

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: P249184

Luminaire Tested: **LSR8B90D010 EC8B909730 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249184
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: LSR8B90D010 EC8B909730 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: 7042.0 lumens
Efficiency: N/A
Efficacy: 81.8 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

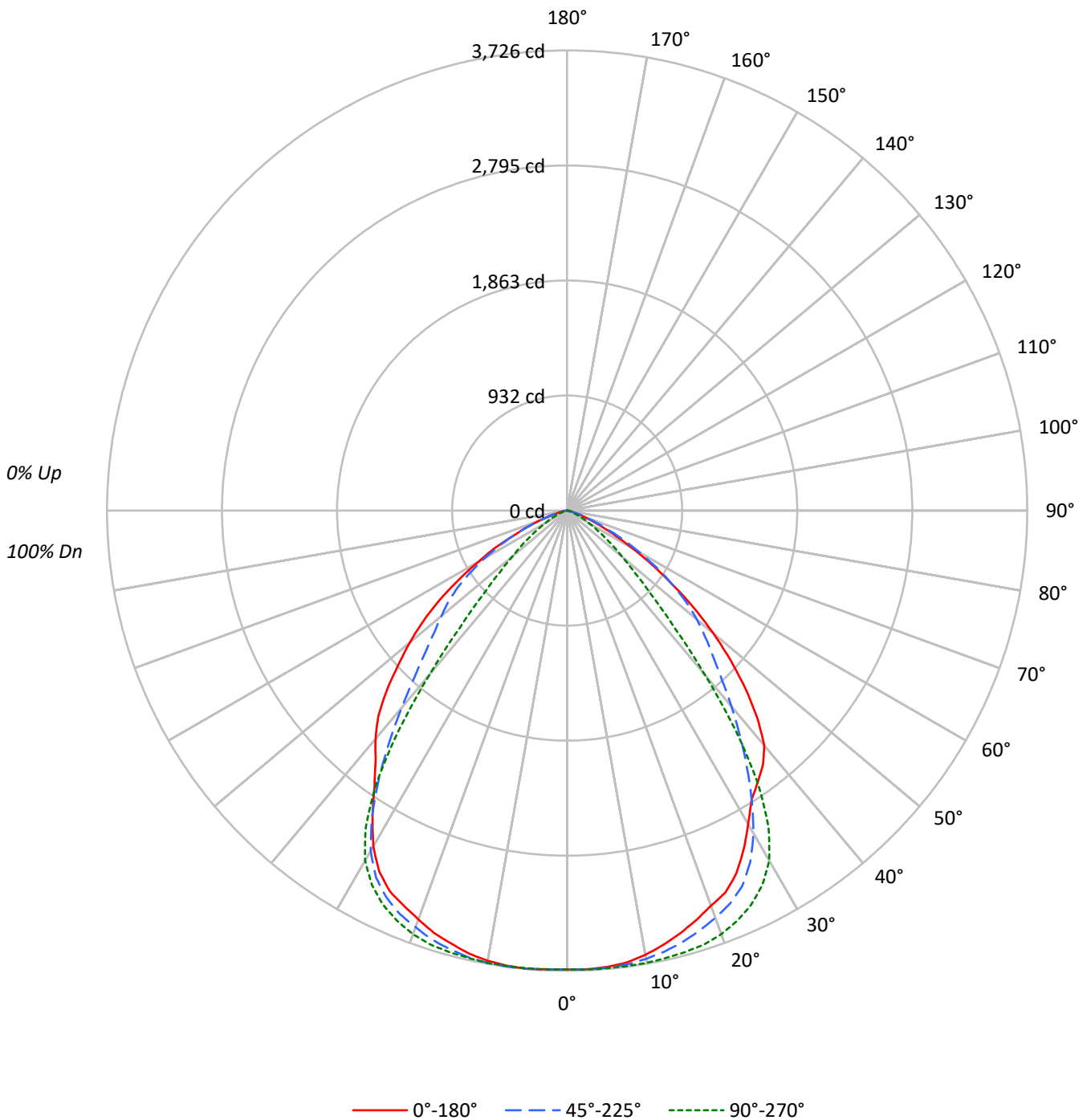
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	354.6	5.0
10°-20°	1029.8	14.6
20°-30°	1563.0	22.2
30°-40°	1641.6	23.3
40°-50°	1230.8	17.5
50°-60°	789.7	11.2
60°-70°	337.8	4.8
70°-80°	79.8	1.1
80°-90°	14.9	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°	2947.4	41.9
0°-40°	4589.0	65.2
0°-60°	6609.5	93.9
0°-90°	7042.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7042.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3716	3716	3716	3716	3716	
5°	3710	3716	3720	3726	3724	352
15°	3542	3616	3700	3676	3630	999
25°	3241	3354	3524	3460	3400	1481
35°	2688	2539	2690	2658	2718	1687
45°	2042	1669	959	1621	2070	1564
55°	1033	1033	357	1077	1258	937
65°	311	367	114	473	481	332
75°	48	56	16	96	94	70
85°	16	10	8	16	22	17
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°	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5
2.5°	3717.5	3721.5	3719.5	3719.5	3717.5	3719.5	3719.5	3723.5	3723.5	3719.5	3717.5
5°	3709.5	3713.5	3713.5	3709.5	3709.5	3719.5	3713.5	3717.5	3717.5	3715.5	3715.5
7.5°	3691.6	3691.6	3699.5	3693.6	3693.6	3699.5	3697.5	3701.5	3705.5	3707.5	3707.5
10°	3651.7	3655.7	3657.7	3657.7	3659.7	3665.6	3669.6	3677.6	3681.6	3685.6	3687.6
12.5°	3601.8	3607.8	3609.8	3607.8	3613.8	3621.8	3631.8	3641.7	3647.7	3655.7	3661.7
15°	3542.0	3542.0	3546.0	3552.0	3556.0	3567.9	3577.9	3589.8	3605.8	3615.8	3625.8
17.5°	3476.2	3480.2	3486.1	3486.1	3494.1	3514.1	3520.1	3538.0	3556.0	3565.9	3585.9
20°	3404.4	3408.4	3414.4	3418.4	3428.3	3444.3	3456.2	3472.2	3492.1	3510.1	3530.0
22.5°	3348.5	3340.6	3344.5	3348.5	3358.5	3372.5	3386.4	3406.4	3426.3	3444.3	3464.2
25°	3240.8	3242.8	3248.8	3252.8	3264.8	3276.7	3292.7	3316.6	3334.6	3354.5	3376.4
27.5°	3095.3	3097.3	3107.2	3107.2	3117.2	3137.1	3147.1	3167.0	3191.0	3210.9	3236.9
