

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: P249281

Luminaire Tested: **LSR8B70D010 EC8B709727 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249281
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 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5287.0 lumens
Efficiency: N/A
Efficacy: 69.7 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

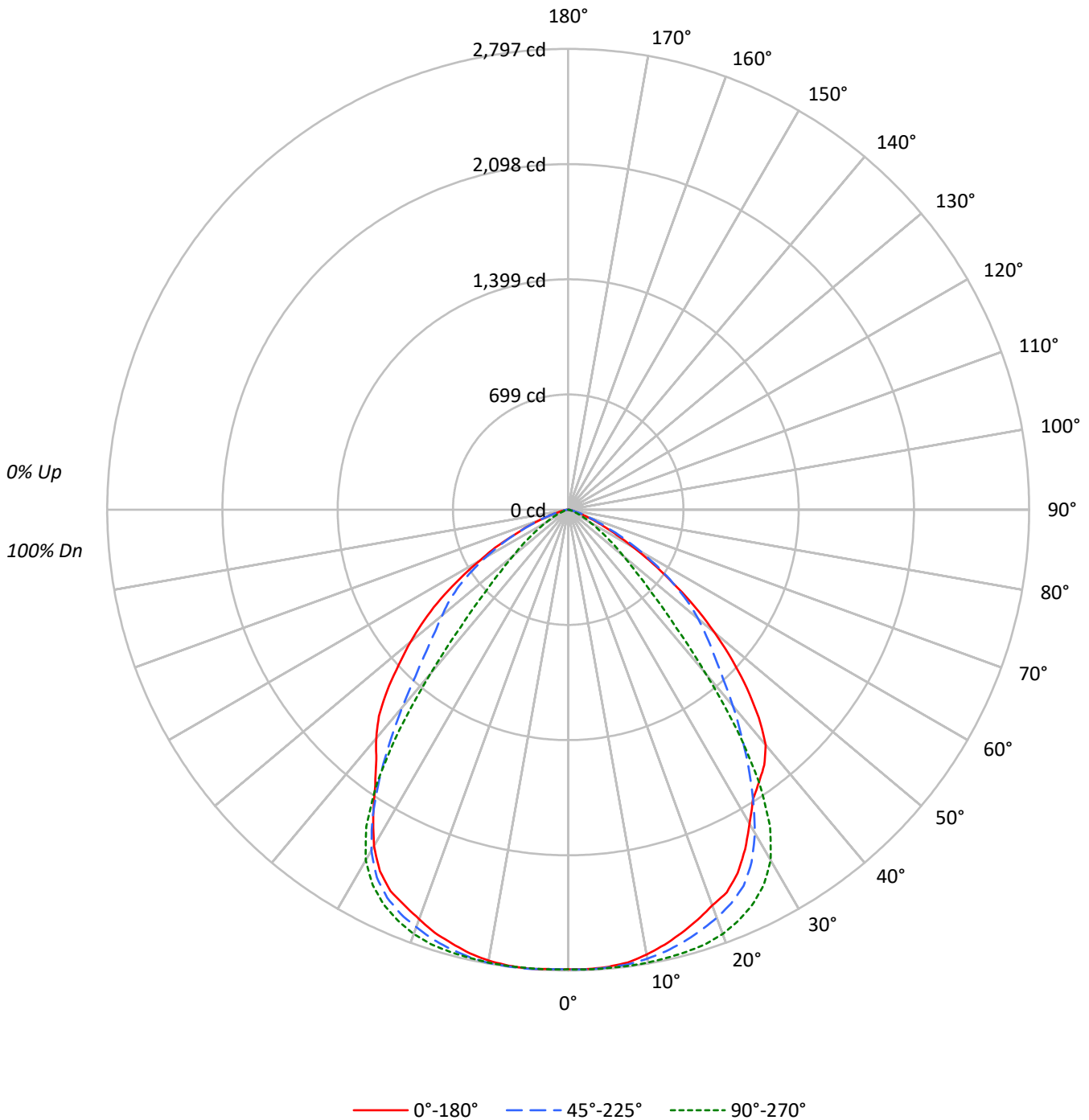
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	266.2	5.0
10°-20°	773.1	14.6
20°-30°	1173.5	22.2
30°-40°	1232.5	23.3
40°-50°	924.1	17.5
50°-60°	592.9	11.2
60°-70°	253.6	4.8
70°-80°	59.9	1.1
80°-90°	11.2	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°	2212.8	41.9
0°-40°	3445.4	65.2
0°-60°	4962.3	93.9
0°-90°	5287.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5287.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2790	2790	2790	2790	2790	
5°	2785	2790	2792	2797	2796	265
15°	2659	2715	2778	2760	2725	750
25°	2433	2518	2646	2598	2553	1112
35°	2018	1906	2020	1996	2041	1267
45°	1533	1253	720	1217	1554	1174
55°	776	776	268	808	945	704
65°	234	276	85	355	361	249
75°	36	42	12	72	70	52
85°	12	8	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°	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5
2.5°	2791.0	2794.0	2792.5	2792.5	2791.0	2792.5	2792.5	2795.5	2795.5	2792.5	2791.0
5°	2785.0	2788.0	2788.0	2785.0	2785.0	2792.5	2788.0	2791.0	2791.0	2789.5	2789.5
7.5°	2771.6	2771.6	2777.5	2773.1	2773.1	2777.5	2776.0	2779.0	2782.1	2783.6	2783.6
10°	2741.6	2744.6	2746.1	2746.1	2747.6	2752.1	2755.1	2761.1	2764.1	2767.1	2768.6
12.5°	2704.2	2708.7	2710.2	2708.7	2713.2	2719.1	2726.7	2734.1	2738.6	2744.6	2749.1
15°	2659.2	2659.2	2662.2	2666.8	2669.8	2678.7	2686.2	2695.2	2707.2	2714.7	2722.1
17.5°	2609.9	2612.9	2617.3	2617.3	2623.3	2638.3	2642.8	2656.3	2669.8	2677.2	2692.2
20°	2556.0	2558.9	2563.4	2566.4	2573.9	2585.9	2594.9	2606.9	2621.8	2635.3	2650.3
22.5°	2514.0	2508.0	2511.0	2514.0	2521.5	2532.0	2542.5	2557.4	2572.4	2585.9	2600.9
25°	2433.2	2434.7	2439.2	2442.1	2451.1	2460.1	2472.1	2490.1	2503.5	2518.5	2535.0
