

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: P249478

Luminaire Tested: **LSR8B60D010 EC8B60940 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249478  
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: LSR8B60D010 EC8B60940 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4984.0 lumens  
Efficiency: N/A  
Efficacy: 83.8 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

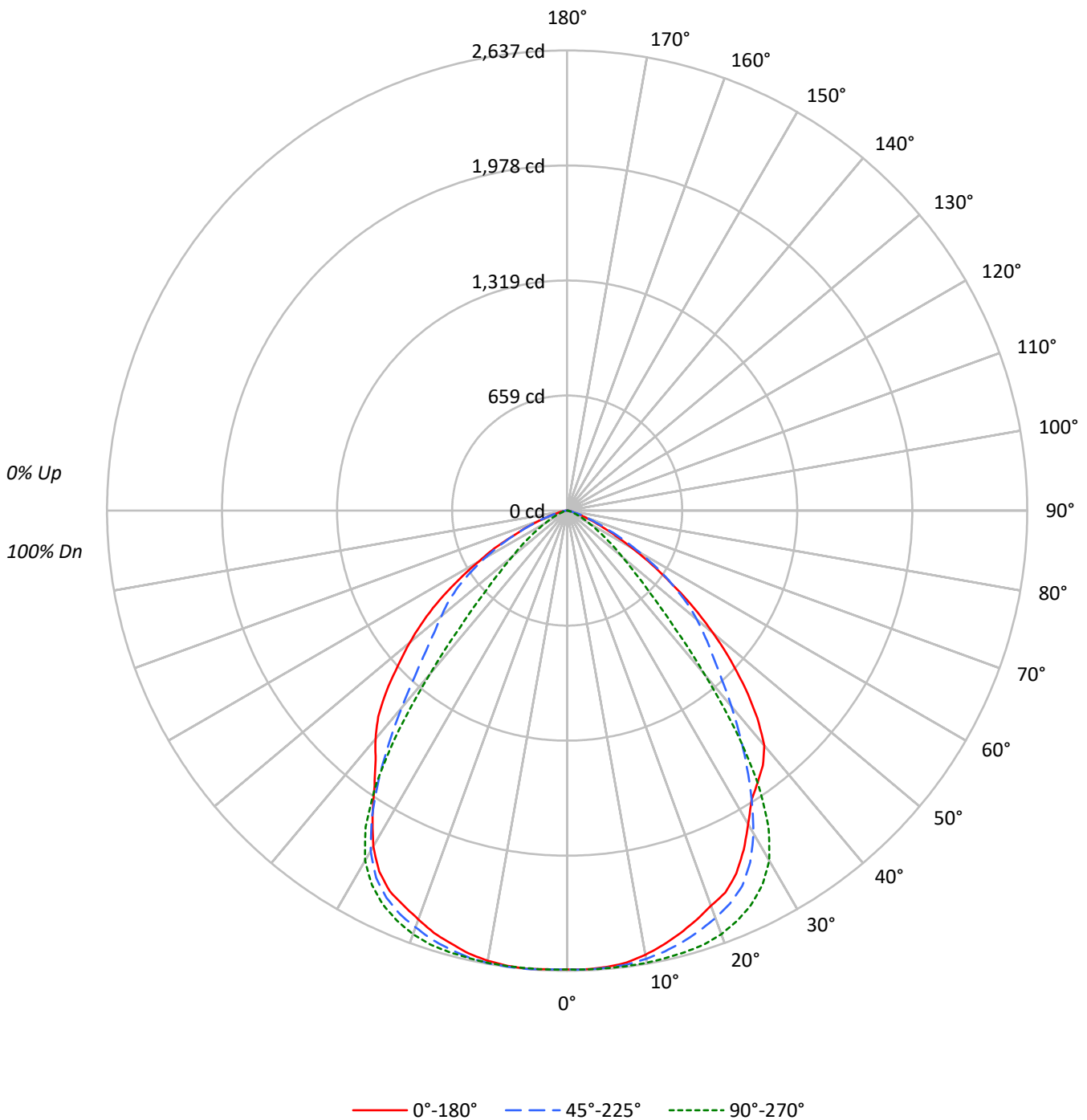
Input Watts (W): 59.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	81090	81090	81090
5°	81267	81487	81573
10°	80926	82385	82031
15°	80027	83590	82013
20°	79069	84765	81799
25°	78041	84863	81882
30°	73831	82476	79107
35°	71626	71678	72424
40°	70738	49319	68754
45°	63033	29606	63896
50°	52410	19707	56474
55°	39310	13586	47885
60°	26636	9054	36128
65°	16067	5874	24823
70°	8908	3183	15273
75°	4039	1346	7899
80°	3516	1509	5505
85°	3998	1981	5484



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	251.0	5.0
10°-20°	728.8	14.6
20°-30°	1106.2	22.2
30°-40°	1161.9	23.3
40°-50°	871.1	17.5
50°-60°	558.9	11.2
60°-70°	239.1	4.8
70°-80°	56.5	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°	2086.0	41.9
0°-40°	3247.9	65.2
0°-60°	4677.9	93.9
0°-90°	4984.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4984.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2630	2630	2630	2630	2630	
5°	2625	2630	2632	2637	2635	249
15°	2507	2559	2618	2601	2569	707
25°	2294	2374	2494	2449	2407	1048
35°	1903	1797	1904	1882	1924	1194
45°	1445	1181	679	1148	1465	1107
55°	731	731	253	762	891	663
65°	220	260	80	334	340	235
75°	34	40	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°	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7
2.5°	2631.1	2633.9	2632.5	2632.5	2631.1	2632.5	2632.5	2635.3	2635.3	2632.5	2631.1
5°	2625.4	2628.2	2628.2	2625.4	2625.4	2632.5	2628.2	2631.1	2631.1	2629.7	2629.7
7.5°	2612.7	2612.7	2618.4	2614.1	2614.1	2618.4	2616.9	2619.8	2622.6	2624.0	2624.0
10°	2584.5	2587.3	2588.7	2588.7	2590.1	2594.4	2597.2	2602.9	2605.7	2608.5	2609.9
12.5°	2549.2	2553.4	2554.8	2553.4	2557.7	2563.3	2570.4	2577.4	2581.7	2587.3	2591.6
15°	2506.8	2506.8	2509.7	2513.9	2516.8	2525.2	2532.3	2540.7	2552.0	2559.1	2566.1
