

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: P249398

Luminaire Tested: **LSR8B70D010 EC8B709730 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249398
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 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5496.0 lumens
Efficiency: N/A
Efficacy: 72.4 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

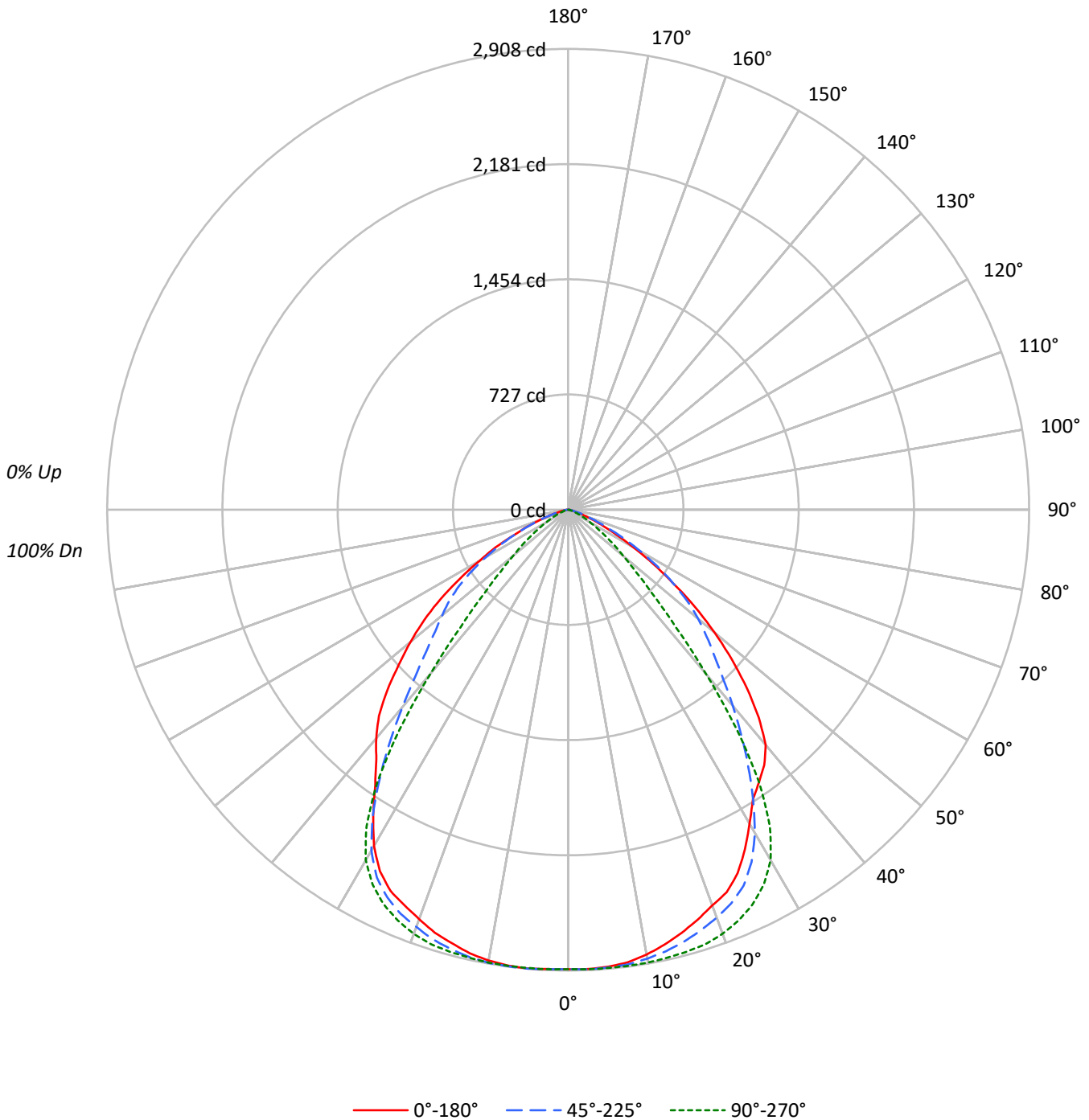
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	276.7	5.0
10°-20°	803.7	14.6
20°-30°	1219.9	22.2
30°-40°	1281.2	23.3
40°-50°	960.6	17.5
50°-60°	616.3	11.2
60°-70°	263.7	4.8
70°-80°	62.3	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°	2300.3	41.9
0°-40°	3581.6	65.2
0°-60°	5158.5	93.9
0°-90°	5496.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5496.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2900	2900	2900	2900	2900	
5°	2895	2900	2903	2908	2906	275
15°	2764	2822	2887	2869	2833	780
25°	2529	2618	2750	2701	2654	1156
35°	2098	1981	2100	2075	2122	1317
45°	1594	1303	749	1266	1616	1221
55°	806	806	279	840	982	731
65°	243	286	89	369	375	259
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°	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8
2.5°	2901.4	2904.5	2902.9	2902.9	2901.4	2902.9	2902.9	2906.0	2906.0	2902.9	2901.4
5°	2895.1	2898.2	2898.2	2895.1	2895.1	2902.9	2898.2	2901.4	2901.4	2899.8	2899.8
7.5°	2881.1	2881.1	2887.3	2882.7	2882.7	2887.3	2885.8	2888.9	2892.0	2893.6	2893.6
10°	2850.0	2853.1	2854.7	2854.7	2856.2	2860.9	2864.0	2870.2	2873.3	2876.5	2878.0
12.5°	2811.1	2815.7	2817.3	2815.7	2820.4	2826.6	2834.4	2842.2	2846.9	2853.1	2857.8
15°	2764.4	2764.4	2767.5	2772.2	2775.3	2784.6	2792.4	2801.7	2814.2	2822.0	2829.8
17.5°	2713.0	2716.1	2720.8	2720.8	2727.0	2742.6	2747.3	2761.3	2775.3	2783.1	2798.6
20°	2657.0	2660.1	2664.8	2667.9	2675.7	2688.1	2697.4	2709.9	2725.5	2739.5	2755.0
22.5°	2613.4	2607.2	2610.3	2613.4	2621.2	2632.1	2643.0	2658.5	2674.1	2688.1	2703.7
25°	2529.3	2530.9	2535.6	2538.7	2548.0	2557.4	2569.8	2588.5	2602.5	2618.1	2635.2
