

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: P248968

Luminaire Tested: **LD8B90D010 ER8B90930 8LBSW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248968
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13958)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B90D010 ER8B90930 8LBSW0B
Description: PORTFOLIO 8 INCH SINGLE 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: 5948.0 lumens
Efficiency: N/A
Efficacy: 69.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.23 / 1.15
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

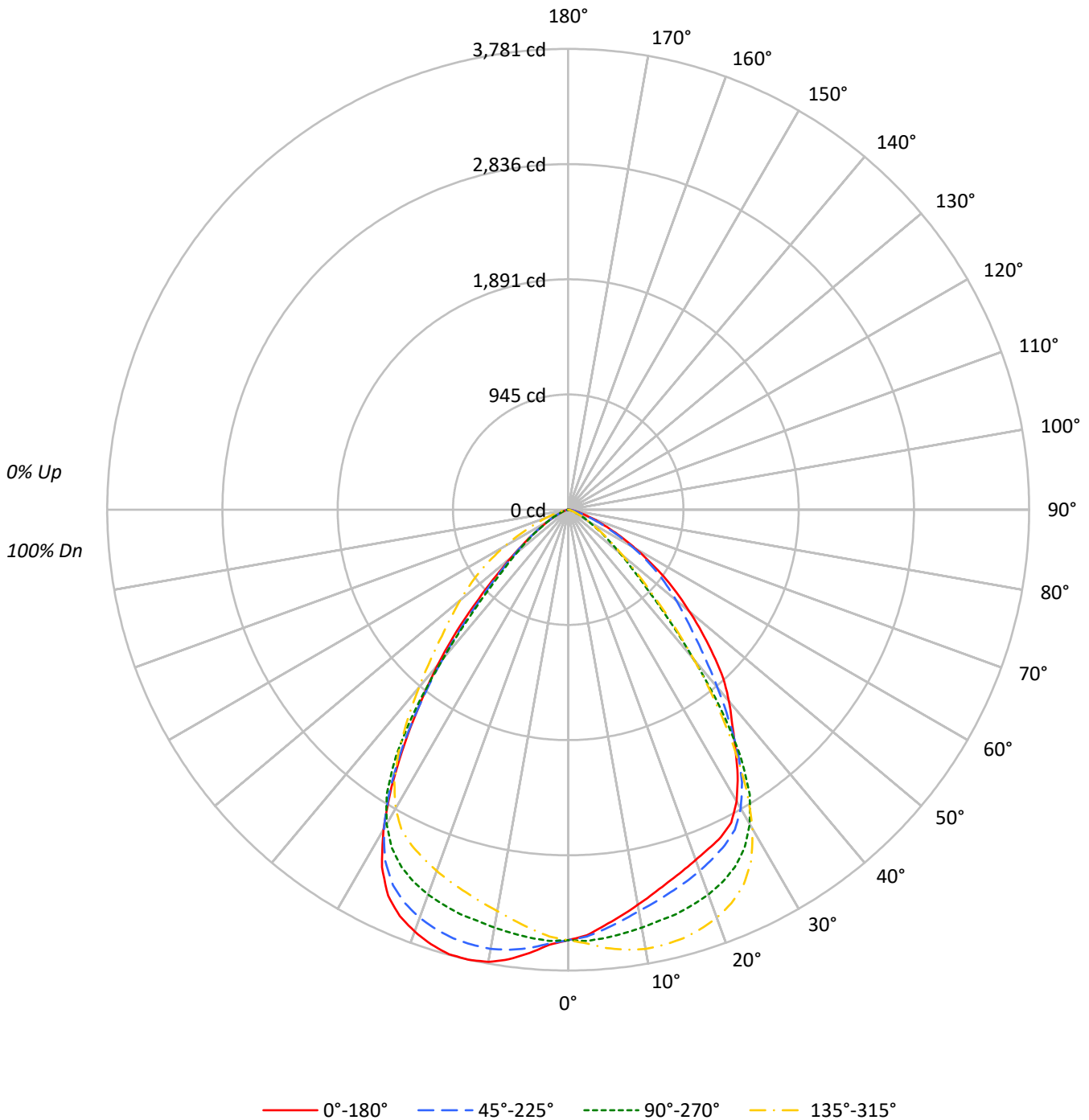
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P248968

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0B

Luminous Intensity Polar Plot





TEST NUMBER: P248968

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0B

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	109	106	103	109	106	104	101	102	100	98	99	97	95	95	94	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	55	49	46	44
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
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°				



