

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: P249586

Luminaire Tested: **LSR8B60D010 EC8B60940 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249586
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 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5568.0 lumens
Efficiency: N/A
Efficacy: 93.6 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

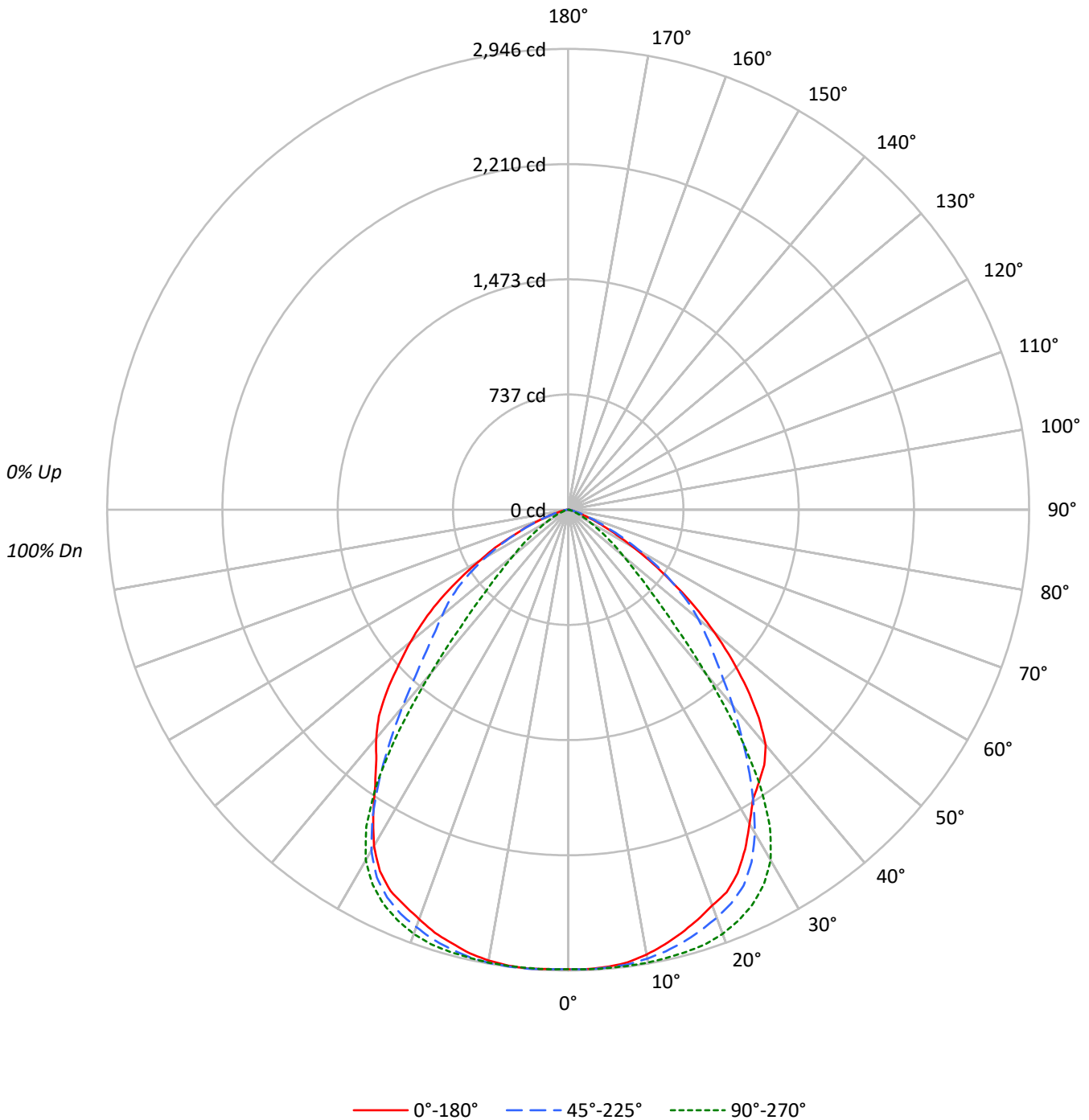
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	90591	90591	90591
5°	90788	91033	91132
10°	90407	92039	91644
15°	89407	93384	91622
20°	88332	94695	91384
25°	87187	94805	91477
30°	82483	92139	88379
35°	80020	80077	80909
40°	79031	55096	76809
45°	70420	33078	71379
50°	58551	22015	63094
55°	43912	15177	53493
60°	29757	10114	40359
65°	17949	6560	27727
70°	9954	3552	17058
75°	4515	1501	8828
80°	3925	1687	6162
85°	4458	2229	6156



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.4	5.0
10°-20°	814.2	14.6
20°-30°	1235.9	22.2
30°-40°	1298.0	23.3
40°-50°	973.2	17.5
50°-60°	624.4	11.2
60°-70°	267.1	4.8
70°-80°	63.1	1.1
80°-90°	11.7	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°	2330.5	41.9
0°-40°	3628.5	65.2
0°-60°	5226.0	93.9
0°-90°	5568.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5568.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2938	2938	2938	2938	2938	
5°	2933	2938	2941	2946	2944	279
15°	2801	2859	2925	2906	2870	790
25°	2562	2652	2786	2736	2689	1171
35°	2126	2007	2127	2102	2149	1334
45°	1615	1320	758	1282	1637	1237
55°	817	817	282	852	995	741
65°	246	290	90	374	380	263
75°	38	44	13	76	74	55
85°	13	8	6	13	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°	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8
2.5°	2939.4	2942.5	2940.9	2940.9	2939.4	2940.9	2940.9	2944.1	2944.1	2940.9	2939.4
5°	2933.0	2936.2	2936.2	2933.0	2933.0	2940.9	2936.2	2939.4	2939.4	2937.8	2937.8
7.5°	2918.9	2918.9	2925.2	2920.5	2920.5	2925.2	2923.6	2926.8	2929.9	2931.5	2931.5
10°	2887.3	2890.5	2892.1	2892.1	2893.6	2898.4	2901.5	2907.8	2911.0	2914.1	2915.7
12.5°	2847.9	2852.6	2854.2	2852.6	2857.4	2863.7	2871.6	2879.4	2884.2	2890.5	2895.2
15°	2800.6	2800.6	2803.7	2808.5	2811.7	2821.1	2829.0	2838.4	2851.0	2859.0	2866.8
