

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: P249370

Luminaire Tested: **LSR8B60D010 EC8B60940 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249370
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 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5505.0 lumens
Efficiency: N/A
Efficacy: 92.5 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

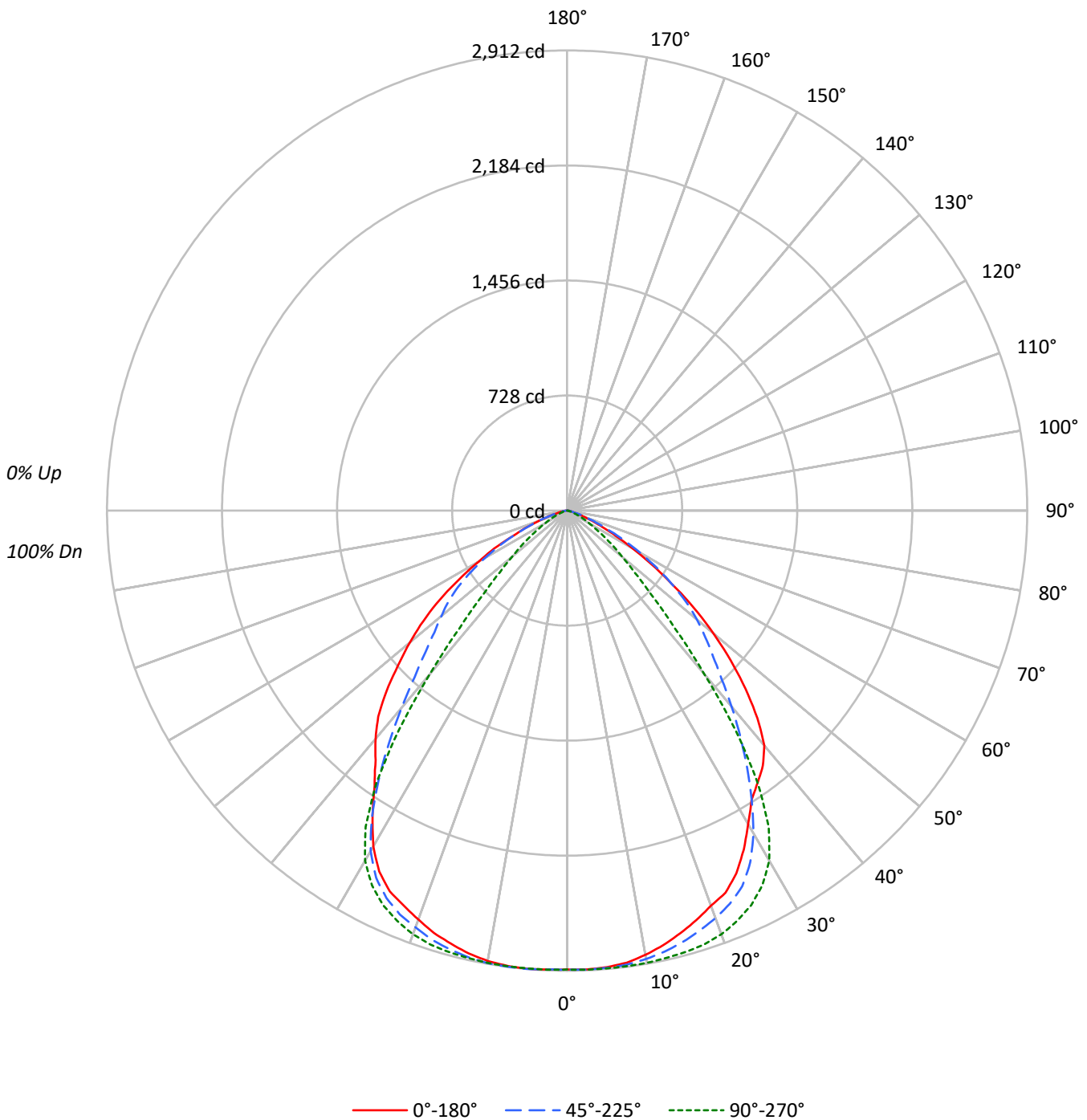
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	89564	89564	89564
5°	89764	90005	90101
10°	89383	90996	90604
15°	88395	92328	90585
20°	87335	93625	90350
25°	86200	93733	90443
30°	81550	91096	87379
35°	79113	79173	79994
40°	78133	54476	75939
45°	69622	32702	70573
50°	57889	21765	62379
55°	43418	15005	52891
60°	29424	9997	39902
65°	17745	6487	27413
70°	9836	3516	16869
75°	4456	1489	8733
80°	3871	1651	6091
85°	4423	2194	6085



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.2	5.0
10°-20°	805.0	14.6
20°-30°	1221.9	22.2
30°-40°	1283.3	23.3
40°-50°	962.2	17.5
50°-60°	617.3	11.2
60°-70°	264.1	4.8
70°-80°	62.4	1.1
80°-90°	11.6	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°	2304.1	41.9
0°-40°	3587.4	65.2
0°-60°	5166.9	93.9
0°-90°	5505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5505.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2904	2904	2904	2904	2904	
5°	2900	2904	2908	2912	2911	275
15°	2769	2827	2892	2873	2838	781
25°	2534	2622	2755	2705	2658	1157
35°	2102	1985	2103	2078	2125	1319
45°	1596	1305	750	1268	1618	1223
55°	808	808	279	842	984	733
65°	243	287	89	370	376	260
75°	37	44	12	75	73	54
85°	12	8	6	12	17	13
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°	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5
2.5°	2906.1	2909.2	2907.7	2907.7	2906.1	2907.7	2907.7	2910.8	2910.8	2907.7	2906.1
5°	2899.9	2903.0	2903.0	2899.9	2899.9	2907.7	2903.0	2906.1	2906.1	2904.5	2904.5
7.5°	2885.9	2885.9	2892.1	2887.4	2887.4	2892.1	2890.5	2893.6	2896.8	2898.3	2898.3
10°	2854.6	2857.8	2859.3	2859.3	2860.9	2865.6	2868.7	2874.9	2878.0	2881.2	2882.7
12.5°	2815.7	2820.4	2821.9	2820.4	2825.0	2831.3	2839.1	2846.9	2851.6	2857.8	2862.5
15°	2768.9	2768.9	2772.0	2776.7	2779.8	2789.2	2797.0	2806.3	2818.8	2826.6	2834.4
