

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: P246202

Luminaire Tested: **LSR8B40D010 EC8B40850 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246202
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B40D010 EC8B40850 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4468.0 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

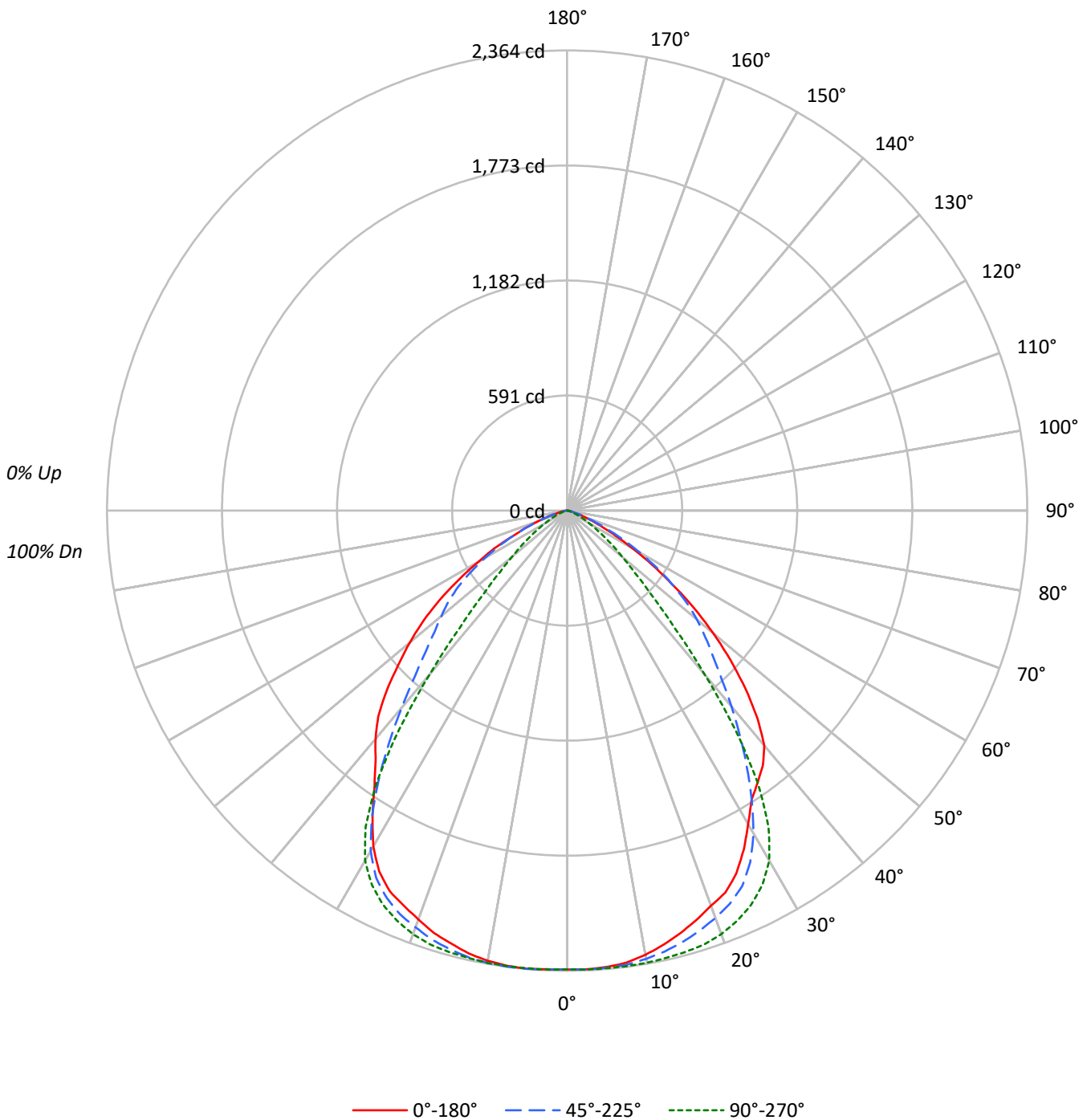
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0MW

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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	72694	72694	72694
5°	72854	73049	73129
10°	72547	73856	73536
15°	71743	74935	73521
20°	70881	75987	73332
25°	69960	76075	73407
30°	66189	73937	70918
35°	64210	64259	64925
40°	63416	44211	61633
45°	56509	26541	57281
50°	46985	17664	50626
55°	35241	12177	42923
60°	23880	8116	32384
65°	14403	5261	22247
70°	7988	2849	13686
75°	3622	1203	7089
80°	3143	1350	4937
85°	3573	1769	4918



