

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: P249508

Luminaire Tested: **LD8B90D010 ER8B90930 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249508  
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: LD8B90D010 ER8B90930 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
97 CRI 3000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6986.1 lumens  
Efficiency: N/A  
Efficacy: 81.1 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

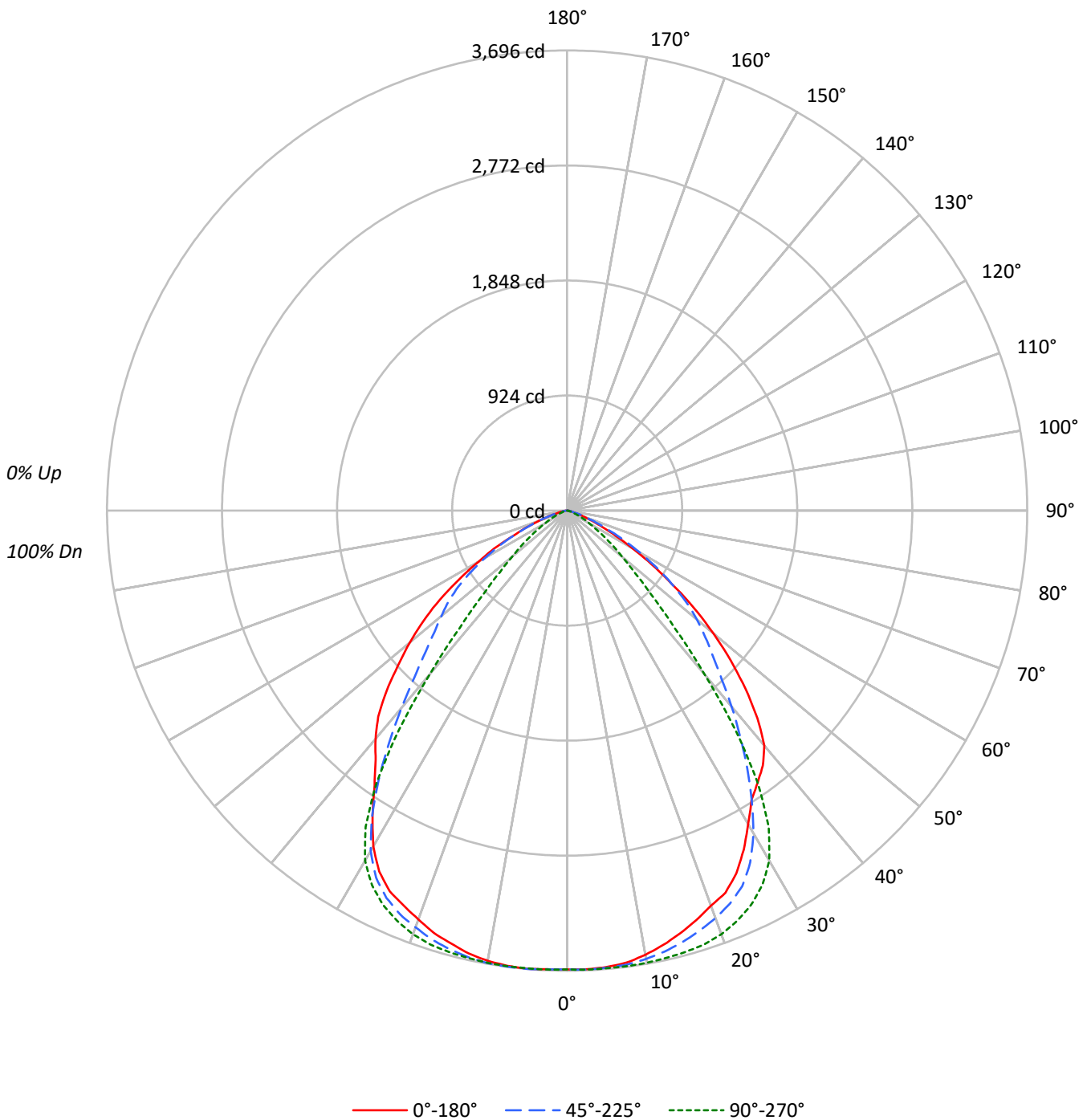
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	351.8	5.0
10°-20°	1021.6	14.6
20°-30°	1550.6	22.2
30°-40°	1628.6	23.3
40°-50°	1221.0	17.5
50°-60°	783.4	11.2
60°-70°	335.1	4.8
70°-80°	79.2	1.1
80°-90°	14.7	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°	2924.0	41.9
0°-40°	4552.6	65.2
0°-60°	6557.0	93.9
0°-90°	6986.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6986.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3686	3686	3686	3686	3686	
5°	3680	3686	3690	3696	3694	350
15°	3514	3587	3670	3646	3601	991
25°	3215	3328	3496	3433	3373	1469
35°	2667	2519	2669	2637	2697	1674
45°	2026	1656	952	1608	2054	1552
55°	1025	1025	354	1068	1248	930
65°	309	364	113	469	477	330
75°	48	55	16	95	93	69
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°	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0
2.5°	3688.0	3691.9	3690.0	3690.0	3688.0	3690.0	3690.0	3693.9	3693.9	3690.0	3688.0
5°	3680.0	3684.1	3684.1	3680.0	3680.0	3690.0	3684.1	3688.0	3688.0	3686.0	3686.0
7.5°	3662.3	3662.3	3670.2	3664.2	3664.2	3670.2	3668.1	3672.2	3676.1	3678.1	3678.1
10°	3622.6	3626.7	3628.7	3628.7	3630.6	3636.5	3640.4	3648.4	3652.3	3656.4	3658.3
12.5°	3573.2	3579.1	3581.1	3579.1	3585.1	3593.0	3602.9	3612.8	3618.7	3626.7	3632.6
15°	3513.9	3513.9	3517.8	3523.8	3527.8	3539.6	3549.4	3561.3	3577.1	3587.1	3597.0
17.5°	3448.5	3452.6	3458.5	3458.5	3466.4	3486.2	3492.1	3510.0	3527.8	3537.7	3557.4
20°	3377.3	3381.3	3387.2	3391.2	3401.1	3416.9	3428.8	3444.6	3464.5	3482.3	3502.0
22.5°	3322.0	3314.0	3317.9	3322.0	3331.8	3345.7	3359.5	3379.3	3399.1	3416.9	3436.8
25°	3215.1	3217.0	3223.0	3226.9	3238.9	3250.7	3266.6	3290.2	3308.1	3327.9	3349.7
