

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: P248869

Luminaire Tested: **LD8B90D010 ER8B90827 8LBSW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248869
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 ER8B90827 8LBSW0B
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6758.0 lumens
Efficiency: N/A
Efficacy: 78.5 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

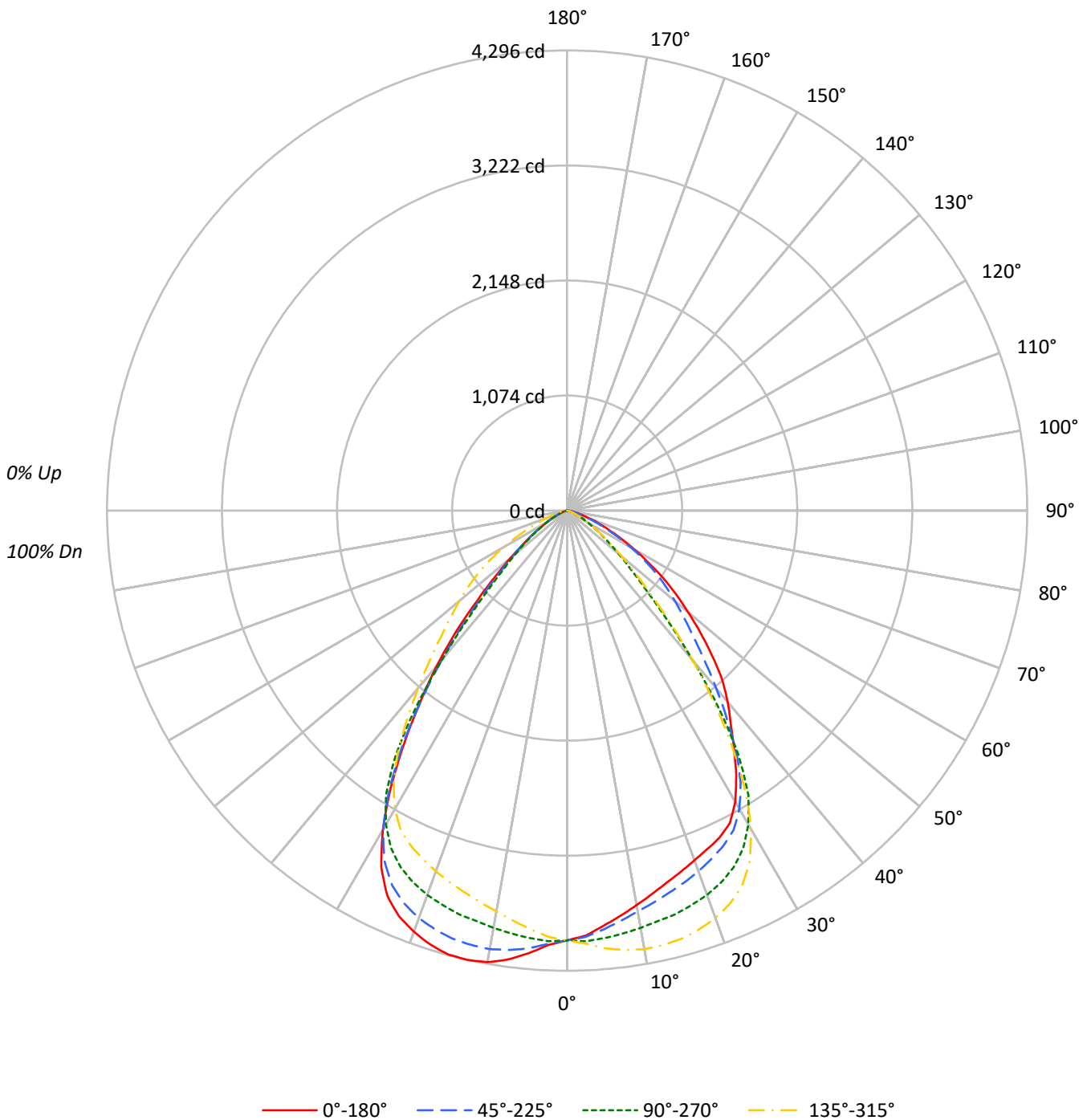
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	123715	123715	123715	123715
5°	120430	124005	128435	124005
10°	117098	123845	134028	123845
15°	114758	124577	136961	124577
20°	113977	125292	137312	125292
25°	114576	125039	135106	125039
30°	111745	120461	122626	120461
35°	102212	105084	99704	105084
40°	93840	73101	76334	73101
45°	83381	44595	51598	44595
50°	70578	29791	33082	29791
55°	58455	20327	21483	20327
60°	44583	13531	13648	13531
65°	31587	8427	7720	8427
70°	22783	5653	5121	5653
75°	14464	2800	2335	2800
80°	10087	2095	1740	2095
85°	9022	0	672	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	381.9	5.7
10°-20°	1105.8	16.4
20°-30°	1674.4	24.8
30°-40°	1678.2	24.8
40°-50°	1053.8	15.6
50°-60°	561.6	8.3
60°-70°	230.9	3.4
70°-80°	61.0	0.9
80°-90°	10.3	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°	3162.1	46.8
0°-40°	4840.3	71.6
0°-60°	6455.7	95.5
0°-90°	6758.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6758.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4012	4012	4012	4012	4012	
5°	3891	4006	4149	4006	3891	367
15°	3595	3902	4290	3902	3595	1017
25°	3368	3675	3971	3675	3368	1544
35°	2715	2792	2649	2792	2715	1701
45°	1912	1023	1183	1023	1912	1470
55°	1087	378	400	378	1087	969
65°	433	116	106	116	433	449
75°	121	24	20	24	121	138
85°	26	0	2	0	26	28
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°	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0
2.5°	3970.9	3966.9	3965.0	3969.0	3970.9	3978.7	3976.8	3980.6	3980.6	3982.7	3986.5
5°	3890.6	3888.6	3890.6	3890.6	3898.4	3906.2	3904.3	3910.2	3914.0	3923.9	3927.7
7.5°	3816.2	3816.2	3814.1	3822.0	3825.9	3837.7	3835.7	3845.5	3851.4	3861.1	3874.9
10°	3739.7	3739.7	3741.6	3747.5	3749.5	3767.1	3767.1	3780.8	3788.7	3798.5	3816.2
12.5°	3665.3	3665.3	3677.1	3673.1	3680.9	3694.6	3700.5	3714.2	3726.0	3745.6	3763.3