TEST NUMBER: P248968

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	336.1	5.7
10°-20°	973.3	16.4
20°-30°	1473.8	24.8
30°-40°	1477.1	24.8
40°-50°	927.5	15.6
50°-60°	494.3	8.3
60°-70°	203.3	3.4
70°-80°	53.7	0.9
80°-90°	9.1	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°	2783.1	46.8
0°-40°	4260.2	71.6
0°-60°	5682.0	95.5
0°-90°	5948.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5948.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3531	3531	3531	3531	3531	
5°	3424	3526	3652	3526	3424	323
15°	3164	3435	3776	3435	3164	895
25°	2964	3234	3495	3234	2964	1359
35°	2390	2457	2331	2457	2390	1497
45°	1683	900	1041	900	1683	1294
55°	957	333	352	333	957	853
65°	381	102	93	102	381	395
75°	107	21	17	21	107	121
85°	22	0	2	0	22	25
90°	0	0	0	0	0	



TEST NUMBER: P248968

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0B

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2
2.5°	3494.9	3491.5	3489.8	3493.3	3494.9	3501.9	3500.1	3503.6	3503.6	3505.4	3508.7
5°	3424.3	3422.5	3424.3	3424.3	3431.2	3438.0	3436.3	3441.5	3444.9	3453.6	3456.9
7.5°	3358.7	3358.7	3356.9	3363.9	3367.4	3377.7	3375.9	3384.6	3389.8	3398.4	3410.4
10°	3291.5	3291.5	3293.2	3298.4	3300.1	3315.6	3315.6	3327.7	3334.5	3343.3	3358.7
12.5°	3226.0	3226.0	3236.3	3232.9	3239.8	3251.8	3257.0	3269.1	3279.4	3296.6	3312.2
15°	3163.9	3163.9	3167.4	3175.9	3181.2	3196.6	3205.3	3219.1	3231.2	3248.4	3270.9
17.5°	3110.4	3108.8	3110.4	3120.9	3131.2	3145.0	3151.8	3169.1	3181.2	3203.6	3224.3
20°	3057.0	3060.4	3060.4	3069.1	3075.9	3093.2	3100.1	3119.1	3132.9	3153.5	3177.7
22.5°	3010.4	3008.8	3008.8	3020.8	3026.0	3041.5	3048.3	3065.6	3081.2	3098.3	3120.9
25°	2963.9	2960.4	2967.4	2969.1	2972.4	2989.7	2994.9	3007.0	3022.6	3038.0	3060.4
27.5°	2894.9	2891.5	2893.2	2900.1	2905.3	2919.1	2922.6	2934.6	2946.7	2960.4	2979.4
30°	2762.1	2758.7	2757.0	2769.1	2774.3	2784.6	2789.7	2810.5	2813.8	2829.4	2843.2
32.5°	2586.3	2584.6	2588.1	2598.4	2603.5	2617.3	2624.3	2636.3	2644.9	2653.5	2667.3
35°	2389.7	2386.3	2389.7	2400.1	2400.1	2412.2	2417.3	2422.5	2420.8	2422.5	2419.1
37.5°	2207.0	2205.2	2207.0	2212.1	2207.0	2212.1	2207.0	2196.6	2177.7	2157.0	2136.3
40°	2051.8	2053.4	2043.2	2050.1	2031.0	2027.7	2008.7	1982.8	1944.9	1903.6	1844.9
42.5°	1886.3	1881.2	1874.2	1877.7	1862.2	1850.0	1819.0	1786.3	1738.0	1669.1	1598.3
45°	1682.8	1681.2	1677.7	1675.9	1665.6	1653.5	1627.6	1589.7	1536.3	1465.6	1381.1
47.5°	1484.5	1479.4	1479.4	1481.1	1469.0	1467.3	1446.5	1413.8	1367.3	1298.3	1210.3
50°	1294.9	1293.2	1296.7	1303.5	1294.9	1291.4	1277.7	1255.2	1213.8	1155.2	1072.5
52.5°	1124.1	1122.5	1125.9	1134.6	1131.1	1134.6	1120.8	1103.5	1075.9	1019.0	946.6
55°	957.0	957.0	957.0	967.2	967.2	967.2	960.4	950.0	924.2	882.8	815.5
57.5°	782.8	784.5	794.9	796.6	794.9	798.4	796.6	786.2	769.0	739.7	688.0
60°	636.3	636.3	641.4	646.6	644.8	646.6	646.6	641.4	624.2	600.1	558.7
62.5°	503.4	508.6	505.1	508.6	515.5	508.6	505.1	501.8	489.7	474.2	439.7
65°	381.0	384.5	384.5	386.2	382.7	384.5	377.7	372.4	365.6	348.3	325.9
67.5°	289.7	289.7	289.7	289.7	287.9	286.2	284.5	279.4	267.2	260.4	236.2
70°	222.4	212.1	212.1	212.1	212.1	213.9	208.6	201.8	198.3	186.2	168.9
72.5°	148.3	151.8	148.3	148.3	144.8	146.5	139.7	136.2	132.8	125.9	115.6
75°	106.8	98.3	101.7	103.5	98.3	101.7	94.8	87.9	87.9	82.7	77.6
77.5°	68.9	67.3	68.9	70.7	68.9	67.3	63.8	60.3	60.3	58.6	53.5
80°	50.0	48.3	48.3	48.3	46.5	48.3	44.8	44.8	41.4	39.7	36.2
82.5°	32.7	32.7	31.1	32.7	31.1	32.7	27.6	27.6	27.6	25.8	22.4
85°	22.4	18.9	18.9	20.7	17.3	20.7	18.9	17.3	15.6	15.6	13.8
87.5°	10.3	12.1	10.3	12.1	10.3	10.3	12.1	10.3	10.3	6.8	6.8
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: P248968

