

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: P249605

Luminaire Tested: **LSR8B70D010 EC8B709727 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249605
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 EC8B709727 8LBDW0MMW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5255.0 lumens
Efficiency: N/A
Efficacy: 69.2 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

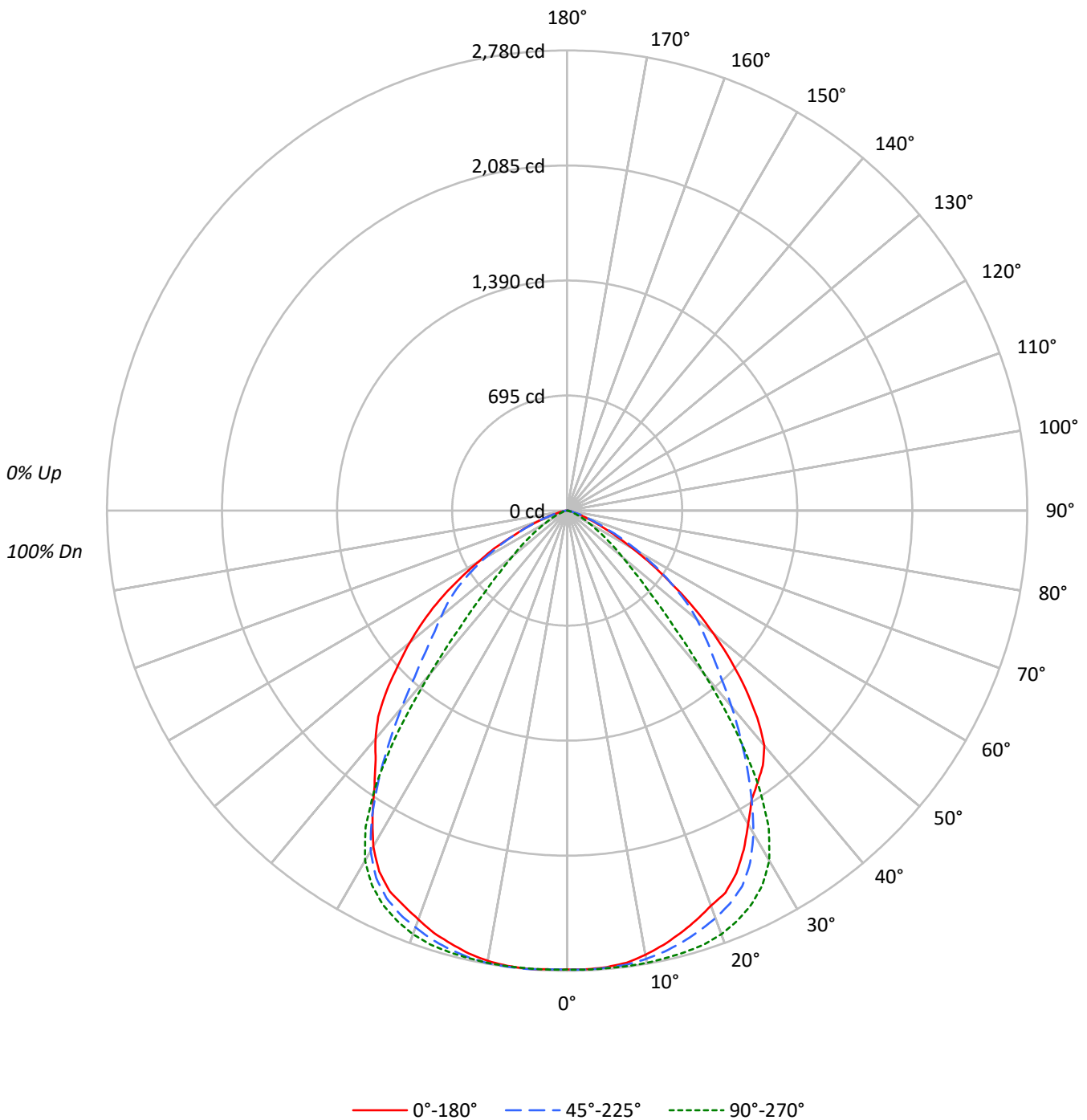
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90	90	90	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79	79	79	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70	70	70	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62	62	62	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55	55	55	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50	50	50	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45	45	45	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41	41	41	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37	37	37	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34	34	34	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°	264.6	5.0
10°-20°	768.5	14.6
20°-30°	1166.4	22.2
30°-40°	1225.0	23.3
40°-50°	918.5	17.5
50°-60°	589.3	11.2
60°-70°	252.1	4.8
70°-80°	59.6	1.1
80°-90°	11.1	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°	2199.5	41.9
0°-40°	3424.5	65.2
0°-60°	4932.3	93.9
0°-90°	5255.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5255.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2773	2773	2773	2773	2773	
5°	2768	2773	2776	2780	2779	263
15°	2643	2698	2761	2743	2709	746
25°	2418	2503	2630	2582	2538	1105
35°	2006	1895	2008	1984	2028	1259
45°	1524	1246	716	1210	1545	1167
55°	771	771	266	804	939	699
65°	232	274	85	353	359	248
75°	36	42	12	71	70	52
85°	12	7	6	12	16	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°	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6
2.5°	2774.1	2777.1	2775.6	2775.6	2774.1	2775.6	2775.6	2778.6	2778.6	2775.6	2774.1
5°	2768.2	2771.1	2771.1	2768.2	2768.2	2775.6	2771.1	2774.1	2774.1	2772.6	2772.6
7.5°	2754.8	2754.8	2760.7	2756.3	2756.3	2760.7	2759.2	2762.2	2765.2	2766.7	2766.7
10°	2725.0	2728.0	2729.5	2729.5	2731.0	2735.4	2738.4	2744.4	2747.3	2750.3	2751.8