15°	3594.7	3594.7	3598.7	3608.4	3614.3	3632.0	3641.7	3657.5	3671.2	3690.8	3716.2
17.5°	3534.0	3532.1	3534.0	3545.8	3557.6	3573.2	3581.0	3600.6	3614.3	3639.8	3663.4
20°	3473.3	3477.2	3477.2	3487.0	3494.8	3514.4	3522.2	3543.9	3559.5	3583.0	3610.5
22.5°	3420.4	3418.5	3418.5	3432.2	3438.1	3455.6	3463.5	3483.1	3500.7	3520.3	3545.8
25°	3367.5	3363.6	3371.5	3373.4	3377.3	3396.9	3402.7	3416.5	3434.1	3451.8	3477.2
27.5°	3289.1	3285.3	3287.2	3295.0	3300.9	3316.5	3320.5	3334.2	3347.9	3363.6	3385.2
30°	3138.3	3134.4	3132.5	3146.2	3152.1	3163.7	3169.6	3193.2	3197.0	3214.7	3230.3
32.5°	2938.5	2936.5	2940.5	2952.2	2958.0	2973.8	2981.6	2995.3	3005.1	3014.9	3030.5
35°	2715.2	2711.2	2715.2	2727.0	2727.0	2740.7	2746.5	2752.4	2750.4	2752.4	2748.5
37.5°	2507.5	2505.5	2507.5	2513.4	2507.5	2513.4	2507.5	2495.8	2474.2	2450.7	2427.2
40°	2331.2	2333.1	2321.4	2329.3	2307.7	2303.8	2282.3	2252.8	2209.8	2162.8	2096.2
42.5°	2143.2	2137.3	2129.5	2133.3	2115.7	2102.0	2066.7	2029.6	1974.6	1896.3	1816.0
45°	1912.0	1910.1	1906.1	1904.2	1892.4	1878.7	1849.3	1806.2	1745.5	1665.2	1569.1
47.5°	1686.7	1680.8	1680.8	1682.7	1669.0	1667.1	1643.6	1606.4	1553.5	1475.1	1375.2
50°	1471.2	1469.2	1473.2	1481.0	1471.2	1467.3	1451.6	1426.2	1379.2	1312.6	1218.5
52.5°	1277.2	1275.3	1279.3	1289.0	1285.1	1289.0	1273.4	1253.8	1222.4	1157.7	1075.5
55°	1087.3	1087.3	1087.3	1099.0	1099.0	1099.0	1091.1	1079.4	1050.0	1003.0	926.6
57.5°	889.4	891.3	903.1	905.0	903.1	907.0	905.0	893.3	873.7	840.4	781.7
60°	722.9	722.9	728.8	734.7	732.6	734.7	734.7	728.8	709.2	681.8	634.7
62.5°	572.0	577.9	574.0	577.9	585.7	577.9	574.0	570.1	556.4	538.7	499.5
65°	432.9	436.9	436.9	438.8	434.9	436.9	429.1	423.2	415.3	395.8	370.3
67.5°	329.1	329.1	329.1	329.1	327.1	325.2	323.3	317.4	303.7	295.8	268.3
70°	252.7	240.9	240.9	240.9	240.9	242.9	237.1	229.2	225.3	211.6	192.0
72.5°	168.4	172.4	168.4	168.4	164.6	166.5	158.7	154.7	150.9	143.0	131.3
75°	121.4	111.7	115.5	117.6	111.7	115.5	107.7	99.9	99.9	94.0	88.1
77.5°	78.4	76.4	78.4	80.3	78.4	76.4	72.5	68.5	68.5	66.6	60.7
80°	56.8	54.8	54.8	54.8	52.9	54.8	51.0	51.0	47.0	45.1	41.1
82.5°	37.3	37.3	35.2	37.3	35.2	37.3	31.4	31.4	31.4	29.4	25.5
85°	25.5	21.5	21.5	23.5	19.6	23.5	21.5	19.6	17.7	17.7	15.6
87.5°	11.8	13.7	11.8	13.7	11.8	11.8	13.7	11.8	11.8	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0