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2
2.5°	3513.9	3515.6	3515.6	3522.5	3526.0	3527.7	3527.7	3541.5	3536.3	3539.8	3543.3
5°	3464.0	3474.2	3477.7	3477.7	3496.6	3503.6	3510.4	3526.0	3527.7	3538.0	3550.1
7.5°	3415.6	3427.7	3434.6	3450.1	3462.2	3474.2	3494.9	3505.4	3515.6	3529.5	3544.9
10°	3369.1	3383.0	3396.6	3408.7	3427.7	3443.3	3456.9	3481.2	3493.3	3512.2	3532.8
12.5°	3324.3	3343.3	3355.3	3375.9	3396.6	3410.4	3431.2	3453.6	3472.5	3491.5	3515.6
15°	3284.6	3307.1	3320.9	3343.3	3365.7	3384.6	3407.1	3434.6	3448.4	3470.8	3493.3
17.5°	3241.5	3265.7	3282.8	3303.6	3331.2	3351.8	3370.8	3398.4	3415.6	3439.8	3465.7
20°	3196.6	3220.9	3241.5	3262.2	3289.8	3310.4	3332.8	3360.4	3379.4	3403.6	3424.3
22.5°	3143.3	3165.7	3188.0	3212.1	3239.8	3257.0	3282.8	3307.1	3327.7	3350.1	3370.8
25°	3074.2	3101.8	3119.1	3141.5	3163.9	3182.9	3210.4	3234.5	3251.8	3272.5	3291.5
27.5°	2993.2	3013.9	3027.7	3046.7	3069.1	3086.3	3107.0	3131.2	3148.4	3167.4	3181.2
30°	2855.2	2874.2	2886.4	2900.1	2922.6	2938.0	2955.3	2977.7	2989.7	3003.6	3015.6
32.5°	2674.1	2689.7	2696.7	2707.0	2722.6	2738.0	2751.8	2770.8	2775.9	2784.6	2784.6
35°	2412.2	2415.5	2413.8	2417.3	2424.3	2432.8	2444.9	2457.0	2463.8	2463.8	2458.7
37.5°	2105.2	2084.6	2062.2	2044.9	2039.8	2036.3	2043.2	2048.3	2055.2	2058.7	2050.1
40°	1786.3	1739.8	1689.7	1644.8	1613.8	1600.1	1594.8	1598.3	1598.3	1610.3	1610.3
42.5°	1512.1	1439.7	1365.6	1298.3	1253.5	1219.1	1203.5	1203.5	1205.2	1213.8	1219.1
45°	1284.6	1193.2	1106.9	1032.8	970.7	925.8	905.2	900.1	898.4	901.7	913.8
47.5°	1110.4	1015.6	925.8	834.6	769.0	724.2	705.2	698.3	691.4	698.3	700.1
50°	974.1	875.9	781.1	689.6	620.7	581.0	556.9	546.5	544.8	544.8	548.3
52.5°	850.1	758.7	663.9	570.7	498.3	460.4	438.0	432.8	425.9	432.8	432.8
55°	732.8	641.4	548.3	460.4	400.0	360.4	339.7	332.8	329.3	334.5	334.5
57.5°	605.2	527.5	441.4	362.1	301.8	274.2	258.6	250.0	248.3	251.8	248.3
60°	496.6	431.0	356.9	284.5	238.0	208.6	196.6	193.1	189.7	193.1	193.1
62.5°	393.1	338.0	277.6	222.4	182.7	162.1	148.3	148.3	146.5	146.5	148.3
65°	291.3	248.3	205.1	158.6	127.6	112.1	101.7	101.7	100.0	101.7	100.0
67.5°	212.1	182.7	148.3	115.6	91.4	82.7	75.9	70.7	74.2	70.7	68.9
70°	155.3	131.0	106.8	87.9	70.7	62.1	56.9	55.2	51.8	51.8	51.8
72.5°	103.5	87.9	72.4	56.9	46.5	37.9	36.2	32.7	29.3	31.1	34.5
75°	68.9	58.6	51.8	41.4	31.1	31.1	20.7	20.7	17.3	20.7	15.6
77.5°	48.3	39.7	31.1	25.8	20.7	18.9	13.8	13.8	12.1	12.1	12.1
80°	34.5	29.3	22.4	18.9	13.8	13.8	12.1	10.3	8.6	8.6	10.3
82.5°	20.7	15.6	15.6	13.8	8.6	6.8	5.2	6.8	3.5	3.5	3.5
85°	12.1	10.3	8.6	5.2	3.5	3.5	1.7	0.0	1.7	1.7	0.0
87.5°	6.8	3.5	3.5	1.7	0.0	1.7	1.7	0.0	0.0	0.0	3.5
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: P248968