17.5°	2460.3	2463.1	2467.3	2467.3	2473.0	2487.1	2491.3	2504.0	2516.8	2523.8	2537.9
20°	2409.5	2412.3	2416.5	2419.4	2426.4	2437.7	2446.2	2457.5	2471.6	2484.3	2498.4
22.5°	2369.9	2364.3	2367.1	2369.9	2377.0	2386.9	2396.8	2410.9	2425.0	2437.7	2451.8
25°	2293.7	2295.1	2299.4	2302.2	2310.7	2319.1	2330.4	2347.3	2360.1	2374.2	2389.7
27.5°	2190.7	2192.1	2199.1	2199.1	2206.2	2220.3	2227.4	2241.5	2258.4	2272.5	2290.9
30°	2073.5	2076.3	2076.3	2082.0	2086.2	2093.3	2100.3	2114.5	2122.9	2135.6	2161.0
32.5°	1966.3	1969.1	1967.6	1966.3	1962.0	1960.6	1959.2	1962.0	1964.8	1969.1	1978.9
35°	1902.7	1895.7	1890.0	1880.2	1868.9	1854.7	1842.0	1825.1	1809.6	1796.9	1782.8
37.5°	1842.0	1840.6	1832.1	1818.0	1795.4	1770.1	1740.4	1703.7	1667.0	1627.5	1589.4
40°	1757.3	1753.1	1746.0	1726.3	1700.9	1669.8	1630.3	1585.1	1525.8	1465.2	1403.1
42.5°	1613.4	1614.8	1606.3	1590.8	1566.8	1537.1	1496.2	1446.8	1383.3	1311.3	1230.8
45°	1445.4	1445.4	1442.6	1429.9	1412.9	1388.9	1357.9	1317.0	1254.9	1181.4	1095.3
47.5°	1270.4	1271.8	1267.5	1264.7	1257.7	1242.1	1219.6	1188.5	1144.7	1074.2	988.1
50°	1092.5	1092.5	1099.6	1098.2	1098.2	1092.5	1082.6	1064.3	1026.2	969.7	889.3
52.5°	914.7	917.5	921.7	927.4	934.4	945.7	934.4	926.0	901.9	858.2	789.0
55°	731.2	734.0	741.0	750.9	759.4	770.7	773.5	773.5	760.8	731.2	678.9
57.5°	574.5	570.3	575.9	584.4	595.7	607.0	615.4	625.3	623.9	604.1	561.8
60°	431.9	433.3	437.6	446.1	454.5	464.4	475.7	484.1	488.4	478.5	451.7
62.5°	314.8	314.8	320.4	328.9	333.1	347.2	354.3	358.5	362.7	361.3	344.4
65°	220.2	223.0	225.8	230.1	234.3	242.8	247.0	255.5	258.3	259.7	247.0
67.5°	155.3	151.0	153.9	156.7	160.9	166.6	175.0	175.0	179.3	179.3	170.8
70°	98.8	98.8	100.2	104.4	107.3	108.7	111.5	114.3	118.6	117.2	117.2
72.5°	66.3	64.9	66.3	67.8	69.2	73.4	73.4	74.8	77.6	79.1	73.4
75°	33.9	35.3	38.1	36.7	40.9	38.1	39.5	43.8	42.3	39.5	39.5
77.5°	28.2	28.2	28.2	26.8	29.6	29.6	28.2	31.0	29.6	29.6	28.2
80°	19.8	21.2	19.8	18.3	19.8	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	8.5	9.9	9.9	8.5	8.5	8.5	8.5	8.5	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°	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7