30°	2929.7	2933.7	2933.7	2941.7	2947.6	2957.7	2967.6	2987.6	2999.5	3017.5	3053.4
32.5°	2778.2	2782.1	2780.1	2778.2	2772.2	2770.2	2768.2	2772.2	2776.2	2782.1	2796.1
35°	2688.4	2678.4	2670.5	2656.5	2640.6	2620.6	2602.6	2578.7	2556.8	2538.8	2518.9
37.5°	2602.6	2600.6	2588.7	2568.7	2536.8	2500.9	2459.1	2407.2	2355.3	2299.5	2245.7
40°	2483.0	2477.0	2467.0	2439.1	2403.2	2359.3	2303.5	2239.7	2155.9	2070.1	1982.4
42.5°	2279.5	2281.5	2269.6	2247.6	2213.8	2171.8	2114.0	2044.2	1954.5	1852.7	1739.1
45°	2042.2	2042.2	2038.2	2020.3	1996.4	1962.4	1918.6	1860.7	1773.0	1669.3	1547.6
47.5°	1794.9	1796.9	1790.9	1787.0	1777.0	1755.1	1723.1	1679.3	1617.4	1517.7	1396.0
50°	1543.7	1543.7	1553.6	1551.6	1551.6	1543.7	1529.7	1503.7	1449.9	1370.1	1256.5
52.5°	1292.3	1296.3	1302.3	1310.3	1320.3	1336.2	1320.3	1308.3	1274.4	1212.6	1114.9
55°	1033.1	1037.1	1047.0	1061.0	1073.0	1088.9	1092.9	1092.9	1074.9	1033.1	959.3
57.5°	811.7	805.7	813.7	825.7	841.6	857.6	869.5	883.5	881.5	853.6	793.8
60°	610.3	612.3	618.2	630.2	642.2	656.1	672.1	684.1	690.1	676.1	638.2
62.5°	444.8	444.8	452.7	464.7	470.7	490.6	500.6	506.6	512.5	510.5	486.6
65°	311.1	315.1	319.1	325.1	331.1	343.0	349.0	361.0	365.0	367.0	349.0
67.5°	219.4	213.4	217.4	221.4	227.4	235.4	247.3	247.3	253.3	253.3	241.3
70°	139.6	139.6	141.6	147.6	151.6	153.6	157.6	161.5	167.5	165.5	165.5
72.5°	93.7	91.7	93.7	95.7	97.7	103.7	103.7	105.7	109.7	111.7	103.7
75°	47.9	49.9	53.8	51.9	57.8	53.8	55.8	61.8	59.8	55.8	55.8
77.5°	39.9	39.9	39.9	37.9	41.9	41.9	39.9	43.9	41.9	41.9	39.9
80°	27.9	29.9	27.9	25.9	27.9	25.9	25.9	25.9	25.9	25.9	23.9
82.5°	22.0	18.0	20.0	18.0	20.0	20.0	18.0	16.0	16.0	18.0	16.0
85°	16.0	12.0	14.0	14.0	12.0	12.0	12.0	12.0	12.0	10.0	10.0
87.5°	10.0	6.0	6.0	6.0	8.0	8.0	8.0	6.0	8.0	8.0	4.0
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: P249184

CATALOG NUMBER: LSR8B90D010 EC8B909730 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5
2.5°	3721.5	3719.5	3723.5	3721.5	3721.5	3719.5	3721.5	3719.5	3723.5	3715.5	3717.5
5°	3721.5	3717.5	3719.5	3721.5	3723.5	3719.5	3719.5	3719.5	3723.5	3719.5	3721.5
7.5°	3713.5	3711.5	3717.5	3721.5	3719.5	3717.5	3721.5	3719.5	3723.5	3721.5	3725.5
