

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: P244643

Luminaire Tested: **LSR8B50D010 EC8B50940 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244643
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: LSR8B50D010 EC8B50940 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4971.0 lumens
Efficiency: N/A
Efficacy: 93.8 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

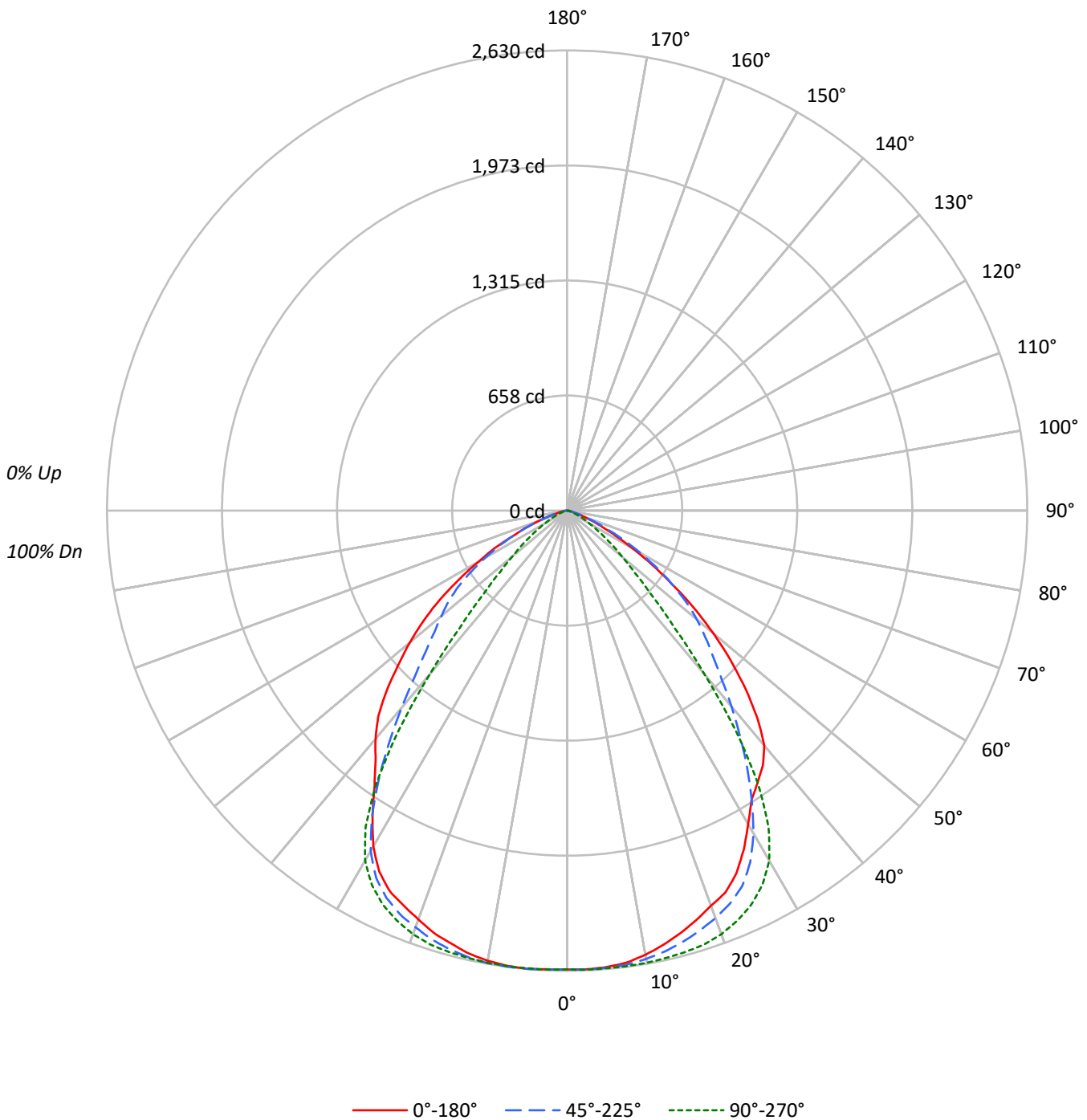
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	80877	80877	80877
5°	81056	81273	81360
10°	80713	82169	81815
15°	79820	83370	81799
20°	78862	84542	81585
25°	77837	84642	81671
30°	73638	82262	78901
35°	71441	71494	72235
40°	70557	49190	68573
45°	62867	29532	63726
50°	52276	19654	56325
55°	39208	13548	47756
60°	26569	9029	36035
65°	16023	5859	24757
70°	8890	3174	15228
75°	4027	1346	7887
80°	3498	1492	5505
85°	3998	1981	5484



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.3	5.0
10°-20°	726.9	14.6
20°-30°	1103.3	22.2
30°-40°	1158.8	23.3
40°-50°	868.8	17.5
50°-60°	557.5	11.2
60°-70°	238.5	4.8
70°-80°	56.3	1.1
80°-90°	10.5	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°	2080.6	41.9
0°-40°	3239.4	65.2
0°-60°	4665.7	93.9
0°-90°	4971.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4971.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2623	2623	2623	2623	2623	
5°	2619	2623	2626	2630	2628	249
15°	2500	2552	2612	2595	2562	705
25°	2288	2368	2488	2443	2400	1045
35°	1898	1792	1899	1877	1919	1191
45°	1442	1178	677	1145	1461	1104
55°	729	729	252	760	888	662
65°	220	259	80	334	339	234
75°	34	39	11	68	66	49
85°	11	7	6	11	16	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8
2.5°	2624.2	2627.0	2625.6	2625.6	2624.2	2625.6	2625.6	2628.4	2628.4	2625.6	2624.2
5°	2618.6	2621.4	2621.4	2618.6	2618.6	2625.6	2621.4	2624.2	2624.2	2622.8	2622.8
7.5°	2605.9	2605.9	2611.5	2607.3	2607.3	2611.5	2610.1	2612.9	2615.8	2617.2	2617.2
10°	2577.7	2580.6	2582.0	2582.0	2583.4	2587.6	2590.4	2596.1	2598.9	2601.7	2603.1
12.5°	2542.6	2546.8	2548.2	2546.8	2551.0	2556.6	2563.7	2570.7	2574.9	2580.6	2584.8
15°	2500.3	2500.3	2503.1	2507.4	2510.2	2518.6	2525.7	2534.1	2545.4	2552.4	2559.4