2.5°	2633.9	2632.5	2635.3	2633.9	2633.9	2632.5	2633.9	2632.5	2635.3	2629.7	2631.1
5°	2633.9	2631.1	2632.5	2633.9	2635.3	2632.5	2632.5	2632.5	2635.3	2632.5	2633.9
7.5°	2628.2	2626.8	2631.1	2633.9	2632.5	2631.1	2633.9	2632.5	2635.3	2633.9	2636.7
10°	2616.9	2618.4	2621.2	2625.4	2626.8	2628.2	2631.1	2631.1	2635.3	2629.7	2632.5
12.5°	2600.0	2605.7	2612.7	2615.5	2621.2	2621.2	2624.0	2625.4	2628.2	2626.8	2631.1
15°	2578.9	2585.9	2594.4	2601.4	2608.5	2612.7	2616.9	2618.4	2622.6	2618.4	2619.8
17.5°	2553.4	2561.9	2574.6	2583.1	2594.4	2598.6	2604.2	2607.1	2611.3	2608.5	2609.9
20°	2518.1	2528.0	2542.1	2554.8	2561.9	2571.8	2578.9	2583.1	2585.9	2583.1	2584.5
22.5°	2468.7	2482.9	2501.2	2511.1	2525.2	2533.7	2535.1	2545.0	2552.0	2545.0	2547.8
25°	2410.9	2425.0	2439.1	2460.3	2473.0	2482.9	2492.7	2494.2	2501.2	2499.8	2498.4
27.5°	2314.9	2333.3	2357.2	2374.2	2391.1	2406.6	2417.9	2420.7	2427.8	2425.0	2426.4
30°	2183.6	2203.4	2226.0	2252.8	2276.8	2292.3	2306.4	2316.3	2323.3	2319.1	2317.7
32.5°	1997.3	2017.1	2041.1	2067.9	2096.1	2118.7	2135.6	2148.3	2156.8	2154.0	2146.9
35°	1784.2	1789.8	1805.3	1826.5	1850.5	1874.5	1890.0	1904.1	1914.0	1916.8	1916.8
37.5°	1565.4	1547.0	1535.7	1535.7	1549.8	1559.7	1573.8	1582.3	1597.8	1603.5	1607.7
40°	1353.6	1311.3	1271.8	1242.1	1222.4	1221.0	1221.0	1225.2	1239.3	1257.7	1274.6
42.5°	1164.5	1096.7	1036.1	981.0	941.5	918.9	909.0	910.4	921.7	938.7	966.9
45°	1013.5	928.8	852.6	786.2	732.6	697.3	680.4	678.9	687.4	707.2	738.2
47.5°	896.3	806.0	719.9	643.6	585.8	547.7	527.9	522.3	527.9	546.2	583.0
50°	798.9	705.8	616.8	537.8	475.7	436.2	417.8	410.8	417.8	433.3	470.0
52.5°	708.6	612.6	529.3	453.1	386.8	352.9	333.1	328.9	333.1	351.5	381.1
55°	604.1	522.3	440.4	364.2	306.3	272.4	256.9	252.7	256.9	273.8	304.9
57.5°	501.1	430.5	358.5	289.4	240.0	210.3	196.2	190.5	200.4	211.7	248.4
60°	405.1	348.7	287.9	227.3	186.3	159.5	148.2	146.8	149.6	163.7	189.1
62.5°	317.6	271.0	223.0	173.6	139.7	128.4	114.3	112.9	115.7	124.2	144.0
65°	228.7	199.0	162.3	127.0	100.2	84.7	79.1	80.5	83.3	88.9	107.3
67.5°	159.5	138.3	112.9	88.9	69.2	62.1	56.5	55.1	56.5	66.3	76.2
70°	107.3	94.6	76.2	67.8	48.0	38.1	39.5	35.3	40.9	40.9	49.4
