

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: P249614

Luminaire Tested: **LSR8B70D010 EC8B709730 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249614
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: LSR8B70D010 EC8B709730 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5559.0 lumens
Efficiency: N/A
Efficacy: 73.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

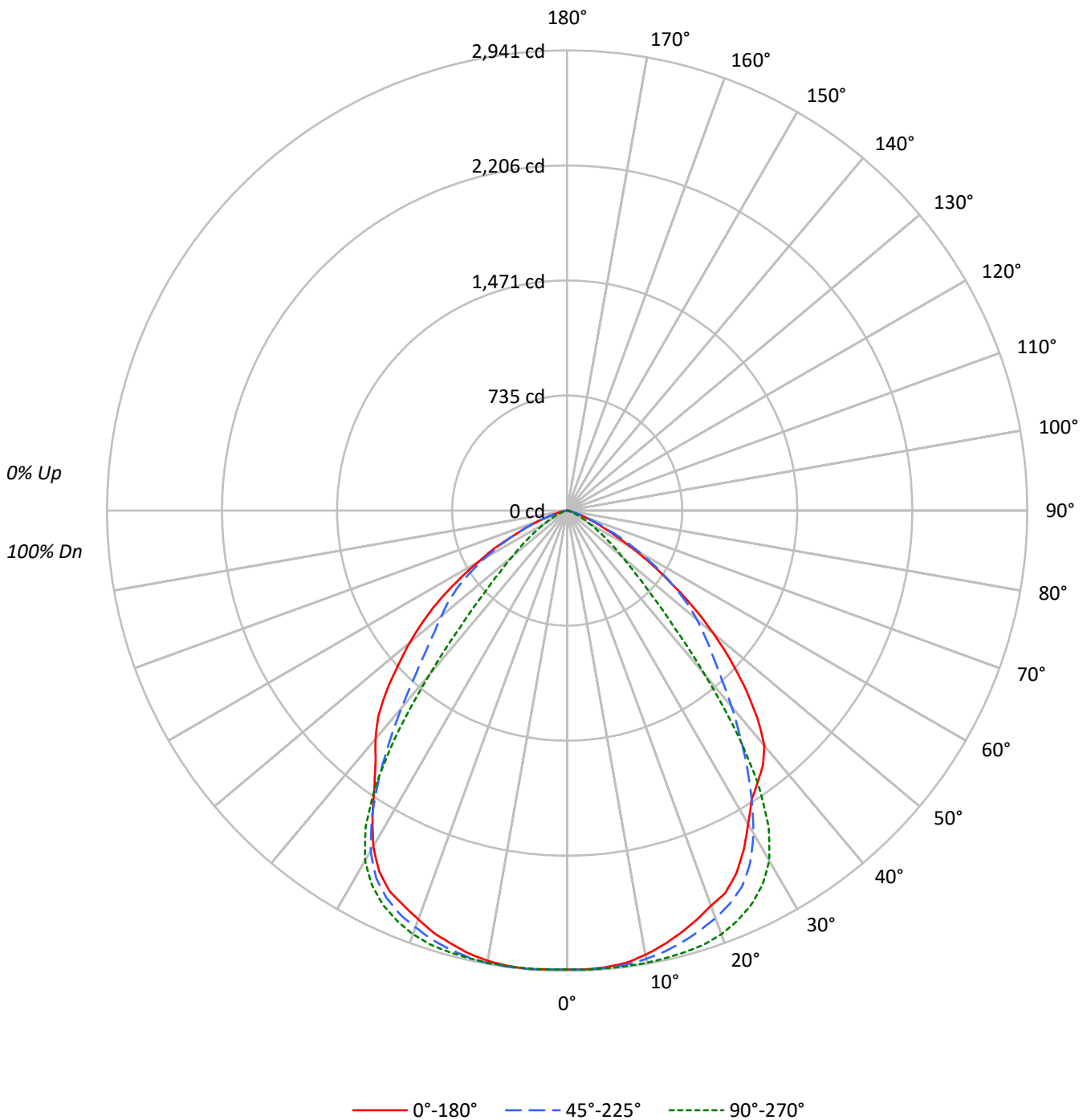
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.9	5.0
10°-20°	812.9	14.6
20°-30°	1233.9	22.2
30°-40°	1295.9	23.3
40°-50°	971.6	17.5
50°-60°	623.4	11.2
60°-70°	266.7	4.8
70°-80°	63.0	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°	2326.7	41.9
0°-40°	3622.6	65.2
0°-60°	5217.6	93.9
0°-90°	5559.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5559.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2933	2933	2933	2933	2933	
5°	2928	2933	2936	2941	2939	278
15°	2796	2854	2920	2902	2865	789
25°	2558	2648	2782	2732	2684	1169
35°	2122	2004	2124	2099	2146	1332
45°	1612	1318	757	1280	1634	1235
55°	816	816	282	850	993	740
65°	246	290	90	373	379	262
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°	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0
2.5°	2934.6	2937.8	2936.2	2936.2	2934.6	2936.2	2936.2	2939.4	2939.4	2936.2	2934.6
5°	2928.3	2931.5	2931.5	2928.3	2928.3	2936.2	2931.5	2934.6	2934.6	2933.0	2933.0
7.5°	2914.2	2914.2	2920.4	2915.7	2915.7	2920.4	2918.9	2922.0	2925.2	2926.8	2926.8
10°	2882.7	2885.8	2887.4	2887.4	2889.0	2893.7	2896.8	2903.1	2906.3	2909.4	2911.0
12.5°	2843.3	2848.0	2849.6	2848.0	2852.8	2859.0	2866.9	2874.8	2879.5	2885.8	2890.5
15°	2796.1	2796.1	2799.2	2803.9	2807.1	2816.5	2824.4	2833.8	2846.4	2854.3	2862.2
17.5°	2744.1	2747.3	2752.0	2752.0	2758.3	2774.0	2778.8	2792.9	2807.1	2815.0	2830.7
20°	2687.5	2690.6	2695.3	2698.5	2706.3	2718.9	2728.4	2741.0	2756.7	2770.9	2786.6
22.5°	2643.4	2637.1	2640.2	2643.4	2651.2	2662.3	2673.3	2689.0	2704.8	2718.9	2734.7
25°	2558.3	2559.9	2564.6	2567.8	2577.2	2586.7	2599.3	2618.2	2632.3	2648.1	2665.4