27.5°	2415.7	2417.3	2425.1	2425.1	2432.8	2448.4	2456.2	2471.8	2490.5	2506.0	2526.3
30°	2286.5	2289.6	2289.6	2295.9	2300.5	2308.3	2316.1	2331.7	2341.0	2355.0	2383.1
32.5°	2168.2	2171.3	2169.8	2168.2	2163.6	2162.0	2160.4	2163.6	2166.7	2171.3	2182.2
35°	2098.2	2090.4	2084.2	2073.3	2060.8	2045.3	2031.3	2012.6	1995.5	1981.4	1965.9
37.5°	2031.3	2029.7	2020.4	2004.8	1979.9	1951.9	1919.2	1878.7	1838.2	1794.7	1752.7
40°	1937.9	1933.2	1925.4	1903.6	1875.6	1841.4	1797.8	1748.0	1682.6	1615.7	1547.2
42.5°	1779.1	1780.7	1771.3	1754.2	1727.8	1695.0	1649.9	1595.4	1525.4	1446.0	1357.3
45°	1593.9	1593.9	1590.8	1576.7	1558.1	1531.6	1497.4	1452.2	1383.8	1302.8	1207.8
47.5°	1400.9	1402.4	1397.7	1394.7	1386.8	1369.7	1344.8	1310.6	1262.3	1184.5	1089.6
50°	1204.8	1204.8	1212.5	1211.0	1211.0	1204.8	1193.9	1173.6	1131.6	1069.3	980.6
52.5°	1008.6	1011.7	1016.4	1022.6	1030.4	1042.9	1030.4	1021.1	994.6	946.4	870.1
55°	806.3	809.4	817.2	828.1	837.4	849.9	853.0	853.0	838.9	806.3	748.7
57.5°	633.5	628.8	635.1	644.4	656.9	669.3	678.6	689.5	688.0	666.2	619.5
60°	476.3	477.9	482.5	491.9	501.2	512.1	524.6	533.9	538.6	527.7	498.1
62.5°	347.1	347.1	353.3	362.7	367.3	382.9	390.7	395.4	400.0	398.5	379.8
65°	242.8	245.9	249.0	253.7	258.4	267.7	272.4	281.7	284.8	286.4	272.4
67.5°	171.2	166.5	169.7	172.8	177.4	183.7	193.0	193.0	197.7	197.7	188.3
70°	109.0	109.0	110.5	115.2	118.3	119.9	123.0	126.1	130.7	129.2	129.2
72.5°	73.2	71.6	73.2	74.7	76.3	80.9	80.9	82.5	85.6	87.2	80.9
75°	37.4	38.9	42.0	40.5	45.1	42.0	43.6	48.3	46.7	43.6	43.6
77.5°	31.1	31.1	31.1	29.6	32.7	32.7	31.1	34.2	32.7	32.7	31.1
80°	21.8	23.3	21.8	20.2	21.8	20.2	20.2	20.2	20.2	20.2	18.7
82.5°	17.1	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°	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8
2.5°	2904.5	2902.9	2906.0	2904.5	2904.5	2902.9	2904.5	2902.9	2906.0	2899.8	2901.4
5°	2904.5	2901.4	2902.9	2904.5	2906.0	2902.9	2902.9	2902.9	2906.0	2902.9	2904.5
7.5°	2898.2	2896.7	2901.4	2904.5	2902.9	2901.4	2904.5	2902.9	2906.0	2904.5	2907.6
