

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: P249182

Luminaire Tested: **LSR8B70D010 EC8B709730 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249182
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 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5623.0 lumens
Efficiency: N/A
Efficacy: 74.1 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

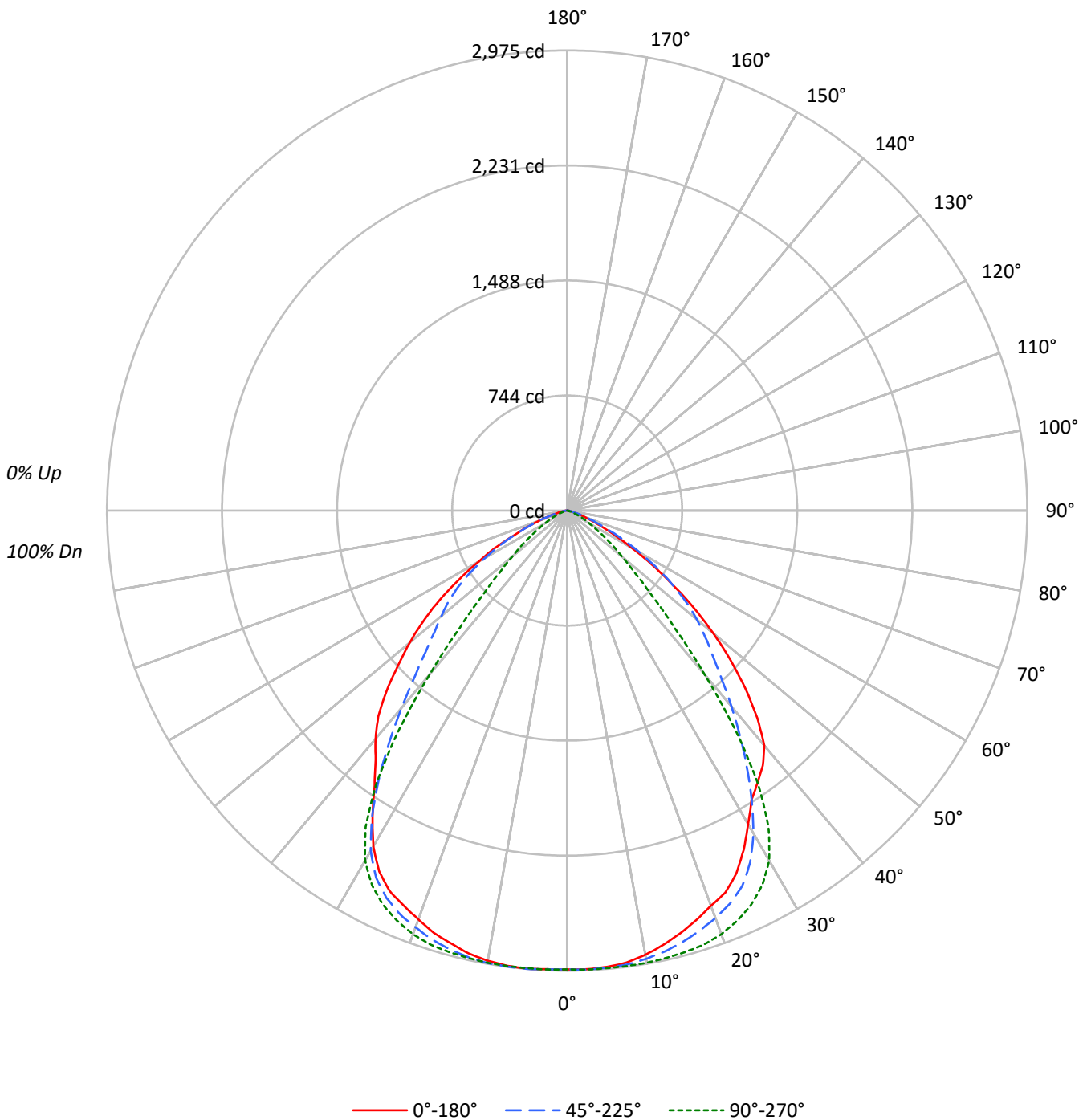
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	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°	283.1	5.0
10°-20°	822.3	14.6
20°-30°	1248.1	22.2
30°-40°	1310.8	23.3
40°-50°	982.8	17.5
50°-60°	630.6	11.2
60°-70°	269.7	4.8
70°-80°	63.7	1.1
80°-90°	11.8	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°	2353.5	41.9
0°-40°	3664.3	65.2
0°-60°	5277.7	93.9
0°-90°	5623.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5623.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2967	2967	2967	2967	2967	
5°	2962	2967	2970	2975	2973	281
15°	2828	2887	2954	2935	2898	798
25°	2588	2679	2814	2763	2715	1182
35°	2147	2027	2148	2123	2171	1347
45°	1631	1333	766	1295	1653	1249
55°	825	825	285	860	1005	748
65°	248	293	91	377	384	265
75°	38	45	13	76	75	56
85°	13	8	6	13	18	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°	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8
2.5°	2968.4	2971.6	2970.0	2970.0	2968.4	2970.0	2970.0	2973.2	2973.2	2970.0	2968.4
5°	2962.0	2965.2	2965.2	2962.0	2962.0	2970.0	2965.2	2968.4	2968.4	2966.8	2966.8
7.5°	2947.7	2947.7	2954.1	2949.3	2949.3	2954.1	2952.5	2955.7	2958.9	2960.5	2960.5
10°	2915.8	2919.0	2920.6	2920.6	2922.2	2927.0	2930.2	2936.6	2939.7	2942.9	2944.5
12.5°	2876.1	2880.8	2882.4	2880.8	2885.6	2892.0	2899.9	2907.9	2912.7	2919.0	2923.8
15°	2828.2	2828.2	2831.4	2836.2	2839.4	2849.0	2856.9	2866.5	2879.2	2887.2	2895.1
17.5°	2775.7	2778.9	2783.7	2783.7	2790.1	2806.0	2810.7	2825.1	2839.4	2847.4	2863.3
20°	2718.4	2721.6	2726.3	2729.5	2737.5	2750.2	2759.8	2772.5	2788.5	2802.8	2818.7
22.5°	2673.8	2667.4	2670.6	2673.8	2681.8	2692.9	2704.1	2720.0	2735.9	2750.2	2766.2
25°	2587.8	2589.4	2594.2	2597.3	2606.9	2616.5	2629.2	2648.3	2662.6	2678.6	2696.1