12.5°	2687.8	2692.3	2693.8	2692.3	2696.8	2702.7	2710.2	2717.6	2722.1	2728.0	2732.5
15°	2643.1	2643.1	2646.1	2650.6	2653.6	2662.5	2669.9	2678.9	2690.8	2698.2	2705.7
17.5°	2594.1	2597.0	2601.5	2601.5	2607.5	2622.3	2626.8	2640.2	2653.6	2661.0	2675.9
20°	2540.5	2543.4	2547.9	2550.9	2558.3	2570.2	2579.2	2591.1	2606.0	2619.4	2634.2
22.5°	2498.8	2492.9	2495.8	2498.8	2506.3	2516.7	2527.1	2541.9	2556.8	2570.2	2585.1
25°	2418.4	2419.9	2424.4	2427.4	2436.3	2445.2	2457.1	2475.0	2488.4	2503.3	2519.6
27.5°	2309.8	2311.3	2318.7	2318.7	2326.2	2341.0	2348.5	2363.4	2381.2	2396.1	2415.5
30°	2186.3	2189.2	2189.2	2195.2	2199.6	2207.1	2214.5	2229.4	2238.4	2251.8	2278.6
32.5°	2073.2	2076.1	2074.6	2073.2	2068.7	2067.2	2065.7	2068.7	2071.7	2076.1	2086.5
35°	2006.2	1998.7	1992.8	1982.4	1970.5	1955.6	1942.2	1924.3	1908.0	1894.6	1879.7
37.5°	1942.2	1940.7	1931.8	1916.9	1893.1	1866.3	1835.1	1796.3	1757.6	1716.0	1675.8
40°	1852.9	1848.4	1841.0	1820.2	1793.4	1760.6	1719.0	1671.3	1608.8	1544.8	1479.3
42.5°	1701.1	1702.6	1693.6	1677.3	1652.0	1620.7	1577.6	1525.5	1458.5	1382.6	1297.8
45°	1524.0	1524.0	1521.0	1507.6	1489.8	1464.5	1431.7	1388.6	1323.1	1245.7	1154.9
47.5°	1339.4	1340.9	1336.5	1333.5	1326.0	1309.7	1285.9	1253.1	1207.0	1132.6	1041.8
50°	1151.9	1151.9	1159.4	1157.9	1157.9	1151.9	1141.5	1122.1	1082.0	1022.4	937.6
52.5°	964.4	967.4	971.9	977.8	985.2	997.1	985.2	976.3	951.0	904.9	831.9
55°	770.9	773.9	781.3	791.7	800.7	812.6	815.6	815.6	802.2	770.9	715.9
57.5°	605.7	601.3	607.2	616.2	628.1	640.0	648.9	659.3	657.8	637.0	592.3
60°	455.4	456.9	461.3	470.3	479.2	489.6	501.6	510.5	515.0	504.5	476.2
62.5°	331.9	331.9	337.8	346.7	351.2	366.1	373.6	378.0	382.5	381.0	363.1
65°	232.2	235.1	238.1	242.6	247.0	256.0	260.4	269.4	272.4	273.8	260.4
67.5°	163.7	159.2	162.2	165.2	169.7	175.6	184.6	184.6	189.0	189.0	180.1
70°	104.2	104.2	105.7	110.1	113.1	114.6	117.6	120.5	125.0	123.5	123.5
72.5°	70.0	68.5	70.0	71.4	72.9	77.4	77.4	78.9	81.9	83.4	77.4
75°	35.7	37.2	40.2	38.7	43.2	40.2	41.7	46.1	44.6	41.7	41.7
77.5°	29.8	29.8	29.8	28.3	31.2	31.2	29.8	32.7	31.2	31.2	29.8
80°	20.8	22.3	20.8	19.3	20.8	19.3	19.3	19.3	19.3	19.3	17.8
82.5°	16.4	13.4	14.9	13.4	14.9	14.9	13.4	11.9	11.9	13.4	11.9
85°	11.9	8.9	10.4	10.4	8.9	8.9	8.9	8.9	8.9	7.4	7.4
