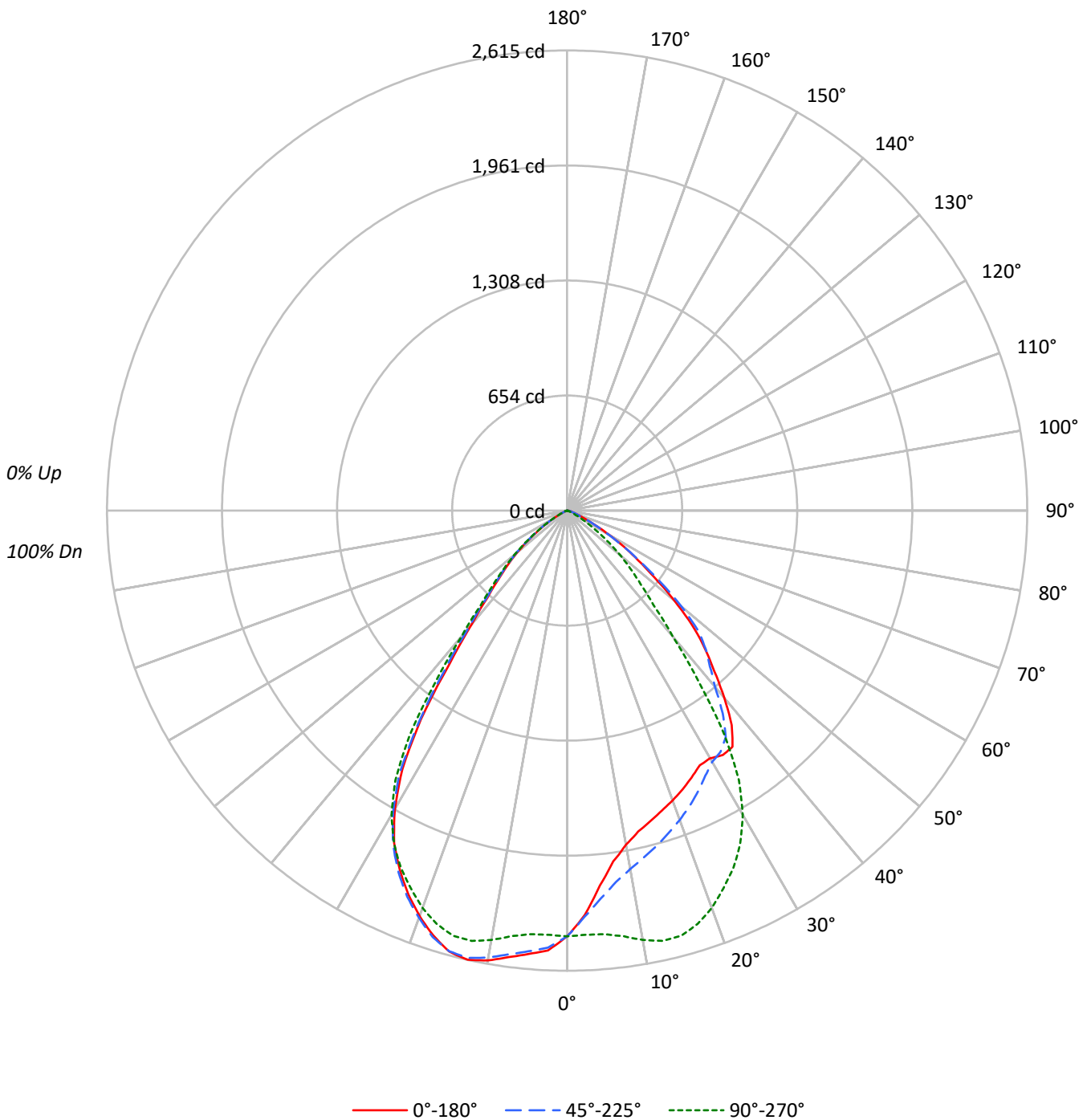
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	225.5	6.1
10°-20°	651.4	17.6
20°-30°	945.4	25.5
30°-40°	931.1	25.1
40°-50°	583.7	15.8
50°-60°	281.6	7.6
60°-70°	68.2	1.8
70°-80°	13.8	0.4
80°-90°	3.2	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°	1822.3	49.2
0°-40°	2753.4	74.3
0°-60°	3618.7	97.7
0°-90°	3703.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3703.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2420	2420	2420	2420	2420	
5°	2139	2211	2416	2514	2530	198
15°	1827	1971	2501	2592	2594	517
25°	1673	1760	2238	2268	2252	774
35°	1638	1572	1562	1473	1449	991
45°	1106	1114	590	566	550	846
55°	491	507	215	212	202	452
65°	115	114	32	27	24	131
75°	28	24	7	3	3	31
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°	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6
2.5°	2300.1	2285.5	2258.1	2291.2	2291.2	2272.7	2309.6	2287.4	2305.2	2333.1	2308.4
5°	2138.6	2126.5	2103.7	2138.6	2143.0	2125.9	2170.4	2153.9	2179.9	2214.3	2211.1
7.5°	2010.8	1995.6	1974.6	2010.8	2017.8	2006.4	2049.0	2041.3	2075.6	2120.1	2127.8
10°	1927.6	1911.6	1893.3	1926.3	1931.4	1923.7	1967.0	1962.5	1996.2	2047.7	2068.0
12.5°	1868.4	1855.0	1834.7	1869.7	1875.4	1864.6	1905.3	1903.3	1938.3	1992.4	2017.8
15°	1827.1	1811.2	1792.8	1822.6	1830.3	1818.1	1856.9	1853.1	1888.8	1942.1	1970.8
17.5°	1788.3	1773.6	1754.6	1782.6	1790.2	1777.6	1815.7	1809.3	1839.8	1890.7	1919.9
20°	1752.1	1736.2	1719.1	1747.6	1752.1	1737.4	1775.6	1767.4	1794.7	1841.7	1870.3
22.5°	1714.6	1698.1	1680.3	1708.2	1712.7	1698.1	1733.1	1723.4	1748.9	1791.5	1817.6
25°	1673.2	1658.0	1640.2	1666.3	1670.1	1654.1	1691.0	1678.9	1701.2	1738.8	1760.3
27.5°	1632.0	1617.3	1597.6	1624.3	1626.2	1611.0	1644.6	1628.1	1646.5	1680.8	1699.3
30°	1624.9	1608.4	1588.1	1609.6	1610.3	1590.6	1622.4	1602.7	1612.9	1638.3	1649.1
32.5°	1647.2	1630.6	1609.6	1627.5	1625.6	1603.9	1634.5	1610.3	1613.5	1626.8	1624.3
35°	1638.3	1618.6	1593.8	1612.9	1612.9	1586.8	1617.3	1588.7	1585.5	1587.4	1571.5
37.5°	1537.2	1522.0	1498.4	1516.8	1514.9	1495.3	1518.7	1495.3	1484.4	1479.9	1451.4