27.5°	2471.6	2473.1	2481.1	2481.1	2489.0	2505.0	2512.9	2528.9	2548.0	2563.9	2584.6
30°	2339.4	2342.5	2342.5	2348.9	2353.7	2361.7	2369.6	2385.6	2395.1	2409.4	2438.1
32.5°	2218.4	2221.5	2219.9	2218.4	2213.6	2212.0	2210.4	2213.6	2216.8	2221.5	2232.7
35°	2146.7	2138.7	2132.4	2121.2	2108.5	2092.5	2078.2	2059.1	2041.6	2027.2	2011.3
37.5°	2078.2	2076.6	2067.0	2051.1	2025.6	1997.0	1963.6	1922.1	1880.7	1836.1	1793.2
40°	1982.6	1977.9	1969.9	1947.6	1918.9	1883.9	1839.3	1788.4	1721.5	1653.0	1582.9
42.5°	1820.2	1821.8	1812.3	1794.7	1767.7	1734.2	1688.0	1632.3	1560.7	1479.4	1388.7
45°	1630.7	1630.7	1627.5	1613.2	1594.1	1567.0	1532.0	1485.8	1415.7	1332.9	1235.8
47.5°	1433.2	1434.8	1430.0	1426.9	1418.9	1401.4	1375.9	1340.9	1291.5	1211.9	1114.7
50°	1232.6	1232.6	1240.5	1239.0	1239.0	1232.6	1221.5	1200.7	1157.7	1094.0	1003.3
52.5°	1031.9	1035.1	1039.9	1046.3	1054.2	1067.0	1054.2	1044.7	1017.6	968.2	890.2
55°	824.9	828.1	836.0	847.2	856.8	869.5	872.7	872.7	858.3	824.9	766.0
57.5°	648.2	643.4	649.8	659.3	672.0	684.8	694.3	705.5	703.9	681.6	633.8
60°	487.3	488.9	493.7	503.2	512.8	523.9	536.7	546.2	551.0	539.9	509.6
62.5°	355.1	355.1	361.5	371.0	375.8	391.8	399.7	404.5	409.3	407.7	388.6
65°	248.4	251.6	254.8	259.6	264.3	273.9	278.7	288.2	291.4	293.0	278.7
67.5°	175.2	170.4	173.6	176.7	181.5	187.9	197.5	197.5	202.2	202.2	192.7
70°	111.5	111.5	113.1	117.8	121.0	122.6	125.8	129.0	133.8	132.2	132.2
72.5°	74.9	73.3	74.9	76.5	78.0	82.8	82.8	84.4	87.6	89.2	82.8
75°	38.2	39.8	43.0	41.4	46.2	43.0	44.6	49.4	47.8	44.6	44.6
77.5°	31.8	31.8	31.8	30.3	33.4	33.4	31.8	35.0	33.4	33.4	31.8
80°	22.3	23.9	22.3	20.7	22.3	20.7	20.7	20.7	20.7	20.7	19.1
82.5°	17.5	14.3	15.9	14.3	15.9	15.9	14.3	12.7	12.7	14.3	12.7
85°	12.7	9.5	11.1	11.1	9.5	9.5	9.5	9.5	9.5	7.9	7.9
87.5°	7.9	4.8	4.8	4.8	6.4	6.4	6.4	4.8	6.4	6.4	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



TEST NUMBER: P249182

CATALOG NUMBER: LSR8B70D010 EC8B709730 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8
2.5°	2971.6	2970.0	2973.2	2971.6	2971.6	2970.0	2971.6	2970.0	2973.2	2966.8	2968.4
5°	2971.6	2968.4	2970.0	2971.6	2973.2	2970.0	2970.0	2970.0	2973.2	2970.0	2971.6