17.5°	2748.6	2751.7	2756.4	2756.4	2762.8	2778.5	2783.3	2797.5	2811.7	2819.5	2835.3
20°	2691.8	2694.9	2699.7	2702.8	2710.7	2723.3	2732.8	2745.4	2761.2	2775.4	2791.1
22.5°	2647.6	2641.3	2644.5	2647.6	2655.5	2666.6	2677.6	2693.4	2709.1	2723.3	2739.1
25°	2562.5	2564.1	2568.8	2571.9	2581.4	2590.9	2603.5	2622.4	2636.6	2652.4	2669.7
27.5°	2447.4	2449.0	2456.8	2456.8	2464.7	2480.5	2488.4	2504.1	2523.1	2538.8	2559.3
30°	2316.5	2319.6	2319.6	2326.0	2330.7	2338.6	2346.4	2362.2	2371.7	2385.9	2414.3
32.5°	2196.7	2199.8	2198.2	2196.7	2191.9	2190.3	2188.7	2191.9	2195.1	2199.8	2210.8
35°	2125.7	2117.8	2111.5	2100.5	2087.8	2072.1	2057.9	2039.0	2021.6	2007.4	1991.7
37.5°	2057.9	2056.3	2046.8	2031.1	2005.8	1977.5	1944.3	1903.3	1862.3	1818.2	1775.6
40°	1963.3	1958.5	1950.6	1928.6	1900.2	1865.5	1821.3	1770.9	1704.6	1636.8	1567.5
42.5°	1802.4	1804.0	1794.5	1777.2	1750.4	1717.2	1671.5	1616.3	1545.4	1464.9	1375.1
45°	1614.8	1614.8	1611.6	1597.4	1578.5	1551.7	1517.0	1471.3	1401.9	1319.9	1223.7
47.5°	1419.2	1420.8	1416.1	1412.9	1405.0	1387.7	1362.5	1327.8	1278.9	1200.0	1103.8
50°	1220.5	1220.5	1228.4	1226.8	1226.8	1220.5	1209.5	1189.0	1146.4	1083.3	993.5
52.5°	1021.8	1025.0	1029.7	1036.0	1043.9	1056.5	1043.9	1034.5	1007.6	958.7	881.5
55°	816.8	820.0	827.9	838.9	848.4	861.0	864.1	864.1	849.9	816.8	758.5
57.5°	641.8	637.1	643.4	652.8	665.5	678.1	687.5	698.6	697.0	674.9	627.6
60°	482.5	484.1	488.8	498.3	507.8	518.8	531.4	540.9	545.6	534.6	504.6
62.5°	351.7	351.7	357.9	367.4	372.1	387.9	395.8	400.5	405.3	403.7	384.8
65°	246.0	249.1	252.3	257.0	261.8	271.2	276.0	285.4	288.6	290.2	276.0
67.5°	173.5	168.7	171.9	175.0	179.8	186.1	195.5	195.5	200.3	200.3	190.8
70°	110.4	110.4	112.0	116.7	119.8	121.4	124.6	127.7	132.5	130.9	130.9
72.5°	74.1	72.5	74.1	75.7	77.3	82.0	82.0	83.6	86.7	88.3	82.0
75°	37.9	39.4	42.6	41.0	45.7	42.6	44.1	48.9	47.3	44.1	44.1
77.5°	31.5	31.5	31.5	30.0	33.1	33.1	31.5	34.7	33.1	33.1	31.5
80°	22.1	23.7	22.1	20.5	22.1	20.5	20.5	20.5	20.5	20.5	18.9
82.5°	17.4	14.2	15.8	14.2	15.8	15.8	14.2	12.6	12.6	14.2	12.6
85°	12.6	9.5	11.0	11.0	9.5	9.5	9.5	9.5	9.5	7.9	7.9
87.5°	7.9	4.7	4.7	4.7	6.3	6.3	6.3	4.7	6.3	6.3	3.2
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8