17.5°	2717.5	2720.6	2725.3	2725.3	2731.5	2747.1	2751.8	2765.8	2779.8	2787.6	2803.2
20°	2661.4	2664.4	2669.1	2672.3	2680.0	2692.5	2701.9	2714.3	2729.9	2744.0	2759.5
22.5°	2617.7	2611.5	2614.5	2617.7	2625.5	2636.4	2647.3	2662.9	2678.5	2692.5	2708.1
25°	2533.5	2535.0	2539.7	2542.8	2552.2	2561.6	2574.0	2592.7	2606.8	2622.4	2639.5
27.5°	2419.7	2421.2	2429.0	2429.0	2436.8	2452.4	2460.2	2475.8	2494.5	2510.1	2530.4
30°	2290.3	2293.4	2293.4	2299.6	2304.3	2312.1	2319.9	2335.5	2344.8	2358.9	2387.0
32.5°	2171.8	2174.9	2173.3	2171.8	2167.1	2165.5	2164.0	2167.1	2170.2	2174.9	2185.8
35°	2101.6	2093.8	2087.6	2076.7	2064.2	2048.6	2034.6	2015.9	1998.7	1984.7	1969.1
37.5°	2034.6	2033.0	2023.7	2008.1	1983.1	1955.1	1922.4	1881.8	1841.2	1797.6	1755.5
40°	1941.0	1936.4	1928.6	1906.7	1878.7	1844.4	1800.7	1750.8	1685.3	1618.3	1549.7
42.5°	1782.0	1783.6	1774.2	1757.1	1730.6	1697.8	1652.6	1598.1	1527.9	1448.4	1359.5
45°	1596.5	1596.5	1593.4	1579.3	1560.6	1534.1	1499.8	1454.6	1386.0	1304.9	1209.8
47.5°	1403.2	1404.7	1400.0	1396.9	1389.1	1372.0	1347.0	1312.7	1264.4	1186.4	1091.3
50°	1206.7	1206.7	1214.5	1213.0	1213.0	1206.7	1195.8	1175.5	1133.5	1071.1	982.2
52.5°	1010.3	1013.4	1018.1	1024.3	1032.1	1044.6	1032.1	1022.7	996.2	947.9	871.5
55°	807.6	810.7	818.5	829.4	838.8	851.3	854.4	854.4	840.3	807.6	749.9
57.5°	634.6	629.9	636.1	645.5	657.9	670.4	679.8	690.7	689.1	667.3	620.5
60°	477.1	478.6	483.3	492.7	502.0	512.9	525.4	534.8	539.4	528.5	498.9
62.5°	347.7	347.7	353.9	363.2	367.9	383.5	391.3	396.0	400.7	399.1	380.4
65°	243.2	246.3	249.4	254.1	258.8	268.1	272.8	282.2	285.3	286.9	272.8
67.5°	171.5	166.8	169.9	173.0	177.7	184.0	193.3	193.3	198.0	198.0	188.6
70°	109.1	109.1	110.7	115.4	118.5	120.1	123.2	126.3	131.0	129.4	129.4
72.5°	73.3	71.7	73.3	74.8	76.4	81.1	81.1	82.6	85.8	87.3	81.1
75°	37.4	39.0	42.1	40.6	45.2	42.1	43.6	48.3	46.8	43.6	43.6
77.5°	31.2	31.2	31.2	29.6	32.7	32.7	31.2	34.3	32.7	32.7	31.2
80°	21.8	23.4	21.8	20.3	21.8	20.3	20.3	20.3	20.3	20.3	18.7
82.5°	17.2	14.0	15.6	14.0	15.6	15.6	14.0	12.5	12.5	14.0	12.5
85°	12.5	9.3	10.9	10.9	9.3	9.3	9.3	9.3	9.3	7.8	7.8
87.5°	7.8	4.7	4.7	4.7	6.2	6.2	6.2	4.7	6.2	6.2	3.1
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°	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5