87.5°	7.4	4.5	4.5	4.5	5.9	5.9	5.9	4.5	5.9	5.9	3.0
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°	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6
2.5°	2777.1	2775.6	2778.6	2777.1	2777.1	2775.6	2777.1	2775.6	2778.6	2772.6	2774.1
5°	2777.1	2774.1	2775.6	2777.1	2778.6	2775.6	2775.6	2775.6	2778.6	2775.6	2777.1
7.5°	2771.1	2769.7	2774.1	2777.1	2775.6	2774.1	2777.1	2775.6	2778.6	2777.1	2780.1
10°	2759.2	2760.7	2763.7	2768.2	2769.7	2771.1	2774.1	2774.1	2778.6	2772.6	2775.6
12.5°	2741.4	2747.3	2754.8	2757.7	2763.7	2763.7	2766.7	2768.2	2771.1	2769.7	2774.1
15°	2719.1	2726.5	2735.4	2742.9	2750.3	2754.8	2759.2	2760.7	2765.2	2760.7	2762.2
17.5°	2692.3	2701.2	2714.6	2723.5	2735.4	2739.9	2745.8	2748.8	2753.3	2750.3	2751.8
20°	2655.1	2665.5	2680.4	2693.8	2701.2	2711.6	2719.1	2723.5	2726.5	2723.5	2725.0
22.5°	2603.0	2617.9	2637.2	2647.6	2662.5	2671.4	2672.9	2683.4	2690.8	2683.4	2686.3
25°	2541.9	2556.8	2571.7	2594.1	2607.5	2617.9	2628.3	2629.8	2637.2	2635.7	2634.2
27.5°	2440.8	2460.1	2485.4	2503.3	2521.1	2537.5	2549.4	2552.4	2559.8	2556.8	2558.3
30°	2302.3	2323.2	2347.0	2375.3	2400.6	2416.9	2431.8	2442.2	2449.7	2445.2	2443.7
32.5°	2105.9	2126.7	2152.0	2180.3	2210.1	2233.9	2251.8	2265.2	2274.1	2271.1	2263.7
35°	1881.2	1887.1	1903.5	1925.8	1951.1	1976.4	1992.8	2007.7	2018.1	2021.1	2021.1
37.5°	1650.5	1631.2	1619.3	1619.3	1634.1	1644.5	1659.4	1668.3	1684.7	1690.7	1695.1
40°	1427.2	1382.6	1340.9	1309.7	1288.9	1287.4	1287.4	1291.8	1306.7	1326.0	1343.9
42.5°	1227.8	1156.4	1092.4	1034.3	992.7	968.9	958.5	959.9	971.9	989.7	1019.5
45°	1068.6	979.3	898.9	829.0	772.4	735.2	717.3	715.9	724.8	745.6	778.4
47.5°	945.1	849.8	759.0	678.6	617.6	577.4	556.6	550.7	556.6	575.9	614.7
50°	842.4	744.2	650.4	567.0	501.6	459.9	440.5	433.1	440.5	456.9	495.6
52.5°	747.1	645.9	558.1	477.7	407.8	372.1	351.2	346.7	351.2	370.6	401.8
55°	637.0	550.7	464.3	384.0	323.0	287.2	270.9	266.4	270.9	288.7	321.5
57.5°	528.4	453.9	378.0	305.1	253.0	221.7	206.9	200.9	211.3	223.2	261.9
60°	427.1	367.6	303.6	239.6	196.5	168.2	156.3	154.8	157.8	172.6	199.4
62.5°	334.9	285.8	235.1	183.1	147.3	135.4	120.5	119.1	122.0	131.0	151.8
65°	241.1	209.9	171.2	133.9	105.7	89.3	83.4	84.8	87.8	93.8	113.1
67.5°	168.2	145.8	119.1	93.8	72.9	65.5	59.5	58.0	59.5	70.0	80.4