10°	2885.8	2887.3	2890.5	2895.1	2896.7	2898.2	2901.4	2901.4	2906.0	2899.8	2902.9
12.5°	2867.1	2873.3	2881.1	2884.2	2890.5	2890.5	2893.6	2895.1	2898.2	2896.7	2901.4
15°	2843.8	2851.5	2860.9	2868.7	2876.5	2881.1	2885.8	2887.3	2892.0	2887.3	2888.9
17.5°	2815.7	2825.1	2839.1	2848.4	2860.9	2865.6	2871.8	2874.9	2879.6	2876.5	2878.0
20°	2776.8	2787.7	2803.3	2817.3	2825.1	2836.0	2843.8	2848.4	2851.5	2848.4	2850.0
22.5°	2722.4	2737.9	2758.2	2769.0	2784.6	2794.0	2795.5	2806.4	2814.2	2806.4	2809.5
25°	2658.5	2674.1	2689.7	2713.0	2727.0	2737.9	2748.8	2750.4	2758.2	2756.6	2755.0
27.5°	2552.7	2572.9	2599.4	2618.1	2636.7	2653.9	2666.3	2669.4	2677.2	2674.1	2675.7
30°	2407.9	2429.7	2454.7	2484.2	2510.7	2527.8	2543.4	2554.2	2562.0	2557.4	2555.8
32.5°	2202.5	2224.3	2250.7	2280.3	2311.5	2336.3	2355.0	2369.0	2378.4	2375.2	2367.5
35°	1967.5	1973.7	1990.8	2014.2	2040.6	2067.1	2084.2	2099.7	2110.6	2113.7	2113.7
37.5°	1726.2	1706.0	1693.5	1693.5	1709.1	1719.9	1735.5	1744.9	1762.0	1768.2	1772.9
40°	1492.7	1446.0	1402.4	1369.7	1348.0	1346.4	1346.4	1351.0	1366.6	1386.8	1405.5
42.5°	1284.1	1209.4	1142.5	1081.8	1038.2	1013.3	1002.4	1004.0	1016.4	1035.1	1066.2
45°	1117.6	1024.2	940.1	867.0	807.8	768.9	750.2	748.7	758.0	779.8	814.1
47.5°	988.4	888.8	793.8	709.8	646.0	603.9	582.1	575.9	582.1	602.4	642.8
50°	881.0	778.3	680.2	593.0	524.6	481.0	460.7	453.0	460.7	477.9	518.3
52.5°	781.4	675.5	583.7	499.6	426.5	389.1	367.3	362.7	367.3	387.6	420.3
55°	666.2	575.9	485.6	401.6	337.8	300.4	283.3	278.6	283.3	302.0	336.2
57.5°	552.6	474.7	395.4	319.1	264.6	231.9	216.4	210.1	221.0	233.5	273.9
60°	446.7	384.5	317.5	250.6	205.5	175.9	163.4	161.9	165.0	180.6	208.6
62.5°	350.2	298.9	245.9	191.5	154.1	141.6	126.1	124.5	127.6	137.0	158.8
65°	252.2	219.5	179.0	140.1	110.5	93.4	87.2	88.7	91.8	98.1	118.3
67.5°	175.9	152.5	124.5	98.1	76.3	68.5	62.3	60.7	62.3	73.2	84.1
70°	118.3	104.3	84.1	74.7	52.9	42.0	43.6	38.9	45.1	45.1	54.5
72.5°	77.8	68.5	56.0	43.6	37.4	29.6	29.6	28.0	31.1	32.7	40.5
75°	40.5	31.1	31.1	21.8	15.6	7.8	14.0	12.5	10.9	12.5	15.6