17.5°	2453.9	2456.7	2460.9	2460.9	2466.5	2480.6	2484.8	2497.5	2510.2	2517.2	2531.3
20°	2403.2	2406.0	2410.2	2413.0	2420.1	2431.3	2439.8	2451.0	2465.1	2477.8	2491.9
22.5°	2363.8	2358.1	2360.9	2363.8	2370.8	2380.7	2390.5	2404.6	2418.7	2431.3	2445.4
25°	2287.7	2289.1	2293.4	2296.2	2304.6	2313.1	2324.3	2341.2	2353.9	2368.0	2383.5
27.5°	2185.0	2186.4	2193.4	2193.4	2200.4	2214.5	2221.6	2235.6	2252.6	2266.6	2284.9
30°	2068.1	2070.9	2070.9	2076.6	2080.8	2087.8	2094.9	2108.9	2117.4	2130.1	2155.4
32.5°	1961.1	1963.9	1962.5	1961.1	1956.9	1955.5	1954.1	1956.9	1959.7	1963.9	1973.8
35°	1897.8	1890.7	1885.1	1875.3	1864.0	1849.9	1837.2	1820.3	1804.8	1792.2	1778.1
37.5°	1837.2	1835.8	1827.4	1813.3	1790.8	1765.4	1735.9	1699.3	1662.6	1623.2	1585.2
40°	1752.8	1748.5	1741.5	1721.8	1696.4	1665.5	1626.1	1581.0	1521.9	1461.3	1399.4
42.5°	1609.1	1610.6	1602.1	1586.6	1562.7	1533.1	1492.3	1443.0	1379.7	1307.9	1227.6
45°	1441.6	1441.6	1438.8	1426.1	1409.2	1385.3	1354.3	1313.5	1251.6	1178.3	1092.5
47.5°	1267.0	1268.5	1264.2	1261.4	1254.4	1238.9	1216.4	1185.4	1141.8	1071.4	985.5
50°	1089.7	1089.7	1096.7	1095.3	1095.3	1089.7	1079.8	1061.5	1023.5	967.2	887.0
52.5°	912.3	915.1	919.3	924.9	932.0	943.2	932.0	923.5	899.6	856.0	787.0
55°	729.3	732.1	739.1	749.0	757.4	768.7	771.5	771.5	758.8	729.3	677.2
57.5°	573.0	568.8	574.4	582.9	594.1	605.4	613.8	623.7	622.3	602.6	560.3
60°	430.8	432.2	436.4	444.9	453.3	463.2	474.4	482.9	487.1	477.3	450.5
62.5°	314.0	314.0	319.6	328.0	332.2	346.3	353.4	357.6	361.8	360.4	343.5
65°	219.6	222.4	225.3	229.5	233.7	242.1	246.4	254.8	257.6	259.0	246.4
67.5°	154.9	150.6	153.5	156.3	160.5	166.1	174.6	174.6	178.8	178.8	170.3
70°	98.6	98.6	100.0	104.2	107.0	108.4	111.2	114.0	118.3	116.8	116.8
72.5°	66.2	64.8	66.2	67.6	69.0	73.2	73.2	74.6	77.4	78.8	73.2
75°	33.8	35.2	38.0	36.6	40.8	38.0	39.4	43.6	42.2	39.4	39.4
77.5°	28.1	28.1	28.1	26.8	29.6	29.6	28.1	31.0	29.6	29.6	28.1
80°	19.7	21.1	19.7	18.3	19.7	18.3	18.3	18.3	18.3	18.3	16.9
82.5°	15.5	12.7	14.1	12.7	14.1	14.1	12.7	11.3	11.3	12.7	11.3
85°	11.3	8.4	9.9	9.9	8.4	8.4	8.4	8.4	8.4	7.0	7.0
87.5°	7.0	4.2	4.2	4.2	5.6	5.6	5.6	4.2	5.6	5.6	2.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8