10°	3697.5	3699.5	3703.5	3709.5	3711.5	3713.5	3717.5	3717.5	3723.5	3715.5	3719.5
12.5°	3673.6	3681.6	3691.6	3695.5	3703.5	3703.5	3707.5	3709.5	3713.5	3711.5	3717.5
15°	3643.7	3653.7	3665.6	3675.6	3685.6	3691.6	3697.5	3699.5	3705.5	3699.5	3701.5
17.5°	3607.8	3619.8	3637.7	3649.7	3665.6	3671.6	3679.6	3683.6	3689.6	3685.6	3687.6
20°	3557.9	3571.9	3591.8	3609.8	3619.8	3633.7	3643.7	3649.7	3653.7	3649.7	3651.7
22.5°	3488.1	3508.1	3534.0	3548.0	3567.9	3579.9	3581.9	3595.8	3605.8	3595.8	3599.8
25°	3406.4	3426.3	3446.3	3476.2	3494.1	3508.1	3522.1	3524.1	3534.0	3532.0	3530.0
27.5°	3270.7	3296.7	3330.6	3354.5	3378.4	3400.4	3416.4	3420.3	3430.3	3426.3	3428.3
30°	3085.3	3113.2	3145.1	3183.0	3216.9	3238.8	3258.8	3272.7	3282.7	3276.7	3274.7
32.5°	2822.0	2850.0	2883.9	2921.7	2961.7	2993.5	3017.5	3035.4	3047.4	3043.4	3033.4
35°	2520.9	2528.9	2550.8	2580.7	2614.6	2648.5	2670.5	2690.4	2704.3	2708.3	2708.3
37.5°	2211.8	2185.8	2169.9	2169.9	2189.8	2203.8	2223.7	2235.7	2257.6	2265.6	2271.6
40°	1912.6	1852.7	1796.9	1755.1	1727.1	1725.1	1725.1	1731.1	1751.1	1777.0	1800.9
42.5°	1645.4	1549.6	1463.9	1386.1	1330.3	1298.3	1284.4	1286.4	1302.3	1326.3	1366.1
45°	1432.0	1312.3	1204.6	1110.9	1035.1	985.2	961.3	959.3	971.2	999.2	1043.1
47.5°	1266.4	1138.8	1017.1	909.4	827.7	773.8	745.9	737.9	745.9	771.8	823.7
50°	1128.8	997.2	871.5	759.8	672.1	616.3	590.3	580.4	590.3	612.3	664.1
52.5°	1001.2	865.5	747.9	640.2	546.5	498.6	470.7	464.7	470.7	496.6	538.5
55°	853.6	737.9	622.2	514.5	432.8	384.9	363.0	357.0	363.0	386.9	430.8
57.5°	708.0	608.3	506.6	408.8	339.1	297.1	277.2	269.2	283.2	299.1	351.0
60°	572.4	492.6	406.8	321.1	263.3	225.4	209.4	207.4	211.4	231.4	267.2
62.5°	448.8	382.9	315.1	245.3	197.4	181.5	161.5	159.6	163.5	175.5	203.4
65°	323.1	281.2	229.4	179.5	141.6	119.7	111.7	113.7	117.7	125.7	151.6
67.5°	225.4	195.4	159.6	125.7	97.7	87.7	79.8	77.8	79.8	93.7	107.7
70°	151.6	133.6	107.7	95.7	67.8	53.8	55.8	49.9	57.8	57.8	69.8
72.5°	99.7	87.7	71.8	55.8	47.9	37.9	37.9	35.9	39.9	41.9	51.9
75°	51.9	39.9	39.9	27.9	20.0	10.0	18.0	16.0	14.0	16.0	20.0
77.5°	35.9	29.9	27.9	22.0	20.0	16.0	16.0	16.0	16.0	18.0	20.0
80°	22.0	22.0	16.0	14.0	12.0	10.0	12.0	12.0	12.0	12.0	14.0