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.0	5.0
10°-20°	653.4	14.6
20°-30°	991.7	22.2
30°-40°	1041.6	23.3
40°-50°	780.9	17.5
50°-60°	501.0	11.2
60°-70°	214.3	4.8
70°-80°	50.6	1.1
80°-90°	9.4	0.2
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°	1870.1	41.9
0°-40°	2911.6	65.2
0°-60°	4193.6	93.9
0°-90°	4468.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4468.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2357	2357	2357	2357	2357	
5°	2354	2357	2360	2364	2362	224
15°	2247	2294	2347	2332	2303	634
25°	2056	2128	2236	2195	2158	939
35°	1706	1611	1707	1687	1725	1071
45°	1296	1059	609	1029	1314	992
55°	656	656	226	683	798	595
65°	197	233	72	300	305	211
75°	30	35	10	61	60	44
85°	10	6	5	10	14	11
90°	0	0	0	0	0	



TEST NUMBER: P246202

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4
2.5°	2358.7	2361.2	2359.9	2359.9	2358.7	2359.9	2359.9	2362.5	2362.5	2359.9	2358.7
5°	2353.6	2356.1	2356.1	2353.6	2353.6	2359.9	2356.1	2358.7	2358.7	2357.4	2357.4
7.5°	2342.2	2342.2	2347.3	2343.5	2343.5	2347.3	2346.0	2348.5	2351.1	2352.4	2352.4
10°	2316.9	2319.4	2320.7	2320.7	2322.0	2325.8	2328.3	2333.4	2335.9	2338.4	2339.7
12.5°	2285.3	2289.1	2290.3	2289.1	2292.9	2297.9	2304.3	2310.6	2314.4	2319.4	2323.3
15°	2247.3	2247.3	2249.8	2253.7	2256.2	2263.8	2270.1	2277.7	2287.8	2294.1	2300.5
17.5°	2205.6	2208.1	2211.9	2211.9	2217.0	2229.6	2233.4	2244.8	2256.2	2262.5	2275.2
20°	2160.0	2162.5	2166.3	2168.9	2175.2	2185.3	2192.9	2203.0	2215.7	2227.1	2239.7
22.5°	2124.6	2119.5	2122.0	2124.6	2130.9	2139.8	2148.6	2161.3	2173.9	2185.3	2198.0
25°	2056.2	2057.5	2061.3	2063.8	2071.4	2079.0	2089.2	2104.3	2115.7	2128.4	2142.3
27.5°	1963.9	1965.1	1971.5	1971.5	1977.8	1990.4	1996.8	2009.4	2024.6	2037.3	2053.7
30°	1858.9	1861.4	1861.4	1866.4	1870.2	1876.6	1882.9	1895.5	1903.1	1914.5	1937.3
32.5°	1762.7	1765.2	1763.9	1762.7	1758.9	1757.6	1756.3	1758.9	1761.4	1765.2	1774.1
35°	1705.7	1699.4	1694.4	1685.5	1675.4	1662.7	1651.3	1636.1	1622.2	1610.8	1598.2
37.5°	1651.3	1650.1	1642.5	1629.8	1609.6	1586.8	1560.2	1527.3	1494.4	1459.0	1424.8
40°	1575.4	1571.6	1565.3	1547.6	1524.8	1496.9	1461.5	1421.0	1367.9	1313.5	1257.8
42.5°	1446.3	1447.6	1440.0	1426.1	1404.6	1378.0	1341.3	1297.0	1240.1	1175.5	1103.4
45°	1295.8	1295.8	1293.2	1281.8	1266.6	1245.1	1217.3	1180.6	1124.9	1059.1	981.9
47.5°	1138.8	1140.1	1136.3	1133.8	1127.4	1113.5	1093.3	1065.5	1026.2	962.9	885.8
50°	979.4	979.4	985.7	984.5	984.5	979.4	970.6	954.1	919.9	869.3	797.2
52.5°	820.0	822.5	826.3	831.4	837.7	847.8	837.7	830.1	808.6	769.3	707.4
55°	655.5	658.0	664.3	673.2	680.8	690.9	693.4	693.4	682.0	655.5	608.6
57.5°	515.0	511.2	516.3	523.9	534.0	544.1	551.7	560.6	559.3	541.6	503.6
60°	387.2	388.5	392.3	399.9	407.5	416.3	426.4	434.0	437.8	429.0	404.9
62.5°	282.2	282.2	287.2	294.8	298.6	311.3	317.6	321.4	325.2	323.9	308.8
65°	197.4	199.9	202.5	206.3	210.0	217.6	221.4	229.0	231.6	232.8	221.4
67.5°	139.2	135.4	137.9	140.4	144.3	149.3	156.9	156.9	160.7	160.7	153.1
70°	88.6	88.6	89.9	93.6	96.2	97.4	100.0	102.5	106.3	105.0	105.0
72.5°	59.5	58.2	59.5	60.7	62.0	65.8	65.8	67.1	69.6	70.9	65.8
75°	30.4	31.6	34.2	32.9	36.7	34.2	35.4	39.2	38.0	35.4	35.4
77.5°	25.3	25.3	25.3	24.1	26.6	26.6	25.3	27.8	26.6	26.6	25.3
80°	17.7	19.0	17.7	16.4	17.7	16.4	16.4	16.4	16.4	16.4	15.2
82.5°	13.9	11.4	12.7	11.4	12.7	12.7	11.4	10.1	10.1	11.4	10.1
85°	10.1	7.6	8.9	8.9	7.6	7.6	7.6	7.6	7.6	6.3	6.3
87.5°	6.3	3.8	3.8	3.8	5.0	5.0	5.0	3.8	5.0	5.0	2.5
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: P246202