7.5°	2965.2	2963.6	2968.4	2971.6	2970.0	2968.4	2971.6	2970.0	2973.2	2971.6	2974.8
10°	2952.5	2954.1	2957.3	2962.0	2963.6	2965.2	2968.4	2968.4	2973.2	2966.8	2970.0
12.5°	2933.4	2939.7	2947.7	2950.9	2957.3	2957.3	2960.5	2962.0	2965.2	2963.6	2968.4
15°	2909.5	2917.4	2927.0	2935.0	2942.9	2947.7	2952.5	2954.1	2958.9	2954.1	2955.7
17.5°	2880.8	2890.4	2904.7	2914.2	2927.0	2931.8	2938.1	2941.3	2946.1	2942.9	2944.5
20°	2841.0	2852.2	2868.1	2882.4	2890.4	2901.5	2909.5	2914.2	2917.4	2914.2	2915.8
22.5°	2785.3	2801.2	2821.9	2833.0	2849.0	2858.5	2860.1	2871.3	2879.2	2871.3	2874.5
25°	2720.0	2735.9	2751.8	2775.7	2790.1	2801.2	2812.3	2813.9	2821.9	2820.3	2818.7
27.5°	2611.7	2632.4	2659.4	2678.6	2697.7	2715.2	2727.9	2731.1	2739.1	2735.9	2737.5
30°	2463.6	2485.9	2511.4	2541.6	2568.7	2586.2	2602.1	2613.3	2621.2	2616.5	2614.9
32.5°	2253.4	2275.7	2302.8	2333.0	2364.9	2390.3	2409.4	2423.8	2433.3	2430.1	2422.2
35°	2012.9	2019.3	2036.8	2060.7	2087.7	2114.8	2132.4	2148.3	2159.4	2162.6	2162.6
37.5°	1766.1	1745.4	1732.6	1732.6	1748.5	1759.7	1775.6	1785.2	1802.7	1809.1	1813.9
40°	1527.2	1479.4	1434.8	1401.4	1379.1	1377.5	1377.5	1382.3	1398.2	1418.9	1438.0
42.5°	1313.8	1237.4	1168.9	1106.8	1062.2	1036.7	1025.6	1027.2	1039.9	1059.0	1090.8
45°	1143.4	1047.9	961.9	887.0	826.5	786.7	767.6	766.0	775.5	797.8	832.9
47.5°	1011.2	909.3	812.2	726.2	660.9	617.9	595.6	589.2	595.6	616.3	657.7
50°	901.4	796.3	695.9	606.7	536.7	492.1	471.4	463.4	471.4	488.9	530.3
52.5°	799.4	691.1	597.2	511.2	436.3	398.1	375.8	371.0	375.8	396.5	430.0
55°	681.6	589.2	496.9	410.9	345.6	307.4	289.8	285.1	289.8	309.0	344.0
57.5°	565.4	485.7	404.5	326.5	270.7	237.3	221.4	215.0	226.1	238.9	280.3
60°	457.0	393.4	324.9	256.4	210.2	179.9	167.2	165.6	168.8	184.7	213.4
62.5°	358.3	305.8	251.6	195.9	157.7	144.9	129.0	127.4	130.6	140.1	162.4
65°	258.0	224.6	183.1	143.3	113.1	95.5	89.2	90.8	93.9	100.3	121.0
67.5°	179.9	156.1	127.4	100.3	78.0	70.1	63.7	62.1	63.7	74.9	86.0
70°	121.0	106.7	86.0	76.5	54.2	43.0	44.6	39.8	46.2	46.2	55.7
72.5°	79.6	70.1	57.3	44.6	38.2	30.3	30.3	28.7	31.8	33.4	41.4
75°	41.4	31.8	31.8	22.3	15.9	7.9	14.3	12.7	11.1	12.7	15.9
77.5°	28.7	23.9	22.3	17.5	15.9	12.7	12.7	12.7	12.7	14.3	15.9