40°	1388.5	1370.0	1352.3	1371.9	1373.8	1352.8	1383.3	1356.6	1353.5	1340.7	1307.1
42.5°	1237.8	1231.4	1214.3	1230.7	1239.7	1221.9	1247.3	1234.6	1236.5	1233.3	1201.5
45°	1106.2	1095.3	1082.7	1101.7	1107.4	1098.6	1124.0	1116.4	1124.0	1139.8	1113.8
47.5°	964.4	953.6	939.6	959.9	970.1	953.6	975.3	972.7	984.1	1011.5	1008.9
50°	793.4	785.8	783.2	785.8	792.1	784.5	799.7	800.4	808.0	845.6	848.0
52.5°	628.1	626.2	617.3	625.5	625.5	613.5	628.8	621.7	629.3	654.8	671.4
55°	491.4	489.5	483.8	491.4	483.2	478.7	483.2	476.2	470.5	490.1	507.4
57.5°	382.7	376.3	369.4	372.5	371.9	362.4	367.5	359.2	354.7	361.7	377.0
60°	272.7	270.8	264.4	267.7	270.2	263.2	268.3	264.4	256.8	262.5	263.2
62.5°	181.2	182.5	178.7	179.2	177.3	176.1	179.2	181.2	179.2	176.8	177.3
65°	115.0	114.5	113.8	114.5	115.7	113.1	115.0	116.4	114.5	114.5	113.8
67.5°	76.3	74.4	72.5	73.8	75.0	73.1	75.0	74.4	75.0	74.4	72.5
70°	51.5	50.9	50.2	50.9	50.9	49.5	50.9	50.2	50.9	50.2	48.3
72.5°	37.6	37.6	36.9	37.6	37.6	36.2	36.9	35.6	36.2	35.6	34.3
75°	28.0	28.0	27.4	28.0	27.4	26.7	27.4	26.7	25.4	25.4	24.2
77.5°	20.3	20.3	20.3	20.3	20.3	19.7	19.7	19.1	18.4	17.8	17.8
80°	15.2	14.6	14.6	14.6	14.6	14.0	14.6	14.0	13.3	12.7	12.1
82.5°	10.8	11.4	10.8	10.8	10.8	10.2	10.8	10.2	10.2	9.5	8.3
85°	8.3	8.3	8.3	8.3	8.3	7.6	7.6	7.6	7.0	7.0	6.4
87.5°	4.5	4.5	4.5	5.0	4.5	4.5	4.5	3.8	3.8	3.1	3.1
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°	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6
2.5°	2341.4	2344.6	2337.6	2348.4	2390.3	2356.7	2370.7	2375.1	2406.9	2412.6	2408.8
5°	2252.4	2266.4	2275.3	2299.5	2345.9	2321.7	2346.5	2362.4	2403.1	2416.4	2419.6
7.5°	2182.5	2211.7	2233.4	2272.7	2327.4	2309.0	2346.5	2372.6	2422.1	2439.3	2447.6
10°	2130.3	2174.9	2212.4	2266.4	2328.1	2316.0	2365.0	2401.9	2457.1	2477.4	2487.6
12.5°	2090.9	2144.9	2195.1	2263.9	2330.6	2324.8	2384.0	2426.0	2484.5	2504.8	2516.9
15°	2047.7	2110.1	2168.5	2245.4	2317.2	2316.0	2379.5	2424.1	2483.8	2501.0	2512.4
17.5°	1996.2	2063.0	2127.2	2210.5	2281.7	2282.9	2347.1	2391.0	2449.5	2463.5	2471.1
