

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: P249361

Luminaire Tested: **LSR8B60D010 EC8B60935 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249361
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 EC8B60935 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5271.0 lumens
Efficiency: N/A
Efficacy: 88.6 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

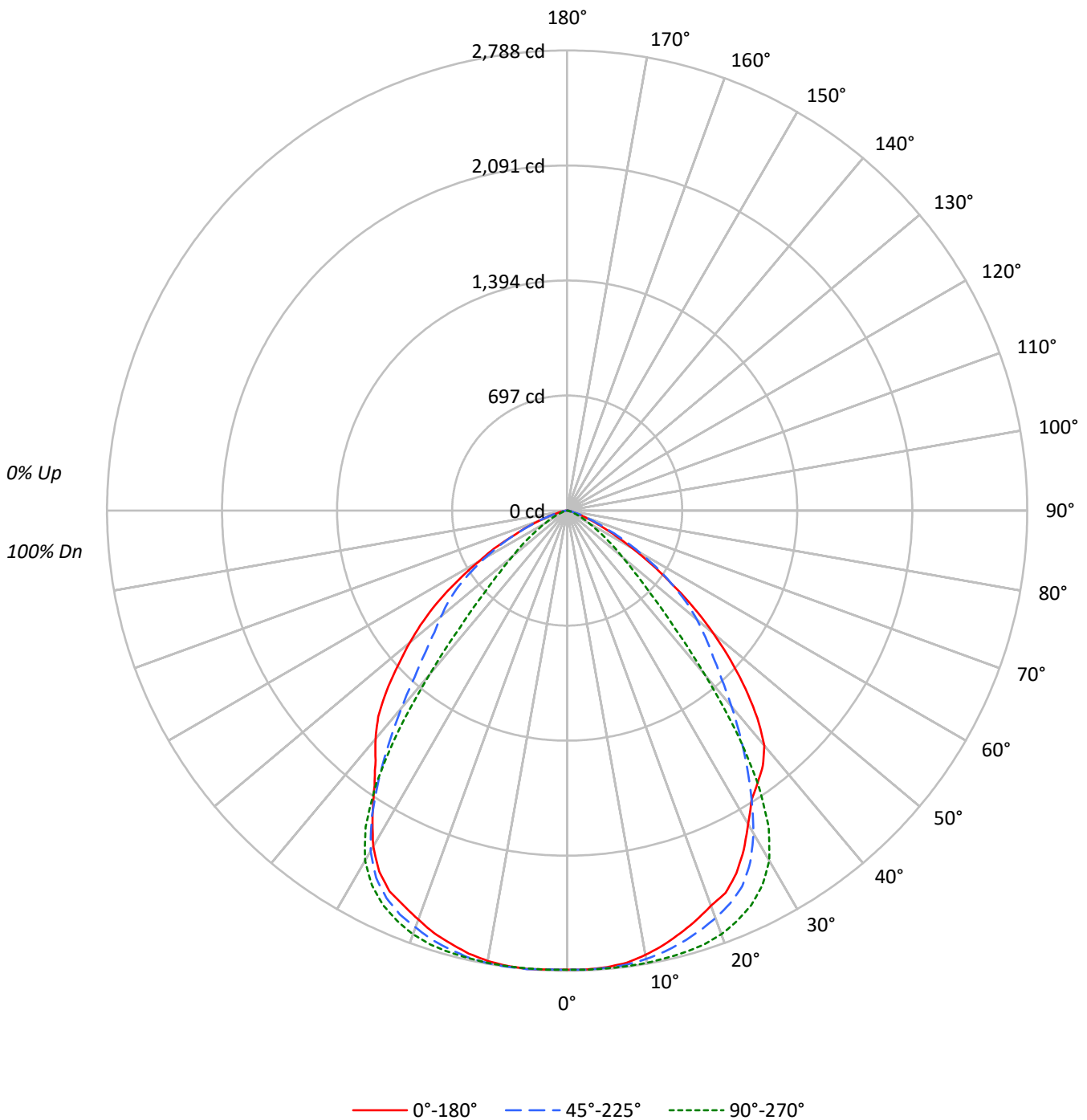
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249361