27.5°	3070.6	3072.7	3082.5	3082.5	3092.4	3112.2	3122.1	3141.9	3165.7	3185.4	3211.2
30°	2906.4	2910.3	2910.3	2918.3	2924.2	2934.1	2944.1	2963.8	2975.7	2993.5	3029.2
32.5°	2756.1	2760.0	2758.0	2756.1	2750.1	2748.1	2746.2	2750.1	2754.1	2760.0	2773.9
35°	2667.1	2657.1	2649.3	2635.4	2619.6	2599.8	2582.0	2558.2	2536.5	2518.7	2498.9
37.5°	2582.0	2580.0	2568.1	2548.4	2516.6	2481.1	2439.5	2388.1	2336.6	2281.2	2227.9
40°	2463.3	2457.3	2447.5	2419.8	2384.1	2340.5	2285.2	2221.9	2138.8	2053.7	1966.7
42.5°	2261.4	2263.4	2251.5	2229.8	2196.2	2154.6	2097.3	2028.0	1939.0	1838.0	1725.3
45°	2026.0	2026.0	2022.1	2004.2	1980.5	1946.8	1903.3	1846.0	1759.0	1656.1	1535.3
47.5°	1780.7	1782.6	1776.7	1772.7	1762.9	1741.1	1709.4	1665.9	1604.6	1505.6	1385.0
50°	1531.4	1531.4	1541.3	1539.2	1539.2	1531.4	1517.5	1491.8	1438.4	1359.2	1246.4
52.5°	1282.1	1286.0	1292.0	1299.9	1309.8	1325.6	1309.8	1297.9	1264.3	1202.9	1106.0
55°	1024.8	1028.9	1038.7	1052.5	1064.5	1080.3	1084.2	1084.2	1066.4	1024.8	951.6
57.5°	805.3	799.3	807.2	819.1	834.9	850.7	862.6	876.5	874.5	846.8	787.5
60°	605.5	607.5	613.3	625.2	637.1	651.0	666.8	678.7	684.6	670.7	633.1
62.5°	441.2	441.2	449.1	461.0	466.9	486.7	496.6	502.5	508.5	506.5	482.7
65°	308.7	312.6	316.6	322.5	328.5	340.3	346.3	358.0	362.1	364.1	346.3
67.5°	217.7	211.8	215.7	219.6	225.5	233.5	245.4	245.4	251.2	251.2	239.4
70°	138.6	138.6	140.5	146.4	150.3	152.3	156.3	160.2	166.2	164.2	164.2
72.5°	93.0	91.0	93.0	94.9	97.0	102.9	102.9	104.8	108.8	110.9	102.9
75°	47.5	49.4	53.4	51.5	57.4	53.4	55.4	61.3	59.3	55.4	55.4
77.5°	39.6	39.6	39.6	37.7	41.6	41.6	39.6	43.5	41.6	41.6	39.6
80°	27.7	29.7	27.7	25.7	27.7	25.7	25.7	25.7	25.7	25.7	23.8
82.5°	21.7	17.8	19.8	17.8	19.8	19.8	17.8	15.8	15.8	17.8	15.8
85°	15.8	11.9	13.9	13.9	11.9	11.9	11.9	11.9	11.9	9.9	9.9
87.5°	9.9	5.9	5.9	5.9	7.8	7.8	7.8	5.9	7.8	7.8	3.9
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0
2.5°	3691.9	3690.0	3693.9	3691.9	3691.9	3690.0	3691.9	3690.0	3693.9	3686.0	3688.0
5°	3691.9	3688.0	3690.0	3691.9	3693.9	3690.0	3690.0	3690.0	3693.9	3690.0	3691.9
7.5°	3684.1	3682.0	3688.0	3691.9	3690.0	3688.0	3691.9	3690.0	3693.9	3691.9	3695.8
