

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: P246131

Luminaire Tested: **LSR8B50D010 EC8B50850 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246131
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 EC8B50850 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5003.0 lumens
Efficiency: N/A
Efficacy: 94.4 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

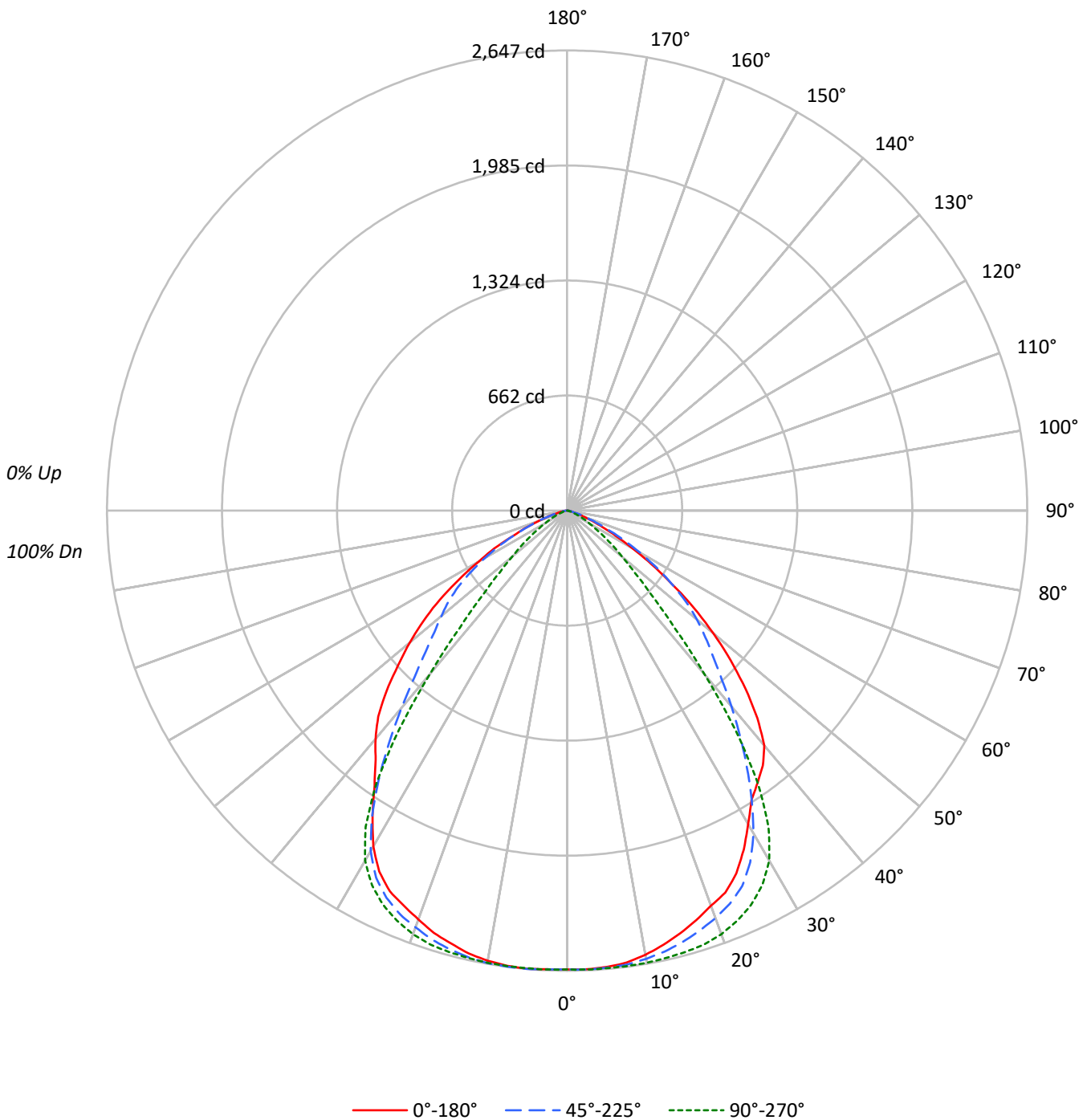
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	81399	81399	81399
5°	81576	81796	81886
10°	81233	82698	82344
15°	80334	83906	82326
20°	79370	85087	82114
25°	78341	85186	82195
30°	74112	82789	79410
35°	71900	71953	72698
40°	71008	49508	69015
45°	63272	29720	64136
50°	52612	19779	56689
55°	39456	13634	48068
60°	26741	9084	36264
65°	16133	5896	24918
70°	8944	3192	15327
75°	4051	1346	7935
80°	3516	1509	5540
85°	3998	2017	5519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.9	5.0
10°-20°	731.6	14.6
20°-30°	1110.4	22.2
30°-40°	1166.3	23.3
40°-50°	874.4	17.5
50°-60°	561.0	11.2
60°-70°	240.0	4.8
70°-80°	56.7	1.1
80°-90°	10.6	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°	2094.0	41.9
0°-40°	3260.3	65.2
0°-60°	4695.7	93.9
0°-90°	5003.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5003.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2640	2640	2640	2640	2640	
5°	2635	2640	2642	2647	2645	250
15°	2516	2569	2628	2611	2579	710
25°	2302	2383	2504	2458	2416	1052
35°	1910	1804	1911	1889	1931	1199
45°	1451	1186	682	1152	1471	1111
55°	734	734	254	765	894	666
65°	221	261	81	336	342	236
75°	34	40	11	68	67	50
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°	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7
2.5°	2641.1	2643.9	2642.5	2642.5	2641.1	2642.5	2642.5	2645.4	2645.4	2642.5	2641.1
5°	2635.4	2638.3	2638.3	2635.4	2635.4	2642.5	2638.3	2641.1	2641.1	2639.7	2639.7
7.5°	2622.7	2622.7	2628.3	2624.1	2624.1	2628.3	2626.9	2629.8	2632.6	2634.0	2634.0
10°	2594.3	2597.2	2598.6	2598.6	2600.0	2604.2	2607.1	2612.8	2615.6	2618.4	2619.9
12.5°	2558.9	2563.2	2564.6	2563.2	2567.4	2573.1	2580.2	2587.3	2591.5	2597.2	2601.4
15°	2516.4	2516.4	2519.2	2523.5	2526.3	2534.8	2541.9	2550.4	2561.7	2568.9	2575.9
