

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: P244150

Luminaire Tested: **LSR8B40D010 EC8B40927 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244150
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 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3643.9 lumens
Efficiency: N/A
Efficacy: 89.1 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

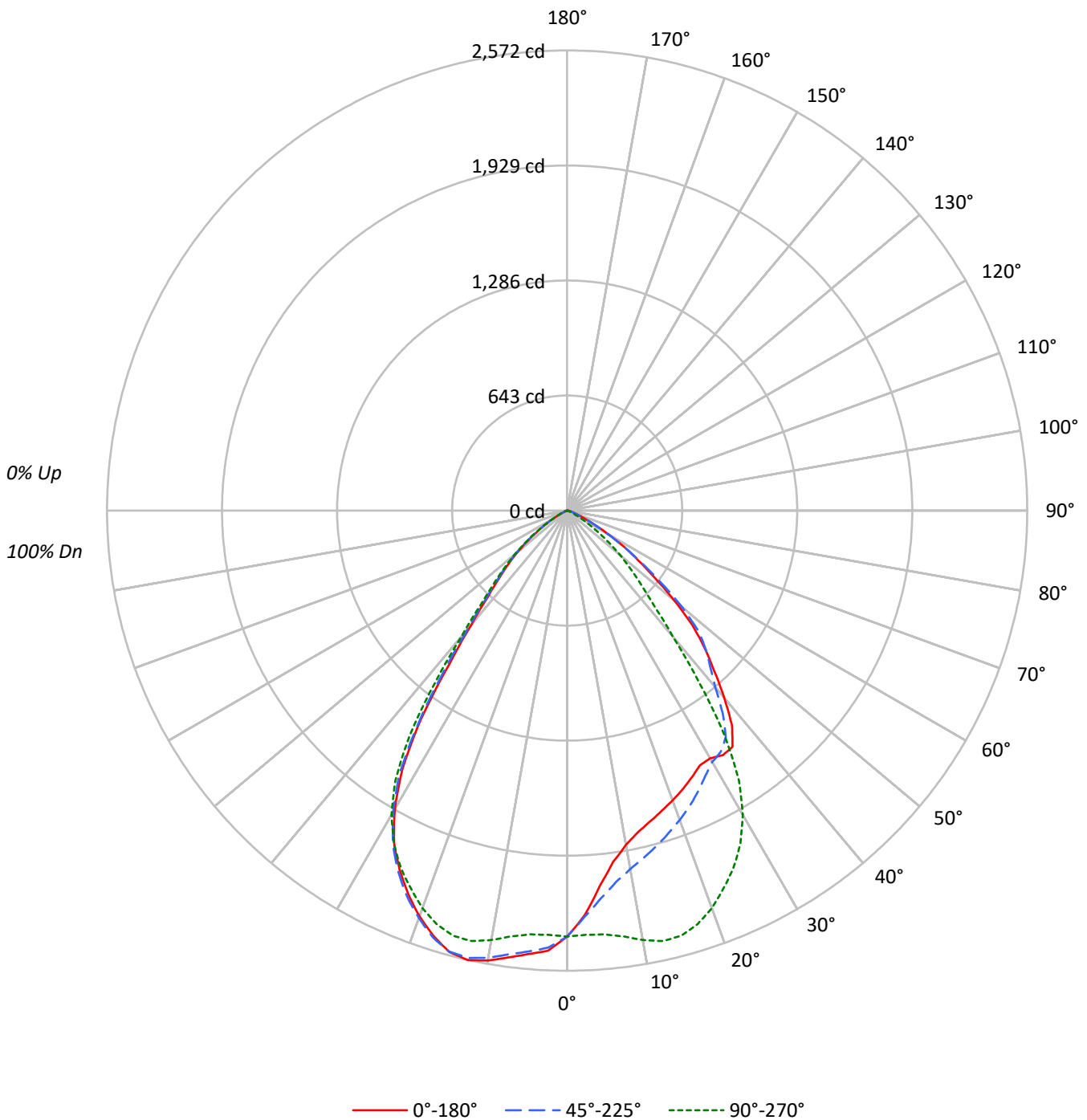
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	221.9	6.1
10°-20°	640.8	17.6
20°-30°	930.1	25.5
30°-40°	916.1	25.1
40°-50°	574.2	15.8
50°-60°	277.1	7.6
60°-70°	67.1	1.8
70°-80°	13.6	0.4
80°-90°	3.1	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°	1792.8	49.2
0°-40°	2708.8	74.3
0°-60°	3560.2	97.7
0°-90°	3643.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3643.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2380	2380	2380	2380	2380	
5°	2104	2175	2377	2474	2489	195
15°	1798	1939	2460	2551	2552	508
25°	1646	1732	2202	2232	2215	762
35°	1612	1546	1537	1449	1425	975
45°	1088	1096	581	557	541	832
55°	484	499	211	209	199	445
65°	113	112	31	27	24	129
75°	28	24	7	3	2	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°	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5
2.5°	2262.9	2248.5	2221.6	2254.2	2254.2	2235.9	2272.3	2250.3	2267.9	2295.5	2271.0
5°	2104.0	2092.2	2069.7	2104.0	2108.4	2091.5	2135.2	2119.0	2144.7	2178.5	2175.3
7.5°	1978.3	1963.2	1942.6	1978.3	1985.2	1973.9	2015.8	2008.4	2042.1	2085.9	2093.4
10°	1896.4	1880.8	1862.6	1895.2	1900.1	1892.6	1935.1	1930.7	1963.9	2014.5	2034.6
12.5°	1838.2	1825.1	1805.1	1839.5	1845.1	1834.4	1874.5	1872.6	1907.0	1960.2	1985.2
15°	1797.5	1781.9	1763.8	1793.1	1800.7	1788.8	1827.0	1823.2	1858.2	1910.7	1938.9
17.5°	1759.4	1745.0	1726.2	1753.8	1761.3	1748.8	1786.3	1780.1	1810.0	1860.1	1888.9
20°	1723.7	1708.1	1691.2	1719.3	1723.7	1709.3	1746.9	1738.8	1765.7	1811.9	1840.0
22.5°	1686.8	1670.6	1653.1	1680.6	1684.9	1670.6	1704.9	1695.6	1720.6	1762.5	1788.2
25°	1646.2	1631.1	1613.7	1639.4	1643.1	1627.4	1663.6	1651.8	1673.7	1710.6	1731.8
27.5°	1605.5	1591.2	1571.7	1598.1	1599.9	1584.9	1618.1	1601.8	1619.9	1653.8	1671.9