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4
2.5°	2361.2	2359.9	2362.5	2361.2	2361.2	2359.9	2361.2	2359.9	2362.5	2357.4	2358.7
5°	2361.2	2358.7	2359.9	2361.2	2362.5	2359.9	2359.9	2359.9	2362.5	2359.9	2361.2
7.5°	2356.1	2354.9	2358.7	2361.2	2359.9	2358.7	2361.2	2359.9	2362.5	2361.2	2363.7
10°	2346.0	2347.3	2349.8	2353.6	2354.9	2356.1	2358.7	2358.7	2362.5	2357.4	2359.9
12.5°	2330.8	2335.9	2342.2	2344.7	2349.8	2349.8	2352.4	2353.6	2356.1	2354.9	2358.7
15°	2311.9	2318.2	2325.8	2332.1	2338.4	2342.2	2346.0	2347.3	2351.1	2347.3	2348.5
17.5°	2289.1	2296.7	2308.1	2315.6	2325.8	2329.6	2334.6	2337.2	2341.0	2338.4	2339.7
20°	2257.4	2266.3	2278.9	2290.3	2296.7	2305.5	2311.9	2315.6	2318.2	2315.6	2316.9
22.5°	2213.2	2225.8	2242.3	2251.1	2263.8	2271.4	2272.6	2281.5	2287.8	2281.5	2284.0
25°	2161.3	2173.9	2186.6	2205.6	2217.0	2225.8	2234.7	2235.9	2242.3	2241.0	2239.7
27.5°	2075.2	2091.7	2113.2	2128.4	2143.6	2157.5	2167.6	2170.1	2176.5	2173.9	2175.2
30°	1957.5	1975.3	1995.5	2019.5	2041.1	2055.0	2067.6	2076.5	2082.8	2079.0	2077.8
32.5°	1790.5	1808.2	1829.8	1853.8	1879.1	1899.3	1914.5	1925.9	1933.5	1931.0	1924.7
35°	1599.5	1604.5	1618.4	1637.4	1658.9	1680.4	1694.4	1707.0	1715.8	1718.4	1718.4
37.5°	1403.3	1386.9	1376.7	1376.7	1389.4	1398.2	1410.9	1418.5	1432.4	1437.5	1441.3
40°	1213.5	1175.5	1140.1	1113.5	1095.8	1094.6	1094.6	1098.3	1111.0	1127.4	1142.6
42.5°	1043.9	983.2	928.8	879.4	844.0	823.8	814.9	816.2	826.3	841.5	866.8
45°	908.5	832.6	764.3	704.8	656.7	625.1	609.9	608.6	616.2	633.9	661.8
47.5°	803.5	722.5	645.3	577.0	525.1	491.0	473.3	468.2	473.3	489.7	522.6
50°	716.2	632.7	553.0	482.1	426.4	391.0	374.5	368.2	374.5	388.5	421.4
52.5°	635.2	549.2	474.5	406.2	346.7	316.3	298.6	294.8	298.6	315.1	341.7
55°	541.6	468.2	394.8	326.5	274.6	244.2	230.3	226.5	230.3	245.5	273.3
57.5°	449.2	385.9	321.4	259.4	215.1	188.5	175.9	170.8	179.7	189.8	222.7
60°	363.2	312.6	258.1	203.7	167.0	143.0	132.9	131.6	134.1	146.8	169.5
62.5°	284.7	243.0	199.9	155.6	125.3	115.1	102.5	101.2	103.8	111.3	129.1
65°	205.0	178.4	145.5	113.9	89.9	75.9	70.9	72.1	74.6	79.7	96.2
67.5°	143.0	124.0	101.2	79.7	62.0	55.7	50.6	49.4	50.6	59.5	68.3
70°	96.2	84.8	68.3	60.7	43.0	34.2	35.4	31.6	36.7	36.7	44.3
72.5°	63.3	55.7	45.5	35.4	30.4	24.1	24.1	22.8	25.3	26.6	32.9
75°	32.9	25.3	25.3	17.7	12.7	6.3	11.4	10.1	8.9	10.1	12.7
77.5°	22.8	19.0	17.7	13.9	12.7	10.1	10.1	10.1	10.1	11.4	12.7
80°	13.9	13.9	10.1	8.9	7.6	6.3	7.6	7.6	7.6	7.6	8.9
82.5°	8.9	7.6	7.6	6.3	6.3	5.0	5.0	5.0	5.0	5.0	7.6
85°	7.6	5.0	5.0	3.8	5.0	8.9	3.8	5.0	5.0	5.0	3.8
87.5°	2.5	3.8	3.8	3.8	2.5	1.3	2.5	3.8	3.8	6.3	5.0
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: P246202