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0GPH

Luminous Intensity Polar Plot





TEST NUMBER: P249361

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0GPH

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°	85759	85759	85759
5°	85947	86179	86272
10°	85585	87129	86753
15°	84637	88401	86735
20°	83620	89645	86511
25°	82536	89749	86598
30°	78082	87226	83665
35°	75751	75808	76595
40°	74812	52157	72711
45°	66661	31311	67572
50°	55428	20839	59726
55°	41574	14365	50638
60°	28172	9572	38206
65°	16994	6209	26245
70°	9422	3363	16148
75°	4265	1418	8364
80°	3711	1580	5825
85°	4210	2123	5802



TEST NUMBER: P249361

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0GPH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.4	5.0
10°-20°	770.8	14.6
20°-30°	1169.9	22.2
30°-40°	1228.8	23.3
40°-50°	921.3	17.5
50°-60°	591.1	11.2
60°-70°	252.9	4.8
70°-80°	59.7	1.1
80°-90°	11.1	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°	2206.1	41.9
0°-40°	3434.9	65.2
0°-60°	4947.3	93.9
0°-90°	5271.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5271.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2781	2781	2781	2781	2781	
5°	2777	2781	2784	2788	2787	264
15°	2651	2706	2769	2751	2717	748
25°	2426	2511	2638	2590	2545	1108
35°	2012	1900	2014	1990	2035	1263
45°	1529	1250	718	1214	1550	1171
55°	773	773	267	806	942	701
65°	233	275	85	354	360	249
75°	36	42	12	72	70	52
85°	12	8	6	12	16	13
90°	0	0	0	0	0	



TEST NUMBER: P249361

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0GPH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1
2.5°	2782.6	2785.6	2784.1	2784.1	2782.6	2784.1	2784.1	2787.1	2787.1	2784.1	2782.6
5°	2776.6	2779.6	2779.6	2776.6	2776.6	2784.1	2779.6	2782.6	2782.6	2781.1	2781.1
7.5°	2763.2	2763.2	2769.1	2764.7	2764.7	2769.1	2767.6	2770.6	2773.6	2775.1	2775.1
10°	2733.3	2736.3	2737.8	2737.8	2739.3	2743.8	2746.7	2752.7	2755.7	2758.7	2760.2
12.5°	2696.0	2700.5	2702.0	2700.5	2705.0	2710.9	2718.4	2725.9	2730.3	2736.3	2740.8
15°	2651.2	2651.2	2654.2	2658.7	2661.7	2670.6	2678.1	2687.0	2699.0	2706.5	2713.9
17.5°	2602.0	2605.0	2609.4	2609.4	2615.4	2630.3	2634.8	2648.2	2661.7	2669.1	2684.1
20°	2548.2	2551.2	2555.7	2558.7	2566.1	2578.1	2587.0	2599.0	2613.9	2627.3	2642.2
22.5°	2506.4	2500.5	2503.4	2506.4	2513.9	2524.3	2534.8	2549.7	2564.6	2578.1	2593.0
25°	2425.8	2427.3	2431.8	2434.7	2443.7	2452.7	2464.6	2482.5	2496.0	2510.9	2527.3
27.5°	2316.8	2318.3	2325.8	2325.8	2333.2	2348.2	2355.6	2370.6	2388.5	2403.4	2422.8
30°	2192.9	2195.9	2195.9	2201.9	2206.3	2213.8	2221.3	2236.2	2245.2	2258.6	2285.5
32.5°	2079.5	2082.4	2080.9	2079.5	2075.0	2073.5	2072.0	2075.0	2078.0	2082.4	2092.9
35°	2012.3	2004.8	1998.9	1988.4	1976.5	1961.5	1948.1	1930.2	1913.8	1900.3	1885.4
37.5°	1948.1	1946.6	1937.7	1922.7	1898.8	1872.0	1840.6	1801.8	1763.0	1721.2	1680.9
40°	1858.5	1854.0	1846.6	1825.7	1798.8	1766.0	1724.2	1676.4	1613.7	1549.5	1483.8
42.5°	1706.3	1707.8	1698.8	1682.4	1657.0	1625.6	1582.4	1530.1	1463.0	1386.8	1301.7
45°	1528.6	1528.6	1525.6	1512.2	1494.3	1468.9	1436.1	1392.8	1327.1	1249.5	1158.4
47.5°	1343.5	1345.0	1340.5	1337.6	1330.1	1313.7	1289.8	1256.9	1210.7	1136.0	1044.9
50°	1155.4	1155.4	1162.9	1161.4	1161.4	1155.4	1145.0	1125.6	1085.3	1025.6	940.5
52.5°	967.3	970.3	974.8	980.8	988.2	1000.2	988.2	979.3	953.9	907.6	834.5
55°	773.3	776.3	783.7	794.2	803.1	815.1	818.0	818.0	804.6	773.3	718.0
57.5°	607.6	603.1	609.1	618.0	630.0	641.9	650.9	661.3	659.8	638.9	594.1
60°	456.8	458.3	462.8	471.7	480.7	491.1	503.1	512.0	516.5	506.1	477.7
62.5°	332.9	332.9	338.9	347.8	352.3	367.2	374.7	379.2	383.6	382.1	364.2
65°	232.9	235.9	238.8	243.3	247.8	256.7	261.2	270.2	273.2	274.7	261.2
67.5°	164.2	159.7	162.7	165.7	170.2	176.2	185.1	185.1	189.6	189.6	180.6
70°	104.5	104.5	106.0	110.5	113.5	114.9	117.9	120.9	125.4	123.9	123.9
72.5°	70.2	68.7	70.2	71.7	73.2	77.6	77.6	79.1	82.1	83.6	77.6
75°	35.8	37.3	40.3	38.8	43.3	40.3	41.8	46.3	44.8	41.8	41.8
77.5°	29.8	29.8	29.8	28.4	31.3	31.3	29.8	32.8	31.3	31.3	29.8
80°	20.9	22.4	20.9	19.4	20.9	19.4	19.4	19.4	19.4	19.4	17.9
82.5°	16.4	13.4	14.9	13.4	14.9	14.9	13.4	11.9	11.9	13.4	11.9
85°	11.9	8.9	10.4	10.4	8.9	8.9	8.9	8.9	8.9	7.5	7.5
87.5°	7.5	4.5	4.5	4.5	6.0	6.0	6.0	4.5	6.0	6.0	3.0
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: P249361