20°	1944.0	2010.2	2074.4	2160.3	2230.1	2232.0	2295.0	2335.7	2391.7	2403.1	2405.0
22.5°	1888.8	1950.4	2014.7	2099.9	2167.2	2168.5	2230.8	2268.9	2316.7	2322.4	2327.4
25°	1825.9	1886.2	1946.6	2031.1	2095.4	2099.2	2155.8	2189.4	2233.4	2237.7	2239.6
27.5°	1760.3	1810.0	1867.8	1940.2	2005.1	2002.6	2055.9	2094.1	2133.5	2131.0	2130.3
30°	1694.3	1735.5	1771.2	1841.1	1888.8	1890.7	1940.9	1959.3	2000.6	1995.6	1994.9
32.5°	1647.9	1658.6	1668.2	1703.8	1748.9	1733.1	1767.4	1790.2	1818.8	1816.9	1817.6
35°	1562.7	1542.9	1514.4	1519.4	1546.8	1522.0	1540.4	1539.8	1569.0	1562.0	1570.3
37.5°	1417.1	1361.1	1297.6	1261.3	1266.4	1235.2	1228.8	1244.1	1254.3	1234.6	1241.6
40°	1261.9	1179.3	1080.1	997.5	993.0	954.2	947.2	932.0	951.7	935.1	940.3
42.5°	1147.5	1038.2	907.8	807.3	785.8	753.3	734.3	731.7	737.5	726.0	722.8
45°	1059.8	943.4	794.0	679.0	654.8	619.8	600.7	593.8	594.5	590.5	587.4
47.5°	956.8	839.9	688.5	570.9	543.6	510.5	491.4	487.0	489.5	484.4	480.6
50°	814.4	709.5	571.5	464.1	439.9	415.8	400.5	396.0	395.4	391.6	389.1
52.5°	661.2	574.1	454.6	364.9	343.3	319.8	308.9	303.2	303.9	300.1	296.3
55°	511.7	457.7	352.2	275.9	256.1	237.8	227.6	220.6	218.7	214.9	213.0
57.5°	380.8	344.6	263.9	199.0	187.5	169.7	159.5	151.3	150.0	148.1	147.5
60°	267.0	240.9	185.6	141.8	128.5	117.6	107.4	99.2	95.4	94.7	92.8
62.5°	173.0	157.1	122.1	94.7	84.5	76.9	66.7	61.0	58.5	55.9	56.6
65°	107.4	95.4	76.3	61.0	55.3	49.5	41.9	36.9	34.3	31.8	32.4
67.5°	66.7	59.7	48.3	39.5	35.6	31.2	25.4	21.6	19.7	17.8	16.5
70°	45.2	38.8	33.1	28.0	25.4	22.2	18.4	15.2	14.0	12.7	11.4
72.5°	31.8	28.6	24.2	21.0	19.1	16.5	14.0	12.1	10.8	9.5	8.3
75°	22.9	20.3	17.8	15.2	14.0	12.7	10.8	9.5	8.3	7.0	5.7
77.5°	16.5	14.6	12.7	11.4	10.8	8.9	7.6	7.0	6.4	5.0	3.8
80°	11.4	10.2	8.3	7.6	7.6	6.4	5.7	5.0	4.5	3.1	2.6
82.5°	7.6	7.0	6.4	5.7	5.0	4.5	4.5	3.1	2.6	1.9	1.2
85°	5.7	5.0	4.5	3.8	3.8	3.1	2.6	1.9	1.9	1.2	0.7
87.5°	3.1	3.1	2.6	1.9	1.9	1.2	1.2	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°	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6
2.5°	2441.2	2443.1	2454.0	2445.7	2466.6	2481.9	2474.3	2491.4	2485.7	2484.5	2504.2
