

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: P248941

Luminaire Tested: **LD8B90D010 ER8B90940 8LBSW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248941
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 ER8B90940 8LBSW0B
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 4000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6416.0 lumens
Efficiency: N/A
Efficacy: 74.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.23 / 1.15
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

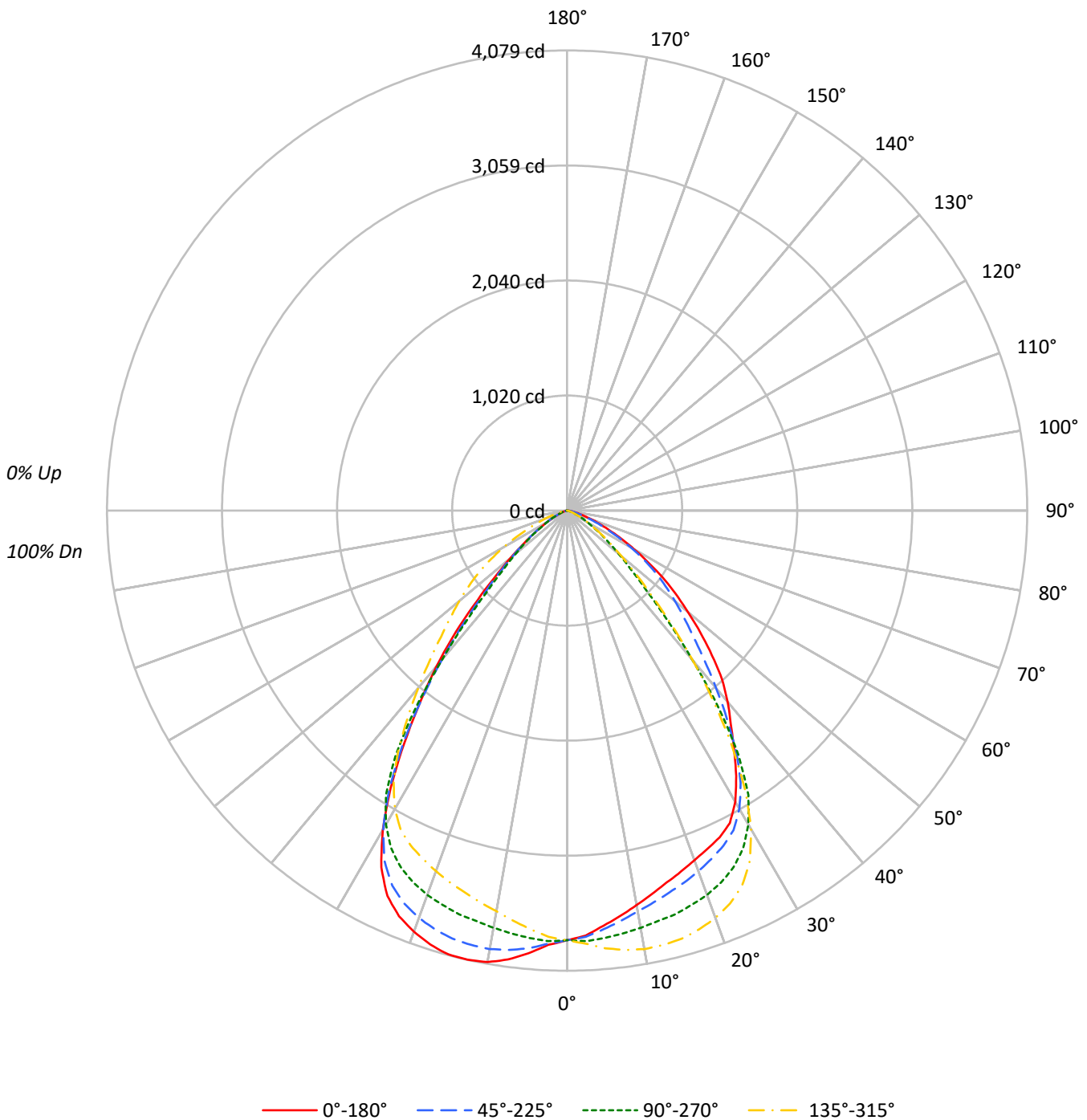
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	112	109	106	103	109	106	104	101	102	100	98	99	97	95	95	94	92	90					90			
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81					81			
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65					65			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	55	49	46	44					44			
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	117456	117456	117456	117456
5°	114335	117731	121934	117731
10°	111173	117577	127243	117577
15°	108951	118276	130030	118276
20°	108209	118952	130362	118952
25°	108778	118714	128267	118714
30°	106087	114365	116423	114365
35°	97039	99768	94656	99768
40°	89090	69402	72473	69402
45°	79159	42336	48986	42336
50°	67004	28280	31408	28280
55°	55493	19300	20397	19300
60°	42326	12846	12957	12846
65°	29989	8004	7326	8004
70°	21629	5364	4869	5364
75°	13737	2669	2216	2669
80°	9589	1989	1651	1989
85°	8562	0	637	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	362.5	5.7
10°-20°	1049.9	16.4
20°-30°	1589.7	24.8
30°-40°	1593.3	24.8
40°-50°	1000.5	15.6
50°-60°	533.2	8.3
60°-70°	219.2	3.4
70°-80°	57.9	0.9
80°-90°	9.8	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°	3002.1	46.8
0°-40°	4595.4	71.6
0°-60°	6129.0	95.5
0°-90°	6416.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6416.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3809	3809	3809	3809	3809	
5°	3694	3803	3939	3803	3694	348
15°	3413	3705	4073	3705	3413	965
25°	3197	3489	3770	3489	3197	1466
35°	2578	2650	2514	2650	2578	1615
45°	1815	971	1123	971	1815	1396
55°	1032	359	379	359	1032	920
65°	411	110	100	110	411	426
75°	115	22	19	22	115	131
85°	24	0	2	0	24	27
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°	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0
2.5°	3769.9	3766.2	3764.3	3768.1	3769.9	3777.4	3775.5	3779.2	3779.2	3781.1	3784.8
5°	3693.7	3691.8	3693.7	3693.7	3701.1	3708.5	3706.7	3712.3	3716.0	3725.3	3729.0
7.5°	3623.0	3623.0	3621.1	3628.5	3632.3	3643.5	3641.6	3650.9	3656.5	3665.7	3678.8
