

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: P248536

Luminaire Tested: **LSR8B90D010 EC8B909730 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248536
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B90D010 EC8B909730 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7097.0 lumens
Efficiency: N/A
Efficacy: 82.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

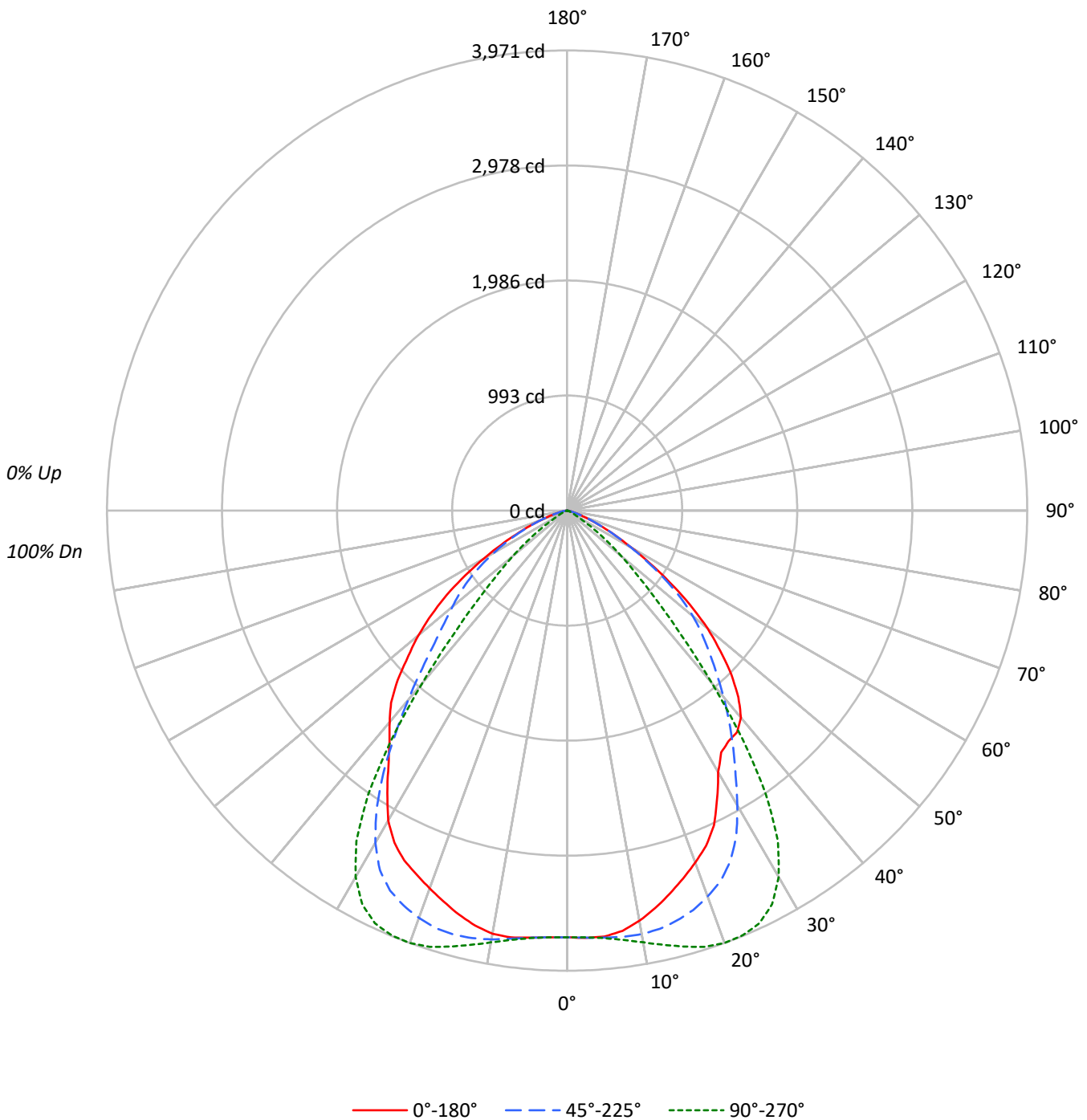
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	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°	354.1	5.0
10°-20°	1048.9	14.8
20°-30°	1600.1	22.5
30°-40°	1669.8	23.5
40°-50°	1254.2	17.7
50°-60°	771.7	10.9
60°-70°	314.1	4.4
70°-80°	74.0	1.0
80°-90°	10.2	0.1
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°	3003.1	42.3
0°-40°	4672.9	65.8
0°-60°	6698.8	94.4
0°-90°	7097.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7097.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3682	3682	3682	3682	3682	
5°	3690	3699	3703	3699	3699	349
15°	3422	3662	3895	3787	3609	964
25°	2998	3334	3928	3617	3330	1363
35°	2429	2498	2992	2765	2687	1534
45°	2005	1735	1083	1616	2068	1530
55°	1083	1028	283	1028	1268	973
65°	338	342	43	459	487	353
75°	59	59	8	104	108	71
85°	6	6	2	14	18	8
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°	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7
2.5°	3691.5	3685.6	3691.5	3691.5	3693.4	3689.5	3691.5	3693.4	3689.5	3689.5	3689.5
5°	3689.5	3685.6	3689.5	3687.6	3691.5	3691.5	3695.4	3695.4	3699.3	3699.3	3705.1
7.5°	3658.2	3650.4	3658.2	3664.1	3668.0	3675.8	3685.6	3693.4	3701.2	3709.1	3718.8
10°	3593.7	3593.7	3599.6	3611.3	3623.1	3636.7	3654.3	3673.9	3693.4	3711.0	3728.6
12.5°	3513.6	3507.8	3519.5	3535.1	3552.7	3574.2	3601.6	3630.9	3662.2	3697.3	3724.7
15°	3421.8	3415.9	3429.6	3445.2	3466.7	3498.0	3531.2	3570.3	3615.3	3662.2	3707.1
17.5°	3328.0	3326.0	3339.7	3361.2	3378.8	3412.0	3455.0	3501.9	3552.7	3615.3	3673.9
20°	3232.3	3230.3	3244.0	3261.6	3285.0	3316.3	3359.3	3414.0	3474.5	3544.9	3613.3
22.5°	3132.6	3134.5	3146.2	3165.8	3185.3	3218.5	3263.5	3318.2	3384.6	3460.9	3537.1
25°	2997.7	2988.0	3003.6	3023.2	3056.3	3083.7	3126.7	3185.3	3253.7	3333.9	3423.8