2.5°	2909.2	2907.7	2910.8	2909.2	2909.2	2907.7	2909.2	2907.7	2910.8	2904.5	2906.1
5°	2909.2	2906.1	2907.7	2909.2	2910.8	2907.7	2907.7	2907.7	2910.8	2907.7	2909.2
7.5°	2903.0	2901.4	2906.1	2909.2	2907.7	2906.1	2909.2	2907.7	2910.8	2909.2	2912.3
10°	2890.5	2892.1	2895.2	2899.9	2901.4	2903.0	2906.1	2906.1	2910.8	2904.5	2907.7
12.5°	2871.8	2878.0	2885.9	2888.9	2895.2	2895.2	2898.3	2899.9	2903.0	2901.4	2906.1
15°	2848.4	2856.2	2865.6	2873.4	2881.2	2885.9	2890.5	2892.1	2896.8	2892.1	2893.6
17.5°	2820.4	2829.7	2843.7	2853.1	2865.6	2870.3	2876.5	2879.6	2884.3	2881.2	2882.7
20°	2781.4	2792.3	2807.9	2821.9	2829.7	2840.6	2848.4	2853.1	2856.2	2853.1	2854.6
22.5°	2726.8	2742.4	2762.7	2773.6	2789.2	2798.5	2800.1	2811.0	2818.8	2811.0	2814.1
25°	2662.9	2678.5	2694.1	2717.5	2731.5	2742.4	2753.3	2754.9	2762.7	2761.1	2759.5
27.5°	2556.9	2577.2	2603.6	2622.4	2641.1	2658.2	2670.7	2673.8	2681.6	2678.5	2680.0
30°	2411.9	2433.7	2458.7	2488.3	2514.8	2531.9	2547.5	2558.4	2566.2	2561.6	2560.0
32.5°	2206.1	2227.9	2254.4	2284.0	2315.2	2340.1	2358.9	2372.9	2382.3	2379.1	2371.4
35°	1970.7	1976.9	1994.1	2017.5	2043.9	2070.4	2087.6	2103.2	2114.1	2117.2	2117.2
37.5°	1729.0	1708.8	1696.3	1696.3	1711.9	1722.8	1738.4	1747.7	1764.9	1771.1	1775.8
40°	1495.1	1448.4	1404.7	1372.0	1350.2	1348.6	1348.6	1353.3	1368.9	1389.1	1407.8
42.5°	1286.2	1211.4	1144.4	1083.6	1039.9	1015.0	1004.1	1005.6	1018.1	1036.8	1068.0
45°	1119.4	1025.9	941.7	868.4	809.2	770.2	751.5	749.9	759.3	781.1	815.4
47.5°	990.0	890.2	795.1	710.9	647.0	604.9	583.1	576.9	583.1	603.3	643.9
50°	882.4	779.6	681.3	594.0	525.4	481.8	461.5	453.7	461.5	478.6	519.2
52.5°	782.6	676.6	584.7	500.5	427.2	389.8	367.9	363.2	367.9	388.2	421.0
55°	667.3	576.9	486.4	402.2	338.3	300.9	283.7	279.1	283.7	302.5	336.8
57.5°	553.5	475.5	396.0	319.6	265.1	232.3	216.7	210.5	221.4	233.8	274.4
60°	447.4	385.1	318.0	251.0	205.8	176.2	163.7	162.1	165.3	180.9	208.9
62.5°	350.8	299.3	246.3	191.8	154.3	141.9	126.3	124.7	127.8	137.2	159.0
65°	252.6	219.8	179.3	140.3	110.7	93.5	87.3	88.9	92.0	98.2	118.5
67.5°	176.2	152.8	124.7	98.2	76.4	68.6	62.4	60.8	62.4	73.3	84.2
70°	118.5	104.4	84.2	74.8	53.0	42.1	43.6	39.0	45.2	45.2	54.6