70°	113.1	99.7	80.4	71.4	50.6	40.2	41.7	37.2	43.2	43.2	52.1
72.5°	74.4	65.5	53.6	41.7	35.7	28.3	28.3	26.8	29.8	31.2	38.7
75°	38.7	29.8	29.8	20.8	14.9	7.4	13.4	11.9	10.4	11.9	14.9
77.5°	26.8	22.3	20.8	16.4	14.9	11.9	11.9	11.9	11.9	13.4	14.9
80°	16.4	16.4	11.9	10.4	8.9	7.4	8.9	8.9	8.9	8.9	10.4
82.5°	10.4	8.9	8.9	7.4	7.4	5.9	5.9	5.9	5.9	5.9	8.9
85°	8.9	5.9	5.9	4.5	5.9	10.4	4.5	5.9	5.9	5.9	4.5
87.5°	3.0	4.5	4.5	4.5	3.0	1.5	3.0	4.5	4.5	7.4	5.9
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°	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6	2772.6
2.5°	2777.1	2778.6	2778.6	2777.1	2777.1	2774.1	2780.1	2775.6	2777.1	2783.1	2778.6
5°	2780.1	2781.6	2781.6	2780.1	2780.1	2780.1	2781.6	2781.6	2780.1	2778.6	2781.6
7.5°	2786.0	2784.5	2784.5	2781.6	2781.6	2778.6	2781.6	2777.1	2780.1	2777.1	2781.6
10°	2778.6	2780.1	2778.6	2777.1	2777.1	2775.6	2775.6	2771.1	2772.6	2768.2	2771.1
12.5°	2774.1	2772.6	2772.6	2769.7	2766.7	2763.7	2762.2	2757.7	2757.7	2747.3	2751.8
15°	2762.2	2763.7	2759.2	2753.3	2750.3	2742.9	2739.9	2733.9	2728.0	2720.6	2722.1
17.5°	2751.8	2747.3	2741.4	2735.4	2723.5	2717.6	2711.6	2702.7	2699.7	2690.8	2687.8
20°	2720.6	2717.6	2710.2	2699.7	2692.3	2678.9	2672.9	2664.0	2656.5	2647.6	2643.1
22.5°	2680.4	2677.4	2668.5	2658.0	2646.1	2640.2	2634.2	2617.9	2610.4	2601.5	2600.0
25°	2629.8	2625.3	2616.4	2604.5	2598.5	2582.2	2576.2	2564.3	2561.3	2552.4	2550.9
27.5°	2552.4	2546.4	2536.0	2521.1	2510.7	2500.3	2494.4	2485.4	2482.4	2473.5	2472.0
30°	2436.3	2428.8	2408.0	2402.1	2384.2	2373.8	2373.8	2361.9	2363.4	2357.4	2357.4
32.5°	2253.2	2241.3	2225.0	2213.0	2201.1	2195.2	2195.2	2190.7	2193.7	2193.7	2196.7
35°	2010.6	1994.3	1985.3	1977.9	1977.9	1983.8	2001.7	2006.2	2015.1	2022.6	2028.5
37.5°	1699.6	1698.1	1708.5	1717.5	1739.8	1765.1	1796.3	1823.1	1848.4	1866.3	1884.1
40°	1363.3	1400.5	1430.2	1471.9	1506.1	1555.2	1611.8	1657.9	1701.1	1732.4	1765.1
42.5°	1064.1	1111.7	1174.3	1235.3	1296.3	1363.3	1437.7	1501.7	1558.2	1601.4	1635.6
45°	829.0	894.4	970.4	1047.7	1126.6	1210.0	1287.4	1352.8	1412.4	1457.0	1491.3
47.5°	668.2	739.7	826.0	910.8	1000.1	1087.9	1174.3	1230.8	1279.9	1315.6	1346.9
50°	552.1	628.1	718.8	815.6	904.9	992.7	1067.1	1122.1	1162.3	1193.6	1212.9
52.5°	461.3	541.7	638.5	735.2	824.5	904.9	971.9	1013.5	1046.3	1068.6	1086.4