30°	1598.6	1582.4	1562.4	1583.7	1584.2	1564.9	1596.1	1576.8	1586.8	1611.8	1622.5
32.5°	1620.6	1604.2	1583.7	1601.2	1599.3	1578.0	1608.1	1584.2	1587.4	1600.5	1598.1
35°	1611.8	1592.4	1568.0	1586.8	1586.8	1561.2	1591.2	1563.0	1559.9	1561.7	1546.1
37.5°	1512.3	1497.4	1474.2	1492.3	1490.4	1471.0	1494.2	1471.0	1460.5	1456.1	1428.0
40°	1366.0	1347.9	1330.3	1349.8	1351.6	1331.0	1361.0	1334.7	1331.6	1319.1	1285.9
42.5°	1217.7	1211.5	1194.6	1210.8	1219.6	1202.1	1227.1	1214.7	1216.5	1213.4	1182.1
45°	1088.3	1077.6	1065.1	1083.9	1089.6	1080.8	1105.8	1098.3	1105.8	1121.4	1095.8
47.5°	948.8	938.1	924.4	944.4	954.4	938.1	959.4	956.9	968.2	995.1	992.6
50°	780.5	773.1	770.5	773.1	779.3	771.9	786.8	787.5	794.9	831.8	834.3
52.5°	618.0	616.1	607.3	615.5	615.5	603.6	618.5	611.7	619.2	644.2	660.5
55°	483.5	481.6	476.0	483.5	475.3	470.9	475.3	468.4	462.8	482.2	499.2
57.5°	376.5	370.2	363.4	366.5	365.8	356.5	361.5	353.4	349.0	355.8	370.9
60°	268.3	266.4	260.2	263.4	265.8	259.0	263.9	260.2	252.7	258.3	259.0
62.5°	178.2	179.5	175.7	176.4	174.5	173.2	176.4	178.2	176.4	173.9	174.5
65°	113.2	112.6	111.9	112.6	113.8	111.4	113.2	114.4	112.6	112.6	111.9
67.5°	75.0	73.1	71.3	72.6	73.8	71.9	73.8	73.1	73.8	73.1	71.3
70°	50.6	50.1	49.4	50.1	50.1	48.8	50.1	49.4	50.1	49.4	47.6
72.5°	36.9	36.9	36.2	36.9	36.9	35.7	36.2	35.0	35.7	35.0	33.8
75°	27.6	27.6	26.9	27.6	26.9	26.3	26.9	26.3	25.0	25.0	23.7
77.5°	20.0	20.0	20.0	20.0	20.0	19.3	19.3	18.8	18.1	17.6	17.6
80°	15.0	14.4	14.4	14.4	14.4	13.7	14.4	13.7	13.2	12.5	11.9
82.5°	10.7	11.2	10.7	10.7	10.7	10.0	10.7	10.0	10.0	9.3	8.1
85°	8.1	8.1	8.1	8.1	8.1	7.5	7.5	7.5	6.9	6.9	6.3
87.5°	4.4	4.4	4.4	5.0	4.4	4.4	4.4	3.7	3.7	3.2	3.2
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°	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5
2.5°	2303.5	2306.7	2299.8	2310.4	2351.7	2318.5	2332.4	2336.7	2368.0	2373.6	2369.8
5°	2216.0	2229.8	2238.5	2262.3	2307.9	2284.2	2308.5	2324.1	2364.2	2377.4	2380.5
7.5°	2147.2	2176.0	2197.2	2235.9	2289.8	2271.6	2308.5	2334.2	2383.0	2399.8	2408.0
10°	2095.9	2139.6	2176.5	2229.8	2290.4	2278.6	2326.7	2363.0	2417.4	2437.4	2447.4