5°	2457.8	2462.2	2476.8	2469.2	2492.1	2508.6	2501.0	2520.0	2514.3	2513.1	2533.3
7.5°	2489.5	2494.0	2506.7	2500.4	2524.5	2539.2	2529.5	2550.6	2543.0	2542.3	2562.0
10°	2529.5	2535.9	2546.8	2540.4	2562.6	2575.4	2565.9	2586.1	2579.2	2575.9	2597.6
12.5°	2559.5	2564.0	2574.7	2569.7	2591.3	2600.8	2592.5	2612.3	2603.3	2600.8	2619.9
15°	2552.5	2556.9	2565.9	2561.4	2581.8	2590.6	2579.8	2601.4	2592.5	2587.5	2604.6
17.5°	2508.0	2510.5	2516.9	2512.4	2534.0	2539.7	2527.6	2549.3	2541.1	2532.1	2548.7
20°	2442.5	2441.2	2445.0	2443.1	2460.9	2464.1	2456.4	2472.4	2462.8	2457.8	2467.3
22.5°	2361.2	2359.8	2362.4	2357.4	2375.1	2377.0	2365.5	2384.6	2375.1	2365.5	2381.5
25°	2270.8	2263.9	2262.6	2264.5	2276.5	2278.4	2266.4	2280.3	2268.3	2260.7	2276.0
27.5°	2159.6	2150.6	2148.7	2150.6	2162.7	2153.9	2143.7	2153.9	2141.8	2134.8	2144.4
30°	2022.3	2009.5	2003.8	2000.0	2012.8	2009.5	1986.1	1997.5	1978.5	1968.3	1975.2
32.5°	1837.3	1830.3	1815.0	1806.2	1818.1	1794.0	1779.5	1779.5	1771.7	1754.6	1758.4
35°	1580.4	1569.6	1555.6	1548.0	1549.9	1517.5	1493.4	1498.4	1473.0	1468.5	1470.4
37.5°	1255.6	1237.8	1232.7	1216.8	1220.7	1192.0	1158.9	1159.6	1146.2	1132.2	1127.8
40°	943.4	940.3	935.1	921.8	927.0	895.8	883.0	883.7	874.7	864.6	869.7
42.5°	729.2	719.0	715.9	711.4	712.6	707.6	691.1	693.0	685.3	682.8	680.2
45°	592.6	581.7	574.1	577.9	577.9	572.2	565.8	569.6	565.8	560.7	563.3
47.5°	488.2	478.1	474.3	473.6	478.1	474.3	467.9	469.1	468.6	466.7	465.3
50°	389.7	387.2	383.9	382.0	383.9	382.7	377.0	380.1	382.0	375.8	377.7
52.5°	296.8	296.8	296.3	291.8	295.6	291.8	291.1	292.5	290.6	288.0	287.3
55°	217.5	215.6	212.3	211.6	213.0	211.6	210.4	211.1	212.3	205.9	205.9
57.5°	148.8	147.5	145.6	145.6	148.1	144.9	143.0	145.6	143.0	140.5	140.5
60°	95.4	94.7	92.8	92.8	92.8	92.1	90.2	90.9	92.1	88.3	89.0
62.5°	57.2	55.3	54.7	54.0	54.7	54.0	54.0	53.4	52.8	52.8	50.9
65°	31.2	29.9	28.6	29.3	29.3	28.6	28.6	28.6	27.4	26.7	26.1
67.5°	15.9	14.6	14.6	14.0	14.0	14.0	14.0	13.3	13.3	13.3	12.7
70°	10.2	9.5	8.9	8.9	8.9	8.3	8.3	8.3	8.3	8.3	7.6
72.5°	7.0	6.4	5.7	5.7	5.7	5.0	5.0	5.0	5.0	4.5	4.5