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2
2.5°	3551.9	3550.1	3553.6	3553.6	3564.0	3562.2	3567.4	3567.4	3564.0	3565.7	3572.5
5°	3564.0	3569.2	3579.5	3588.1	3603.6	3610.5	3619.0	3627.8	3629.5	3634.6	3639.8
7.5°	3564.0	3581.1	3593.3	3608.7	3629.5	3641.5	3660.5	3676.0	3682.9	3691.5	3701.9
10°	3556.9	3574.2	3596.6	3613.9	3639.8	3658.7	3677.7	3701.9	3712.2	3726.0	3739.8
12.5°	3543.3	3562.2	3586.3	3608.7	3638.0	3655.2	3679.5	3701.9	3717.3	3736.3	3751.9
15°	3522.5	3544.9	3567.4	3589.8	3620.8	3641.5	3664.0	3689.8	3705.4	3726.0	3739.8
17.5°	3489.8	3513.9	3534.6	3555.3	3584.6	3608.7	3629.5	3653.6	3669.1	3686.4	3705.4
20°	3450.1	3472.5	3494.9	3512.2	3541.5	3562.2	3584.6	3607.0	3619.0	3622.5	3651.9
22.5°	3400.1	3415.6	3432.8	3460.4	3477.7	3496.6	3517.4	3538.0	3550.1	3569.2	3579.5
25°	3317.4	3332.8	3351.8	3363.9	3384.6	3400.1	3420.8	3443.3	3450.1	3464.0	3474.2
27.5°	3201.9	3210.4	3219.1	3229.4	3241.5	3250.1	3262.2	3272.5	3279.4	3286.3	3293.2
30°	3019.1	3019.1	3019.1	3012.1	3017.3	3022.6	3024.2	3022.6	3022.6	3020.8	3020.8
32.5°	2777.7	2763.9	2748.4	2734.6	2729.4	2722.6	2719.1	2713.8	2705.3	2700.2	2701.8
35°	2451.7	2420.8	2401.9	2384.6	2370.8	2360.5	2355.2	2350.1	2348.4	2341.5	2334.6
37.5°	2044.9	2022.5	2008.7	1998.4	1986.3	1976.0	1977.7	1979.5	1984.5	1981.1	1982.8
40°	1613.8	1608.6	1613.8	1601.8	1598.3	1601.8	1610.3	1622.5	1629.4	1636.3	1648.3
42.5°	1227.6	1236.2	1248.3	1248.3	1253.5	1260.5	1270.7	1289.7	1300.0	1312.1	1325.9
45°	924.2	934.6	950.0	955.2	958.7	967.2	979.4	994.9	1001.7	1012.2	1024.1
47.5°	712.1	719.0	727.5	736.3	744.8	748.3	760.4	760.4	769.0	776.0	779.3
50°	555.2	562.1	568.9	574.2	577.7	582.8	586.2	591.4	593.1	596.6	598.3
52.5°	434.5	443.1	443.1	446.5	451.8	456.9	455.2	456.9	458.6	458.6	463.8
55°	339.7	339.7	344.8	344.8	348.3	346.5	348.3	348.3	348.3	348.3	350.0
57.5°	253.5	255.3	260.4	256.9	255.3	258.6	255.3	258.6	256.9	260.4	255.3
60°	194.8	194.8	196.6	196.6	198.3	198.3	198.3	196.6	196.6	194.8	194.8
62.5°	146.5	148.3	150.0	148.3	148.3	148.3	146.5	146.5	144.8	143.0	143.0
65°	98.3	96.6	100.0	96.6	98.3	98.3	96.6	98.3	93.2	94.8	93.2
67.5°	70.7	68.9	67.3	68.9	67.3	65.5	65.5	67.3	68.9	63.8	63.8
70°	46.5	48.3	46.5	48.3	50.0	50.0	48.3	46.5	48.3	44.8	46.5
72.5°	29.3	29.3	29.3	29.3	29.3	31.1	31.1	31.1	27.6	27.6	25.8
75°	13.8	18.9	15.6	13.8	18.9	18.9	17.3	17.3	15.6	15.6	15.6
77.5°	13.8	10.3	10.3	10.3	10.3	10.3	10.3	10.3	8.6	10.3	8.6
80°	6.8	6.8	6.8	5.2	6.8	6.8	8.6	6.8	6.8	5.2	8.6
82.5°	3.5	3.5	3.5	0.0	1.7	3.5	3.5	1.7	3.5	3.5	1.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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