77.5°	28.0	23.3	21.8	17.1	15.6	12.5	12.5	12.5	12.5	14.0	15.6
80°	17.1	17.1	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°	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8	2899.8
2.5°	2904.5	2906.0	2906.0	2904.5	2904.5	2901.4	2907.6	2902.9	2904.5	2910.7	2906.0
5°	2907.6	2909.1	2909.1	2907.6	2907.6	2907.6	2909.1	2909.1	2907.6	2906.0	2909.1
7.5°	2913.8	2912.3	2912.3	2909.1	2909.1	2906.0	2909.1	2904.5	2907.6	2904.5	2909.1
10°	2906.0	2907.6	2906.0	2904.5	2904.5	2902.9	2902.9	2898.2	2899.8	2895.1	2898.2
12.5°	2901.4	2899.8	2899.8	2896.7	2893.6	2890.5	2888.9	2884.2	2884.2	2873.3	2878.0
15°	2888.9	2890.5	2885.8	2879.6	2876.5	2868.7	2865.6	2859.3	2853.1	2845.3	2846.9
17.5°	2878.0	2873.3	2867.1	2860.9	2848.4	2842.2	2836.0	2826.6	2823.5	2814.2	2811.1
20°	2845.3	2842.2	2834.4	2823.5	2815.7	2801.7	2795.5	2786.2	2778.4	2769.0	2764.4
22.5°	2803.3	2800.2	2790.8	2779.9	2767.5	2761.3	2755.0	2737.9	2730.1	2720.8	2719.2
25°	2750.4	2745.7	2736.4	2723.9	2717.7	2700.6	2694.3	2681.9	2678.8	2669.4	2667.9
27.5°	2669.4	2663.2	2652.3	2636.7	2625.8	2615.0	2608.7	2599.4	2596.3	2586.9	2585.4
30°	2548.0	2540.2	2518.4	2512.2	2493.5	2482.6	2482.6	2470.2	2471.8	2465.5	2465.5
32.5°	2356.6	2344.1	2327.0	2314.5	2302.1	2295.9	2295.9	2291.2	2294.3	2294.3	2297.4
35°	2102.9	2085.8	2076.4	2068.6	2068.6	2074.8	2093.5	2098.2	2107.5	2115.3	2121.6
37.5°	1777.5	1776.0	1786.9	1796.2	1819.6	1846.0	1878.7	1906.8	1933.2	1951.9	1970.5
40°	1425.8	1464.7	1495.8	1539.4	1575.2	1626.6	1685.7	1734.0	1779.1	1811.8	1846.0
42.5°	1112.9	1162.7	1228.1	1291.9	1355.7	1425.8	1503.6	1570.5	1629.7	1674.8	1710.6
45°	867.0	935.5	1014.9	1095.8	1178.3	1265.5	1346.4	1414.9	1477.1	1523.8	1559.6
47.5°	698.9	773.6	863.9	952.6	1046.0	1137.8	1228.1	1287.3	1338.6	1376.0	1408.7
50°	577.5	656.9	751.8	853.0	946.4	1038.2	1116.0	1173.6	1215.7	1248.3	1268.6
52.5°	482.5	566.6	667.8	768.9	862.3	946.4	1016.4	1060.0	1094.2	1117.6	1136.2
55°	398.5	479.4	574.4	669.3	761.1	840.5	898.1	930.8	957.2	971.3	982.2