75°	5.0	4.5	3.8	3.8	3.8	3.1	3.1	3.1	3.1	3.1	3.1
77.5°	3.1	2.6	2.6	2.6	2.6	1.9	1.9	1.9	1.9	1.9	1.2
80°	1.9	1.9	1.2	1.2	1.2	1.2	0.7	0.7	0.7	0.7	0.7
82.5°	1.2	1.2	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: P245452

CATALOG NUMBER: LSR8B40D010 EC8B40930 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6	2419.6
2.5°	2497.1	2492.1	2495.2	2518.8	2508.6	2505.4	2478.8	2502.3
5°	2527.1	2523.3	2523.3	2549.9	2537.8	2535.4	2509.2	2529.5
7.5°	2555.0	2551.2	2551.8	2579.2	2569.7	2565.9	2539.7	2560.1
10°	2591.3	2588.7	2589.4	2615.4	2605.2	2601.4	2574.7	2595.7
12.5°	2612.8	2609.0	2609.0	2637.0	2625.6	2619.9	2594.4	2614.7
15°	2596.3	2590.6	2590.6	2618.5	2605.9	2597.6	2575.4	2594.4
17.5°	2539.7	2534.0	2534.0	2558.2	2548.7	2536.6	2513.7	2531.4
20°	2460.9	2454.0	2452.1	2480.0	2466.6	2455.9	2435.5	2452.6
22.5°	2371.9	2368.8	2363.1	2391.0	2378.9	2367.4	2345.9	2359.3
25°	2265.1	2260.0	2254.3	2281.7	2269.6	2258.1	2241.0	2251.8
27.5°	2132.3	2132.9	2129.7	2151.3	2139.2	2132.9	2112.0	2129.7
30°	1971.4	1964.4	1961.9	1987.3	1975.9	1967.6	1941.6	1958.7
32.5°	1761.7	1751.5	1738.1	1766.7	1747.0	1740.0	1717.7	1742.6
35°	1456.5	1453.3	1441.2	1465.4	1454.6	1441.8	1427.8	1448.9
37.5°	1125.9	1128.4	1127.2	1133.6	1127.2	1118.9	1103.6	1096.0
40°	859.5	853.2	848.0	859.5	846.1	846.1	837.3	846.8
42.5°	673.8	671.4	677.6	680.2	672.6	671.4	670.0	669.5
45°	556.2	556.2	557.6	560.1	557.6	556.2	552.4	550.0
47.5°	458.4	461.0	458.4	466.7	462.2	461.0	453.3	456.5
50°	371.3	368.1	371.3	373.9	374.4	370.6	366.8	368.7
52.5°	288.0	282.9	281.6	285.4	282.9	282.9	280.4	279.7
55°	202.8	204.7	201.6	204.7	203.5	201.6	199.7	202.1
57.5°	137.3	138.0	136.6	138.6	135.4	136.1	135.4	134.7
60°	89.0	86.4	86.4	88.3	85.2	85.2	84.5	84.5
62.5°	50.9	50.2	50.2	49.5	49.0	49.0	49.0	47.6
65°	26.1	25.4	24.8	24.8	24.8	24.8	24.2	24.2
67.5°	12.7	12.1	12.1	12.7	12.1	12.1	12.1	12.1
70°	7.6	7.6	7.0	7.6	7.0	7.0	7.0	7.0
72.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
75°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
77.5°	1.9	1.2	1.2	1.2	1.2	1.2	1.2	1.2
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)