27.5°	2443.4	2445.0	2452.9	2452.9	2460.7	2476.5	2484.3	2500.1	2519.0	2534.7	2555.2
30°	2312.8	2315.9	2315.9	2322.2	2326.9	2334.8	2342.6	2358.4	2367.8	2382.0	2410.4
32.5°	2193.1	2196.2	2194.6	2193.1	2188.4	2186.8	2185.2	2188.4	2191.5	2196.2	2207.2
35°	2122.3	2114.4	2108.1	2097.1	2084.5	2068.7	2054.5	2035.7	2018.3	2004.2	1988.4
37.5°	2054.5	2053.0	2043.5	2027.8	2002.6	1974.3	1941.2	1900.3	1859.3	1815.2	1772.7
40°	1960.1	1955.3	1947.5	1925.5	1897.1	1862.5	1818.4	1768.0	1701.9	1634.2	1564.9
42.5°	1799.5	1801.1	1791.6	1774.3	1747.6	1714.5	1668.8	1613.7	1542.9	1462.6	1372.9
45°	1612.2	1612.2	1609.0	1594.8	1575.9	1549.2	1514.5	1468.9	1399.6	1317.7	1221.7
47.5°	1416.9	1418.5	1413.8	1410.6	1402.7	1385.4	1360.3	1325.6	1276.8	1198.1	1102.0
50°	1218.6	1218.6	1226.4	1224.9	1224.9	1218.6	1207.6	1187.1	1144.6	1081.6	991.9
52.5°	1020.2	1023.3	1028.1	1034.4	1042.2	1054.8	1042.2	1032.8	1006.0	957.2	880.1
55°	815.5	818.7	826.5	837.5	847.0	859.6	862.7	862.7	848.6	815.5	757.3
57.5°	640.8	636.0	642.4	651.8	664.4	677.0	686.4	697.4	695.9	673.8	626.6
60°	481.8	483.3	488.0	497.5	507.0	518.0	530.6	540.0	544.7	533.7	503.8
62.5°	351.1	351.1	357.4	366.8	371.5	387.3	395.2	399.9	404.6	403.0	384.1
65°	245.6	248.7	251.9	256.6	261.3	270.8	275.5	284.9	288.1	289.7	275.5
67.5°	173.2	168.5	171.6	174.7	179.5	185.8	195.2	195.2	199.9	199.9	190.5
70°	110.2	110.2	111.8	116.5	119.6	121.2	124.4	127.5	132.2	130.7	130.7
72.5°	74.0	72.4	74.0	75.6	77.2	81.9	81.9	83.4	86.6	88.2	81.9
75°	37.8	39.4	42.5	40.9	45.6	42.5	44.1	48.8	47.2	44.1	44.1
77.5°	31.5	31.5	31.5	29.9	33.1	33.1	31.5	34.6	33.1	33.1	31.5
80°	22.0	23.6	22.0	20.5	22.0	20.5	20.5	20.5	20.5	20.5	18.9
82.5°	17.3	14.2	15.8	14.2	15.8	15.8	14.2	12.6	12.6	14.2	12.6
85°	12.6	9.4	11.0	11.0	9.4	9.4	9.4	9.4	9.4	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°	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0
2.5°	2937.8	2936.2	2939.4	2937.8	2937.8	2936.2	2937.8	2936.2	2939.4	2933.0	2934.6
5°	2937.8	2934.6	2936.2	2937.8	2939.4	2936.2	2936.2	2936.2	2939.4	2936.2	2937.8
7.5°	2931.5	2929.9	2934.6	2937.8	2936.2	2934.6	2937.8	2936.2	2939.4	2937.8	2940.9