10°	3668.1	3670.2	3674.1	3680.0	3682.0	3684.1	3688.0	3688.0	3693.9	3686.0	3690.0
12.5°	3644.5	3652.3	3662.3	3666.2	3674.1	3674.1	3678.1	3680.0	3684.1	3682.0	3688.0
15°	3614.8	3624.6	3636.5	3646.4	3656.4	3662.3	3668.1	3670.2	3676.1	3670.2	3672.2
17.5°	3579.1	3591.0	3608.8	3620.7	3636.5	3642.5	3650.3	3654.3	3660.3	3656.4	3658.3
20°	3529.7	3543.6	3563.3	3581.1	3591.0	3604.8	3614.8	3620.7	3624.6	3620.7	3622.6
22.5°	3460.4	3480.3	3505.9	3519.8	3539.6	3551.4	3553.5	3567.2	3577.1	3567.2	3571.3
25°	3379.3	3399.1	3418.9	3448.5	3466.4	3480.3	3494.0	3496.1	3505.9	3503.9	3502.0
27.5°	3244.7	3270.5	3304.1	3327.9	3351.6	3373.4	3389.2	3393.2	3403.0	3399.1	3401.1
30°	3060.8	3088.5	3120.2	3157.7	3191.4	3213.1	3232.9	3246.8	3256.6	3250.7	3248.8
32.5°	2799.6	2827.3	2861.0	2898.6	2938.1	2969.8	2993.5	3011.3	3023.2	3019.2	3009.3
35°	2500.8	2508.8	2530.5	2560.3	2593.9	2627.5	2649.3	2669.0	2682.9	2686.8	2686.8
37.5°	2194.2	2168.5	2152.7	2152.7	2172.4	2186.3	2206.0	2217.9	2239.6	2247.6	2253.5
40°	1897.4	1838.0	1782.6	1741.1	1713.4	1711.4	1711.4	1717.4	1737.1	1762.9	1786.6
42.5°	1632.3	1537.3	1452.3	1375.1	1319.6	1288.0	1274.2	1276.1	1292.0	1315.7	1355.3
45°	1420.5	1301.9	1195.0	1102.1	1026.8	977.4	953.6	951.6	963.5	991.2	1034.8
47.5°	1256.4	1129.7	1009.0	902.2	821.1	767.7	740.0	732.1	740.0	765.6	817.1
50°	1119.9	989.3	864.6	753.8	666.8	611.4	585.6	575.7	585.6	607.5	658.8
52.5°	993.2	858.7	742.0	635.2	542.1	494.6	466.9	461.0	466.9	492.7	534.3
55°	846.8	732.1	617.3	510.5	429.3	381.8	360.1	354.1	360.1	383.8	427.3
57.5°	702.4	603.4	502.5	405.6	336.4	294.8	275.0	267.1	280.9	296.7	348.2
60°	567.8	488.8	403.6	318.6	261.2	223.5	207.7	205.7	209.7	229.5	265.1
62.5°	445.1	379.9	312.6	243.4	195.8	180.0	160.2	158.3	162.2	174.1	201.8
65°	320.5	279.0	227.6	178.0	140.5	118.7	110.9	112.8	116.7	124.7	150.3
67.5°	223.5	193.9	158.3	124.7	97.0	87.0	79.1	77.1	79.1	93.0	106.8
70°	150.3	132.5	106.8	94.9	67.3	53.4	55.4	49.4	57.4	57.4	69.3
72.5°	98.9	87.0	71.2	55.4	47.5	37.7	37.7	35.6	39.6	41.6	51.5
75°	51.5	39.6	39.6	27.7	19.8	9.9	17.8	15.8	13.9	15.8	19.8
77.5°	35.6	29.7	27.7	21.7	19.8	15.8	15.8	15.8	15.8	17.8	19.8