82.5°	14.0	12.0	12.0	10.0	10.0	8.0	8.0	8.0	8.0	8.0	12.0
85°	12.0	8.0	8.0	6.0	8.0	14.0	6.0	8.0	8.0	8.0	6.0
87.5°	4.0	6.0	6.0	6.0	4.0	2.0	4.0	6.0	6.0	10.0	8.0
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: P249184

CATALOG NUMBER: LSR8B90D010 EC8B909730 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5	3715.5
2.5°	3721.5	3723.5	3723.5	3721.5	3721.5	3717.5	3725.5	3719.5	3721.5	3729.5	3723.5
5°	3725.5	3727.5	3727.5	3725.5	3725.5	3725.5	3727.5	3727.5	3725.5	3723.5	3727.5
7.5°	3733.5	3731.5	3731.5	3727.5	3727.5	3723.5	3727.5	3721.5	3725.5	3721.5	3727.5
10°	3723.5	3725.5	3723.5	3721.5	3721.5	3719.5	3719.5	3713.5	3715.5	3709.5	3713.5
12.5°	3717.5	3715.5	3715.5	3711.5	3707.5	3703.5	3701.5	3695.5	3695.5	3681.6	3687.6
15°	3701.5	3703.5	3697.5	3689.6	3685.6	3675.6	3671.6	3663.6	3655.7	3645.7	3647.7
17.5°	3687.6	3681.6	3673.6	3665.6	3649.7	3641.7	3633.7	3621.8	3617.8	3605.8	3601.8
20°	3645.7	3641.7	3631.8	3617.8	3607.8	3589.8	3581.9	3569.9	3559.9	3548.0	3542.0
22.5°	3591.8	3587.8	3575.9	3561.9	3546.0	3538.0	3530.0	3508.1	3498.1	3486.1	3484.1
25°	3524.1	3518.1	3506.1	3490.1	3482.1	3460.2	3452.2	3436.3	3432.3	3420.3	3418.4
27.5°	3420.3	3412.4	3398.4	3378.4	3364.5	3350.5	3342.6	3330.6	3326.6	3314.6	3312.7
30°	3264.8	3254.8	3226.9	3218.9	3195.0	3181.0	3181.0	3165.0	3167.0	3159.1	3159.1
32.5°	3019.5	3003.5	2981.6	2965.6	2949.6	2941.7	2941.7	2935.7	2939.7	2939.7	2943.7
35°	2694.4	2672.5	2660.5	2650.5	2650.5	2658.5	2682.4	2688.4	2700.4	2710.3	2718.3
37.5°	2277.5	2275.6	2289.5	2301.5	2331.4	2365.3	2407.2	2443.1	2477.0	2500.9	2524.9
40°	1826.8	1876.7	1916.6	1972.4	2018.3	2084.1	2159.9	2221.7	2279.5	2321.5	2365.3
42.5°	1426.0	1489.8	1573.6	1655.3	1737.1	1826.8	1926.6	2012.3	2088.1	2145.9	2191.8
45°	1110.9	1198.6	1300.3	1404.0	1509.7	1621.4	1725.1	1812.9	1892.7	1952.5	1998.4
47.5°	895.5	991.2	1106.9	1220.6	1340.2	1457.9	1573.6	1649.4	1715.1	1763.0	1804.9
50°	739.9	841.6	963.3	1092.9	1212.6	1330.3	1430.0	1503.7	1557.6	1599.5	1625.4
52.5°	618.2	725.9	855.6	985.2	1104.9	1212.6	1302.3	1358.2	1402.0	1432.0	1455.9
55°	510.5	614.3	735.9	857.6	975.2	1076.9	1150.7	1192.6	1226.5	1244.5	1258.4