10°	3550.5	3550.5	3552.3	3557.9	3559.8	3576.5	3576.5	3589.5	3596.9	3606.3	3623.0
12.5°	3479.8	3479.8	3491.0	3487.2	3494.6	3507.7	3513.3	3526.3	3537.4	3556.0	3572.8
15°	3412.8	3412.8	3416.6	3425.8	3431.4	3448.2	3457.4	3472.4	3485.4	3504.0	3528.2
17.5°	3355.2	3353.3	3355.2	3366.3	3377.5	3392.4	3399.8	3418.4	3431.4	3455.6	3478.0
20°	3297.5	3301.3	3301.3	3310.5	3318.0	3336.6	3344.0	3364.5	3379.4	3401.6	3427.7
22.5°	3247.3	3245.5	3245.5	3258.5	3264.1	3280.8	3288.2	3306.8	3323.6	3342.2	3366.3
25°	3197.1	3193.3	3200.8	3202.7	3206.4	3225.0	3230.5	3243.6	3260.3	3277.1	3301.3
27.5°	3122.7	3119.0	3120.8	3128.3	3133.9	3148.7	3152.5	3165.5	3178.5	3193.3	3213.9
30°	2979.4	2975.8	2973.9	2986.9	2992.5	3003.6	3009.2	3031.6	3035.3	3052.0	3066.9
32.5°	2789.7	2787.9	2791.7	2802.8	2808.4	2823.3	2830.7	2843.7	2853.0	2862.3	2877.2
35°	2577.8	2574.0	2577.8	2588.9	2588.9	2602.0	2607.6	2613.1	2611.2	2613.1	2609.4
37.5°	2380.6	2378.7	2380.6	2386.2	2380.6	2386.2	2380.6	2369.5	2349.0	2326.7	2304.3
40°	2213.2	2215.1	2204.0	2211.4	2190.9	2187.2	2166.8	2138.8	2097.9	2053.3	1990.1
42.5°	2034.7	2029.1	2021.7	2025.4	2008.7	1995.6	1962.1	1926.8	1874.7	1800.4	1724.1
45°	1815.2	1813.4	1809.6	1807.8	1796.6	1783.6	1755.7	1714.8	1657.1	1580.9	1489.7
47.5°	1601.3	1595.7	1595.7	1597.6	1584.6	1582.7	1560.4	1525.1	1474.9	1400.5	1305.6
50°	1396.7	1394.9	1398.6	1406.1	1396.7	1393.0	1378.2	1354.0	1309.4	1246.1	1156.8
52.5°	1212.6	1210.8	1214.5	1223.8	1220.0	1223.8	1208.9	1190.3	1160.5	1099.1	1021.1
55°	1032.2	1032.2	1032.2	1043.3	1043.3	1043.3	1035.9	1024.8	996.9	952.2	879.7
57.5°	844.4	846.2	857.4	859.2	857.4	861.1	859.2	848.1	829.5	797.9	742.1
60°	686.3	686.3	691.9	697.5	695.6	697.5	697.5	691.9	673.3	647.3	602.6
62.5°	543.1	548.7	544.9	548.7	556.1	548.7	544.9	541.2	528.2	511.5	474.2
65°	411.0	414.8	414.8	416.6	412.9	414.8	407.3	401.8	394.3	375.7	351.5
67.5°	312.5	312.5	312.5	312.5	310.6	308.7	306.9	301.3	288.3	280.9	254.8
70°	239.9	228.7	228.7	228.7	228.7	230.7	225.1	217.6	213.9	200.9	182.3
72.5°	159.9	163.7	159.9	159.9	156.2	158.1	150.7	146.9	143.2	135.8	124.6
75°	115.3	106.0	109.7	111.6	106.0	109.7	102.3	94.8	94.8	89.3	83.7
77.5°	74.4	72.6	74.4	76.2	74.4	72.6	68.8	65.1	65.1	63.2	57.6
80°	54.0	52.1	52.1	52.1	50.2	52.1	48.4	48.4	44.6	42.8	39.0
82.5°	35.4	35.4	33.5	35.4	33.5	35.4	29.8	29.8	29.8	27.9	24.2
85°	24.2	20.4	20.4	22.4	18.6	22.4	20.4	18.6	16.8	16.8	14.9
87.5°	11.2	13.0	11.2	13.0	11.2	11.2	13.0	11.2	11.2	7.4	7.4
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°	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0