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1
2.5°	2785.6	2784.1	2787.1	2785.6	2785.6	2784.1	2785.6	2784.1	2787.1	2781.1	2782.6
5°	2785.6	2782.6	2784.1	2785.6	2787.1	2784.1	2784.1	2784.1	2787.1	2784.1	2785.6
7.5°	2779.6	2778.1	2782.6	2785.6	2784.1	2782.6	2785.6	2784.1	2787.1	2785.6	2788.5
10°	2767.6	2769.1	2772.1	2776.6	2778.1	2779.6	2782.6	2782.6	2787.1	2781.1	2784.1
12.5°	2749.7	2755.7	2763.2	2766.1	2772.1	2772.1	2775.1	2776.6	2779.6	2778.1	2782.6
15°	2727.4	2734.8	2743.8	2751.2	2758.7	2763.2	2767.6	2769.1	2773.6	2769.1	2770.6
17.5°	2700.5	2709.4	2722.9	2731.8	2743.8	2748.2	2754.2	2757.2	2761.7	2758.7	2760.2
20°	2663.1	2673.6	2688.5	2702.0	2709.4	2719.9	2727.4	2731.8	2734.8	2731.8	2733.3
22.5°	2610.9	2625.8	2645.2	2655.7	2670.6	2679.6	2681.1	2691.5	2699.0	2691.5	2694.5
25°	2549.7	2564.6	2579.6	2602.0	2615.4	2625.8	2636.3	2637.8	2645.2	2643.7	2642.2
27.5°	2448.2	2467.6	2493.0	2510.9	2528.8	2545.2	2557.2	2560.1	2567.6	2564.6	2566.1
30°	2309.3	2330.3	2354.2	2382.5	2407.9	2424.3	2439.2	2449.7	2457.1	2452.7	2451.2
32.5°	2112.3	2133.2	2158.6	2186.9	2216.8	2240.7	2258.6	2272.1	2281.0	2278.0	2270.6
35°	1886.9	1892.9	1909.3	1931.7	1957.0	1982.4	1998.9	2013.8	2024.2	2027.2	2027.2
37.5°	1655.5	1636.1	1624.2	1624.2	1639.1	1649.5	1664.5	1673.4	1689.9	1695.8	1700.3
40°	1431.6	1386.8	1345.0	1313.7	1292.8	1291.3	1291.3	1295.7	1310.7	1330.1	1348.0
42.5°	1231.6	1159.9	1095.7	1037.5	995.7	971.8	961.4	962.9	974.8	992.7	1022.6
45°	1071.8	982.3	901.7	831.5	774.8	737.4	719.5	718.0	727.0	747.9	780.8
47.5°	947.9	852.4	761.3	680.7	619.5	579.2	558.3	552.4	558.3	577.7	616.5
50°	844.9	746.4	652.4	568.8	503.1	461.3	441.9	434.4	441.9	458.3	497.1
52.5°	749.4	647.9	559.8	479.2	409.0	373.2	352.3	347.8	352.3	371.7	403.1
55°	638.9	552.4	465.7	385.1	324.0	288.1	271.7	267.2	271.7	289.6	322.5
57.5°	530.0	455.3	379.2	306.0	253.8	222.4	207.5	201.5	212.0	223.9	262.7
60°	428.4	368.7	304.5	240.3	197.1	168.7	156.7	155.2	158.2	173.2	200.0
62.5°	335.9	286.6	235.9	183.6	147.8	135.8	120.9	119.4	122.4	131.3	152.3
65°	241.8	210.5	171.7	134.3	106.0	89.6	83.6	85.1	88.1	94.1	113.5
67.5°	168.7	146.3	119.4	94.1	73.2	65.7	59.7	58.2	59.7	70.2	80.6
70°	113.5	100.0	80.6	71.7	50.8	40.3	41.8	37.3	43.3	43.3	52.2
72.5°	74.6	65.7	53.7	41.8	35.8	28.4	28.4	26.9	29.8	31.3	38.8
75°	38.8	29.8	29.8	20.9	14.9	7.5	13.4	11.9	10.4	11.9	14.9
77.5°	26.9	22.4	20.9	16.4	14.9	11.9	11.9	11.9	11.9	13.4	14.9
80°	16.4	16.4	11.9	10.4	8.9	7.5	8.9	8.9	8.9	8.9	10.4
82.5°	10.4	8.9	8.9	7.5	7.5	6.0	6.0	6.0	6.0	6.0	8.9
85°	8.9	6.0	6.0	4.5	6.0	10.4	4.5	6.0	6.0	6.0	4.5
87.5°	3.0	4.5	4.5	4.5	3.0	1.5	3.0	4.5	4.5	7.5	6.0
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: P249361