80°	21.7	21.7	15.8	13.9	11.9	9.9	11.9	11.9	11.9	11.9	13.9
82.5°	13.9	11.9	11.9	9.9	9.9	7.8	7.8	7.8	7.8	7.8	11.9
85°	11.9	7.8	7.8	5.9	7.8	13.9	5.9	7.8	7.8	7.8	5.9
87.5°	3.9	5.9	5.9	5.9	3.9	2.0	3.9	5.9	5.9	9.9	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



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0	3686.0
2.5°	3691.9	3693.9	3693.9	3691.9	3691.9	3688.0	3695.8	3690.0	3691.9	3699.9	3693.9
5°	3695.8	3697.8	3697.8	3695.8	3695.8	3695.8	3697.8	3697.8	3695.8	3693.9	3697.8
7.5°	3703.8	3701.8	3701.8	3697.8	3697.8	3693.9	3697.8	3691.9	3695.8	3691.9	3697.8
10°	3693.9	3695.8	3693.9	3691.9	3691.9	3690.0	3690.0	3684.1	3686.0	3680.0	3684.1
12.5°	3688.0	3686.0	3686.0	3682.0	3678.1	3674.1	3672.2	3666.2	3666.2	3652.3	3658.3
15°	3672.2	3674.1	3668.1	3660.3	3656.4	3646.4	3642.5	3634.5	3626.7	3616.8	3618.7
17.5°	3658.3	3652.3	3644.5	3636.5	3620.7	3612.8	3604.8	3593.0	3589.0	3577.1	3573.2
20°	3616.8	3612.8	3602.9	3589.0	3579.1	3561.3	3553.5	3541.6	3531.6	3519.8	3513.9
22.5°	3563.3	3559.4	3547.5	3533.6	3517.8	3510.0	3502.0	3480.3	3470.3	3458.5	3456.5
25°	3496.1	3490.1	3478.2	3462.4	3454.5	3432.7	3424.8	3409.0	3405.0	3393.2	3391.2
27.5°	3393.2	3385.3	3371.4	3351.6	3337.8	3323.9	3316.0	3304.1	3300.2	3288.3	3286.3
30°	3238.9	3228.9	3201.2	3193.4	3169.6	3155.7	3155.7	3139.9	3141.9	3134.0	3134.0
32.5°	2995.5	2979.6	2957.9	2942.1	2926.3	2918.3	2918.3	2912.4	2916.4	2916.4	2920.3
35°	2673.0	2651.3	2639.3	2629.4	2629.4	2637.4	2661.1	2667.1	2679.0	2688.8	2696.8
37.5°	2259.5	2257.5	2271.4	2283.3	2312.8	2346.6	2388.1	2423.7	2457.3	2481.1	2504.8
40°	1812.3	1861.8	1901.3	1956.8	2002.2	2067.6	2142.7	2204.1	2261.4	2303.0	2346.6
42.5°	1414.6	1477.9	1561.1	1642.2	1723.3	1812.3	1911.3	1996.4	2071.5	2128.9	2174.4
45°	1102.1	1189.0	1290.0	1392.8	1497.8	1608.5	1711.4	1798.5	1877.7	1937.0	1982.5
47.5°	888.4	983.3	1098.0	1210.9	1329.6	1446.3	1561.1	1636.2	1701.6	1749.0	1790.6
50°	734.0	834.9	955.7	1084.2	1202.9	1319.6	1418.6	1491.8	1545.2	1586.8	1612.4
52.5°	613.3	720.1	848.8	977.4	1096.1	1202.9	1292.0	1347.3	1390.9	1420.5	1444.3
55°	506.5	609.4	730.1	850.7	967.5	1068.4	1141.6	1183.2	1216.7	1234.6	1248.5