2.5°	3790.4	3792.2	3792.2	3799.7	3803.4	3805.2	3805.2	3820.2	3814.6	3818.3	3822.0
5°	3736.5	3747.6	3751.3	3751.3	3771.8	3779.2	3786.6	3803.4	3805.2	3816.4	3829.4
7.5°	3684.3	3697.4	3704.9	3721.6	3734.6	3747.6	3769.9	3781.1	3792.2	3807.1	3823.8
10°	3634.1	3649.1	3663.9	3676.9	3697.4	3714.1	3729.0	3755.0	3768.1	3788.5	3810.8
12.5°	3585.8	3606.3	3619.3	3641.6	3663.9	3678.8	3701.1	3725.3	3745.7	3766.2	3792.2
15°	3543.0	3567.2	3582.1	3606.3	3630.5	3650.9	3675.1	3704.9	3719.7	3743.9	3768.1
17.5°	3496.5	3522.6	3541.2	3563.5	3593.2	3615.5	3636.0	3665.7	3684.3	3710.4	3738.3
20°	3448.2	3474.2	3496.5	3518.8	3548.6	3570.9	3595.1	3624.9	3645.3	3671.3	3693.7
22.5°	3390.5	3414.7	3438.8	3464.9	3494.6	3513.3	3541.2	3567.2	3589.5	3613.7	3636.0
25°	3316.1	3345.9	3364.5	3388.6	3412.8	3433.3	3463.0	3489.1	3507.7	3530.0	3550.5
27.5°	3228.7	3251.1	3265.9	3286.3	3310.5	3329.1	3351.4	3377.5	3396.1	3416.6	3431.4
30°	3079.9	3100.4	3113.4	3128.3	3152.5	3169.2	3187.8	3211.9	3225.0	3239.9	3252.9
32.5°	2884.6	2901.4	2908.8	2920.0	2936.7	2953.4	2968.3	2988.8	2994.4	3003.6	3003.6
35°	2602.0	2605.6	2603.8	2607.6	2615.0	2624.2	2637.3	2650.3	2657.7	2657.7	2652.2
37.5°	2270.9	2248.6	2224.4	2205.8	2200.2	2196.5	2204.0	2209.5	2217.0	2220.7	2211.4
40°	1926.8	1876.6	1822.7	1774.3	1740.8	1726.0	1720.4	1724.1	1724.1	1737.1	1737.1
42.5°	1631.1	1553.0	1473.0	1400.5	1352.1	1315.0	1298.2	1298.2	1300.0	1309.4	1315.0
45°	1385.6	1287.0	1194.0	1114.1	1047.1	998.7	976.4	970.8	969.0	972.7	985.7
47.5°	1197.7	1095.5	998.7	900.2	829.5	781.1	760.7	753.2	745.8	753.2	755.1
50°	1050.8	944.8	842.5	743.9	669.5	626.7	600.7	589.5	587.7	587.7	591.4
52.5°	916.9	818.4	716.1	615.6	537.5	496.6	472.4	466.8	459.4	466.8	466.8
55°	790.4	691.9	591.4	496.6	431.5	388.7	366.4	359.0	355.2	360.8	360.8
57.5°	652.8	569.1	476.2	390.6	325.5	295.7	279.0	269.7	267.8	271.5	267.8
60°	535.6	465.0	385.0	306.9	256.7	225.1	212.1	208.3	204.5	208.3	208.3
62.5°	424.0	364.5	299.4	239.9	197.1	174.8	159.9	159.9	158.1	158.1	159.9
65°	314.3	267.8	221.3	171.1	137.6	120.9	109.7	109.7	107.9	109.7	107.9
67.5°	228.7	197.1	159.9	124.6	98.6	89.3	81.8	76.2	80.0	76.2	74.4
70°	167.4	141.3	115.3	94.8	76.2	67.0	61.4	59.5	55.8	55.8	55.8
72.5°	111.6	94.8	78.1	61.4	50.2	40.9	39.0	35.4	31.6	33.5	37.2
75°	74.4	63.2	55.8	44.6	33.5	33.5	22.4	22.4	18.6	22.4	16.8
77.5°	52.1	42.8	33.5	27.9	22.4	20.4	14.9	14.9	13.0	13.0	13.0
80°	37.2	31.6	24.2	20.4	14.9	14.9	13.0	11.2	9.3	9.3	11.2
82.5°	22.4	16.8	16.8	14.9	9.3	7.4	5.6	7.4	3.8	3.8	3.8
85°	13.0	11.2	9.3	5.6	3.8	3.8	1.8	0.0	1.8	1.8	0.0
87.5°	7.4	3.8	3.8	1.8	0.0	1.8	1.8	0.0	0.0	0.0	3.8