10°	2918.9	2920.4	2923.6	2928.3	2929.9	2931.5	2934.6	2934.6	2939.4	2933.0	2936.2
12.5°	2900.0	2906.3	2914.2	2917.3	2923.6	2923.6	2926.8	2928.3	2931.5	2929.9	2934.6
15°	2876.4	2884.2	2893.7	2901.6	2909.4	2914.2	2918.9	2920.4	2925.2	2920.4	2922.0
17.5°	2848.0	2857.5	2871.6	2881.1	2893.7	2898.4	2904.7	2907.8	2912.6	2909.4	2911.0
20°	2808.7	2819.7	2835.4	2849.6	2857.5	2868.5	2876.4	2881.1	2884.2	2881.1	2882.7
22.5°	2753.6	2769.3	2789.8	2800.8	2816.5	2826.0	2827.6	2838.6	2846.4	2838.6	2841.7
25°	2689.0	2704.8	2720.5	2744.1	2758.3	2769.3	2780.3	2781.9	2789.8	2788.2	2786.6
27.5°	2581.9	2602.4	2629.2	2648.1	2667.0	2684.3	2696.9	2700.0	2707.9	2704.8	2706.3
30°	2435.5	2457.6	2482.8	2512.7	2539.5	2556.8	2572.5	2583.5	2591.4	2586.7	2585.1
32.5°	2227.7	2249.8	2276.5	2306.4	2337.9	2363.1	2382.0	2396.2	2405.6	2402.5	2394.6
35°	1990.0	1996.3	2013.6	2037.2	2064.0	2090.8	2108.1	2123.8	2134.8	2138.0	2138.0
37.5°	1746.0	1725.5	1712.9	1712.9	1728.6	1739.7	1755.4	1764.9	1782.2	1788.5	1793.2
40°	1509.8	1462.6	1418.5	1385.4	1363.4	1361.8	1361.8	1366.5	1382.3	1402.7	1421.7
42.5°	1298.9	1223.3	1155.6	1094.2	1050.1	1024.9	1013.9	1015.5	1028.1	1047.0	1078.4
45°	1130.4	1035.9	950.9	876.9	817.1	777.7	758.8	757.3	766.7	788.7	823.4
47.5°	999.7	899.0	802.9	717.9	653.4	610.8	588.8	582.5	588.8	609.3	650.2
50°	891.1	787.2	688.0	599.8	530.6	486.5	466.0	458.1	466.0	483.3	524.2
52.5°	790.3	683.3	590.4	505.4	431.4	393.6	371.5	366.8	371.5	392.0	425.1
55°	673.8	582.5	491.2	406.2	341.7	303.9	286.5	281.8	286.5	305.4	340.1
57.5°	558.9	480.2	399.9	322.7	267.7	234.6	218.8	212.5	223.5	236.1	277.1
60°	451.8	388.9	321.2	253.5	207.8	177.9	165.3	163.7	166.9	182.6	210.9
62.5°	354.2	302.3	248.7	193.7	155.9	143.3	127.5	126.0	129.1	138.5	160.6
65°	255.1	222.0	181.1	141.7	111.8	94.5	88.2	89.8	92.9	99.2	119.6
67.5°	177.9	154.3	126.0	99.2	77.2	69.3	63.0	61.4	63.0	74.0	85.0
70°	119.6	105.5	85.0	75.6	53.5	42.5	44.1	39.4	45.6	45.6	55.1
72.5°	78.7	69.3	56.7	44.1	37.8	29.9	29.9	28.4	31.5	33.1	40.9
75°	40.9	31.5	31.5	22.0	15.8	7.9	14.2	12.6	11.0	12.6	15.8
77.5°	28.4	23.6	22.0	17.3	15.8	12.6	12.6	12.6	12.6	14.2	15.8