TEST NUMBER: P248968

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2
2.5°	3570.8	3569.2	3570.8	3572.5	3570.8	3569.2	3570.8	3572.5	3565.7	3564.0	3567.4
5°	3646.7	3646.7	3650.1	3651.9	3650.1	3646.7	3646.7	3639.8	3634.6	3629.5	3627.8
7.5°	3712.2	3715.7	3719.0	3720.8	3719.0	3715.7	3712.2	3701.9	3691.5	3682.9	3676.0
10°	3751.9	3757.0	3764.0	3767.3	3764.0	3757.0	3751.9	3739.8	3726.0	3712.2	3701.9
12.5°	3769.1	3774.3	3782.9	3781.1	3782.9	3774.3	3769.1	3751.9	3736.3	3717.3	3701.9
15°	3757.0	3764.0	3772.5	3776.0	3772.5	3764.0	3757.0	3739.8	3726.0	3705.4	3689.8
17.5°	3719.0	3729.5	3734.6	3739.8	3734.6	3729.5	3719.0	3705.4	3686.4	3669.1	3653.6
20°	3667.4	3674.3	3681.1	3682.9	3681.1	3674.3	3667.4	3651.9	3622.5	3619.0	3607.0
22.5°	3593.3	3598.4	3613.9	3608.7	3613.9	3598.4	3593.3	3579.5	3569.2	3550.1	3538.0
25°	3486.3	3491.5	3493.3	3494.9	3493.3	3491.5	3486.3	3474.2	3464.0	3450.1	3443.3
27.5°	3301.9	3301.9	3305.3	3307.1	3305.3	3301.9	3301.9	3293.2	3286.3	3279.4	3272.5
30°	3022.6	3022.6	3022.6	3031.2	3022.6	3022.6	3022.6	3020.8	3020.8	3022.6	3022.6
32.5°	2700.2	2696.7	2693.2	2696.7	2693.2	2696.7	2700.2	2701.8	2700.2	2705.3	2713.8
35°	2334.6	2332.8	2338.1	2331.1	2338.1	2332.8	2334.6	2334.6	2341.5	2348.4	2350.1
37.5°	1984.5	1981.1	1988.0	1981.1	1988.0	1981.1	1984.5	1982.8	1981.1	1984.5	1979.5
40°	1651.8	1655.3	1655.3	1669.1	1655.3	1655.3	1651.8	1648.3	1636.3	1629.4	1622.5
42.5°	1332.8	1343.2	1339.7	1350.0	1339.7	1343.2	1332.8	1325.9	1312.1	1300.0	1289.7
45°	1031.1	1038.0	1038.0	1041.4	1038.0	1038.0	1031.1	1024.1	1012.2	1001.7	994.9
47.5°	791.4	791.4	791.4	793.1	791.4	791.4	791.4	779.3	776.0	769.0	760.4
50°	601.8	603.4	605.2	606.9	605.2	603.4	601.8	598.3	596.6	593.1	591.4
52.5°	462.1	463.8	460.4	463.8	460.4	463.8	462.1	463.8	458.6	458.6	456.9
55°	350.0	348.3	350.0	351.8	350.0	348.3	350.0	350.0	348.3	348.3	348.3
57.5°	256.9	253.5	253.5	253.5	253.5	253.5	256.9	255.3	260.4	256.9	258.6
60°	191.4	193.1	193.1	194.8	193.1	193.1	191.4	194.8	194.8	196.6	196.6
62.5°	141.4	146.5	143.0	146.5	143.0	146.5	141.4	143.0	143.0	144.8	146.5
65°	91.4	91.4	91.4	93.2	91.4	91.4	91.4	93.2	94.8	93.2	98.3
67.5°	62.1	63.8	67.3	65.5	67.3	63.8	62.1	63.8	63.8	68.9	67.3
70°	50.0	44.8	44.8	50.0	44.8	44.8	50.0	46.5	44.8	48.3	46.5
72.5°	29.3	25.8	29.3	29.3	29.3	25.8	29.3	25.8	27.6	27.6	31.1
75°	15.6	13.8	12.1	17.3	12.1	13.8	15.6	15.6	15.6	15.6	17.3
77.5°	10.3	8.6	12.1	12.1	12.1	8.6	10.3	8.6	10.3	8.6	10.3
80°	5.2	6.8	5.2	8.6	5.2	6.8	5.2	8.6	5.2	6.8	6.8
82.5°	1.7	3.5	3.5	3.5	3.5	3.5	1.7	1.7	3.5	3.5	1.7
85°	0.0	3.5	1.7	1.7	1.7	3.5	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	0.0	0.0	1.7	0.0	0.0	1.7	0.0	0.0	0.0	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