2.5°	3992.4	3994.4	3994.4	4002.3	4006.1	4008.1	4008.1	4023.8	4017.9	4021.8	4025.7
5°	3935.7	3947.3	3951.3	3951.3	3972.8	3980.6	3988.5	4006.1	4008.1	4019.8	4033.5
7.5°	3880.7	3894.4	3902.3	3919.9	3933.6	3947.3	3970.9	3982.7	3994.4	4010.1	4027.7
10°	3827.8	3843.6	3859.2	3872.9	3894.4	3912.1	3927.7	3955.2	3969.0	3990.5	4013.9
12.5°	3777.0	3798.5	3812.2	3835.7	3859.2	3874.9	3898.4	3923.9	3945.4	3966.9	3994.4
15°	3731.9	3757.4	3773.0	3798.5	3824.0	3845.5	3871.0	3902.3	3918.0	3943.5	3969.0
17.5°	3682.9	3710.4	3730.0	3753.4	3784.8	3808.2	3829.9	3861.1	3880.7	3908.2	3937.6
20°	3632.0	3659.4	3682.9	3706.4	3737.8	3761.2	3786.7	3818.1	3839.6	3867.0	3890.6
22.5°	3571.3	3596.7	3622.1	3649.6	3680.9	3700.5	3730.0	3757.4	3780.8	3806.3	3829.9
25°	3492.9	3524.3	3543.9	3569.3	3594.7	3616.3	3647.6	3675.0	3694.6	3718.2	3739.7
27.5°	3400.8	3424.4	3440.0	3461.5	3487.0	3506.6	3530.1	3557.6	3577.2	3598.7	3614.3
30°	3244.1	3265.7	3279.4	3295.0	3320.5	3338.2	3357.7	3383.1	3396.9	3412.6	3426.3
32.5°	3038.4	3056.0	3063.8	3075.6	3093.3	3110.8	3126.6	3148.1	3154.0	3163.7	3163.7
35°	2740.7	2744.5	2742.6	2746.5	2754.4	2764.1	2777.8	2791.5	2799.4	2799.4	2793.6
37.5°	2391.9	2368.5	2343.0	2323.4	2317.5	2313.5	2321.4	2327.2	2335.2	2339.0	2329.3
40°	2029.6	1976.7	1919.8	1868.8	1833.6	1818.0	1812.1	1816.0	1816.0	1829.7	1829.7
42.5°	1718.1	1635.7	1551.6	1475.1	1424.2	1385.0	1367.4	1367.4	1369.3	1379.2	1385.0
45°	1459.5	1355.6	1257.6	1173.5	1102.9	1051.9	1028.5	1022.6	1020.7	1024.5	1038.2
47.5°	1261.6	1153.9	1051.9	948.2	873.7	822.8	801.3	793.4	785.5	793.4	795.4
50°	1106.9	995.2	887.5	783.6	705.2	660.1	632.7	621.0	619.0	619.0	623.0
52.5°	965.7	862.0	754.2	648.5	566.1	523.1	497.6	491.7	483.9	491.7	491.7
55°	832.5	728.8	623.0	523.1	454.5	409.5	385.9	378.1	374.1	380.0	380.0
57.5°	687.6	599.4	501.5	411.4	342.9	311.5	293.8	284.1	282.1	286.0	282.1
60°	564.2	489.8	405.5	323.3	270.4	237.1	223.4	219.4	215.5	219.4	219.4
62.5°	446.6	384.0	315.4	252.7	207.6	184.2	168.4	168.4	166.5	166.5	168.4
65°	331.1	282.1	233.1	180.2	145.0	127.3	115.5	115.5	113.6	115.5	113.6
67.5°	240.9	207.6	168.4	131.3	103.9	94.0	86.2	80.3	84.3	80.3	78.4
70°	176.3	148.8	121.4	99.9	80.3	70.6	64.7	62.7	58.8	58.8	58.8