2.5°	2627.0	2625.6	2628.4	2627.0	2627.0	2625.6	2627.0	2625.6	2628.4	2622.8	2624.2
5°	2627.0	2624.2	2625.6	2627.0	2628.4	2625.6	2625.6	2625.6	2628.4	2625.6	2627.0
7.5°	2621.4	2620.0	2624.2	2627.0	2625.6	2624.2	2627.0	2625.6	2628.4	2627.0	2629.8
10°	2610.1	2611.5	2614.4	2618.6	2620.0	2621.4	2624.2	2624.2	2628.4	2622.8	2625.6
12.5°	2593.2	2598.9	2605.9	2608.7	2614.4	2614.4	2617.2	2618.6	2621.4	2620.0	2624.2
15°	2572.1	2579.2	2587.6	2594.7	2601.7	2605.9	2610.1	2611.5	2615.8	2611.5	2612.9
17.5°	2546.8	2555.2	2567.9	2576.3	2587.6	2591.8	2597.4	2600.3	2604.5	2601.7	2603.1
20°	2511.6	2521.5	2535.5	2548.2	2555.2	2565.1	2572.1	2576.3	2579.2	2576.3	2577.7
22.5°	2462.3	2476.4	2494.7	2504.5	2518.6	2527.1	2528.5	2538.3	2545.4	2538.3	2541.2
25°	2404.6	2418.7	2432.8	2453.9	2466.5	2476.4	2486.2	2487.7	2494.7	2493.3	2491.9
27.5°	2308.8	2327.2	2351.1	2368.0	2384.9	2400.4	2411.6	2414.4	2421.5	2418.7	2420.1
30°	2177.9	2197.6	2220.2	2246.9	2270.8	2286.3	2300.4	2310.3	2317.3	2313.1	2311.7
32.5°	1992.1	2011.8	2035.7	2062.5	2090.7	2113.1	2130.1	2142.7	2151.2	2148.4	2141.3
35°	1779.5	1785.1	1800.6	1821.8	1845.7	1869.6	1885.1	1899.2	1909.0	1911.8	1911.8
37.5°	1561.3	1543.0	1531.7	1531.7	1545.8	1555.6	1569.7	1578.2	1593.7	1599.3	1603.5
40°	1350.1	1307.9	1268.5	1238.9	1219.2	1217.8	1217.8	1222.0	1236.1	1254.4	1271.3
42.5°	1161.5	1093.9	1033.4	978.4	939.0	916.5	906.7	908.1	919.3	936.2	964.4
45°	1010.8	926.4	850.3	784.2	730.7	695.5	678.6	677.2	685.6	705.3	736.3
47.5°	894.0	803.9	718.0	642.0	584.3	546.2	526.5	520.9	526.5	544.8	581.4
50°	796.8	703.9	615.2	536.4	474.4	435.0	416.7	409.7	416.7	432.2	468.8
52.5°	706.7	611.0	527.9	451.9	385.7	352.0	332.2	328.0	332.2	350.5	380.1
55°	602.6	520.9	439.2	363.2	305.5	271.7	256.2	252.0	256.2	273.1	304.1
57.5°	499.8	429.4	357.6	288.6	239.3	209.8	195.7	190.0	199.9	211.2	247.8
60°	404.0	347.7	287.2	226.7	185.8	159.1	147.8	146.4	149.2	163.3	188.6
62.5°	316.8	270.3	222.4	173.2	139.4	128.1	114.0	112.6	115.4	123.9	143.6
65°	228.1	198.5	161.9	126.7	100.0	84.5	78.8	80.3	83.1	88.7	107.0
67.5°	159.1	138.0	112.6	88.7	69.0	61.9	56.3	54.9	56.3	66.2	76.0
70°	107.0	94.3	76.0	67.6	47.9	38.0	39.4	35.2	40.8	40.8	49.3