2.5°	2942.5	2940.9	2944.1	2942.5	2942.5	2940.9	2942.5	2940.9	2944.1	2937.8	2939.4
5°	2942.5	2939.4	2940.9	2942.5	2944.1	2940.9	2940.9	2940.9	2944.1	2940.9	2942.5
7.5°	2936.2	2934.6	2939.4	2942.5	2940.9	2939.4	2942.5	2940.9	2944.1	2942.5	2945.7
10°	2923.6	2925.2	2928.3	2933.0	2934.6	2936.2	2939.4	2939.4	2944.1	2937.8	2940.9
12.5°	2904.7	2911.0	2918.9	2922.0	2928.3	2928.3	2931.5	2933.0	2936.2	2934.6	2939.4
15°	2881.0	2888.9	2898.4	2906.3	2914.1	2918.9	2923.6	2925.2	2929.9	2925.2	2926.8
17.5°	2852.6	2862.1	2876.3	2885.7	2898.4	2903.1	2909.4	2912.6	2917.3	2914.1	2915.7
20°	2813.2	2824.3	2840.0	2854.2	2862.1	2873.1	2881.0	2885.7	2888.9	2885.7	2887.3
22.5°	2758.0	2773.8	2794.3	2805.3	2821.1	2830.6	2832.1	2843.2	2851.0	2843.2	2846.3
25°	2693.4	2709.1	2724.9	2748.6	2762.8	2773.8	2784.8	2786.4	2794.3	2792.7	2791.1
27.5°	2586.1	2606.7	2633.4	2652.4	2671.3	2688.6	2701.3	2704.4	2712.3	2709.1	2710.7
30°	2439.5	2461.6	2486.8	2516.8	2543.6	2560.9	2576.7	2587.7	2595.6	2590.9	2589.3
32.5°	2231.3	2253.4	2280.2	2310.2	2341.7	2366.9	2385.9	2400.1	2409.5	2406.4	2398.5
35°	1993.2	1999.5	2016.9	2040.5	2067.3	2094.1	2111.5	2127.2	2138.3	2141.4	2141.4
37.5°	1748.8	1728.3	1715.7	1715.7	1731.4	1742.5	1758.3	1767.7	1785.1	1791.4	1796.1
40°	1512.2	1464.9	1420.8	1387.7	1365.6	1364.0	1364.0	1368.7	1384.5	1405.0	1424.0
42.5°	1301.0	1225.3	1157.5	1096.0	1051.8	1026.6	1015.5	1017.1	1029.7	1048.6	1080.2
45°	1132.2	1037.6	952.5	878.3	818.4	779.0	760.1	758.5	767.9	790.0	824.7
47.5°	1001.3	900.4	804.2	719.1	654.4	611.8	589.8	583.5	589.8	610.3	651.3
50°	892.5	788.5	689.1	600.8	531.4	487.3	466.8	458.9	466.8	484.1	525.1
52.5°	791.6	684.4	591.3	506.2	432.1	394.2	372.1	367.4	372.1	392.6	425.8
55°	674.9	583.5	492.0	406.8	342.2	304.4	287.0	282.3	287.0	305.9	340.6
57.5°	559.8	481.0	400.5	323.3	268.1	234.9	219.2	212.9	223.9	236.5	277.5
60°	452.6	389.5	321.7	253.9	208.2	178.2	165.6	164.0	167.1	182.9	211.3
62.5°	354.8	302.8	249.1	194.0	156.1	143.5	127.7	126.2	129.3	138.8	160.9
65°	255.5	222.4	181.3	141.9	112.0	94.6	88.3	89.9	93.0	99.4	119.8
67.5°	178.2	154.5	126.2	99.4	77.3	69.4	63.1	61.5	63.1	74.1	85.2
70°	119.8	105.6	85.2	75.7	53.6	42.6	44.1	39.4	45.7	45.7	55.2
72.5°	78.8	69.4	56.8	44.1	37.9	30.0	30.0	28.4	31.5	33.1	41.0