80°	17.5	17.5	12.7	11.1	9.5	7.9	9.5	9.5	9.5	9.5	11.1
82.5°	11.1	9.5	9.5	7.9	7.9	6.4	6.4	6.4	6.4	6.4	9.5
85°	9.5	6.4	6.4	4.8	6.4	11.1	4.8	6.4	6.4	6.4	4.8
87.5°	3.2	4.8	4.8	4.8	3.2	1.6	3.2	4.8	4.8	7.9	6.4
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: P249182

CATALOG NUMBER: LSR8B70D010 EC8B709730 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8	2966.8
2.5°	2971.6	2973.2	2973.2	2971.6	2971.6	2968.4	2974.8	2970.0	2971.6	2977.9	2973.2
5°	2974.8	2976.4	2976.4	2974.8	2974.8	2974.8	2976.4	2976.4	2974.8	2973.2	2976.4
7.5°	2981.1	2979.5	2979.5	2976.4	2976.4	2973.2	2976.4	2971.6	2974.8	2971.6	2976.4
10°	2973.2	2974.8	2973.2	2971.6	2971.6	2970.0	2970.0	2965.2	2966.8	2962.0	2965.2
12.5°	2968.4	2966.8	2966.8	2963.6	2960.5	2957.3	2955.7	2950.9	2950.9	2939.7	2944.5
15°	2955.7	2957.3	2952.5	2946.1	2942.9	2935.0	2931.8	2925.4	2919.0	2911.1	2912.7
17.5°	2944.5	2939.7	2933.4	2927.0	2914.2	2907.9	2901.5	2892.0	2888.8	2879.2	2876.1
20°	2911.1	2907.9	2899.9	2888.8	2880.8	2866.5	2860.1	2850.6	2842.6	2833.0	2828.2
22.5°	2868.1	2864.9	2855.3	2844.2	2831.4	2825.1	2818.7	2801.2	2793.2	2783.7	2782.1
25°	2813.9	2809.2	2799.6	2786.9	2780.5	2763.0	2756.6	2743.8	2740.7	2731.1	2729.5
27.5°	2731.1	2724.8	2713.6	2697.7	2686.5	2675.4	2669.0	2659.4	2656.3	2646.7	2645.1
30°	2606.9	2598.9	2576.6	2570.3	2551.2	2540.0	2540.0	2527.3	2528.9	2522.5	2522.5
32.5°	2411.0	2398.3	2380.8	2368.0	2355.3	2348.9	2348.9	2344.1	2347.3	2347.3	2350.5
35°	2151.4	2134.0	2124.4	2116.4	2116.4	2122.8	2141.9	2146.7	2156.2	2164.2	2170.6
37.5°	1818.6	1817.0	1828.2	1837.7	1861.6	1888.7	1922.1	1950.8	1977.9	1997.0	2016.1
40°	1458.7	1498.5	1530.4	1575.0	1611.6	1664.1	1724.7	1774.0	1820.2	1853.7	1888.7
42.5°	1138.6	1189.6	1256.5	1321.8	1387.1	1458.7	1538.4	1606.8	1667.3	1713.5	1750.1
45°	887.0	957.1	1038.3	1121.1	1205.5	1294.7	1377.5	1447.6	1511.3	1559.1	1595.7
47.5°	715.0	791.5	883.8	974.6	1070.2	1164.1	1256.5	1317.0	1369.5	1407.8	1441.2
50°	590.8	672.0	769.2	872.7	968.2	1062.2	1141.8	1200.7	1243.7	1277.2	1297.9
52.5°	493.7	579.7	683.2	786.7	882.2	968.2	1039.9	1084.5	1119.5	1143.4	1162.5
55°	407.7	490.5	587.6	684.8	778.7	859.9	918.8	952.3	979.4	993.7	1004.8