57.5°	325.3	400.0	487.2	574.4	653.7	719.1	764.3	796.9	809.4	820.3	818.7
60°	255.3	325.3	404.7	479.4	547.9	600.8	633.5	652.2	661.5	666.2	663.1
62.5°	200.8	264.6	325.3	390.7	440.5	485.6	516.8	516.8	521.4	523.0	527.7
65°	149.4	197.7	250.6	298.9	339.3	368.9	386.0	390.7	396.9	395.4	392.2
67.5°	110.5	146.3	185.2	221.0	249.0	267.7	280.2	291.1	289.5	286.4	284.8
70°	76.3	99.6	133.9	155.7	175.9	194.6	197.7	199.2	200.8	202.3	199.2
72.5°	52.9	70.0	88.7	107.4	119.9	127.6	135.4	137.0	137.0	137.0	135.4
75°	26.5	35.8	52.9	60.7	71.6	74.7	80.9	80.9	85.6	79.4	77.8
77.5°	23.3	28.0	37.4	43.6	48.3	52.9	54.5	59.1	57.6	54.5	56.0
80°	14.0	17.1	23.3	26.5	32.7	34.2	35.8	37.4	35.8	37.4	37.4
82.5°	10.9	12.5	15.6	15.6	20.2	20.2	21.8	21.8	23.3	23.3	23.3
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: P249398

CATALOG NUMBER: LSR8B70D010 EC8B709730 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2899.8	2899.8	2899.8	2899.8
2.5°	2904.5	2907.6	2902.9	2901.4
5°	2909.1	2909.1	2906.0	2906.0
7.5°	2909.1	2909.1	2904.5	2901.4
10°	2896.7	2896.7	2892.0	2888.9
12.5°	2873.3	2873.3	2871.8	2867.1
15°	2843.8	2843.8	2837.5	2832.9
17.5°	2803.3	2806.4	2798.6	2798.6
20°	2759.7	2758.2	2751.9	2748.8
22.5°	2714.6	2711.5	2709.9	2700.6
25°	2666.3	2663.2	2658.5	2653.9
27.5°	2583.8	2582.3	2577.6	2571.4
30°	2457.7	2456.2	2450.0	2450.0
32.5°	2294.3	2292.8	2286.5	2288.1
35°	2124.6	2130.9	2127.8	2121.6
37.5°	1983.0	1987.7	1990.8	1987.7
40°	1864.7	1878.7	1880.3	1883.4
42.5°	1738.6	1757.3	1763.6	1766.6
45°	1587.6	1604.8	1618.8	1615.7
47.5°	1433.5	1446.0	1458.4	1449.1
50°	1285.7	1293.5	1298.1	1298.1
52.5°	1145.6	1145.6	1144.1	1145.6
55°	985.3	985.3	979.1	982.2
57.5°	817.2	820.3	815.6	807.8
60°	661.5	653.7	650.6	646.0
62.5°	515.2	515.2	504.3	518.3
65°	386.0	381.4	376.7	375.1
67.5°	280.2	278.6	273.9	272.4
70°	197.7	191.5	189.9	186.8
72.5°	132.3	132.3	129.2	129.2
75°	80.9	73.2	71.6	73.2
77.5°	56.0	54.5	54.5	52.9
80°	37.4	35.8	38.9	34.2
82.5°	23.3	24.9	23.3	24.9
85°	15.6	18.7	17.1	17.1
87.5°	9.3	9.3	9.3	9.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)