75°	41.0	31.5	31.5	22.1	15.8	7.9	14.2	12.6	11.0	12.6	15.8
77.5°	28.4	23.7	22.1	17.4	15.8	12.6	12.6	12.6	12.6	14.2	15.8
80°	17.4	17.4	12.6	11.0	9.5	7.9	9.5	9.5	9.5	9.5	11.0
82.5°	11.0	9.5	9.5	7.9	7.9	6.3	6.3	6.3	6.3	6.3	9.5
85°	9.5	6.3	6.3	4.7	6.3	11.0	4.7	6.3	6.3	6.3	4.7
87.5°	3.2	4.7	4.7	4.7	3.2	1.6	3.2	4.7	4.7	7.9	6.3
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°	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8	2937.8
2.5°	2942.5	2944.1	2944.1	2942.5	2942.5	2939.4	2945.7	2940.9	2942.5	2948.8	2944.1
5°	2945.7	2947.2	2947.2	2945.7	2945.7	2945.7	2947.2	2947.2	2945.7	2944.1	2947.2
7.5°	2952.0	2950.4	2950.4	2947.2	2947.2	2944.1	2947.2	2942.5	2945.7	2942.5	2947.2
10°	2944.1	2945.7	2944.1	2942.5	2942.5	2940.9	2940.9	2936.2	2937.8	2933.0	2936.2
12.5°	2939.4	2937.8	2937.8	2934.6	2931.5	2928.3	2926.8	2922.0	2922.0	2911.0	2915.7
15°	2926.8	2928.3	2923.6	2917.3	2914.1	2906.3	2903.1	2896.8	2890.5	2882.6	2884.2
17.5°	2915.7	2911.0	2904.7	2898.4	2885.7	2879.4	2873.1	2863.7	2860.5	2851.0	2847.9
20°	2882.6	2879.4	2871.6	2860.5	2852.6	2838.4	2832.1	2822.7	2814.8	2805.3	2800.6
22.5°	2840.0	2836.8	2827.4	2816.4	2803.7	2797.5	2791.1	2773.8	2765.9	2756.4	2754.9
25°	2786.4	2781.7	2772.2	2759.6	2753.3	2736.0	2729.6	2717.0	2713.9	2704.4	2702.8
27.5°	2704.4	2698.1	2687.1	2671.3	2660.2	2649.2	2642.9	2633.4	2630.3	2620.8	2619.3
30°	2581.4	2573.5	2551.4	2545.1	2526.2	2515.2	2515.2	2502.6	2504.1	2497.8	2497.8
32.5°	2387.5	2374.8	2357.5	2344.9	2332.2	2326.0	2326.0	2321.2	2324.4	2324.4	2327.5
35°	2130.4	2113.1	2103.6	2095.7	2095.7	2102.0	2121.0	2125.7	2135.2	2143.0	2149.3
37.5°	1800.8	1799.3	1810.3	1819.8	1843.4	1870.2	1903.3	1931.7	1958.5	1977.5	1996.4
40°	1444.4	1483.9	1515.4	1559.6	1595.8	1647.9	1707.8	1756.7	1802.4	1835.5	1870.2
42.5°	1127.5	1177.9	1244.2	1308.8	1373.5	1444.4	1523.3	1591.1	1651.0	1696.8	1733.0
45°	878.3	947.7	1028.2	1110.2	1193.7	1282.0	1364.0	1433.4	1496.5	1543.8	1580.1
47.5°	708.0	783.7	875.2	965.1	1059.7	1152.7	1244.2	1304.1	1356.1	1394.0	1427.1
50°	585.0	665.5	761.7	864.1	958.7	1051.8	1130.6	1189.0	1231.6	1264.7	1285.2
52.5°	488.8	574.0	676.5	779.0	873.6	958.7	1029.7	1073.9	1108.6	1132.2	1151.1