27.5°	2802.3	2800.3	2814.1	2831.6	2860.9	2894.1	2941.1	3001.6	3073.9	3161.9	3249.8
30°	2606.9	2610.8	2616.7	2634.3	2653.8	2687.0	2733.9	2784.7	2853.1	2937.1	3030.9
32.5°	2474.0	2474.0	2481.8	2493.5	2507.2	2524.8	2558.0	2595.2	2647.9	2706.6	2774.9
35°	2429.0	2421.2	2429.0	2431.0	2433.0	2436.9	2442.7	2454.5	2472.0	2497.5	2522.9
37.5°	2409.5	2403.7	2403.7	2395.9	2386.1	2374.3	2358.7	2341.1	2321.6	2296.2	2276.7
40°	2333.3	2329.4	2325.5	2317.7	2296.2	2272.7	2247.3	2206.3	2161.3	2098.8	2036.3
42.5°	2186.8	2182.8	2180.9	2165.2	2145.7	2118.3	2089.0	2046.0	1989.4	1909.2	1819.3
45°	2005.0	1997.2	1991.3	1977.7	1963.9	1940.5	1913.2	1874.0	1817.4	1735.3	1627.8
47.5°	1794.0	1790.0	1788.1	1782.2	1768.6	1754.8	1737.3	1706.0	1655.2	1577.0	1465.6
50°	1580.9	1573.1	1577.0	1575.1	1569.2	1559.5	1547.7	1526.2	1487.1	1416.8	1315.2
52.5°	1336.6	1336.6	1334.7	1340.6	1342.5	1340.6	1342.5	1319.1	1285.9	1233.1	1147.1
55°	1082.6	1082.6	1088.5	1096.3	1104.1	1106.1	1104.1	1094.4	1070.9	1027.9	951.7
57.5°	844.2	840.3	852.0	863.7	871.6	879.4	873.5	865.7	852.0	816.8	758.2
60°	642.9	642.9	650.7	658.6	666.4	674.2	672.2	670.3	658.6	635.1	588.2
62.5°	472.9	474.9	474.9	480.7	488.5	496.4	502.2	496.4	490.5	474.9	443.6
65°	338.1	336.1	338.1	343.9	349.8	357.6	361.5	359.6	353.7	342.0	318.5
67.5°	226.7	224.7	232.5	234.5	238.4	246.3	244.3	246.3	244.3	234.5	215.0
70°	148.5	144.6	148.5	146.6	152.4	154.4	158.3	160.2	158.3	152.4	146.6
72.5°	91.9	89.9	91.9	93.8	95.8	97.7	101.6	101.6	99.6	95.8	87.9
75°	58.6	52.7	54.7	50.8	54.7	54.7	58.6	60.6	58.6	58.6	54.7
77.5°	35.2	35.2	35.2	35.2	35.2	35.2	35.2	37.2	39.1	35.2	33.2
80°	17.6	17.6	19.6	19.6	19.6	21.5	19.6	19.6	19.6	21.5	15.6
82.5°	13.7	11.7	11.7	11.7	13.7	11.7	11.7	11.7	11.7	11.7	11.7
85°	5.9	7.8	5.9	3.9	5.9	5.9	7.8	5.9	5.9	5.9	7.8
87.5°	2.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	3.9	0.0
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°	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7
2.5°	3691.5	3687.6	3687.6	3685.6	3689.5	3685.6	3687.6	3685.6	3685.6	3689.5	3685.6
5°	3705.1	3707.1	3703.2	3701.2	3707.1	3707.1	3707.1	3703.2	3703.2	3705.1	3703.2