17.5°	2469.7	2472.5	2476.7	2476.7	2482.4	2496.6	2500.8	2513.6	2526.3	2533.4	2547.6
20°	2418.7	2421.5	2425.7	2428.6	2435.7	2447.0	2455.5	2466.8	2481.0	2493.8	2507.9
22.5°	2379.0	2373.3	2376.1	2379.0	2386.1	2396.0	2405.9	2420.1	2434.2	2447.0	2461.2
25°	2302.5	2303.9	2308.1	2310.9	2319.5	2328.0	2339.3	2356.3	2369.1	2383.2	2398.8
27.5°	2199.0	2200.5	2207.5	2207.5	2214.6	2228.8	2235.9	2250.0	2267.1	2281.2	2299.6
30°	2081.4	2084.2	2084.2	2089.9	2094.2	2101.3	2108.3	2122.5	2131.0	2143.8	2169.3
32.5°	1973.8	1976.6	1975.1	1973.8	1969.5	1968.1	1966.6	1969.5	1972.3	1976.6	1986.5
35°	1910.0	1902.9	1897.2	1887.3	1876.0	1861.8	1849.0	1832.1	1816.5	1803.7	1789.6
37.5°	1849.0	1847.6	1839.1	1825.0	1802.3	1776.8	1747.1	1710.2	1673.3	1633.7	1595.4
40°	1764.0	1759.8	1752.7	1732.9	1707.4	1676.2	1636.5	1591.2	1531.7	1470.7	1408.4
42.5°	1619.5	1620.9	1612.4	1596.8	1572.8	1543.0	1501.9	1452.3	1388.6	1316.3	1235.5
45°	1450.9	1450.9	1448.1	1435.3	1418.3	1394.2	1363.1	1322.0	1259.6	1185.9	1099.5
47.5°	1275.2	1276.6	1272.4	1269.6	1262.4	1246.9	1224.2	1193.0	1149.1	1078.2	991.8
50°	1096.7	1096.7	1103.8	1102.3	1102.3	1096.7	1086.8	1068.3	1030.1	973.4	892.7
52.5°	918.1	921.0	925.3	930.9	938.0	949.3	938.0	929.5	905.4	861.5	792.1
55°	733.9	736.8	743.9	753.8	762.3	773.6	776.5	776.5	763.7	733.9	681.5
57.5°	576.7	572.4	578.1	586.6	597.9	609.3	617.8	627.7	626.3	606.4	563.9
60°	433.6	435.0	439.2	447.8	456.2	466.2	477.5	486.0	490.3	480.3	453.4
62.5°	316.0	316.0	321.6	330.1	334.4	348.6	355.6	359.9	364.1	362.7	345.7
65°	221.1	223.9	226.7	231.0	235.2	243.7	248.0	256.4	259.3	260.7	248.0
67.5°	155.9	151.6	154.5	157.3	161.5	167.2	175.7	175.7	179.9	179.9	171.4
70°	99.2	99.2	100.6	104.8	107.7	109.1	111.9	114.8	119.0	117.6	117.6
72.5°	66.6	65.2	66.6	68.0	69.4	73.7	73.7	75.1	77.9	79.4	73.7
75°	34.0	35.4	38.2	36.9	41.1	38.2	39.7	43.9	42.5	39.7	39.7
77.5°	28.3	28.3	28.3	26.9	29.7	29.7	28.3	31.2	29.7	29.7	28.3
80°	19.8	21.3	19.8	18.4	19.8	18.4	18.4	18.4	18.4	18.4	17.0
82.5°	15.6	12.8	14.2	12.8	14.2	14.2	12.8	11.3	11.3	12.8	11.3
85°	11.3	8.5	9.9	9.9	8.5	8.5	8.5	8.5	8.5	7.1	7.1
87.5°	7.1	4.3	4.3	4.3	5.7	5.7	5.7	4.3	5.7	5.7	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°	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7