12.5°	2057.1	2110.3	2159.7	2227.3	2292.9	2287.2	2345.4	2386.7	2444.3	2464.3	2476.1
15°	2014.5	2075.8	2133.5	2209.0	2279.8	2278.6	2341.0	2384.9	2443.6	2460.5	2471.7
17.5°	1963.9	2029.6	2092.7	2174.7	2244.7	2246.0	2309.2	2352.4	2409.9	2423.6	2431.1
20°	1912.6	1977.6	2040.9	2125.2	2194.1	2196.0	2257.9	2297.9	2352.9	2364.2	2366.1
22.5°	1858.2	1918.9	1982.0	2065.8	2132.2	2133.5	2194.8	2232.2	2279.1	2284.8	2289.8
25°	1796.3	1855.7	1915.1	1998.3	2061.5	2065.3	2121.0	2154.0	2197.2	2201.6	2203.4
27.5°	1731.8	1780.6	1837.6	1908.9	1972.7	1970.2	2022.8	2060.2	2099.0	2096.5	2095.9
30°	1666.8	1707.5	1742.5	1811.4	1858.2	1860.1	1909.5	1927.7	1968.3	1963.2	1962.7
32.5°	1621.1	1631.8	1641.2	1676.2	1720.6	1704.9	1738.8	1761.3	1789.4	1787.5	1788.2
35°	1537.3	1518.0	1489.8	1494.8	1521.7	1497.4	1515.5	1514.8	1543.6	1536.8	1544.9
37.5°	1394.1	1339.1	1276.5	1240.9	1245.9	1215.2	1209.0	1224.0	1234.0	1214.7	1221.5
40°	1241.6	1160.2	1062.7	981.3	977.0	938.8	932.0	916.9	936.3	920.0	925.1
42.5°	1128.9	1021.4	893.1	794.4	773.1	741.2	722.4	719.9	725.5	714.3	711.1
45°	1042.6	928.1	781.2	668.0	644.2	609.9	591.1	584.2	584.8	581.1	577.9
47.5°	941.3	826.2	677.4	561.6	534.7	502.2	483.5	479.1	481.6	476.6	472.8
50°	801.2	697.9	562.3	456.5	432.8	409.0	394.1	389.7	389.0	385.3	382.7
52.5°	650.5	564.8	447.2	359.0	337.7	314.6	304.0	298.3	298.9	295.2	291.5
55°	503.4	450.3	346.5	271.5	252.1	233.9	223.9	217.0	215.1	211.4	209.5
57.5°	374.6	339.0	259.5	195.8	184.5	167.0	156.9	148.8	147.6	145.7	145.1
60°	262.7	237.0	182.6	139.5	126.3	115.8	105.8	97.5	93.8	93.1	91.4
62.5°	170.1	154.5	120.0	93.1	83.1	75.7	65.7	60.1	57.5	55.0	55.7
65°	105.8	93.8	75.0	60.1	54.4	48.8	41.3	36.2	33.8	31.3	32.0
67.5°	65.7	58.8	47.6	38.8	35.0	30.6	25.0	21.3	19.3	17.6	16.3
70°	44.4	38.1	32.5	27.6	25.0	21.9	18.1	15.0	13.7	12.5	11.2
72.5°	31.3	28.1	23.7	20.6	18.8	16.3	13.7	11.9	10.7	9.3	8.1
75°	22.5	20.0	17.6	15.0	13.7	12.5	10.7	9.3	8.1	6.9	5.6
77.5°	16.3	14.4	12.5	11.2	10.7	8.8	7.5	6.9	6.3	5.0	3.7
80°	11.2	10.0	8.1	7.5	7.5	6.3	5.6	5.0	4.4	3.2	2.5
82.5°	7.5	6.9	6.3	5.6	5.0	4.4	4.4	3.2	2.5	1.9	1.2
85°	5.6	5.0	4.4	3.7	3.7	3.2	2.5	1.9	1.9	1.2	0.7