55°	381.0	458.4	549.2	640.0	727.8	803.7	858.7	890.0	915.3	928.7	939.1
57.5°	311.1	382.5	465.8	549.2	625.1	687.6	730.7	762.0	773.9	784.3	782.8
60°	244.1	311.1	387.0	458.4	523.9	574.5	605.7	623.6	632.5	637.0	634.0
62.5°	192.0	253.0	311.1	373.6	421.2	464.3	494.1	494.1	498.6	500.1	504.5
65°	142.9	189.0	239.6	285.8	324.4	352.7	369.1	373.6	379.5	378.0	375.0
67.5°	105.7	139.9	177.1	211.3	238.1	256.0	267.9	278.3	276.8	273.8	272.4
70°	72.9	95.3	128.0	148.8	168.2	186.0	189.0	190.5	192.0	193.5	190.5
72.5°	50.6	67.0	84.8	102.7	114.6	122.0	129.5	131.0	131.0	131.0	129.5
75°	25.3	34.2	50.6	58.0	68.5	71.4	77.4	77.4	81.9	75.9	74.4
77.5°	22.3	26.8	35.7	41.7	46.1	50.6	52.1	56.6	55.1	52.1	53.6
80°	13.4	16.4	22.3	25.3	31.2	32.7	34.2	35.7	34.2	35.7	35.7
82.5°	10.4	11.9	14.9	14.9	19.3	19.3	20.8	20.8	22.3	22.3	22.3
85°	5.9	10.4	8.9	17.8	11.9	11.9	14.9	17.8	14.9	14.9	17.8
87.5°	5.9	5.9	4.5	5.9	5.9	5.9	7.4	8.9	8.9	10.4	8.9
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: P249605

CATALOG NUMBER: LSR8B70D010 EC8B709727 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2772.6	2772.6	2772.6	2772.6
2.5°	2777.1	2780.1	2775.6	2774.1
5°	2781.6	2781.6	2778.6	2778.6
7.5°	2781.6	2781.6	2777.1	2774.1
10°	2769.7	2769.7	2765.2	2762.2
12.5°	2747.3	2747.3	2745.8	2741.4
15°	2719.1	2719.1	2713.1	2708.7
17.5°	2680.4	2683.4	2675.9	2675.9
20°	2638.7	2637.2	2631.3	2628.3
22.5°	2595.6	2592.6	2591.1	2582.2
25°	2549.4	2546.4	2541.9	2537.5
27.5°	2470.5	2469.0	2464.6	2458.6
30°	2350.0	2348.5	2342.5	2342.5
32.5°	2193.7	2192.2	2186.3	2187.8
35°	2031.5	2037.4	2034.5	2028.5
37.5°	1896.0	1900.5	1903.5	1900.5
40°	1782.9	1796.3	1797.8	1800.8
42.5°	1662.4	1680.2	1686.2	1689.2
45°	1518.0	1534.4	1547.8	1544.8
47.5°	1370.7	1382.6	1394.5	1385.6
50°	1229.3	1236.7	1241.2	1241.2
52.5°	1095.4	1095.4	1093.9	1095.4
55°	942.1	942.1	936.1	939.1
57.5°	781.3	784.3	779.8	772.4
60°	632.5	625.1	622.1	617.6
62.5°	492.6	492.6	482.2	495.6
65°	369.1	364.6	360.2	358.7
67.5°	267.9	266.4	261.9	260.4
70°	189.0	183.1	181.6	178.6
72.5°	126.5	126.5	123.5	123.5
75°	77.4	70.0	68.5	70.0
77.5°	53.6	52.1	52.1	50.6
80°	35.7	34.2	37.2	32.7
82.5°	22.3	23.8	22.3	23.8
85°	14.9	17.8	16.4	16.4
87.5°	8.9	8.9	8.9	8.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)