2.5°	2643.9	2642.5	2645.4	2643.9	2643.9	2642.5	2643.9	2642.5	2645.4	2639.7	2641.1
5°	2643.9	2641.1	2642.5	2643.9	2645.4	2642.5	2642.5	2642.5	2645.4	2642.5	2643.9
7.5°	2638.3	2636.8	2641.1	2643.9	2642.5	2641.1	2643.9	2642.5	2645.4	2643.9	2646.8
10°	2626.9	2628.3	2631.2	2635.4	2636.8	2638.3	2641.1	2641.1	2645.4	2639.7	2642.5
12.5°	2609.9	2615.6	2622.7	2625.5	2631.2	2631.2	2634.0	2635.4	2638.3	2636.8	2641.1
15°	2588.7	2595.8	2604.2	2611.4	2618.4	2622.7	2626.9	2628.3	2632.6	2628.3	2629.8
17.5°	2563.2	2571.7	2584.4	2592.9	2604.2	2608.5	2614.2	2617.0	2621.3	2618.4	2619.9
20°	2527.7	2537.7	2551.8	2564.6	2571.7	2581.6	2588.7	2592.9	2595.8	2592.9	2594.3
22.5°	2478.2	2492.3	2510.7	2520.7	2534.8	2543.3	2544.8	2554.7	2561.7	2554.7	2557.5
25°	2420.1	2434.2	2448.4	2469.7	2482.4	2492.3	2502.3	2503.7	2510.7	2509.3	2507.9
27.5°	2323.7	2342.1	2366.2	2383.2	2400.2	2415.8	2427.2	2430.0	2437.1	2434.2	2435.7
30°	2191.9	2211.8	2234.5	2261.4	2285.5	2301.0	2315.2	2325.1	2332.2	2328.0	2326.5
32.5°	2004.9	2024.8	2048.8	2075.8	2104.1	2126.8	2143.8	2156.5	2165.0	2162.2	2155.1
35°	1791.0	1796.6	1812.2	1833.5	1857.5	1881.6	1897.2	1911.4	1921.3	1924.1	1924.1
37.5°	1571.3	1552.9	1541.6	1541.6	1555.7	1565.7	1579.8	1588.3	1603.9	1609.6	1613.9
40°	1358.8	1316.3	1276.6	1246.9	1227.0	1225.6	1225.6	1229.9	1244.0	1262.4	1279.5
42.5°	1168.9	1100.9	1040.0	984.7	945.1	922.4	912.5	913.9	925.3	942.2	970.6
45°	1017.3	932.3	855.8	789.2	735.4	699.9	682.9	681.5	690.0	709.9	741.1
47.5°	899.7	809.0	722.6	646.1	588.0	549.8	529.9	524.3	529.9	548.3	585.2
50°	802.0	708.5	619.2	539.8	477.5	437.8	419.4	412.3	419.4	435.0	471.8
52.5°	711.3	614.9	531.3	454.8	388.2	354.2	334.4	330.1	334.4	352.8	382.6
55°	606.4	524.3	442.1	365.6	307.5	273.5	257.9	253.6	257.9	274.9	306.1
57.5°	503.0	432.2	359.9	290.5	240.9	211.1	197.0	191.3	201.2	212.5	249.4
60°	406.6	350.0	289.0	228.1	187.0	160.1	148.8	147.3	150.2	164.4	189.8
62.5°	318.8	272.0	223.9	174.3	140.3	128.9	114.8	113.4	116.2	124.7	144.5
65°	229.5	199.8	162.9	127.5	100.6	85.0	79.4	80.8	83.6	89.3	107.7
67.5°	160.1	138.9	113.4	89.3	69.4	62.3	56.7	55.3	56.7	66.6	76.5
70°	107.7	94.9	76.5	68.0	48.2	38.2	39.7	35.4	41.1	41.1	49.6