55°	403.7	485.7	581.9	678.1	771.1	851.5	909.9	943.0	969.8	984.0	995.0
57.5°	329.6	405.3	493.6	581.9	662.3	728.6	774.3	807.4	820.0	831.0	829.5
60°	258.6	329.6	410.0	485.7	555.1	608.7	641.8	660.7	670.2	674.9	671.8
62.5°	203.4	268.1	329.6	395.8	446.3	492.0	523.6	523.6	528.3	529.8	534.6
65°	151.4	200.3	253.9	302.8	343.8	373.7	391.1	395.8	402.1	400.5	397.4
67.5°	112.0	148.2	187.6	223.9	252.3	271.2	283.8	294.9	293.3	290.2	288.6
70°	77.3	100.9	135.6	157.7	178.2	197.1	200.3	201.8	203.4	205.0	201.8
72.5°	53.6	71.0	89.9	108.8	121.4	129.3	137.2	138.8	138.8	138.8	137.2
75°	26.8	36.3	53.6	61.5	72.5	75.7	82.0	82.0	86.7	80.4	78.8
77.5°	23.7	28.4	37.9	44.1	48.9	53.6	55.2	59.9	58.3	55.2	56.8
80°	14.2	17.4	23.7	26.8	33.1	34.7	36.3	37.9	36.3	37.9	37.9
82.5°	11.0	12.6	15.8	15.8	20.5	20.5	22.1	22.1	23.7	23.7	23.7
85°	6.3	11.0	9.5	18.9	12.6	12.6	15.8	18.9	15.8	15.8	18.9
87.5°	6.3	6.3	4.7	6.3	6.3	6.3	7.9	9.5	9.5	11.0	9.5
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: P249586

CATALOG NUMBER: LSR8B60D010 EC8B60940 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2937.8	2937.8	2937.8	2937.8
2.5°	2942.5	2945.7	2940.9	2939.4
5°	2947.2	2947.2	2944.1	2944.1
7.5°	2947.2	2947.2	2942.5	2939.4
10°	2934.6	2934.6	2929.9	2926.8
12.5°	2911.0	2911.0	2909.4	2904.7
15°	2881.0	2881.0	2874.7	2870.0
17.5°	2840.0	2843.2	2835.3	2835.3
20°	2795.9	2794.3	2788.0	2784.8
22.5°	2750.1	2747.0	2745.4	2736.0
25°	2701.3	2698.1	2693.4	2688.6
27.5°	2617.7	2616.1	2611.4	2605.1
30°	2489.9	2488.4	2482.1	2482.1
32.5°	2324.4	2322.8	2316.5	2318.1
35°	2152.5	2158.8	2155.6	2149.3
37.5°	2009.0	2013.7	2016.9	2013.7
40°	1889.1	1903.3	1904.9	1908.1
42.5°	1761.4	1780.3	1786.7	1789.8
45°	1608.4	1625.8	1640.0	1636.8
47.5°	1452.3	1464.9	1477.6	1468.1
50°	1302.5	1310.4	1315.2	1315.2
52.5°	1160.6	1160.6	1159.0	1160.6
55°	998.2	998.2	991.9	995.0
57.5°	827.9	831.0	826.3	818.4
60°	670.2	662.3	659.1	654.4
62.5°	522.0	522.0	510.9	525.1
65°	391.1	386.3	381.6	380.0
67.5°	283.8	282.3	277.5	276.0
70°	200.3	194.0	192.4	189.2
72.5°	134.0	134.0	130.9	130.9
75°	82.0	74.1	72.5	74.1
77.5°	56.8	55.2	55.2	53.6
80°	37.9	36.3	39.4	34.7
82.5°	23.7	25.2	23.7	25.2
85°	15.8	18.9	17.4	17.4
87.5°	9.5	9.5	9.5	9.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)