72.5°	70.6	62.1	50.8	39.5	33.9	26.8	26.8	25.4	28.2	29.6	36.7
75°	36.7	28.2	28.2	19.8	14.1	7.0	12.7	11.3	9.9	11.3	14.1
77.5°	25.4	21.2	19.8	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	8.5	7.0	8.5	8.5	8.5	8.5	9.9
82.5°	9.9	8.5	8.5	7.0	7.0	5.6	5.6	5.6	5.6	5.6	8.5
85°	8.5	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°	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7	2629.7
2.5°	2633.9	2635.3	2635.3	2633.9	2633.9	2631.1	2636.7	2632.5	2633.9	2639.5	2635.3
5°	2636.7	2638.1	2638.1	2636.7	2636.7	2636.7	2638.1	2638.1	2636.7	2635.3	2638.1
7.5°	2642.4	2641.0	2641.0	2638.1	2638.1	2635.3	2638.1	2633.9	2636.7	2633.9	2638.1
10°	2635.3	2636.7	2635.3	2633.9	2633.9	2632.5	2632.5	2628.2	2629.7	2625.4	2628.2
12.5°	2631.1	2629.7	2629.7	2626.8	2624.0	2621.2	2619.8	2615.5	2615.5	2605.7	2609.9
15°	2619.8	2621.2	2616.9	2611.3	2608.5	2601.4	2598.6	2592.9	2587.3	2580.3	2581.7
17.5°	2609.9	2605.7	2600.0	2594.4	2583.1	2577.4	2571.8	2563.3	2560.5	2552.0	2549.2
20°	2580.3	2577.4	2570.4	2560.5	2553.4	2540.7	2535.1	2526.6	2519.6	2511.1	2506.8
22.5°	2542.1	2539.3	2530.8	2521.0	2509.7	2504.0	2498.4	2482.9	2475.8	2467.3	2465.9
25°	2494.2	2489.9	2481.5	2470.2	2464.5	2449.0	2443.3	2432.0	2429.2	2420.7	2419.4
27.5°	2420.7	2415.1	2405.2	2391.1	2381.2	2371.3	2365.7	2357.2	2354.4	2345.9	2344.5
30°	2310.7	2303.6	2283.8	2278.2	2261.2	2251.4	2251.4	2240.1	2241.5	2235.9	2235.9
32.5°	2137.0	2125.8	2110.2	2098.9	2087.6	2082.0	2082.0	2077.7	2080.6	2080.6	2083.4
35°	1907.0	1891.4	1883.0	1875.9	1875.9	1881.5	1898.5	1902.7	1911.2	1918.3	1923.9
37.5°	1611.9	1610.6	1620.4	1628.9	1650.1	1674.1	1703.7	1729.1	1753.1	1770.1	1787.0
40°	1292.9	1328.2	1356.5	1396.0	1428.4	1475.0	1528.7	1572.4	1613.4	1643.0	1674.1
42.5°	1009.2	1054.4	1113.7	1171.5	1229.4	1292.9	1363.5	1424.2	1477.9	1518.8	1551.3
45°	786.2	848.3	920.3	993.7	1068.5	1147.6	1221.0	1283.1	1339.5	1381.9	1414.3
47.5°	633.8	701.5	783.4	863.9	948.5	1031.8	1113.7	1167.3	1213.9	1247.8	1277.4
50°	523.7	595.7	681.8	773.5	858.2	941.5	1012.1	1064.3	1102.4	1132.0	1150.4
52.5°	437.6	513.8	605.5	697.3	782.0	858.2	921.7	961.2	992.3	1013.5	1030.4
55°	361.3	434.8	520.9	607.0	690.2	762.2	814.4	844.1	868.1	880.8	890.7