72.5°	70.4	61.9	50.7	39.4	33.8	26.8	26.8	25.4	28.1	29.6	36.6
75°	36.6	28.1	28.1	19.7	14.1	7.0	12.7	11.3	9.9	11.3	14.1
77.5°	25.4	21.1	19.7	15.5	14.1	11.3	11.3	11.3	11.3	12.7	14.1
80°	15.5	15.5	11.3	9.9	8.4	7.0	8.4	8.4	8.4	8.4	9.9
82.5°	9.9	8.4	8.4	7.0	7.0	5.6	5.6	5.6	5.6	5.6	8.4
85°	8.4	5.6	5.6	4.2	5.6	9.9	4.2	5.6	5.6	5.6	4.2
87.5°	2.8	4.2	4.2	4.2	2.8	1.4	2.8	4.2	4.2	7.0	5.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8	2622.8
2.5°	2627.0	2628.4	2628.4	2627.0	2627.0	2624.2	2629.8	2625.6	2627.0	2632.6	2628.4
5°	2629.8	2631.2	2631.2	2629.8	2629.8	2629.8	2631.2	2631.2	2629.8	2628.4	2631.2
7.5°	2635.5	2634.1	2634.1	2631.2	2631.2	2628.4	2631.2	2627.0	2629.8	2627.0	2631.2
10°	2628.4	2629.8	2628.4	2627.0	2627.0	2625.6	2625.6	2621.4	2622.8	2618.6	2621.4
12.5°	2624.2	2622.8	2622.8	2620.0	2617.2	2614.4	2612.9	2608.7	2608.7	2598.9	2603.1
15°	2612.9	2614.4	2610.1	2604.5	2601.7	2594.7	2591.8	2586.2	2580.6	2573.5	2574.9
17.5°	2603.1	2598.9	2593.2	2587.6	2576.3	2570.7	2565.1	2556.6	2553.8	2545.4	2542.6
20°	2573.5	2570.7	2563.7	2553.8	2546.8	2534.1	2528.5	2520.0	2513.0	2504.5	2500.3
22.5°	2535.5	2532.7	2524.2	2514.4	2503.1	2497.5	2491.9	2476.4	2469.3	2460.9	2459.5
25°	2487.7	2483.4	2475.0	2463.7	2458.1	2442.6	2437.0	2425.7	2422.9	2414.4	2413.0
27.5°	2414.4	2408.8	2399.0	2384.9	2375.0	2365.2	2359.5	2351.1	2348.3	2339.8	2338.4
30°	2304.6	2297.6	2277.9	2272.3	2255.3	2245.5	2245.5	2234.2	2235.6	2230.0	2230.0
32.5°	2131.5	2120.2	2104.7	2093.4	2082.2	2076.6	2076.6	2072.3	2075.2	2075.2	2078.0
35°	1902.0	1886.5	1878.0	1871.0	1871.0	1876.6	1893.5	1897.8	1906.2	1913.2	1918.9
37.5°	1607.7	1606.4	1616.2	1624.6	1645.8	1669.7	1699.3	1724.6	1748.5	1765.4	1782.3
40°	1289.6	1324.8	1352.9	1392.4	1424.7	1471.2	1524.7	1568.3	1609.1	1638.7	1669.7
42.5°	1006.6	1051.6	1110.8	1168.5	1226.2	1289.6	1360.0	1420.5	1474.0	1514.8	1547.2
45°	784.2	846.1	917.9	991.1	1065.7	1144.6	1217.8	1279.7	1336.0	1378.3	1410.7
47.5°	632.1	699.7	781.3	861.6	946.1	1029.1	1110.8	1164.3	1210.7	1244.5	1274.1
50°	522.3	594.1	680.0	771.5	856.0	939.0	1009.4	1061.5	1099.5	1129.1	1147.4
52.5°	436.4	512.4	604.0	695.5	779.9	856.0	919.3	958.7	989.7	1010.8	1027.7
55°	360.4	433.6	519.5	605.4	688.4	760.2	812.3	841.9	865.8	878.5	888.3