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1	2781.1
2.5°	2785.6	2787.1	2787.1	2785.6	2785.6	2782.6	2788.5	2784.1	2785.6	2791.5	2787.1
5°	2788.5	2790.0	2790.0	2788.5	2788.5	2788.5	2790.0	2790.0	2788.5	2787.1	2790.0
7.5°	2794.5	2793.0	2793.0	2790.0	2790.0	2787.1	2790.0	2785.6	2788.5	2785.6	2790.0
10°	2787.1	2788.5	2787.1	2785.6	2785.6	2784.1	2784.1	2779.6	2781.1	2776.6	2779.6
12.5°	2782.6	2781.1	2781.1	2778.1	2775.1	2772.1	2770.6	2766.1	2766.1	2755.7	2760.2
15°	2770.6	2772.1	2767.6	2761.7	2758.7	2751.2	2748.2	2742.3	2736.3	2728.8	2730.3
17.5°	2760.2	2755.7	2749.7	2743.8	2731.8	2725.9	2719.9	2710.9	2707.9	2699.0	2696.0
20°	2728.8	2725.9	2718.4	2707.9	2700.5	2687.0	2681.1	2672.1	2664.6	2655.7	2651.2
22.5°	2688.5	2685.5	2676.6	2666.1	2654.2	2648.2	2642.2	2625.8	2618.4	2609.4	2607.9
25°	2637.8	2633.3	2624.3	2612.4	2606.4	2590.0	2584.0	2572.1	2569.1	2560.1	2558.7
27.5°	2560.1	2554.2	2543.7	2528.8	2518.3	2507.9	2501.9	2493.0	2490.0	2481.0	2479.6
30°	2443.7	2436.2	2415.3	2409.4	2391.5	2381.0	2381.0	2369.1	2370.6	2364.6	2364.6
32.5°	2260.1	2248.2	2231.7	2219.8	2207.8	2201.9	2201.9	2197.4	2200.4	2200.4	2203.4
35°	2016.8	2000.4	1991.4	1983.9	1983.9	1989.9	2007.8	2012.3	2021.3	2028.7	2034.7
37.5°	1704.8	1703.3	1713.7	1722.7	1745.1	1770.5	1801.8	1828.7	1854.0	1872.0	1889.9
40°	1367.4	1404.7	1434.6	1476.4	1510.7	1560.0	1616.7	1663.0	1706.3	1737.6	1770.5
42.5°	1067.3	1115.1	1177.8	1239.0	1300.2	1367.4	1442.1	1506.2	1563.0	1606.2	1640.6
45°	831.5	897.2	973.3	1050.9	1130.1	1213.7	1291.3	1357.0	1416.7	1461.5	1495.8
47.5°	670.3	741.9	828.5	913.6	1003.2	1091.2	1177.8	1234.6	1283.8	1319.6	1351.0
50°	553.8	630.0	721.0	818.0	907.6	995.7	1070.3	1125.6	1165.9	1197.2	1216.6
52.5°	462.8	543.4	640.4	737.4	827.0	907.6	974.8	1016.6	1049.4	1071.8	1089.7
55°	382.1	459.8	550.9	641.9	730.0	806.1	861.3	892.7	918.1	931.5	941.9
57.5°	312.0	383.6	467.2	550.9	627.0	689.7	733.0	764.3	776.3	786.7	785.2
60°	244.8	312.0	388.1	459.8	525.5	576.2	607.6	625.5	634.4	638.9	635.9
62.5°	192.6	253.8	312.0	374.7	422.5	465.7	495.6	495.6	500.1	501.6	506.1
65°	143.3	189.6	240.3	286.6	325.4	353.8	370.2	374.7	380.7	379.2	376.2
67.5°	106.0	140.3	177.6	212.0	238.8	256.7	268.7	279.2	277.7	274.7	273.2
70°	73.2	95.6	128.4	149.3	168.7	186.6	189.6	191.1	192.6	194.1	191.1
72.5°	50.8	67.2	85.1	103.0	114.9	122.4	129.9	131.3	131.3	131.3	129.9
75°	25.4	34.3	50.8	58.2	68.7	71.7	77.6	77.6	82.1	76.1	74.6
77.5°	22.4	26.9	35.8	41.8	46.3	50.8	52.2	56.7	55.2	52.2	53.7
80°	13.4	16.4	22.4	25.4	31.3	32.8	34.3	35.8	34.3	35.8	35.8
82.5°	10.4	11.9	14.9	14.9	19.4	19.4	20.9	20.9	22.4	22.4	22.4
85°	6.0	10.4	8.9	17.9	11.9	11.9	14.9	17.9	14.9	14.9	17.9
87.5°	6.0	6.0	4.5	6.0	6.0	6.0	7.5	8.9	8.9	10.4	8.9
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: P249361