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4	2357.4
2.5°	2361.2	2362.5	2362.5	2361.2	2361.2	2358.7	2363.7	2359.9	2361.2	2366.3	2362.5
5°	2363.7	2365.0	2365.0	2363.7	2363.7	2363.7	2365.0	2365.0	2363.7	2362.5	2365.0
7.5°	2368.8	2367.5	2367.5	2365.0	2365.0	2362.5	2365.0	2361.2	2363.7	2361.2	2365.0
10°	2362.5	2363.7	2362.5	2361.2	2361.2	2359.9	2359.9	2356.1	2357.4	2353.6	2356.1
12.5°	2358.7	2357.4	2357.4	2354.9	2352.4	2349.8	2348.5	2344.7	2344.7	2335.9	2339.7
15°	2348.5	2349.8	2346.0	2341.0	2338.4	2332.1	2329.6	2324.5	2319.4	2313.1	2314.4
17.5°	2339.7	2335.9	2330.8	2325.8	2315.6	2310.6	2305.5	2297.9	2295.4	2287.8	2285.3
20°	2313.1	2310.6	2304.3	2295.4	2289.1	2277.7	2272.6	2265.0	2258.7	2251.1	2247.3
22.5°	2278.9	2276.4	2268.8	2260.0	2249.8	2244.8	2239.7	2225.8	2219.5	2211.9	2210.6
25°	2235.9	2232.1	2224.5	2214.4	2209.3	2195.4	2190.4	2180.2	2177.7	2170.1	2168.9
27.5°	2170.1	2165.1	2156.2	2143.6	2134.7	2125.8	2120.8	2113.2	2110.7	2103.1	2101.8
30°	2071.4	2065.1	2047.4	2042.3	2027.1	2018.3	2018.3	2008.2	2009.4	2004.4	2004.4
32.5°	1915.8	1905.7	1891.7	1881.6	1871.5	1866.4	1866.4	1862.6	1865.2	1865.2	1867.7
35°	1709.5	1695.6	1688.0	1681.7	1681.7	1686.7	1701.9	1705.7	1713.3	1719.7	1724.7
37.5°	1445.1	1443.8	1452.7	1460.3	1479.2	1500.8	1527.3	1550.1	1571.6	1586.8	1602.0
40°	1159.1	1190.7	1216.0	1251.5	1280.6	1322.3	1370.4	1409.6	1446.3	1472.9	1500.8
42.5°	904.7	945.2	998.4	1050.3	1102.1	1159.1	1222.4	1276.8	1324.9	1361.5	1390.7
45°	704.8	760.5	825.0	890.8	957.9	1028.8	1094.6	1150.2	1200.9	1238.8	1267.9
47.5°	568.2	628.9	702.3	774.4	850.3	925.0	998.4	1046.5	1088.2	1118.6	1145.2
50°	469.4	534.0	611.2	693.4	769.3	844.0	907.3	954.1	988.3	1014.8	1031.3
52.5°	392.3	460.6	542.9	625.1	701.0	769.3	826.3	861.7	889.6	908.5	923.7
55°	323.9	389.7	466.9	544.1	618.8	683.3	730.1	756.7	778.2	789.6	798.4
57.5°	264.5	325.2	396.1	466.9	531.5	584.6	621.3	647.9	658.0	666.9	665.6
60°	207.5	264.5	329.0	389.7	445.4	488.4	515.0	530.2	537.8	541.6	539.0
62.5°	163.2	215.1	264.5	317.6	358.1	394.8	420.1	420.1	423.9	425.2	429.0
65°	121.5	160.7	203.7	243.0	275.8	299.9	313.8	317.6	322.7	321.4	318.9
67.5°	89.9	119.0	150.6	179.7	202.5	217.6	227.8	236.6	235.4	232.8	231.6
70°	62.0	81.0	108.8	126.5	143.0	158.2	160.7	162.0	163.2	164.5	162.0
72.5°	43.0	56.9	72.1	87.3	97.4	103.8	110.1	111.3	111.3	111.3	110.1
75°	21.5	29.1	43.0	49.4	58.2	60.7	65.8	65.8	69.6	64.5	63.3
77.5°	19.0	22.8	30.4	35.4	39.2	43.0	44.3	48.1	46.8	44.3	45.5
80°	11.4	13.9	19.0	21.5	26.6	27.8	29.1	30.4	29.1	30.4	30.4
82.5°	8.9	10.1	12.7	12.7	16.4	16.4	17.7	17.7	19.0	19.0	19.0
85°	5.0	8.9	7.6	15.2	10.1	10.1	12.7	15.2	12.7	12.7	15.2
87.5°	5.0	5.0	3.8	5.0	5.0	5.0	6.3	7.6	7.6	8.9	7.6
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: P246202