57.5°	332.8	409.3	498.4	587.6	668.8	735.7	781.9	815.4	828.1	839.2	837.6
60°	261.2	332.8	414.0	490.5	560.6	614.7	648.2	667.2	676.8	681.6	678.4
62.5°	205.4	270.7	332.8	399.7	450.7	496.9	528.7	528.7	533.5	535.1	539.9
65°	152.9	202.2	256.4	305.8	347.1	377.4	395.0	399.7	406.1	404.5	401.3
67.5°	113.1	149.7	189.5	226.1	254.8	273.9	286.6	297.8	296.2	293.0	291.4
70°	78.0	101.9	137.0	159.3	179.9	199.1	202.2	203.8	205.4	207.0	203.8
72.5°	54.2	71.7	90.8	109.9	122.6	130.6	138.6	140.1	140.1	140.1	138.6
75°	27.1	36.6	54.2	62.1	73.3	76.5	82.8	82.8	87.6	81.2	79.6
77.5°	23.9	28.7	38.2	44.6	49.4	54.2	55.7	60.5	58.9	55.7	57.3
80°	14.3	17.5	23.9	27.1	33.4	35.0	36.6	38.2	36.6	38.2	38.2
82.5°	11.1	12.7	15.9	15.9	20.7	20.7	22.3	22.3	23.9	23.9	23.9
85°	6.4	11.1	9.5	19.1	12.7	12.7	15.9	19.1	15.9	15.9	19.1
87.5°	6.4	6.4	4.8	6.4	6.4	6.4	7.9	9.5	9.5	11.1	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: P249182

CATALOG NUMBER: LSR8B70D010 EC8B709730 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2966.8	2966.8	2966.8	2966.8
2.5°	2971.6	2974.8	2970.0	2968.4
5°	2976.4	2976.4	2973.2	2973.2
7.5°	2976.4	2976.4	2971.6	2968.4
10°	2963.6	2963.6	2958.9	2955.7
12.5°	2939.7	2939.7	2938.1	2933.4
15°	2909.5	2909.5	2903.1	2898.3
17.5°	2868.1	2871.3	2863.3	2863.3
20°	2823.5	2821.9	2815.5	2812.3
22.5°	2777.3	2774.1	2772.5	2763.0
25°	2727.9	2724.8	2720.0	2715.2
27.5°	2643.5	2641.9	2637.2	2630.8
30°	2514.5	2512.9	2506.6	2506.6
32.5°	2347.3	2345.7	2339.4	2341.0
35°	2173.7	2180.1	2176.9	2170.6
37.5°	2028.8	2033.6	2036.8	2033.6
40°	1907.8	1922.1	1923.7	1926.9
42.5°	1778.8	1797.9	1804.3	1807.5
45°	1624.3	1641.9	1656.2	1653.0
47.5°	1466.7	1479.4	1492.2	1482.6
50°	1315.4	1323.4	1328.1	1328.1
52.5°	1172.1	1172.1	1170.5	1172.1
55°	1008.0	1008.0	1001.7	1004.8
57.5°	836.0	839.2	834.5	826.5
60°	676.8	668.8	665.7	660.9
62.5°	527.1	527.1	516.0	530.3
65°	395.0	390.2	385.4	383.8
67.5°	286.6	285.1	280.3	278.7
70°	202.2	195.9	194.3	191.1
72.5°	135.4	135.4	132.2	132.2
75°	82.8	74.9	73.3	74.9
77.5°	57.3	55.7	55.7	54.2
80°	38.2	36.6	39.8	35.0
82.5°	23.9	25.5	23.9	25.5
85°	15.9	19.1	17.5	17.5
87.5°	9.5	9.5	9.5	9.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)