57.5°	416.8	512.5	624.2	735.9	837.6	921.4	979.2	1021.1	1037.1	1051.0	1049.0
60°	327.1	416.8	518.5	614.3	702.0	769.8	811.7	835.6	847.6	853.6	849.6
62.5°	257.3	339.1	416.8	500.6	564.4	622.2	662.2	662.2	668.1	670.1	676.1
65°	191.4	253.3	321.1	382.9	434.8	472.7	494.6	500.6	508.6	506.6	502.6
67.5°	141.6	187.5	237.3	283.2	319.1	343.0	359.0	373.0	371.0	367.0	365.0
70°	97.7	127.7	171.5	199.4	225.4	249.3	253.3	255.3	257.3	259.3	255.3
72.5°	67.8	89.7	113.7	137.6	153.6	163.5	173.5	175.5	175.5	175.5	173.5
75°	33.9	45.9	67.8	77.8	91.7	95.7	103.7	103.7	109.7	101.7	99.7
77.5°	29.9	35.9	47.9	55.8	61.8	67.8	69.8	75.8	73.8	69.8	71.8
80°	18.0	22.0	29.9	33.9	41.9	43.9	45.9	47.9	45.9	47.9	47.9
82.5°	14.0	16.0	20.0	20.0	25.9	25.9	27.9	27.9	29.9	29.9	29.9
85°	8.0	14.0	12.0	23.9	16.0	16.0	20.0	23.9	20.0	20.0	23.9
87.5°	8.0	8.0	6.0	8.0	8.0	8.0	10.0	12.0	12.0	14.0	12.0
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: P249184

CATALOG NUMBER: LSR8B90D010 EC8B909730 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3715.5	3715.5	3715.5	3715.5
2.5°	3721.5	3725.5	3719.5	3717.5
5°	3727.5	3727.5	3723.5	3723.5
7.5°	3727.5	3727.5	3721.5	3717.5
10°	3711.5	3711.5	3705.5	3701.5
12.5°	3681.6	3681.6	3679.6	3673.6
15°	3643.7	3643.7	3635.7	3629.8
17.5°	3591.8	3595.8	3585.9	3585.9
20°	3536.0	3534.0	3526.1	3522.1
22.5°	3478.2	3474.2	3472.2	3460.2
25°	3416.4	3412.4	3406.4	3400.4
27.5°	3310.7	3308.7	3302.7	3294.7
30°	3149.1	3147.1	3139.1	3139.1
32.5°	2939.7	2937.7	2929.7	2931.7
35°	2722.3	2730.3	2726.3	2718.3
37.5°	2540.8	2546.8	2550.8	2546.8
40°	2389.2	2407.2	2409.2	2413.2
42.5°	2227.7	2251.6	2259.6	2263.6
45°	2034.2	2056.2	2074.1	2070.1
47.5°	1836.8	1852.7	1868.7	1856.7
50°	1647.4	1657.3	1663.3	1663.3
52.5°	1467.9	1467.9	1465.9	1467.9
55°	1262.4	1262.4	1254.5	1258.4
57.5°	1047.0	1051.0	1045.0	1035.1
60°	847.6	837.6	833.6	827.7
62.5°	660.2	660.2	646.2	664.1
65°	494.6	488.6	482.6	480.6
67.5°	359.0	357.0	351.0	349.0
70°	253.3	245.3	243.3	239.3
72.5°	169.5	169.5	165.5	165.5
75°	103.7	93.7	91.7	93.7
77.5°	71.8	69.8	69.8	67.8
80°	47.9	45.9	49.9	43.9
82.5°	29.9	31.9	29.9	31.9
85°	20.0	23.9	22.0	22.0
87.5°	12.0	12.0	12.0	12.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)