7.5°	3724.7	3728.6	3730.5	3732.5	3736.4	3738.4	3738.4	3736.4	3734.5	3740.3	3732.5
10°	3746.2	3752.1	3763.8	3769.7	3779.4	3779.4	3783.3	3783.3	3779.4	3783.3	3781.4
12.5°	3738.4	3773.5	3793.1	3806.8	3820.4	3832.1	3836.1	3838.0	3836.1	3843.9	3836.1
15°	3752.1	3781.4	3812.6	3836.1	3861.5	3875.1	3879.1	3894.7	3898.6	3900.6	3888.9
17.5°	3730.5	3783.3	3816.5	3851.7	3888.9	3914.2	3937.7	3947.5	3949.4	3953.3	3937.7
20°	3681.7	3740.3	3791.1	3842.0	3884.9	3924.0	3943.6	3970.9	3963.1	3978.8	3957.2
22.5°	3615.3	3681.7	3746.2	3812.6	3857.6	3904.5	3945.5	3965.0	3974.8	3974.8	3951.4
25°	3509.7	3587.9	3658.2	3726.6	3795.0	3851.7	3898.6	3927.9	3933.8	3931.8	3904.5
27.5°	3345.6	3429.6	3511.7	3589.9	3673.9	3740.3	3795.0	3830.2	3840.0	3840.0	3810.7
30°	3118.9	3208.8	3288.9	3382.7	3468.7	3543.0	3619.2	3650.4	3668.0	3668.0	3634.8
32.5°	2849.2	2925.4	2999.7	3091.5	3185.3	3269.4	3341.7	3384.6	3406.2	3404.2	3374.9
35°	2556.1	2593.2	2649.9	2718.3	2802.3	2880.5	2950.8	2991.9	3029.0	3027.0	2999.7
37.5°	2262.9	2253.2	2259.1	2284.4	2337.2	2391.9	2446.6	2485.8	2517.0	2530.7	2524.8
40°	1975.7	1924.9	1876.0	1858.5	1862.3	1881.9	1911.2	1940.5	1975.7	1993.3	2001.1
42.5°	1717.7	1631.8	1545.7	1481.3	1444.1	1432.4	1446.1	1455.8	1477.4	1502.8	1528.2
45°	1510.6	1395.3	1281.9	1182.3	1119.8	1082.6	1074.8	1082.6	1094.4	1119.8	1153.0
47.5°	1340.6	1205.7	1078.7	967.3	875.5	826.6	813.0	809.0	820.8	844.2	889.1
50°	1190.1	1055.2	914.6	785.6	689.8	635.1	615.6	607.7	621.4	639.0	680.0
52.5°	1025.9	893.1	748.5	623.4	523.7	467.1	445.5	433.8	441.6	465.1	506.1
55°	848.1	725.0	594.1	465.1	369.3	316.6	291.2	283.4	291.2	316.6	357.6
57.5°	670.3	566.7	457.3	336.1	250.1	197.4	171.9	164.2	185.7	195.4	238.4
60°	523.7	439.7	345.9	246.3	171.9	130.9	105.5	99.6	109.4	127.0	162.2
62.5°	392.8	340.0	265.8	175.9	127.0	84.0	70.3	64.5	70.3	84.0	111.4
65°	285.3	244.3	185.7	129.0	86.0	62.5	46.9	43.0	48.9	58.6	82.1
67.5°	195.4	164.2	129.0	89.9	58.6	39.1	33.2	33.2	35.2	43.0	60.6
70°	127.0	107.5	82.1	58.6	39.1	29.3	25.4	21.5	25.4	31.3	41.0
72.5°	80.1	68.4	52.7	41.0	29.3	21.5	17.6	15.6	19.6	23.4	31.3
75°	48.9	37.2	27.4	21.5	15.6	15.6	15.6	7.8	9.8	15.6	19.6
77.5°	29.3	25.4	21.5	17.6	13.7	7.8	7.8	7.8	9.8	11.7	17.6