57.5°	294.2	361.8	440.7	519.5	591.3	650.4	691.3	720.8	732.1	741.9	740.5
60°	230.9	294.2	366.0	433.6	495.6	543.4	573.0	589.9	598.3	602.6	599.7
62.5°	181.6	239.3	294.2	353.4	398.4	439.2	467.4	467.4	471.6	473.0	477.3
65°	135.1	178.8	226.7	270.3	306.9	333.7	349.2	353.4	359.0	357.6	354.8
67.5°	100.0	132.3	167.5	199.9	225.3	242.1	253.4	263.3	261.9	259.0	257.6
70°	69.0	90.1	121.1	140.8	159.1	176.0	178.8	180.2	181.6	183.0	180.2
72.5°	47.9	63.3	80.3	97.1	108.4	115.4	122.5	123.9	123.9	123.9	122.5
75°	23.9	32.4	47.9	54.9	64.8	67.6	73.2	73.2	77.4	71.8	70.4
77.5°	21.1	25.4	33.8	39.4	43.6	47.9	49.3	53.5	52.1	49.3	50.7
80°	12.7	15.5	21.1	23.9	29.6	31.0	32.4	33.8	32.4	33.8	33.8
82.5°	9.9	11.3	14.1	14.1	18.3	18.3	19.7	19.7	21.1	21.1	21.1
85°	5.6	9.9	8.4	16.9	11.3	11.3	14.1	16.9	14.1	14.1	16.9
87.5°	5.6	5.6	4.2	5.6	5.6	5.6	7.0	8.4	8.4	9.9	8.4
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: P244643

CATALOG NUMBER: LSR8B50D010 EC8B50940 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2622.8	2622.8	2622.8	2622.8
2.5°	2627.0	2629.8	2625.6	2624.2
5°	2631.2	2631.2	2628.4	2628.4
7.5°	2631.2	2631.2	2627.0	2624.2
10°	2620.0	2620.0	2615.8	2612.9
12.5°	2598.9	2598.9	2597.4	2593.2
15°	2572.1	2572.1	2566.5	2562.3
17.5°	2535.5	2538.3	2531.3	2531.3
20°	2496.1	2494.7	2489.1	2486.2
22.5°	2455.3	2452.5	2451.0	2442.6
25°	2411.6	2408.8	2404.6	2400.4
27.5°	2337.0	2335.6	2331.4	2325.8
30°	2223.0	2221.6	2215.9	2215.9
32.5°	2075.2	2073.7	2068.1	2069.5
35°	1921.7	1927.3	1924.5	1918.9
37.5°	1793.6	1797.8	1800.6	1797.8
40°	1686.6	1699.3	1700.7	1703.5
42.5°	1572.6	1589.4	1595.1	1597.9
45°	1436.0	1451.5	1464.2	1461.3
47.5°	1296.6	1307.9	1319.1	1310.7
50°	1162.9	1169.9	1174.1	1174.1
52.5°	1036.2	1036.2	1034.8	1036.2
55°	891.2	891.2	885.5	888.3
57.5°	739.1	741.9	737.7	730.7
60°	598.3	591.3	588.5	584.3
62.5°	466.0	466.0	456.2	468.8
65°	349.2	344.9	340.7	339.3
67.5°	253.4	252.0	247.8	246.4
70°	178.8	173.2	171.8	168.9
72.5°	119.7	119.7	116.8	116.8
75°	73.2	66.2	64.8	66.2
77.5°	50.7	49.3	49.3	47.9
80°	33.8	32.4	35.2	31.0
82.5°	21.1	22.5	21.1	22.5
85°	14.1	16.9	15.5	15.5
87.5°	8.4	8.4	8.4	8.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)