87.5°	3.2	3.2	2.5	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°	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5
2.5°	2401.8	2403.6	2414.2	2406.2	2426.7	2441.8	2434.3	2451.2	2445.5	2444.3	2463.6
5°	2418.0	2422.4	2436.8	2429.2	2451.8	2468.0	2460.5	2479.3	2473.6	2472.4	2492.4
7.5°	2449.2	2453.6	2466.1	2459.9	2483.7	2498.1	2488.7	2509.3	2501.8	2501.2	2520.6
10°	2488.7	2494.9	2505.6	2499.3	2521.2	2533.7	2524.3	2544.3	2537.4	2534.3	2555.5
12.5°	2518.1	2522.5	2533.0	2528.1	2549.4	2558.7	2550.6	2570.0	2561.2	2558.7	2577.5
15°	2511.2	2515.6	2524.3	2520.0	2539.9	2548.7	2538.1	2559.4	2550.6	2545.5	2562.5
17.5°	2467.5	2469.9	2476.1	2471.7	2493.0	2498.6	2486.8	2508.1	2500.0	2491.2	2507.4
20°	2403.0	2401.8	2405.5	2403.6	2421.1	2424.3	2416.7	2432.4	2423.0	2418.0	2427.4
22.5°	2322.9	2321.7	2324.1	2319.2	2336.7	2338.5	2327.3	2346.1	2336.7	2327.3	2342.9
25°	2234.1	2227.3	2226.0	2227.8	2239.8	2241.7	2229.8	2243.5	2231.7	2224.1	2239.1
27.5°	2124.7	2115.9	2114.0	2115.9	2127.8	2119.0	2109.0	2119.0	2107.1	2100.3	2109.6
30°	1989.6	1977.1	1971.4	1967.6	1980.2	1977.1	1953.9	1965.2	1946.4	1936.4	1943.3
32.5°	1807.5	1800.7	1785.7	1776.9	1788.8	1765.0	1750.6	1750.6	1743.2	1726.2	1730.0
35°	1554.9	1544.3	1530.4	1523.0	1524.8	1493.0	1469.1	1474.2	1449.2	1444.8	1446.6
37.5°	1235.2	1217.7	1212.8	1197.1	1200.8	1172.7	1140.2	1140.9	1127.7	1114.0	1109.6
40°	928.1	925.1	920.0	906.9	911.9	881.2	868.7	869.4	860.6	850.6	855.6
42.5°	717.4	707.4	704.2	699.9	701.1	696.2	679.8	681.8	674.2	671.7	669.3
45°	583.0	572.3	564.8	568.6	568.6	562.9	556.6	560.4	556.6	551.7	554.2
47.5°	480.4	470.4	466.5	466.0	470.4	466.5	460.4	461.6	460.9	459.1	457.9
50°	383.4	380.9	377.8	375.9	377.8	376.5	370.9	374.1	375.9	369.7	371.5
52.5°	292.0	292.0	291.5	287.1	290.8	287.1	286.4	287.7	285.9	283.3	282.7
55°	213.9	212.1	208.9	208.2	209.5	208.2	207.0	207.7	208.9	202.6	202.6
57.5°	146.4	145.1	143.2	143.2	145.7	142.6	140.7	143.2	140.7	138.3	138.3
60°	93.8	93.1	91.4	91.4	91.4	90.7	88.8	89.4	90.7	87.0	87.5
62.5°	56.2	54.4	53.8	53.2	53.8	53.2	53.2	52.5	51.9	51.9	50.1
65°	30.6	29.4	28.1	28.8	28.8	28.1	28.1	28.1	26.9	26.3	25.6