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°	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0
2.5°	3831.3	3829.4	3833.2	3833.2	3844.3	3842.4	3848.0	3848.0	3844.3	3846.2	3853.6
5°	3844.3	3849.9	3861.0	3870.4	3887.1	3894.6	3903.8	3913.2	3915.0	3920.6	3926.2
7.5°	3844.3	3862.9	3876.0	3892.6	3915.0	3928.0	3948.5	3965.2	3972.6	3981.9	3993.1
10°	3836.8	3855.4	3879.6	3898.2	3926.2	3946.6	3967.1	3993.1	4004.3	4019.1	4034.0
12.5°	3822.0	3842.4	3868.5	3892.6	3924.3	3942.9	3968.9	3993.1	4009.9	4030.3	4047.1
15°	3799.7	3823.8	3848.0	3872.2	3905.7	3928.0	3952.2	3980.1	3996.8	4019.1	4034.0
17.5°	3764.3	3790.4	3812.7	3835.0	3866.6	3892.6	3915.0	3941.0	3957.8	3976.4	3996.8
20°	3721.6	3745.7	3769.9	3788.5	3820.2	3842.4	3866.6	3890.8	3903.8	3907.6	3939.2
22.5°	3667.7	3684.3	3702.9	3732.7	3751.3	3771.8	3794.1	3816.4	3829.4	3849.9	3861.0
25°	3578.3	3595.1	3615.5	3628.5	3650.9	3667.7	3689.9	3714.1	3721.6	3736.5	3747.6
27.5°	3453.8	3463.0	3472.4	3483.5	3496.5	3505.8	3518.8	3530.0	3537.4	3544.9	3552.3
30°	3256.6	3256.6	3256.6	3249.1	3254.7	3260.3	3262.2	3260.3	3260.3	3258.5	3258.5
32.5°	2996.2	2981.4	2964.6	2949.7	2944.2	2936.7	2933.0	2927.4	2918.1	2912.5	2914.4
35°	2644.7	2611.2	2590.8	2572.2	2557.3	2546.2	2540.6	2535.0	2533.1	2525.7	2518.2
37.5°	2205.8	2181.6	2166.8	2155.6	2142.6	2131.4	2133.2	2135.1	2140.7	2137.0	2138.8
40°	1740.8	1735.2	1740.8	1727.8	1724.1	1727.8	1737.1	1750.2	1757.6	1765.0	1778.0
42.5°	1324.2	1333.5	1346.6	1346.6	1352.1	1359.6	1370.7	1391.2	1402.3	1415.3	1430.2
45°	996.9	1008.1	1024.8	1030.3	1034.1	1043.3	1056.4	1073.1	1080.5	1091.7	1104.7
47.5°	768.1	775.6	784.8	794.2	803.4	807.2	820.2	820.2	829.5	837.0	840.6
50°	598.9	606.3	613.7	619.3	623.1	628.7	632.3	637.9	639.8	643.5	645.3
52.5°	468.7	478.0	478.0	481.7	487.3	492.8	491.0	492.8	494.7	494.7	500.3
55°	366.4	366.4	372.0	372.0	375.7	373.8	375.7	375.7	375.7	375.7	377.6
57.5°	273.4	275.3	280.9	277.1	275.3	279.0	275.3	279.0	277.1	280.9	275.3
60°	210.1	210.1	212.1	212.1	213.9	213.9	213.9	212.1	212.1	210.1	210.1
62.5°	158.1	159.9	161.8	159.9	159.9	159.9	158.1	158.1	156.2	154.3	154.3
65°	106.0	104.2	107.9	104.2	106.0	106.0	104.2	106.0	100.4	102.3	100.4
67.5°	76.2	74.4	72.6	74.4	72.6	70.7	70.7	72.6	74.4	68.8	68.8
70°	50.2	52.1	50.2	52.1	54.0	54.0	52.1	50.2	52.1	48.4	50.2
72.5°	31.6	31.6	31.6	31.6	31.6	33.5	33.5	33.5	29.8	29.8	27.9
75°	14.9	20.4	16.8	14.9	20.4	20.4	18.6	18.6	16.8	16.8	16.8
77.5°	14.9	11.2	11.2	11.2	11.2	11.2	11.2	11.2	9.3	11.2	9.3
80°	7.4	7.4	7.4	5.6	7.4	7.4	9.3	7.4	7.4	5.6	9.3