72.5°	77.9	68.6	56.1	43.6	37.4	29.6	29.6	28.1	31.2	32.7	40.6
75°	40.6	31.2	31.2	21.8	15.6	7.8	14.0	12.5	10.9	12.5	15.6
77.5°	28.1	23.4	21.8	17.2	15.6	12.5	12.5	12.5	12.5	14.0	15.6
80°	17.2	17.2	12.5	10.9	9.3	7.8	9.3	9.3	9.3	9.3	10.9
82.5°	10.9	9.3	9.3	7.8	7.8	6.2	6.2	6.2	6.2	6.2	9.3
85°	9.3	6.2	6.2	4.7	6.2	10.9	4.7	6.2	6.2	6.2	4.7
87.5°	3.1	4.7	4.7	4.7	3.1	1.6	3.1	4.7	4.7	7.8	6.2
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°	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5	2904.5
2.5°	2909.2	2910.8	2910.8	2909.2	2909.2	2906.1	2912.3	2907.7	2909.2	2915.5	2910.8
5°	2912.3	2913.9	2913.9	2912.3	2912.3	2912.3	2913.9	2913.9	2912.3	2910.8	2913.9
7.5°	2918.6	2917.0	2917.0	2913.9	2913.9	2910.8	2913.9	2909.2	2912.3	2909.2	2913.9
10°	2910.8	2912.3	2910.8	2909.2	2909.2	2907.7	2907.7	2903.0	2904.5	2899.9	2903.0
12.5°	2906.1	2904.5	2904.5	2901.4	2898.3	2895.2	2893.6	2888.9	2888.9	2878.0	2882.7
15°	2893.6	2895.2	2890.5	2884.3	2881.2	2873.4	2870.3	2864.0	2857.8	2850.0	2851.6
17.5°	2882.7	2878.0	2871.8	2865.6	2853.1	2846.9	2840.6	2831.3	2828.1	2818.8	2815.7
20°	2850.0	2846.9	2839.1	2828.1	2820.4	2806.3	2800.1	2790.8	2782.9	2773.6	2768.9
22.5°	2807.9	2804.8	2795.4	2784.5	2772.0	2765.8	2759.5	2742.4	2734.6	2725.3	2723.7
25°	2754.9	2750.2	2740.9	2728.4	2722.1	2705.0	2698.7	2686.3	2683.2	2673.8	2672.3
27.5°	2673.8	2667.6	2656.7	2641.1	2630.1	2619.2	2613.0	2603.6	2600.5	2591.2	2589.6
30°	2552.2	2544.4	2522.6	2516.4	2497.6	2486.7	2486.7	2474.2	2475.8	2469.6	2469.6
32.5°	2360.4	2348.0	2330.8	2318.3	2305.9	2299.6	2299.6	2294.9	2298.1	2298.1	2301.2
35°	2106.3	2089.2	2079.8	2072.0	2072.0	2078.2	2097.0	2101.6	2111.0	2118.8	2125.0
37.5°	1780.4	1778.9	1789.8	1799.2	1822.6	1849.1	1881.8	1909.9	1936.4	1955.1	1973.8
40°	1428.1	1467.1	1498.3	1541.9	1577.8	1629.2	1688.5	1736.8	1782.0	1814.8	1849.1
42.5°	1114.7	1164.6	1230.1	1294.0	1358.0	1428.1	1506.1	1573.1	1632.4	1677.6	1713.4
45°	868.4	937.0	1016.5	1097.6	1180.2	1267.5	1348.6	1417.2	1479.6	1526.3	1562.2
47.5°	700.0	774.9	865.3	954.2	1047.7	1139.7	1230.1	1289.4	1340.8	1378.2	1411.0
50°	578.4	657.9	753.0	854.4	947.9	1039.9	1117.8	1175.5	1217.6	1250.4	1270.6
52.5°	483.3	567.5	668.8	770.2	863.7	947.9	1018.1	1061.7	1096.0	1119.4	1138.1