80°	17.3	17.3	12.6	11.0	9.4	7.9	9.4	9.4	9.4	9.4	11.0
82.5°	11.0	9.4	9.4	7.9	7.9	6.3	6.3	6.3	6.3	6.3	9.4
85°	9.4	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°	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0	2933.0
2.5°	2937.8	2939.4	2939.4	2937.8	2937.8	2934.6	2940.9	2936.2	2937.8	2944.1	2939.4
5°	2940.9	2942.5	2942.5	2940.9	2940.9	2940.9	2942.5	2942.5	2940.9	2939.4	2942.5
7.5°	2947.2	2945.6	2945.6	2942.5	2942.5	2939.4	2942.5	2937.8	2940.9	2937.8	2942.5
10°	2939.4	2940.9	2939.4	2937.8	2937.8	2936.2	2936.2	2931.5	2933.0	2928.3	2931.5
12.5°	2934.6	2933.0	2933.0	2929.9	2926.8	2923.6	2922.0	2917.3	2917.3	2906.3	2911.0
15°	2922.0	2923.6	2918.9	2912.6	2909.4	2901.6	2898.4	2892.1	2885.8	2878.0	2879.5
17.5°	2911.0	2906.3	2900.0	2893.7	2881.1	2874.8	2868.5	2859.0	2855.9	2846.4	2843.3
20°	2878.0	2874.8	2866.9	2855.9	2848.0	2833.8	2827.6	2818.1	2810.2	2800.8	2796.1
22.5°	2835.4	2832.3	2822.8	2811.8	2799.2	2792.9	2786.6	2769.3	2761.4	2752.0	2750.4
25°	2781.9	2777.2	2767.7	2755.1	2748.8	2731.5	2725.2	2712.6	2709.5	2700.0	2698.5
27.5°	2700.0	2693.7	2682.7	2667.0	2655.9	2644.9	2638.7	2629.2	2626.1	2616.6	2615.0
30°	2577.2	2569.4	2547.3	2541.0	2522.1	2511.1	2511.1	2498.5	2500.1	2493.8	2493.8
32.5°	2383.6	2371.0	2353.7	2341.1	2328.5	2322.2	2322.2	2317.5	2320.6	2320.6	2323.8
35°	2127.0	2109.7	2100.2	2092.3	2092.3	2098.6	2117.5	2122.3	2131.7	2139.6	2145.9
37.5°	1797.9	1796.4	1807.4	1816.8	1840.4	1867.2	1900.3	1928.6	1955.3	1974.3	1993.1
40°	1442.1	1481.5	1513.0	1557.1	1593.2	1645.2	1705.0	1753.8	1799.5	1832.6	1867.2
42.5°	1125.7	1176.0	1242.2	1306.7	1371.3	1442.1	1520.9	1588.5	1648.4	1694.0	1730.2
45°	876.9	946.2	1026.5	1108.4	1191.8	1280.0	1361.8	1431.1	1494.1	1541.3	1577.5
47.5°	706.9	782.5	873.8	963.5	1058.0	1150.8	1242.2	1302.0	1353.9	1391.7	1424.8
50°	584.1	664.4	760.4	862.7	957.2	1050.1	1128.8	1187.1	1229.6	1262.6	1283.1
52.5°	488.0	573.1	675.4	777.7	872.2	957.2	1028.1	1072.1	1106.8	1130.4	1149.3
55°	403.0	484.9	581.0	677.0	769.9	850.1	908.4	941.5	968.2	982.4	993.4
57.5°	329.1	404.6	492.8	581.0	661.2	727.4	773.0	806.1	818.7	829.7	828.1