TEST NUMBER: P248968

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0B

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2
2.5°	3567.4	3562.2	3564.0	3553.6	3553.6	3550.1	3551.9	3543.3	3539.8	3536.3	3541.5
5°	3619.0	3610.5	3603.6	3588.1	3579.5	3569.2	3564.0	3550.1	3538.0	3527.7	3526.0
7.5°	3660.5	3641.5	3629.5	3608.7	3593.3	3581.1	3564.0	3544.9	3529.5	3515.6	3505.4
10°	3677.7	3658.7	3639.8	3613.9	3596.6	3574.2	3556.9	3532.8	3512.2	3493.3	3481.2
12.5°	3679.5	3655.2	3638.0	3608.7	3586.3	3562.2	3543.3	3515.6	3491.5	3472.5	3453.6
15°	3664.0	3641.5	3620.8	3589.8	3567.4	3544.9	3522.5	3493.3	3470.8	3448.4	3434.6
17.5°	3629.5	3608.7	3584.6	3555.3	3534.6	3513.9	3489.8	3465.7	3439.8	3415.6	3398.4
20°	3584.6	3562.2	3541.5	3512.2	3494.9	3472.5	3450.1	3424.3	3403.6	3379.4	3360.4
22.5°	3517.4	3496.6	3477.7	3460.4	3432.8	3415.6	3400.1	3370.8	3350.1	3327.7	3307.1
25°	3420.8	3400.1	3384.6	3363.9	3351.8	3332.8	3317.4	3291.5	3272.5	3251.8	3234.5
27.5°	3262.2	3250.1	3241.5	3229.4	3219.1	3210.4	3201.9	3181.2	3167.4	3148.4	3131.2
30°	3024.2	3022.6	3017.3	3012.1	3019.1	3019.1	3019.1	3015.6	3003.6	2989.7	2977.7
32.5°	2719.1	2722.6	2729.4	2734.6	2748.4	2763.9	2777.7	2784.6	2784.6	2775.9	2770.8
35°	2355.2	2360.5	2370.8	2384.6	2401.9	2420.8	2451.7	2458.7	2463.8	2463.8	2457.0
37.5°	1977.7	1976.0	1986.3	1998.4	2008.7	2022.5	2044.9	2050.1	2058.7	2055.2	2048.3
40°	1610.3	1601.8	1598.3	1601.8	1613.8	1608.6	1613.8	1610.3	1610.3	1598.3	1598.3
42.5°	1270.7	1260.5	1253.5	1248.3	1248.3	1236.2	1227.6	1219.1	1213.8	1205.2	1203.5
45°	979.4	967.2	958.7	955.2	950.0	934.6	924.2	913.8	901.7	898.4	900.1
47.5°	760.4	748.3	744.8	736.3	727.5	719.0	712.1	700.1	698.3	691.4	698.3
50°	586.2	582.8	577.7	574.2	568.9	562.1	555.2	548.3	544.8	544.8	546.5
52.5°	455.2	456.9	451.8	446.5	443.1	443.1	434.5	432.8	432.8	425.9	432.8
55°	348.3	346.5	348.3	344.8	344.8	339.7	339.7	334.5	334.5	329.3	332.8
57.5°	255.3	258.6	255.3	256.9	260.4	255.3	253.5	248.3	251.8	248.3	250.0
60°	198.3	198.3	198.3	196.6	196.6	194.8	194.8	193.1	193.1	189.7	193.1
62.5°	146.5	148.3	148.3	148.3	150.0	148.3	146.5	148.3	146.5	146.5	148.3
65°	96.6	98.3	98.3	96.6	100.0	96.6	98.3	100.0	101.7	100.0	101.7
67.5°	65.5	65.5	67.3	68.9	67.3	68.9	70.7	68.9	70.7	74.2	70.7
70°	48.3	50.0	50.0	48.3	46.5	48.3	46.5	51.8	51.8	51.8	55.2
72.5°	31.1	31.1	29.3	29.3	29.3	29.3	29.3	34.5	31.1	29.3	32.7
75°	17.3	18.9	18.9	13.8	15.6	18.9	13.8	15.6	20.7	17.3	20.7
77.5°	10.3	10.3	10.3	10.3	10.3	10.3	13.8	12.1	12.1	12.1	13.8
80°	8.6	6.8	6.8	5.2	6.8	6.8	6.8	10.3	8.6	8.6	10.3
82.5°	3.5	3.5	1.7	0.0	3.5	3.5	3.5	3.5	3.5	3.5	6.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	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