72.5°	70.8	62.3	51.0	39.7	34.0	26.9	26.9	25.5	28.3	29.7	36.9
75°	36.9	28.3	28.3	19.8	14.2	7.1	12.8	11.3	9.9	11.3	14.2
77.5°	25.5	21.3	19.8	15.6	14.2	11.3	11.3	11.3	11.3	12.8	14.2
80°	15.6	15.6	11.3	9.9	8.5	7.1	8.5	8.5	8.5	8.5	9.9
82.5°	9.9	8.5	8.5	7.1	7.1	5.7	5.7	5.7	5.7	5.7	8.5
85°	8.5	5.7	5.7	4.3	5.7	9.9	4.3	5.7	5.7	5.7	4.3
87.5°	2.8	4.3	4.3	4.3	2.8	1.4	2.8	4.3	4.3	7.1	5.7
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7	2639.7
2.5°	2643.9	2645.4	2645.4	2643.9	2643.9	2641.1	2646.8	2642.5	2643.9	2649.6	2645.4
5°	2646.8	2648.2	2648.2	2646.8	2646.8	2646.8	2648.2	2648.2	2646.8	2645.4	2648.2
7.5°	2652.4	2651.0	2651.0	2648.2	2648.2	2645.4	2648.2	2643.9	2646.8	2643.9	2648.2
10°	2645.4	2646.8	2645.4	2643.9	2643.9	2642.5	2642.5	2638.3	2639.7	2635.4	2638.3
12.5°	2641.1	2639.7	2639.7	2636.8	2634.0	2631.2	2629.8	2625.5	2625.5	2615.6	2619.9
15°	2629.8	2631.2	2626.9	2621.3	2618.4	2611.4	2608.5	2602.8	2597.2	2590.1	2591.5
17.5°	2619.9	2615.6	2609.9	2604.2	2592.9	2587.3	2581.6	2573.1	2570.2	2561.7	2558.9
20°	2590.1	2587.3	2580.2	2570.2	2563.2	2550.4	2544.8	2536.3	2529.2	2520.7	2516.4
22.5°	2551.8	2549.0	2540.5	2530.6	2519.2	2513.6	2507.9	2492.3	2485.2	2476.7	2475.3
25°	2503.7	2499.4	2490.9	2479.6	2473.9	2458.3	2452.6	2441.3	2438.5	2430.0	2428.6
27.5°	2430.0	2424.3	2414.4	2400.2	2390.3	2380.4	2374.7	2366.2	2363.4	2354.9	2353.5
30°	2319.5	2312.4	2292.5	2286.9	2269.9	2259.9	2259.9	2248.6	2250.0	2244.4	2244.4
32.5°	2145.2	2133.9	2118.3	2106.9	2095.6	2089.9	2089.9	2085.7	2088.5	2088.5	2091.4
35°	1914.2	1898.7	1890.1	1883.1	1883.1	1888.7	1905.7	1910.0	1918.5	1925.6	1931.2
37.5°	1618.1	1616.7	1626.6	1635.1	1656.4	1680.5	1710.2	1735.7	1759.8	1776.8	1793.8
40°	1297.9	1333.3	1361.6	1401.3	1433.9	1480.7	1534.5	1578.4	1619.5	1649.3	1680.5
42.5°	1013.1	1058.4	1117.9	1176.0	1234.1	1297.9	1368.7	1429.7	1483.5	1524.6	1557.2
45°	789.2	851.5	923.8	997.5	1072.6	1152.0	1225.6	1288.0	1344.6	1387.2	1419.7
47.5°	636.2	704.2	786.4	867.1	952.2	1035.7	1117.9	1171.8	1218.5	1252.5	1282.3
50°	525.7	597.9	684.4	776.5	861.5	945.1	1015.9	1068.3	1106.6	1136.4	1154.8
52.5°	439.2	515.7	607.9	699.9	784.9	861.5	925.3	964.9	996.1	1017.3	1034.3
55°	362.7	436.4	522.8	609.3	692.9	765.1	817.5	847.3	871.4	884.1	894.1