80°	15.6	13.7	9.8	9.8	7.8	5.9	7.8	5.9	3.9	9.8	11.7
82.5°	9.8	7.8	7.8	7.8	9.8	3.9	5.9	3.9	5.9	7.8	5.9
85°	5.9	5.9	5.9	3.9	9.8	3.9	3.9	2.0	2.0	3.9	3.9
87.5°	0.0	2.0	2.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0
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°	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7	3681.7
2.5°	3687.6	3685.6	3687.6	3685.6	3685.6	3685.6	3687.6	3687.6	3685.6	3685.6	3689.5
5°	3703.2	3703.2	3703.2	3701.2	3699.3	3699.3	3703.2	3703.2	3697.3	3703.2	3703.2
7.5°	3736.4	3730.5	3736.4	3728.6	3724.7	3726.6	3728.6	3724.7	3720.8	3722.7	3722.7
10°	3779.4	3773.5	3773.5	3767.7	3761.8	3757.9	3754.0	3744.2	3734.5	3732.5	3724.7
12.5°	3830.2	3820.4	3814.6	3802.8	3793.1	3779.4	3767.7	3752.1	3732.5	3718.8	3705.1
15°	3881.0	3865.4	3851.7	3832.1	3810.7	3787.2	3761.8	3736.4	3705.1	3677.8	3654.3
17.5°	3922.0	3900.6	3875.1	3843.9	3812.6	3777.4	3740.3	3703.2	3658.2	3623.1	3595.7
20°	3935.7	3904.5	3871.3	3830.2	3789.2	3740.3	3693.4	3644.6	3593.7	3556.6	3525.4
22.5°	3918.2	3881.0	3840.0	3797.0	3742.3	3689.5	3634.8	3578.1	3533.2	3482.4	3453.1
25°	3869.3	3824.4	3779.4	3728.6	3675.8	3617.2	3558.6	3500.0	3445.2	3417.9	3380.8
27.5°	3769.7	3720.8	3671.9	3619.2	3558.6	3500.0	3439.4	3382.7	3335.8	3298.7	3277.2
30°	3593.7	3537.1	3480.4	3423.8	3371.0	3310.4	3253.7	3206.8	3159.9	3130.6	3109.1
32.5°	3324.1	3273.3	3216.6	3161.9	3113.0	3062.2	3015.3	2974.3	2941.1	2921.5	2905.9
35°	2960.6	2909.8	2866.8	2827.7	2786.7	2765.2	2735.9	2712.4	2698.7	2690.9	2689.0
37.5°	2503.3	2474.0	2460.3	2452.5	2444.7	2438.8	2442.7	2452.5	2460.3	2474.0	2489.6
40°	2014.8	2040.2	2048.0	2075.3	2100.7	2134.0	2171.1	2214.1	2249.3	2294.2	2325.5
42.5°	1569.2	1616.1	1670.8	1729.4	1792.0	1852.6	1926.8	1995.2	2057.8	2114.4	2163.3
45°	1205.7	1278.0	1360.1	1444.1	1528.2	1616.1	1706.0	1790.0	1864.3	1924.9	1975.7
47.5°	940.0	1020.1	1125.6	1229.2	1330.8	1434.4	1534.0	1622.0	1684.5	1743.1	1788.1
50°	744.5	836.4	951.7	1070.9	1182.3	1291.7	1397.2	1479.3	1541.9	1588.8	1622.0
52.5°	576.5	685.9	803.2	928.2	1047.5	1166.7	1264.3	1340.6	1391.4	1432.4	1457.8
55°	429.9	537.4	662.5	791.4	912.6	1027.9	1119.8	1186.2	1231.2	1254.6	1268.3