TEST NUMBER: P248968

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0B

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2
2.5°	3527.7	3527.7	3526.0	3522.5	3515.6	3515.6	3513.9	3508.7	3505.4	3503.6	3503.6
5°	3510.4	3503.6	3496.6	3477.7	3477.7	3474.2	3464.0	3456.9	3453.6	3444.9	3441.5
7.5°	3494.9	3474.2	3462.2	3450.1	3434.6	3427.7	3415.6	3410.4	3398.4	3389.8	3384.6
10°	3456.9	3443.3	3427.7	3408.7	3396.6	3383.0	3369.1	3358.7	3343.3	3334.5	3327.7
12.5°	3431.2	3410.4	3396.6	3375.9	3355.3	3343.3	3324.3	3312.2	3296.6	3279.4	3269.1
15°	3407.1	3384.6	3365.7	3343.3	3320.9	3307.1	3284.6	3270.9	3248.4	3231.2	3219.1
17.5°	3370.8	3351.8	3331.2	3303.6	3282.8	3265.7	3241.5	3224.3	3203.6	3181.2	3169.1
20°	3332.8	3310.4	3289.8	3262.2	3241.5	3220.9	3196.6	3177.7	3153.5	3132.9	3119.1
22.5°	3282.8	3257.0	3239.8	3212.1	3188.0	3165.7	3143.3	3120.9	3098.3	3081.2	3065.6
25°	3210.4	3182.9	3163.9	3141.5	3119.1	3101.8	3074.2	3060.4	3038.0	3022.6	3007.0
27.5°	3107.0	3086.3	3069.1	3046.7	3027.7	3013.9	2993.2	2979.4	2960.4	2946.7	2934.6
30°	2955.3	2938.0	2922.6	2900.1	2886.4	2874.2	2855.2	2843.2	2829.4	2813.8	2810.5
32.5°	2751.8	2738.0	2722.6	2707.0	2696.7	2689.7	2674.1	2667.3	2653.5	2644.9	2636.3
35°	2444.9	2432.8	2424.3	2417.3	2413.8	2415.5	2412.2	2419.1	2422.5	2420.8	2422.5
37.5°	2043.2	2036.3	2039.8	2044.9	2062.2	2084.6	2105.2	2136.3	2157.0	2177.7	2196.6
40°	1594.8	1600.1	1613.8	1644.8	1689.7	1739.8	1786.3	1844.9	1903.6	1944.9	1982.8
42.5°	1203.5	1219.1	1253.5	1298.3	1365.6	1439.7	1512.1	1598.3	1669.1	1738.0	1786.3
45°	905.2	925.8	970.7	1032.8	1106.9	1193.2	1284.6	1381.1	1465.6	1536.3	1589.7
47.5°	705.2	724.2	769.0	834.6	925.8	1015.6	1110.4	1210.3	1298.3	1367.3	1413.8
50°	556.9	581.0	620.7	689.6	781.1	875.9	974.1	1072.5	1155.2	1213.8	1255.2
52.5°	438.0	460.4	498.3	570.7	663.9	758.7	850.1	946.6	1019.0	1075.9	1103.5
55°	339.7	360.4	400.0	460.4	548.3	641.4	732.8	815.5	882.8	924.2	950.0
57.5°	258.6	274.2	301.8	362.1	441.4	527.5	605.2	688.0	739.7	769.0	786.2
60°	196.6	208.6	238.0	284.5	356.9	431.0	496.6	558.7	600.1	624.2	641.4
62.5°	148.3	162.1	182.7	222.4	277.6	338.0	393.1	439.7	474.2	489.7	501.8
65°	101.7	112.1	127.6	158.6	205.1	248.3	291.3	325.9	348.3	365.6	372.4
67.5°	75.9	82.7	91.4	115.6	148.3	182.7	212.1	236.2	260.4	267.2	279.4
70°	56.9	62.1	70.7	87.9	106.8	131.0	155.3	168.9	186.2	198.3	201.8
72.5°	36.2	37.9	46.5	56.9	72.4	87.9	103.5	115.6	125.9	132.8	136.2
75°	20.7	31.1	31.1	41.4	51.8	58.6	68.9	77.6	82.7	87.9	87.9
77.5°	13.8	18.9	20.7	25.8	31.1	39.7	48.3	53.5	58.6	60.3	60.3
80°	12.1	13.8	13.8	18.9	22.4	29.3	34.5	36.2	39.7	41.4	44.8
82.5°	5.2	6.8	8.6	13.8	15.6	15.6	20.7	22.4	25.8	27.6	27.6
85°	1.7	3.5	3.5	5.2	8.6	10.3	12.1	13.8	15.6	15.6	17.3
87.5°	1.7	1.7	0.0	1.7	3.5	3.5	6.8	6.8	6.8	10.3	10.3
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: P248968