57.5°	413.5	508.5	619.2	730.1	831.0	914.1	971.5	1013.0	1028.9	1042.6	1040.7
60°	324.5	413.5	514.4	609.4	696.5	763.7	805.3	829.0	840.9	846.8	842.9
62.5°	255.3	336.4	413.5	496.6	559.9	617.3	656.9	656.9	662.8	664.8	670.7
65°	189.9	251.2	318.6	379.9	431.2	468.9	490.7	496.6	504.6	502.5	498.6
67.5°	140.5	186.0	235.4	280.9	316.6	340.3	356.1	370.0	368.0	364.1	362.1
70°	97.0	126.7	170.2	197.9	223.5	247.3	251.2	253.2	255.3	257.2	253.2
72.5°	67.3	89.0	112.8	136.5	152.3	162.2	172.2	174.1	174.1	174.1	172.2
75°	33.6	45.5	67.3	77.1	91.0	94.9	102.9	102.9	108.8	100.9	98.9
77.5°	29.7	35.6	47.5	55.4	61.3	67.3	69.3	75.2	73.2	69.3	71.2
80°	17.8	21.7	29.7	33.6	41.6	43.5	45.5	47.5	45.5	47.5	47.5
82.5°	13.9	15.8	19.8	19.8	25.7	25.7	27.7	27.7	29.7	29.7	29.7
85°	7.8	13.9	11.9	23.8	15.8	15.8	19.8	23.8	19.8	19.8	23.8
87.5°	7.8	7.8	5.9	7.8	7.8	7.8	9.9	11.9	11.9	13.9	11.9
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: P249508

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3686.0	3686.0	3686.0	3686.0
2.5°	3691.9	3695.8	3690.0	3688.0
5°	3697.8	3697.8	3693.9	3693.9
7.5°	3697.8	3697.8	3691.9	3688.0
10°	3682.0	3682.0	3676.1	3672.2
12.5°	3652.3	3652.3	3650.3	3644.5
15°	3614.8	3614.8	3606.8	3600.9
17.5°	3563.3	3567.2	3557.4	3557.4
20°	3507.9	3505.9	3498.1	3494.0
22.5°	3450.6	3446.6	3444.6	3432.7
25°	3389.2	3385.3	3379.3	3373.4
27.5°	3284.4	3282.4	3276.5	3268.5
30°	3124.1	3122.1	3114.3	3114.3
32.5°	2916.4	2914.4	2906.4	2908.4
35°	2700.7	2708.6	2704.6	2696.8
37.5°	2520.7	2526.6	2530.5	2526.6
40°	2370.2	2388.1	2390.1	2394.0
42.5°	2210.1	2233.7	2241.7	2245.6
45°	2018.0	2039.9	2057.7	2053.7
47.5°	1822.2	1838.0	1853.9	1842.0
50°	1634.3	1644.2	1650.1	1650.1
52.5°	1456.2	1456.2	1454.3	1456.2
55°	1252.4	1252.4	1244.5	1248.5
57.5°	1038.7	1042.6	1036.7	1026.8
60°	840.9	831.0	827.0	821.1
62.5°	654.9	654.9	641.1	658.8
65°	490.7	484.7	478.8	476.8
67.5°	356.1	354.1	348.2	346.3
70°	251.2	243.4	241.4	237.4
72.5°	168.2	168.2	164.2	164.2
75°	102.9	93.0	91.0	93.0
77.5°	71.2	69.3	69.3	67.3
80°	47.5	45.5	49.4	43.5
82.5°	29.7	31.6	29.7	31.6
85°	19.8	23.8	21.7	21.7
87.5°	11.9	11.9	11.9	11.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)