55°	399.1	480.2	575.3	670.4	762.4	841.9	899.6	932.3	958.8	972.8	983.8
57.5°	325.9	400.7	488.0	575.3	654.8	720.3	765.5	798.2	810.7	821.6	820.1
60°	255.7	325.9	405.4	480.2	548.8	601.8	634.6	653.2	662.6	667.3	664.2
62.5°	201.1	265.1	325.9	391.3	441.2	486.4	517.6	517.6	522.3	523.8	528.5
65°	149.7	198.0	251.0	299.3	339.9	369.5	386.7	391.3	397.6	396.0	392.9
67.5°	110.7	146.6	185.5	221.4	249.4	268.1	280.6	291.6	290.0	286.9	285.3
70°	76.4	99.8	134.1	155.9	176.2	194.9	198.0	199.6	201.1	202.7	199.6
72.5°	53.0	70.2	88.9	107.6	120.1	127.8	135.7	137.2	137.2	137.2	135.7
75°	26.5	35.9	53.0	60.8	71.7	74.8	81.1	81.1	85.8	79.5	77.9
77.5°	23.4	28.1	37.4	43.6	48.3	53.0	54.6	59.2	57.7	54.6	56.1
80°	14.0	17.2	23.4	26.5	32.7	34.3	35.9	37.4	35.9	37.4	37.4
82.5°	10.9	12.5	15.6	15.6	20.3	20.3	21.8	21.8	23.4	23.4	23.4
85°	6.2	10.9	9.3	18.7	12.5	12.5	15.6	18.7	15.6	15.6	18.7
87.5°	6.2	6.2	4.7	6.2	6.2	6.2	7.8	9.3	9.3	10.9	9.3
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: P249370

CATALOG NUMBER: LSR8B60D010 EC8B60940 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2904.5	2904.5	2904.5	2904.5
2.5°	2909.2	2912.3	2907.7	2906.1
5°	2913.9	2913.9	2910.8	2910.8
7.5°	2913.9	2913.9	2909.2	2906.1
10°	2901.4	2901.4	2896.8	2893.6
12.5°	2878.0	2878.0	2876.5	2871.8
15°	2848.4	2848.4	2842.2	2837.5
17.5°	2807.9	2811.0	2803.2	2803.2
20°	2764.2	2762.7	2756.5	2753.3
22.5°	2719.0	2715.9	2714.3	2705.0
25°	2670.7	2667.6	2662.9	2658.2
27.5°	2588.1	2586.5	2581.8	2575.6
30°	2461.8	2460.2	2454.0	2454.0
32.5°	2298.1	2296.5	2290.3	2291.9
35°	2128.1	2134.4	2131.2	2125.0
37.5°	1986.2	1990.9	1994.1	1990.9
40°	1867.8	1881.8	1883.4	1886.5
42.5°	1741.5	1760.2	1766.4	1769.5
45°	1590.2	1607.4	1621.4	1618.3
47.5°	1435.9	1448.4	1460.8	1451.5
50°	1287.8	1295.6	1300.3	1300.3
52.5°	1147.5	1147.5	1145.9	1147.5
55°	986.9	986.9	980.7	983.8
57.5°	818.5	821.6	816.9	809.2
60°	662.6	654.8	651.7	647.0
62.5°	516.1	516.1	505.2	519.2
65°	386.7	382.0	377.3	375.7
67.5°	280.6	279.1	274.4	272.8
70°	198.0	191.8	190.2	187.1
72.5°	132.5	132.5	129.4	129.4
75°	81.1	73.3	71.7	73.3
77.5°	56.1	54.6	54.6	53.0
80°	37.4	35.9	39.0	34.3
82.5°	23.4	24.9	23.4	24.9
85°	15.6	18.7	17.2	17.2
87.5°	9.3	9.3	9.3	9.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)