82.5°	3.8	3.8	3.8	0.0	1.8	3.8	3.8	1.8	3.8	3.8	1.8
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: P248941

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0
2.5°	3851.8	3849.9	3851.8	3853.6	3851.8	3849.9	3851.8	3853.6	3846.2	3844.3	3848.0
5°	3933.6	3933.6	3937.3	3939.2	3937.3	3933.6	3933.6	3926.2	3920.6	3915.0	3913.2
7.5°	4004.3	4008.0	4011.7	4013.5	4011.7	4008.0	4004.3	3993.1	3981.9	3972.6	3965.2
10°	4047.1	4052.6	4060.1	4063.7	4060.1	4052.6	4047.1	4034.0	4019.1	4004.3	3993.1
12.5°	4065.7	4071.2	4080.5	4078.7	4080.5	4071.2	4065.7	4047.1	4030.3	4009.9	3993.1
15°	4052.6	4060.1	4069.3	4073.1	4069.3	4060.1	4052.6	4034.0	4019.1	3996.8	3980.1
17.5°	4011.7	4022.9	4028.5	4034.0	4028.5	4022.9	4011.7	3996.8	3976.4	3957.8	3941.0
20°	3955.9	3963.4	3970.8	3972.6	3970.8	3963.4	3955.9	3939.2	3907.6	3903.8	3890.8
22.5°	3876.0	3881.5	3898.2	3892.6	3898.2	3881.5	3876.0	3861.0	3849.9	3829.4	3816.4
25°	3760.6	3766.2	3768.1	3769.9	3768.1	3766.2	3760.6	3747.6	3736.5	3721.6	3714.1
27.5°	3561.6	3561.6	3565.3	3567.2	3565.3	3561.6	3561.6	3552.3	3544.9	3537.4	3530.0
30°	3260.3	3260.3	3260.3	3269.7	3260.3	3260.3	3260.3	3258.5	3258.5	3260.3	3260.3
32.5°	2912.5	2908.8	2905.1	2908.8	2905.1	2908.8	2912.5	2914.4	2912.5	2918.1	2927.4
35°	2518.2	2516.4	2522.0	2514.5	2522.0	2516.4	2518.2	2518.2	2525.7	2533.1	2535.0
37.5°	2140.7	2137.0	2144.4	2137.0	2144.4	2137.0	2140.7	2138.8	2137.0	2140.7	2135.1
40°	1781.8	1785.4	1785.4	1800.4	1785.4	1785.4	1781.8	1778.0	1765.0	1757.6	1750.2
42.5°	1437.7	1448.8	1445.1	1456.3	1445.1	1448.8	1437.7	1430.2	1415.3	1402.3	1391.2
45°	1112.2	1119.7	1119.7	1123.3	1119.7	1119.7	1112.2	1104.7	1091.7	1080.5	1073.1
47.5°	853.6	853.6	853.6	855.6	853.6	853.6	853.6	840.6	837.0	829.5	820.2
50°	649.1	650.9	652.8	654.7	652.8	650.9	649.1	645.3	643.5	639.8	637.9
52.5°	498.4	500.3	496.6	500.3	496.6	500.3	498.4	500.3	494.7	494.7	492.8
55°	377.6	375.7	377.6	379.4	377.6	375.7	377.6	377.6	375.7	375.7	375.7
57.5°	277.1	273.4	273.4	273.4	273.4	273.4	277.1	275.3	280.9	277.1	279.0
60°	206.5	208.3	208.3	210.1	208.3	208.3	206.5	210.1	210.1	212.1	212.1
62.5°	152.5	158.1	154.3	158.1	154.3	158.1	152.5	154.3	154.3	156.2	158.1
65°	98.6	98.6	98.6	100.4	98.6	98.6	98.6	100.4	102.3	100.4	106.0
67.5°	67.0	68.8	72.6	70.7	72.6	68.8	67.0	68.8	68.8	74.4	72.6
70°	54.0	48.4	48.4	54.0	48.4	48.4	54.0	50.2	48.4	52.1	50.2
72.5°	31.6	27.9	31.6	31.6	31.6	27.9	31.6	27.9	29.8	29.8	33.5
75°	16.8	14.9	13.0	18.6	13.0	14.9	16.8	16.8	16.8	16.8	18.6
77.5°	11.2	9.3	13.0	13.0	13.0	9.3	11.2	9.3	11.2	9.3	11.2
80°	5.6	7.4	5.6	9.3	5.6	7.4	5.6	9.3	5.6	7.4	7.4