27.5°	2323.9	2325.4	2332.8	2332.8	2340.3	2355.3	2362.8	2377.8	2395.7	2410.7	2430.2
30°	2199.6	2202.6	2202.6	2208.6	2213.0	2220.5	2228.0	2243.0	2252.0	2265.5	2292.4
32.5°	2085.8	2088.8	2087.3	2085.8	2081.3	2079.8	2078.3	2081.3	2084.3	2088.8	2099.2
35°	2018.4	2010.9	2004.9	1994.5	1982.5	1967.5	1954.0	1936.1	1919.6	1906.1	1891.1
37.5°	1954.0	1952.5	1943.5	1928.5	1904.6	1877.7	1846.2	1807.3	1768.3	1726.4	1686.0
40°	1864.2	1859.7	1852.2	1831.2	1804.3	1771.3	1729.4	1681.5	1618.6	1554.2	1488.4
42.5°	1711.4	1712.9	1704.0	1687.5	1662.0	1630.6	1587.2	1534.8	1467.4	1391.0	1305.7
45°	1533.3	1533.3	1530.3	1516.8	1498.8	1473.4	1440.4	1397.0	1331.1	1253.3	1161.9
47.5°	1347.6	1349.1	1344.6	1341.6	1334.1	1317.7	1293.7	1260.8	1214.3	1139.5	1048.1
50°	1158.9	1158.9	1166.4	1164.9	1164.9	1158.9	1148.5	1129.0	1088.6	1028.7	943.3
52.5°	970.3	973.3	977.8	983.7	991.2	1003.2	991.2	982.2	956.8	910.4	837.0
55°	775.6	778.6	786.1	796.6	805.6	817.6	820.5	820.5	807.0	775.6	720.2
57.5°	609.4	604.9	610.9	619.9	631.9	643.9	652.8	663.3	661.8	640.9	595.9
60°	458.2	459.7	464.2	473.2	482.1	492.6	504.6	513.6	518.1	507.6	479.1
62.5°	333.9	333.9	339.9	348.9	353.4	368.4	375.8	380.3	384.8	383.3	365.3
65°	233.6	236.6	239.6	244.1	248.5	257.5	262.0	271.0	274.0	275.5	262.0
67.5°	164.7	160.2	163.2	166.2	170.7	176.7	185.7	185.7	190.1	190.1	181.2
70°	104.8	104.8	106.3	110.8	113.8	115.3	118.3	121.3	125.8	124.3	124.3
72.5°	70.4	68.9	70.4	71.9	73.4	77.9	77.9	79.4	82.4	83.9	77.9
75°	35.9	37.4	40.4	38.9	43.4	40.4	41.9	46.4	44.9	41.9	41.9
77.5°	29.9	29.9	29.9	28.5	31.4	31.4	29.9	32.9	31.4	31.4	29.9
80°	21.0	22.5	21.0	19.5	21.0	19.5	19.5	19.5	19.5	19.5	18.0
82.5°	16.5	13.5	15.0	13.5	15.0	15.0	13.5	12.0	12.0	13.5	12.0
85°	12.0	9.0	10.5	10.5	9.0	9.0	9.0	9.0	9.0	7.5	7.5
87.5°	7.5	4.5	4.5	4.5	6.0	6.0	6.0	4.5	6.0	6.0	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°	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5
2.5°	2794.0	2792.5	2795.5	2794.0	2794.0	2792.5	2794.0	2792.5	2795.5	2789.5	2791.0
5°	2794.0	2791.0	2792.5	2794.0	2795.5	2792.5	2792.5	2792.5	2795.5	2792.5	2794.0
7.5°	2788.0	2786.5	2791.0	2794.0	2792.5	2791.0	2794.0	2792.5	2795.5	2794.0	2797.0