60°	258.2	329.1	409.3	484.9	554.2	607.7	640.8	659.7	669.1	673.8	670.7
62.5°	203.1	267.7	329.1	395.2	445.5	491.2	522.7	522.7	527.4	529.0	533.7
65°	151.1	199.9	253.5	302.3	343.2	373.1	390.5	395.2	401.5	399.9	396.7
67.5°	111.8	148.0	187.3	223.5	251.9	270.8	283.4	294.4	292.8	289.7	288.1
70°	77.2	100.8	135.4	157.4	177.9	196.8	199.9	201.5	203.1	204.7	201.5
72.5°	53.5	70.8	89.8	108.6	121.2	129.1	137.0	138.5	138.5	138.5	137.0
75°	26.8	36.2	53.5	61.4	72.4	75.6	81.9	81.9	86.6	80.3	78.7
77.5°	23.6	28.4	37.8	44.1	48.8	53.5	55.1	59.8	58.2	55.1	56.7
80°	14.2	17.3	23.6	26.8	33.1	34.6	36.2	37.8	36.2	37.8	37.8
82.5°	11.0	12.6	15.8	15.8	20.5	20.5	22.0	22.0	23.6	23.6	23.6
85°	6.3	11.0	9.4	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	9.4	9.4	11.0	9.4
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: P249614

CATALOG NUMBER: LSR8B70D010 EC8B709730 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2933.0	2933.0	2933.0	2933.0
2.5°	2937.8	2940.9	2936.2	2934.6
5°	2942.5	2942.5	2939.4	2939.4
7.5°	2942.5	2942.5	2937.8	2934.6
10°	2929.9	2929.9	2925.2	2922.0
12.5°	2906.3	2906.3	2904.7	2900.0
15°	2876.4	2876.4	2870.1	2865.4
17.5°	2835.4	2838.6	2830.7	2830.7
20°	2791.4	2789.8	2783.5	2780.3
22.5°	2745.7	2742.5	2741.0	2731.5
25°	2696.9	2693.7	2689.0	2684.3
27.5°	2613.5	2611.9	2607.1	2600.9
30°	2485.9	2484.3	2478.1	2478.1
32.5°	2320.6	2319.0	2312.8	2314.3
35°	2149.0	2155.3	2152.2	2145.9
37.5°	2005.7	2010.5	2013.6	2010.5
40°	1886.1	1900.3	1901.8	1905.0
42.5°	1758.6	1777.5	1783.8	1786.9
45°	1605.8	1623.2	1637.3	1634.2
47.5°	1450.0	1462.6	1475.2	1465.7
50°	1300.4	1308.3	1313.0	1313.0
52.5°	1158.7	1158.7	1157.2	1158.7
55°	996.6	996.6	990.3	993.4
57.5°	826.5	829.7	825.0	817.1
60°	669.1	661.2	658.1	653.4
62.5°	521.1	521.1	510.1	524.2
65°	390.5	385.7	381.0	379.4
67.5°	283.4	281.8	277.1	275.5
70°	199.9	193.7	192.1	188.9
72.5°	133.8	133.8	130.7	130.7
75°	81.9	74.0	72.4	74.0
77.5°	56.7	55.1	55.1	53.5
80°	37.8	36.2	39.4	34.6
82.5°	23.6	25.2	23.6	25.2
85°	15.8	18.9	17.3	17.3
87.5°	9.4	9.4	9.4	9.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)