82.5°	1.8	3.8	3.8	3.8	3.8	3.8	1.8	1.8	3.8	3.8	1.8
85°	0.0	3.8	1.8	1.8	1.8	3.8	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	0.0	0.0	1.8	0.0	0.0	1.8	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: P248941

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0B

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0
2.5°	3848.0	3842.4	3844.3	3833.2	3833.2	3829.4	3831.3	3822.0	3818.3	3814.6	3820.2
5°	3903.8	3894.6	3887.1	3870.4	3861.0	3849.9	3844.3	3829.4	3816.4	3805.2	3803.4
7.5°	3948.5	3928.0	3915.0	3892.6	3876.0	3862.9	3844.3	3823.8	3807.1	3792.2	3781.1
10°	3967.1	3946.6	3926.2	3898.2	3879.6	3855.4	3836.8	3810.8	3788.5	3768.1	3755.0
12.5°	3968.9	3942.9	3924.3	3892.6	3868.5	3842.4	3822.0	3792.2	3766.2	3745.7	3725.3
15°	3952.2	3928.0	3905.7	3872.2	3848.0	3823.8	3799.7	3768.1	3743.9	3719.7	3704.9
17.5°	3915.0	3892.6	3866.6	3835.0	3812.7	3790.4	3764.3	3738.3	3710.4	3684.3	3665.7
20°	3866.6	3842.4	3820.2	3788.5	3769.9	3745.7	3721.6	3693.7	3671.3	3645.3	3624.9
22.5°	3794.1	3771.8	3751.3	3732.7	3702.9	3684.3	3667.7	3636.0	3613.7	3589.5	3567.2
25°	3689.9	3667.7	3650.9	3628.5	3615.5	3595.1	3578.3	3550.5	3530.0	3507.7	3489.1
27.5°	3518.8	3505.8	3496.5	3483.5	3472.4	3463.0	3453.8	3431.4	3416.6	3396.1	3377.5
30°	3262.2	3260.3	3254.7	3249.1	3256.6	3256.6	3256.6	3252.9	3239.9	3225.0	3211.9
32.5°	2933.0	2936.7	2944.2	2949.7	2964.6	2981.4	2996.2	3003.6	3003.6	2994.4	2988.8
35°	2540.6	2546.2	2557.3	2572.2	2590.8	2611.2	2644.7	2652.2	2657.7	2657.7	2650.3
37.5°	2133.2	2131.4	2142.6	2155.6	2166.8	2181.6	2205.8	2211.4	2220.7	2217.0	2209.5
40°	1737.1	1727.8	1724.1	1727.8	1740.8	1735.2	1740.8	1737.1	1737.1	1724.1	1724.1
42.5°	1370.7	1359.6	1352.1	1346.6	1346.6	1333.5	1324.2	1315.0	1309.4	1300.0	1298.2
45°	1056.4	1043.3	1034.1	1030.3	1024.8	1008.1	996.9	985.7	972.7	969.0	970.8
47.5°	820.2	807.2	803.4	794.2	784.8	775.6	768.1	755.1	753.2	745.8	753.2
50°	632.3	628.7	623.1	619.3	613.7	606.3	598.9	591.4	587.7	587.7	589.5
52.5°	491.0	492.8	487.3	481.7	478.0	478.0	468.7	466.8	466.8	459.4	466.8
55°	375.7	373.8	375.7	372.0	372.0	366.4	366.4	360.8	360.8	355.2	359.0
57.5°	275.3	279.0	275.3	277.1	280.9	275.3	273.4	267.8	271.5	267.8	269.7
60°	213.9	213.9	213.9	212.1	212.1	210.1	210.1	208.3	208.3	204.5	208.3
62.5°	158.1	159.9	159.9	159.9	161.8	159.9	158.1	159.9	158.1	158.1	159.9
65°	104.2	106.0	106.0	104.2	107.9	104.2	106.0	107.9	109.7	107.9	109.7
67.5°	70.7	70.7	72.6	74.4	72.6	74.4	76.2	74.4	76.2	80.0	76.2
70°	52.1	54.0	54.0	52.1	50.2	52.1	50.2	55.8	55.8	55.8	59.5
72.5°	33.5	33.5	31.6	31.6	31.6	31.6	31.6	37.2	33.5	31.6	35.4