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2357.4	2357.4	2357.4	2357.4
2.5°	2361.2	2363.7	2359.9	2358.7
5°	2365.0	2365.0	2362.5	2362.5
7.5°	2365.0	2365.0	2361.2	2358.7
10°	2354.9	2354.9	2351.1	2348.5
12.5°	2335.9	2335.9	2334.6	2330.8
15°	2311.9	2311.9	2306.8	2303.0
17.5°	2278.9	2281.5	2275.2	2275.2
20°	2243.5	2242.3	2237.2	2234.7
22.5°	2206.8	2204.3	2203.0	2195.4
25°	2167.6	2165.1	2161.3	2157.5
27.5°	2100.5	2099.3	2095.5	2090.4
30°	1998.0	1996.8	1991.7	1991.7
32.5°	1865.2	1863.9	1858.9	1860.1
35°	1727.2	1732.3	1729.8	1724.7
37.5°	1612.1	1615.9	1618.4	1615.9
40°	1515.9	1527.3	1528.6	1531.1
42.5°	1413.4	1428.6	1433.7	1436.2
45°	1290.7	1304.6	1316.0	1313.5
47.5°	1165.4	1175.5	1185.7	1178.1
50°	1045.2	1051.5	1055.3	1055.3
52.5°	931.3	931.3	930.1	931.3
55°	801.0	801.0	795.9	798.4
57.5°	664.3	666.9	663.0	656.7
60°	537.8	531.5	528.9	525.1
62.5°	418.9	418.9	410.0	421.4
65°	313.8	310.0	306.2	304.9
67.5°	227.8	226.5	222.7	221.4
70°	160.7	155.6	154.4	151.8
72.5°	107.6	107.6	105.0	105.0
75°	65.8	59.5	58.2	59.5
77.5°	45.5	44.3	44.3	43.0
80°	30.4	29.1	31.6	27.8
82.5°	19.0	20.2	19.0	20.2
85°	12.7	15.2	13.9	13.9
87.5°	7.6	7.6	7.6	7.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)