72.5°	117.6	99.9	82.2	64.7	52.9	43.1	41.1	37.3	33.3	35.2	39.2
75°	78.4	66.6	58.8	47.0	35.2	35.2	23.5	23.5	19.6	23.5	17.7
77.5°	54.8	45.1	35.2	29.4	23.5	21.5	15.6	15.6	13.7	13.7	13.7
80°	39.2	33.3	25.5	21.5	15.6	15.6	13.7	11.8	9.8	9.8	11.8
82.5°	23.5	17.7	17.7	15.6	9.8	7.8	5.9	7.8	4.0	4.0	4.0
85°	13.7	11.8	9.8	5.9	4.0	4.0	1.9	0.0	1.9	1.9	0.0
87.5°	7.8	4.0	4.0	1.9	0.0	1.9	1.9	0.0	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0
2.5°	4035.6	4033.5	4037.5	4037.5	4049.3	4047.2	4053.1	4053.1	4049.3	4051.2	4059.0
5°	4049.3	4055.1	4066.8	4076.7	4094.3	4102.2	4111.9	4121.8	4123.7	4129.6	4135.5
7.5°	4049.3	4068.9	4082.6	4100.1	4123.7	4137.4	4158.9	4176.6	4184.4	4194.2	4205.9
10°	4041.4	4061.0	4086.4	4106.0	4135.5	4157.0	4178.5	4205.9	4217.7	4233.4	4249.1
12.5°	4025.7	4047.2	4074.7	4100.1	4133.4	4153.0	4180.5	4205.9	4223.6	4245.1	4262.8
15°	4002.3	4027.7	4053.1	4078.6	4113.9	4137.4	4162.9	4192.2	4209.9	4233.4	4249.1
17.5°	3965.0	3992.4	4016.0	4039.4	4072.7	4100.1	4123.7	4151.1	4168.8	4188.4	4209.9
20°	3919.9	3945.4	3970.9	3990.5	4023.8	4047.2	4072.7	4098.2	4111.9	4115.9	4149.2
22.5°	3863.2	3880.7	3900.3	3931.7	3951.3	3972.8	3996.4	4019.8	4033.5	4055.1	4066.8
25°	3769.1	3786.7	3808.2	3822.0	3845.5	3863.2	3886.6	3912.1	3919.9	3935.7	3947.3
27.5°	3637.9	3647.6	3657.5	3669.2	3682.9	3692.7	3706.4	3718.2	3726.0	3733.8	3741.6
30°	3430.2	3430.2	3430.2	3422.3	3428.2	3434.1	3436.0	3434.1	3434.1	3432.2	3432.2
32.5°	3155.9	3140.3	3122.6	3107.0	3101.1	3093.3	3089.3	3083.4	3073.7	3067.8	3069.7
35°	2785.7	2750.4	2728.9	2709.3	2693.6	2681.9	2676.0	2670.1	2668.2	2660.3	2652.4
37.5°	2323.4	2297.9	2282.3	2270.5	2256.8	2245.0	2246.9	2249.0	2254.8	2250.9	2252.8
40°	1833.6	1827.7	1833.6	1819.9	1816.0	1819.9	1829.7	1843.4	1851.3	1859.1	1872.8
42.5°	1394.8	1404.6	1418.3	1418.3	1424.2	1432.1	1443.7	1465.4	1477.0	1490.8	1506.5
45°	1050.0	1061.8	1079.4	1085.2	1089.2	1099.0	1112.7	1130.3	1138.1	1149.9	1163.6
47.5°	809.1	816.9	826.7	836.5	846.3	850.2	863.9	863.9	873.7	881.6	885.4
50°	630.8	638.6	646.4	652.3	656.3	662.2	666.0	671.9	673.9	677.8	679.7
52.5°	493.6	503.5	503.5	507.3	513.2	519.1	517.2	519.1	521.1	521.1	526.9
55°	385.9	385.9	391.8	391.8	395.8	393.7	395.8	395.8	395.8	395.8	397.7
57.5°	287.9	290.0	295.8	291.9	290.0	293.8	290.0	293.8	291.9	295.8	290.0