75°	18.6	20.4	20.4	14.9	16.8	20.4	14.9	16.8	22.4	18.6	22.4
77.5°	11.2	11.2	11.2	11.2	11.2	11.2	14.9	13.0	13.0	13.0	14.9
80°	9.3	7.4	7.4	5.6	7.4	7.4	7.4	11.2	9.3	9.3	11.2
82.5°	3.8	3.8	1.8	0.0	3.8	3.8	3.8	3.8	3.8	3.8	7.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	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: P248941

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0B

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0
2.5°	3805.2	3805.2	3803.4	3799.7	3792.2	3792.2	3790.4	3784.8	3781.1	3779.2	3779.2
5°	3786.6	3779.2	3771.8	3751.3	3751.3	3747.6	3736.5	3729.0	3725.3	3716.0	3712.3
7.5°	3769.9	3747.6	3734.6	3721.6	3704.9	3697.4	3684.3	3678.8	3665.7	3656.5	3650.9
10°	3729.0	3714.1	3697.4	3676.9	3663.9	3649.1	3634.1	3623.0	3606.3	3596.9	3589.5
12.5°	3701.1	3678.8	3663.9	3641.6	3619.3	3606.3	3585.8	3572.8	3556.0	3537.4	3526.3
15°	3675.1	3650.9	3630.5	3606.3	3582.1	3567.2	3543.0	3528.2	3504.0	3485.4	3472.4
17.5°	3636.0	3615.5	3593.2	3563.5	3541.2	3522.6	3496.5	3478.0	3455.6	3431.4	3418.4
20°	3595.1	3570.9	3548.6	3518.8	3496.5	3474.2	3448.2	3427.7	3401.6	3379.4	3364.5
22.5°	3541.2	3513.3	3494.6	3464.9	3438.8	3414.7	3390.5	3366.3	3342.2	3323.6	3306.8
25°	3463.0	3433.3	3412.8	3388.6	3364.5	3345.9	3316.1	3301.3	3277.1	3260.3	3243.6
27.5°	3351.4	3329.1	3310.5	3286.3	3265.9	3251.1	3228.7	3213.9	3193.3	3178.5	3165.5
30°	3187.8	3169.2	3152.5	3128.3	3113.4	3100.4	3079.9	3066.9	3052.0	3035.3	3031.6
32.5°	2968.3	2953.4	2936.7	2920.0	2908.8	2901.4	2884.6	2877.2	2862.3	2853.0	2843.7
35°	2637.3	2624.2	2615.0	2607.6	2603.8	2605.6	2602.0	2609.4	2613.1	2611.2	2613.1
37.5°	2204.0	2196.5	2200.2	2205.8	2224.4	2248.6	2270.9	2304.3	2326.7	2349.0	2369.5
40°	1720.4	1726.0	1740.8	1774.3	1822.7	1876.6	1926.8	1990.1	2053.3	2097.9	2138.8
42.5°	1298.2	1315.0	1352.1	1400.5	1473.0	1553.0	1631.1	1724.1	1800.4	1874.7	1926.8
45°	976.4	998.7	1047.1	1114.1	1194.0	1287.0	1385.6	1489.7	1580.9	1657.1	1714.8
47.5°	760.7	781.1	829.5	900.2	998.7	1095.5	1197.7	1305.6	1400.5	1474.9	1525.1
50°	600.7	626.7	669.5	743.9	842.5	944.8	1050.8	1156.8	1246.1	1309.4	1354.0
52.5°	472.4	496.6	537.5	615.6	716.1	818.4	916.9	1021.1	1099.1	1160.5	1190.3
55°	366.4	388.7	431.5	496.6	591.4	691.9	790.4	879.7	952.2	996.9	1024.8
57.5°	279.0	295.7	325.5	390.6	476.2	569.1	652.8	742.1	797.9	829.5	848.1
60°	212.1	225.1	256.7	306.9	385.0	465.0	535.6	602.6	647.3	673.3	691.9
62.5°	159.9	174.8	197.1	239.9	299.4	364.5	424.0	474.2	511.5	528.2	541.2
65°	109.7	120.9	137.6	171.1	221.3	267.8	314.3	351.5	375.7	394.3	401.8