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0B

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2	3531.2
2.5°	3500.1	3501.9	3494.9	3493.3	3489.8	3491.5	3494.9
5°	3436.3	3438.0	3431.2	3424.3	3424.3	3422.5	3424.3
7.5°	3375.9	3377.7	3367.4	3363.9	3356.9	3358.7	3358.7
10°	3315.6	3315.6	3300.1	3298.4	3293.2	3291.5	3291.5
12.5°	3257.0	3251.8	3239.8	3232.9	3236.3	3226.0	3226.0
15°	3205.3	3196.6	3181.2	3175.9	3167.4	3163.9	3163.9
17.5°	3151.8	3145.0	3131.2	3120.9	3110.4	3108.8	3110.4
20°	3100.1	3093.2	3075.9	3069.1	3060.4	3060.4	3057.0
22.5°	3048.3	3041.5	3026.0	3020.8	3008.8	3008.8	3010.4
25°	2994.9	2989.7	2972.4	2969.1	2967.4	2960.4	2963.9
27.5°	2922.6	2919.1	2905.3	2900.1	2893.2	2891.5	2894.9
30°	2789.7	2784.6	2774.3	2769.1	2757.0	2758.7	2762.1
32.5°	2624.3	2617.3	2603.5	2598.4	2588.1	2584.6	2586.3
35°	2417.3	2412.2	2400.1	2400.1	2389.7	2386.3	2389.7
37.5°	2207.0	2212.1	2207.0	2212.1	2207.0	2205.2	2207.0
40°	2008.7	2027.7	2031.0	2050.1	2043.2	2053.4	2051.8
42.5°	1819.0	1850.0	1862.2	1877.7	1874.2	1881.2	1886.3
45°	1627.6	1653.5	1665.6	1675.9	1677.7	1681.2	1682.8
47.5°	1446.5	1467.3	1469.0	1481.1	1479.4	1479.4	1484.5
50°	1277.7	1291.4	1294.9	1303.5	1296.7	1293.2	1294.9
52.5°	1120.8	1134.6	1131.1	1134.6	1125.9	1122.5	1124.1
55°	960.4	967.2	967.2	967.2	957.0	957.0	957.0
57.5°	796.6	798.4	794.9	796.6	794.9	784.5	782.8
60°	646.6	646.6	644.8	646.6	641.4	636.3	636.3
62.5°	505.1	508.6	515.5	508.6	505.1	508.6	503.4
65°	377.7	384.5	382.7	386.2	384.5	384.5	381.0
67.5°	284.5	286.2	287.9	289.7	289.7	289.7	289.7
70°	208.6	213.9	212.1	212.1	212.1	212.1	222.4
72.5°	139.7	146.5	144.8	148.3	148.3	151.8	148.3
75°	94.8	101.7	98.3	103.5	101.7	98.3	106.8
77.5°	63.8	67.3	68.9	70.7	68.9	67.3	68.9
80°	44.8	48.3	46.5	48.3	48.3	48.3	50.0
82.5°	27.6	32.7	31.1	32.7	31.1	32.7	32.7
85°	18.9	20.7	17.3	20.7	18.9	18.9	22.4
87.5°	12.1	10.3	10.3	12.1	10.3	12.1	10.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)