10°	2776.0	2777.5	2780.5	2785.0	2786.5	2788.0	2791.0	2791.0	2795.5	2789.5	2792.5
12.5°	2758.1	2764.1	2771.6	2774.5	2780.5	2780.5	2783.6	2785.0	2788.0	2786.5	2791.0
15°	2735.6	2743.1	2752.1	2759.6	2767.1	2771.6	2776.0	2777.5	2782.1	2777.5	2779.0
17.5°	2708.7	2717.6	2731.1	2740.1	2752.1	2756.6	2762.6	2765.6	2770.1	2767.1	2768.6
20°	2671.2	2681.7	2696.7	2710.2	2717.6	2728.1	2735.6	2740.1	2743.1	2740.1	2741.6
22.5°	2618.8	2633.8	2653.3	2663.7	2678.7	2687.7	2689.2	2699.7	2707.2	2699.7	2702.7
25°	2557.4	2572.4	2587.4	2609.9	2623.3	2633.8	2644.3	2645.8	2653.3	2651.8	2650.3
27.5°	2455.6	2475.1	2500.5	2518.5	2536.5	2553.0	2564.9	2567.9	2575.4	2572.4	2573.9
30°	2316.4	2337.3	2361.3	2389.7	2415.2	2431.7	2446.6	2457.1	2464.6	2460.1	2458.6
32.5°	2118.7	2139.7	2165.2	2193.6	2223.6	2247.5	2265.5	2278.9	2287.9	2284.9	2277.4
35°	1892.6	1898.6	1915.1	1937.6	1963.0	1988.5	2004.9	2019.9	2030.4	2033.4	2033.4
37.5°	1660.5	1641.1	1629.1	1629.1	1644.1	1654.5	1669.5	1678.5	1695.0	1701.0	1705.5
40°	1435.9	1391.0	1349.1	1317.7	1296.7	1295.2	1295.2	1299.7	1314.7	1334.1	1352.1
42.5°	1235.3	1163.4	1099.0	1040.6	998.7	974.8	964.3	965.8	977.8	995.7	1025.7
45°	1075.1	985.2	904.4	834.0	777.1	739.7	721.7	720.2	729.2	750.1	783.1
47.5°	950.8	855.0	763.6	682.8	621.4	581.0	560.0	554.0	560.0	579.5	618.4
50°	847.5	748.7	654.3	570.5	504.6	462.7	443.2	435.7	443.2	459.7	498.6
52.5°	751.7	649.8	561.5	480.6	410.3	374.3	353.4	348.9	353.4	372.8	404.3
55°	640.9	554.0	467.2	386.3	324.9	289.0	272.5	268.0	272.5	290.5	323.4
57.5°	531.6	456.7	380.3	306.9	254.6	223.1	208.1	202.1	212.6	224.6	263.5
60°	429.7	369.9	305.4	241.1	197.7	169.2	157.2	155.7	158.7	173.7	200.6
62.5°	336.9	287.5	236.6	184.2	148.2	136.3	121.3	119.8	122.8	131.7	152.7
65°	242.6	211.1	172.2	134.8	106.3	89.8	83.9	85.4	88.3	94.3	113.8
67.5°	169.2	146.7	119.8	94.3	73.4	65.9	59.9	58.4	59.9	70.4	80.9
70°	113.8	100.3	80.9	71.9	50.9	40.4	41.9	37.4	43.4	43.4	52.4
72.5°	74.9	65.9	53.9	41.9	35.9	28.5	28.5	27.0	29.9	31.4	38.9
75°	38.9	29.9	29.9	21.0	15.0	7.5	13.5	12.0	10.5	12.0	15.0
77.5°	27.0	22.5	21.0	16.5	15.0	12.0	12.0	12.0	12.0	13.5	15.0