57.5°	295.0	362.7	441.8	520.9	592.8	652.1	693.1	722.7	734.0	743.9	742.5
60°	231.5	295.0	367.0	434.8	496.9	544.8	574.5	591.4	599.9	604.1	601.3
62.5°	182.1	240.0	295.0	354.3	399.5	440.4	468.6	468.6	472.9	474.3	478.5
65°	135.5	179.3	227.3	271.0	307.7	334.5	350.1	354.3	359.9	358.5	355.7
67.5°	100.2	132.7	168.0	200.4	225.8	242.8	254.1	264.0	262.6	259.7	258.3
70°	69.2	90.3	121.4	141.2	159.5	176.5	179.3	180.7	182.1	183.5	180.7
72.5°	48.0	63.5	80.5	97.4	108.7	115.7	122.8	124.2	124.2	124.2	122.8
75°	24.0	32.5	48.0	55.1	64.9	67.8	73.4	73.4	77.6	72.0	70.6
77.5°	21.2	25.4	33.9	39.5	43.8	48.0	49.4	53.6	52.2	49.4	50.8
80°	12.7	15.5	21.2	24.0	29.6	31.0	32.5	33.9	32.5	33.9	33.9
82.5°	9.9	11.3	14.1	14.1	18.3	18.3	19.8	19.8	21.2	21.2	21.2
85°	5.6	9.9	8.5	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	8.5	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: P249478

CATALOG NUMBER: LSR8B60D010 EC8B60940 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2629.7	2629.7	2629.7	2629.7
2.5°	2633.9	2636.7	2632.5	2631.1
5°	2638.1	2638.1	2635.3	2635.3
7.5°	2638.1	2638.1	2633.9	2631.1
10°	2626.8	2626.8	2622.6	2619.8
12.5°	2605.7	2605.7	2604.2	2600.0
15°	2578.9	2578.9	2573.2	2569.0
17.5°	2542.1	2545.0	2537.9	2537.9
20°	2502.6	2501.2	2495.6	2492.7
22.5°	2461.7	2458.9	2457.5	2449.0
25°	2417.9	2415.1	2410.9	2406.6
27.5°	2343.1	2341.7	2337.5	2331.8
30°	2228.8	2227.4	2221.7	2221.7
32.5°	2080.6	2079.2	2073.5	2074.9
35°	1926.7	1932.4	1929.5	1923.9
37.5°	1798.3	1802.5	1805.3	1802.5
40°	1691.0	1703.7	1705.1	1708.0
42.5°	1576.7	1593.6	1599.3	1602.1
45°	1439.7	1455.3	1468.0	1465.2
47.5°	1300.0	1311.3	1322.6	1314.1
50°	1165.9	1173.0	1177.2	1177.2
52.5°	1038.9	1038.9	1037.5	1038.9
55°	893.5	893.5	887.9	890.7
57.5°	741.0	743.9	739.6	732.6
60°	599.9	592.8	590.0	585.8
62.5°	467.2	467.2	457.3	470.0
65°	350.1	345.8	341.6	340.2
67.5°	254.1	252.7	248.4	247.0
70°	179.3	173.6	172.2	169.4
72.5°	120.0	120.0	117.2	117.2
75°	73.4	66.3	64.9	66.3
77.5°	50.8	49.4	49.4	48.0
80°	33.9	32.5	35.3	31.0
82.5°	21.2	22.6	21.2	22.6
85°	14.1	16.9	15.5	15.5
87.5°	8.5	8.5	8.5	8.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)