57.5°	310.7	408.4	533.5	662.5	771.9	881.3	955.6	1016.2	1041.6	1055.2	1061.1
60°	226.7	316.6	428.0	539.4	642.9	730.9	795.4	836.4	855.9	863.7	861.8
62.5°	166.1	244.3	340.0	433.8	517.8	590.1	641.0	668.3	678.1	682.0	676.2
65°	127.0	187.6	269.7	342.0	406.5	459.2	496.4	514.0	519.8	517.8	514.0
67.5°	93.8	140.7	201.3	256.0	302.9	343.9	363.5	379.1	383.0	377.2	371.3
70°	66.5	103.6	146.6	183.7	218.9	242.3	263.8	265.8	265.8	263.8	259.9
72.5°	46.9	72.3	99.6	125.1	146.6	164.2	171.9	177.8	175.9	173.9	170.0
75°	31.3	44.9	72.3	78.2	97.7	103.6	111.4	111.4	113.3	107.5	107.5
77.5°	19.6	31.3	43.0	50.8	58.6	66.5	70.3	70.3	72.3	70.3	70.3
80°	11.7	19.6	23.4	35.2	35.2	41.0	43.0	44.9	41.0	46.9	41.0
82.5°	7.8	11.7	17.6	17.6	21.5	25.4	25.4	27.4	27.4	25.4	25.4
85°	5.9	7.8	9.8	11.7	11.7	13.7	11.7	11.7	13.7	15.6	13.7
87.5°	2.0	3.9	2.0	3.9	3.9	7.8	5.9	5.9	5.9	7.8	7.8
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: P248536

CATALOG NUMBER: LSR8B90D010 EC8B909730 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3681.7	3681.7	3681.7	3681.7
2.5°	3685.6	3687.6	3685.6	3685.6
5°	3703.2	3701.2	3703.2	3699.3
7.5°	3716.9	3716.9	3714.9	3714.9
10°	3716.9	3709.1	3709.1	3709.1
12.5°	3687.6	3677.8	3671.9	3668.0
15°	3636.7	3619.2	3611.3	3609.4
17.5°	3570.3	3554.7	3544.9	3539.0
20°	3494.1	3478.5	3466.7	3468.7
22.5°	3427.6	3410.1	3402.2	3398.3
25°	3361.2	3339.7	3333.9	3329.9
27.5°	3253.7	3242.0	3236.1	3230.3
30°	3089.6	3083.7	3073.9	3087.6
32.5°	2900.0	2890.2	2882.4	2888.3
35°	2690.9	2685.0	2690.9	2687.0
37.5°	2499.4	2505.3	2513.1	2517.0
40°	2349.0	2370.4	2378.3	2382.1
42.5°	2198.5	2223.9	2239.5	2249.3
45°	2012.8	2038.2	2055.8	2067.6
47.5°	1821.3	1842.8	1860.4	1858.5
50°	1647.4	1659.1	1666.9	1674.7
52.5°	1471.5	1471.5	1473.4	1473.4
55°	1272.2	1268.3	1266.3	1268.3
57.5°	1053.3	1049.4	1047.5	1041.6
60°	854.0	842.3	834.4	834.4
62.5°	668.3	654.6	648.8	646.9
65°	502.2	500.2	488.5	486.6
67.5°	363.5	355.7	347.9	349.8
70°	256.0	244.3	244.3	240.4
72.5°	166.1	160.2	158.3	158.3
75°	103.6	103.6	99.6	107.5
77.5°	68.4	68.4	66.5	68.4
80°	41.0	41.0	41.0	39.1
82.5°	25.4	27.4	25.4	25.4
85°	13.7	15.6	11.7	17.6
87.5°	7.8	9.8	7.8	9.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)