80°	16.5	16.5	12.0	10.5	9.0	7.5	9.0	9.0	9.0	9.0	10.5
82.5°	10.5	9.0	9.0	7.5	7.5	6.0	6.0	6.0	6.0	6.0	9.0
85°	9.0	6.0	6.0	4.5	6.0	10.5	4.5	6.0	6.0	6.0	4.5
87.5°	3.0	4.5	4.5	4.5	3.0	1.5	3.0	4.5	4.5	7.5	6.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5	2789.5
2.5°	2794.0	2795.5	2795.5	2794.0	2794.0	2791.0	2797.0	2792.5	2794.0	2800.0	2795.5
5°	2797.0	2798.5	2798.5	2797.0	2797.0	2797.0	2798.5	2798.5	2797.0	2795.5	2798.5
7.5°	2803.0	2801.5	2801.5	2798.5	2798.5	2795.5	2798.5	2794.0	2797.0	2794.0	2798.5
10°	2795.5	2797.0	2795.5	2794.0	2794.0	2792.5	2792.5	2788.0	2789.5	2785.0	2788.0
12.5°	2791.0	2789.5	2789.5	2786.5	2783.6	2780.5	2779.0	2774.5	2774.5	2764.1	2768.6
15°	2779.0	2780.5	2776.0	2770.1	2767.1	2759.6	2756.6	2750.6	2744.6	2737.1	2738.6
17.5°	2768.6	2764.1	2758.1	2752.1	2740.1	2734.1	2728.1	2719.1	2716.1	2707.2	2704.2
20°	2737.1	2734.1	2726.7	2716.1	2708.7	2695.2	2689.2	2680.2	2672.7	2663.7	2659.2
22.5°	2696.7	2693.7	2684.7	2674.2	2662.2	2656.3	2650.3	2633.8	2626.3	2617.3	2615.8
25°	2645.8	2641.3	2632.3	2620.3	2614.3	2597.9	2591.9	2579.9	2576.9	2567.9	2566.4
27.5°	2567.9	2561.9	2551.5	2536.5	2526.0	2515.5	2509.5	2500.5	2497.6	2488.6	2487.1
30°	2451.1	2443.6	2422.7	2416.7	2398.7	2388.2	2388.2	2376.3	2377.8	2371.8	2371.8
32.5°	2267.0	2255.0	2238.5	2226.5	2214.5	2208.6	2208.6	2204.1	2207.1	2207.1	2210.1
35°	2022.9	2006.4	1997.4	1990.0	1990.0	1995.9	2013.9	2018.4	2027.4	2034.9	2040.9
37.5°	1709.9	1708.5	1718.9	1727.9	1750.4	1775.8	1807.3	1834.2	1859.7	1877.7	1895.6
40°	1371.6	1409.0	1438.9	1480.9	1515.3	1564.7	1621.6	1668.0	1711.4	1742.9	1775.8
42.5°	1070.6	1118.5	1181.4	1242.8	1304.2	1371.6	1446.4	1510.8	1567.7	1611.1	1645.6
45°	834.0	899.9	976.3	1054.1	1133.5	1217.3	1295.2	1361.1	1421.0	1465.9	1500.3
47.5°	672.3	744.2	831.0	916.4	1006.2	1094.5	1181.4	1238.3	1287.7	1323.6	1355.1
50°	555.5	631.9	723.2	820.5	910.4	998.7	1073.6	1129.0	1169.4	1200.9	1220.3
52.5°	464.2	545.0	642.4	739.7	829.5	910.4	977.8	1019.7	1052.6	1075.1	1093.0
55°	383.3	461.2	552.5	643.9	732.2	808.5	863.9	895.4	920.8	934.3	944.8
57.5°	313.0	384.8	468.7	552.5	628.9	691.8	735.2	766.6	778.6	789.1	787.6