57.5°	296.1	364.1	443.5	522.8	595.1	654.6	695.7	725.5	736.8	746.7	745.3
60°	232.4	296.1	368.4	436.4	498.8	546.9	576.7	593.7	602.2	606.4	603.6
62.5°	182.8	240.9	296.1	355.6	401.0	442.1	470.4	470.4	474.7	476.1	480.3
65°	136.0	179.9	228.1	272.0	308.9	335.8	351.4	355.6	361.3	359.9	357.1
67.5°	100.6	133.2	168.6	201.2	226.7	243.7	255.0	265.0	263.6	260.7	259.3
70°	69.4	90.7	121.9	141.7	160.1	177.1	179.9	181.4	182.8	184.2	181.4
72.5°	48.2	63.8	80.8	97.8	109.1	116.2	123.3	124.7	124.7	124.7	123.3
75°	24.1	32.6	48.2	55.3	65.2	68.0	73.7	73.7	77.9	72.3	70.8
77.5°	21.3	25.5	34.0	39.7	43.9	48.2	49.6	53.8	52.4	49.6	51.0
80°	12.8	15.6	21.3	24.1	29.7	31.2	32.6	34.0	32.6	34.0	34.0
82.5°	9.9	11.3	14.2	14.2	18.4	18.4	19.8	19.8	21.3	21.3	21.3
85°	5.7	9.9	8.5	17.0	11.3	11.3	14.2	17.0	14.2	14.2	17.0
87.5°	5.7	5.7	4.3	5.7	5.7	5.7	7.1	8.5	8.5	9.9	8.5
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: P246131

CATALOG NUMBER: LSR8B50D010 EC8B50850 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2639.7	2639.7	2639.7	2639.7
2.5°	2643.9	2646.8	2642.5	2641.1
5°	2648.2	2648.2	2645.4	2645.4
7.5°	2648.2	2648.2	2643.9	2641.1
10°	2636.8	2636.8	2632.6	2629.8
12.5°	2615.6	2615.6	2614.2	2609.9
15°	2588.7	2588.7	2583.0	2578.8
17.5°	2551.8	2554.7	2547.6	2547.6
20°	2512.2	2510.7	2505.1	2502.3
22.5°	2471.1	2468.2	2466.8	2458.3
25°	2427.2	2424.3	2420.1	2415.8
27.5°	2352.1	2350.6	2346.4	2340.7
30°	2237.3	2235.9	2230.2	2230.2
32.5°	2088.5	2087.1	2081.4	2082.9
35°	1934.1	1939.7	1936.9	1931.2
37.5°	1805.1	1809.4	1812.2	1809.4
40°	1697.4	1710.2	1711.6	1714.5
42.5°	1582.7	1599.7	1605.4	1608.2
45°	1445.2	1460.8	1473.6	1470.7
47.5°	1305.0	1316.3	1327.6	1319.1
50°	1170.4	1177.4	1181.7	1181.7
52.5°	1042.9	1042.9	1041.4	1042.9
55°	896.9	896.9	891.2	894.1
57.5°	743.9	746.7	742.4	735.4
60°	602.2	595.1	592.3	588.0
62.5°	469.0	469.0	459.1	471.8
65°	351.4	347.1	342.9	341.5
67.5°	255.0	253.6	249.4	248.0
70°	179.9	174.3	172.9	170.0
72.5°	120.4	120.4	117.6	117.6
75°	73.7	66.6	65.2	66.6
77.5°	51.0	49.6	49.6	48.2
80°	34.0	32.6	35.4	31.2
82.5°	21.3	22.7	21.3	22.7
85°	14.2	17.0	15.6	15.6
87.5°	8.5	8.5	8.5	8.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)