67.5°	81.8	89.3	98.6	124.6	159.9	197.1	228.7	254.8	280.9	288.3	301.3
70°	61.4	67.0	76.2	94.8	115.3	141.3	167.4	182.3	200.9	213.9	217.6
72.5°	39.0	40.9	50.2	61.4	78.1	94.8	111.6	124.6	135.8	143.2	146.9
75°	22.4	33.5	33.5	44.6	55.8	63.2	74.4	83.7	89.3	94.8	94.8
77.5°	14.9	20.4	22.4	27.9	33.5	42.8	52.1	57.6	63.2	65.1	65.1
80°	13.0	14.9	14.9	20.4	24.2	31.6	37.2	39.0	42.8	44.6	48.4
82.5°	5.6	7.4	9.3	14.9	16.8	16.8	22.4	24.2	27.9	29.8	29.8
85°	1.8	3.8	3.8	5.6	9.3	11.2	13.0	14.9	16.8	16.8	18.6
87.5°	1.8	1.8	0.0	1.8	3.8	3.8	7.4	7.4	7.4	11.2	11.2
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: P248941

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0B

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0	3809.0
2.5°	3775.5	3777.4	3769.9	3768.1	3764.3	3766.2	3769.9
5°	3706.7	3708.5	3701.1	3693.7	3693.7	3691.8	3693.7
7.5°	3641.6	3643.5	3632.3	3628.5	3621.1	3623.0	3623.0
10°	3576.5	3576.5	3559.8	3557.9	3552.3	3550.5	3550.5
12.5°	3513.3	3507.7	3494.6	3487.2	3491.0	3479.8	3479.8
15°	3457.4	3448.2	3431.4	3425.8	3416.6	3412.8	3412.8
17.5°	3399.8	3392.4	3377.5	3366.3	3355.2	3353.3	3355.2
20°	3344.0	3336.6	3318.0	3310.5	3301.3	3301.3	3297.5
22.5°	3288.2	3280.8	3264.1	3258.5	3245.5	3245.5	3247.3
25°	3230.5	3225.0	3206.4	3202.7	3200.8	3193.3	3197.1
27.5°	3152.5	3148.7	3133.9	3128.3	3120.8	3119.0	3122.7
30°	3009.2	3003.6	2992.5	2986.9	2973.9	2975.8	2979.4
32.5°	2830.7	2823.3	2808.4	2802.8	2791.7	2787.9	2789.7
35°	2607.6	2602.0	2588.9	2588.9	2577.8	2574.0	2577.8
37.5°	2380.6	2386.2	2380.6	2386.2	2380.6	2378.7	2380.6
40°	2166.8	2187.2	2190.9	2211.4	2204.0	2215.1	2213.2
42.5°	1962.1	1995.6	2008.7	2025.4	2021.7	2029.1	2034.7
45°	1755.7	1783.6	1796.6	1807.8	1809.6	1813.4	1815.2
47.5°	1560.4	1582.7	1584.6	1597.6	1595.7	1595.7	1601.3
50°	1378.2	1393.0	1396.7	1406.1	1398.6	1394.9	1396.7
52.5°	1208.9	1223.8	1220.0	1223.8	1214.5	1210.8	1212.6
55°	1035.9	1043.3	1043.3	1043.3	1032.2	1032.2	1032.2
57.5°	859.2	861.1	857.4	859.2	857.4	846.2	844.4
60°	697.5	697.5	695.6	697.5	691.9	686.3	686.3
62.5°	544.9	548.7	556.1	548.7	544.9	548.7	543.1
65°	407.3	414.8	412.9	416.6	414.8	414.8	411.0
67.5°	306.9	308.7	310.6	312.5	312.5	312.5	312.5
70°	225.1	230.7	228.7	228.7	228.7	228.7	239.9
72.5°	150.7	158.1	156.2	159.9	159.9	163.7	159.9
75°	102.3	109.7	106.0	111.6	109.7	106.0	115.3
77.5°	68.8	72.6	74.4	76.2	74.4	72.6	74.4
80°	48.4	52.1	50.2	52.1	52.1	52.1	54.0
82.5°	29.8	35.4	33.5	35.4	33.5	35.4	35.4
85°	20.4	22.4	18.6	22.4	20.4	20.4	24.2
87.5°	13.0	11.2	11.2	13.0	11.2	13.0	11.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)