60°	245.6	313.0	389.3	461.2	527.1	578.0	609.4	627.4	636.4	640.9	637.9
62.5°	193.2	254.6	313.0	375.8	423.7	467.2	497.1	497.1	501.6	503.1	507.6
65°	143.7	190.1	241.1	287.5	326.4	354.9	371.4	375.8	381.8	380.3	377.3
67.5°	106.3	140.8	178.2	212.6	239.6	257.5	269.5	280.0	278.5	275.5	274.0
70°	73.4	95.8	128.8	149.7	169.2	187.2	190.1	191.6	193.2	194.7	191.6
72.5°	50.9	67.4	85.4	103.3	115.3	122.8	130.3	131.7	131.7	131.7	130.3
75°	25.5	34.4	50.9	58.4	68.9	71.9	77.9	77.9	82.4	76.4	74.9
77.5°	22.5	27.0	35.9	41.9	46.4	50.9	52.4	56.9	55.4	52.4	53.9
80°	13.5	16.5	22.5	25.5	31.4	32.9	34.4	35.9	34.4	35.9	35.9
82.5°	10.5	12.0	15.0	15.0	19.5	19.5	21.0	21.0	22.5	22.5	22.5
85°	6.0	10.5	9.0	18.0	12.0	12.0	15.0	18.0	15.0	15.0	18.0
87.5°	6.0	6.0	4.5	6.0	6.0	6.0	7.5	9.0	9.0	10.5	9.0
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: P249281

CATALOG NUMBER: LSR8B70D010 EC8B709727 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2789.5	2789.5	2789.5	2789.5
2.5°	2794.0	2797.0	2792.5	2791.0
5°	2798.5	2798.5	2795.5	2795.5
7.5°	2798.5	2798.5	2794.0	2791.0
10°	2786.5	2786.5	2782.1	2779.0
12.5°	2764.1	2764.1	2762.6	2758.1
15°	2735.6	2735.6	2729.6	2725.2
17.5°	2696.7	2699.7	2692.2	2692.2
20°	2654.8	2653.3	2647.3	2644.3
22.5°	2611.4	2608.4	2606.9	2597.9
25°	2564.9	2561.9	2557.4	2553.0
27.5°	2485.6	2484.1	2479.6	2473.6
30°	2364.3	2362.8	2356.8	2356.8
32.5°	2207.1	2205.6	2199.6	2201.1
35°	2043.8	2049.9	2046.9	2040.9
37.5°	1907.6	1912.1	1915.1	1912.1
40°	1793.8	1807.3	1808.8	1811.8
42.5°	1672.5	1690.5	1696.5	1699.5
45°	1527.3	1543.7	1557.2	1554.2
47.5°	1379.0	1391.0	1403.0	1394.0
50°	1236.8	1244.3	1248.8	1248.8
52.5°	1102.0	1102.0	1100.5	1102.0
55°	947.8	947.8	941.8	944.8
57.5°	786.1	789.1	784.6	777.1
60°	636.4	628.9	625.9	621.4
62.5°	495.6	495.6	485.2	498.6
65°	371.4	366.8	362.3	360.8
67.5°	269.5	268.0	263.5	262.0
70°	190.1	184.2	182.7	179.7
72.5°	127.3	127.3	124.3	124.3
75°	77.9	70.4	68.9	70.4
77.5°	53.9	52.4	52.4	50.9
80°	35.9	34.4	37.4	32.9
82.5°	22.5	24.0	22.5	24.0
85°	15.0	18.0	16.5	16.5
87.5°	9.0	9.0	9.0	9.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)