67.5°	15.6	14.4	14.4	13.7	13.7	13.7	13.7	13.2	13.2	13.2	12.5
70°	10.0	9.3	8.8	8.8	8.8	8.1	8.1	8.1	8.1	8.1	7.5
72.5°	6.9	6.3	5.6	5.6	5.6	5.0	5.0	5.0	5.0	4.4	4.4
75°	5.0	4.4	3.7	3.7	3.7	3.2	3.2	3.2	3.2	3.2	3.2
77.5°	3.2	2.5	2.5	2.5	2.5	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: P244150

CATALOG NUMBER: LSR8B40D010 EC8B40927 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5	2380.5
2.5°	2456.8	2451.8	2454.9	2478.0	2468.0	2464.9	2438.7	2461.7
5°	2486.1	2482.4	2482.4	2508.6	2496.8	2494.4	2468.7	2488.7
7.5°	2513.7	2510.0	2510.5	2537.4	2528.1	2524.3	2498.6	2518.6
10°	2549.4	2546.9	2547.5	2573.1	2563.1	2559.4	2533.0	2553.8
12.5°	2570.6	2566.8	2566.8	2594.4	2583.1	2577.5	2552.5	2572.5
15°	2554.3	2548.7	2548.7	2576.2	2563.8	2555.5	2533.7	2552.5
17.5°	2498.6	2493.0	2493.0	2516.8	2507.4	2495.6	2473.1	2490.5
20°	2421.1	2414.2	2412.3	2439.9	2426.7	2416.2	2396.1	2413.0
22.5°	2333.6	2330.4	2324.8	2352.4	2340.5	2329.2	2307.9	2321.1
25°	2228.5	2223.5	2217.8	2244.7	2232.9	2221.6	2204.7	2215.4
27.5°	2097.8	2098.4	2095.3	2116.6	2104.6	2098.4	2077.8	2095.3
30°	1939.5	1932.6	1930.2	1955.1	1943.9	1935.8	1910.1	1927.0
32.5°	1733.2	1723.2	1710.0	1738.1	1718.8	1711.9	1690.0	1714.4
35°	1432.9	1429.8	1418.0	1441.7	1431.0	1418.5	1404.8	1425.4
37.5°	1107.7	1110.1	1108.9	1115.2	1108.9	1100.8	1085.7	1078.3
40°	845.7	839.4	834.3	845.7	832.5	832.5	823.7	833.1
42.5°	663.0	660.5	666.8	669.3	661.7	660.5	659.2	658.6
45°	547.3	547.3	548.6	551.0	548.6	547.3	543.5	541.0
47.5°	450.9	453.5	450.9	459.1	454.7	453.5	446.0	449.1
50°	365.3	362.1	365.3	367.8	368.4	364.6	360.9	362.8
52.5°	283.3	278.3	277.1	280.8	278.3	278.3	275.8	275.2
55°	199.6	201.4	198.2	201.4	200.1	198.2	196.4	198.9
57.5°	135.1	135.7	134.4	136.4	133.2	133.9	133.2	132.6
60°	87.5	85.0	85.0	87.0	83.8	83.8	83.1	83.1
62.5°	50.1	49.4	49.4	48.8	48.2	48.2	48.2	46.9
65°	25.6	25.0	24.4	24.4	24.4	24.4	23.7	23.7
67.5°	12.5	11.9	11.9	12.5	11.9	11.9	11.9	11.9
70°	7.5	7.5	6.9	7.5	6.9	6.9	6.9	6.9
72.5°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
75°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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)