CATALOG NUMBER: LSR8B60D010 EC8B60935 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2781.1	2781.1	2781.1	2781.1
2.5°	2785.6	2788.5	2784.1	2782.6
5°	2790.0	2790.0	2787.1	2787.1
7.5°	2790.0	2790.0	2785.6	2782.6
10°	2778.1	2778.1	2773.6	2770.6
12.5°	2755.7	2755.7	2754.2	2749.7
15°	2727.4	2727.4	2721.4	2716.9
17.5°	2688.5	2691.5	2684.1	2684.1
20°	2646.7	2645.2	2639.3	2636.3
22.5°	2603.5	2600.5	2599.0	2590.0
25°	2557.2	2554.2	2549.7	2545.2
27.5°	2478.1	2476.6	2472.1	2466.1
30°	2357.1	2355.6	2349.7	2349.7
32.5°	2200.4	2198.9	2192.9	2194.4
35°	2037.7	2043.7	2040.7	2034.7
37.5°	1901.8	1906.3	1909.3	1906.3
40°	1788.4	1801.8	1803.3	1806.3
42.5°	1667.5	1685.4	1691.4	1694.3
45°	1522.6	1539.1	1552.5	1549.5
47.5°	1374.9	1386.8	1398.7	1389.8
50°	1233.1	1240.5	1245.0	1245.0
52.5°	1098.7	1098.7	1097.2	1098.7
55°	944.9	944.9	939.0	941.9
57.5°	783.7	786.7	782.2	774.8
60°	634.4	627.0	624.0	619.5
62.5°	494.1	494.1	483.7	497.1
65°	370.2	365.7	361.2	359.7
67.5°	268.7	267.2	262.7	261.2
70°	189.6	183.6	182.1	179.1
72.5°	126.9	126.9	123.9	123.9
75°	77.6	70.2	68.7	70.2
77.5°	53.7	52.2	52.2	50.8
80°	35.8	34.3	37.3	32.8
82.5°	22.4	23.9	22.4	23.9
85°	14.9	17.9	16.4	16.4
87.5°	8.9	8.9	8.9	8.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)