60°	221.3	221.3	223.4	223.4	225.3	225.3	225.3	223.4	223.4	221.3	221.3
62.5°	166.5	168.4	170.5	168.4	168.4	168.4	166.5	166.5	164.6	162.6	162.6
65°	111.7	109.7	113.6	109.7	111.7	111.7	109.7	111.7	105.8	107.7	105.8
67.5°	80.3	78.4	76.4	78.4	76.4	74.4	74.4	76.4	78.4	72.5	72.5
70°	52.9	54.8	52.9	54.8	56.8	56.8	54.8	52.9	54.8	51.0	52.9
72.5°	33.3	33.3	33.3	33.3	33.3	35.2	35.2	35.2	31.4	31.4	29.4
75°	15.6	21.5	17.7	15.6	21.5	21.5	19.6	19.6	17.7	17.7	17.7
77.5°	15.6	11.8	11.8	11.8	11.8	11.8	11.8	11.8	9.8	11.8	9.8
80°	7.8	7.8	7.8	5.9	7.8	7.8	9.8	7.8	7.8	5.9	9.8
82.5°	4.0	4.0	4.0	0.0	1.9	4.0	4.0	1.9	4.0	4.0	1.9
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: P248869

CATALOG NUMBER: LD8B90D010 ER8B90827 8LBSW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0
2.5°	4057.1	4055.1	4057.1	4059.0	4057.1	4055.1	4057.1	4059.0	4051.2	4049.3	4053.1
5°	4143.3	4143.3	4147.2	4149.2	4147.2	4143.3	4143.3	4135.5	4129.6	4123.7	4121.8
7.5°	4217.7	4221.7	4225.5	4227.5	4225.5	4221.7	4217.7	4205.9	4194.2	4184.4	4176.6
10°	4262.8	4268.7	4276.5	4280.4	4276.5	4268.7	4262.8	4249.1	4233.4	4217.7	4205.9
12.5°	4282.4	4288.3	4298.0	4296.1	4298.0	4288.3	4282.4	4262.8	4245.1	4223.6	4205.9
15°	4268.7	4276.5	4286.2	4290.2	4286.2	4276.5	4268.7	4249.1	4233.4	4209.9	4192.2
17.5°	4225.5	4237.3	4243.2	4249.1	4243.2	4237.3	4225.5	4209.9	4188.4	4168.8	4151.1
20°	4166.7	4174.6	4182.5	4184.4	4182.5	4174.6	4166.7	4149.2	4115.9	4111.9	4098.2
22.5°	4082.6	4088.5	4106.0	4100.1	4106.0	4088.5	4082.6	4066.8	4055.1	4033.5	4019.8
25°	3961.1	3966.9	3969.0	3970.9	3969.0	3966.9	3961.1	3947.3	3935.7	3919.9	3912.1
27.5°	3751.5	3751.5	3755.4	3757.4	3755.4	3751.5	3751.5	3741.6	3733.8	3726.0	3718.2
30°	3434.1	3434.1	3434.1	3443.9	3434.1	3434.1	3434.1	3432.2	3432.2	3434.1	3434.1
32.5°	3067.8	3063.8	3060.0	3063.8	3060.0	3063.8	3067.8	3069.7	3067.8	3073.7	3083.4
35°	2652.4	2650.5	2656.4	2648.6	2656.4	2650.5	2652.4	2652.4	2660.3	2668.2	2670.1
37.5°	2254.8	2250.9	2258.7	2250.9	2258.7	2250.9	2254.8	2252.8	2250.9	2254.8	2249.0
40°	1876.7	1880.6	1880.6	1896.3	1880.6	1880.6	1876.7	1872.8	1859.1	1851.3	1843.4
42.5°	1514.3	1526.1	1522.1	1533.9	1522.1	1526.1	1514.3	1506.5	1490.8	1477.0	1465.4
45°	1171.4	1179.3	1179.3	1183.2	1179.3	1179.3	1171.4	1163.6	1149.9	1138.1	1130.3
47.5°	899.1	899.1	899.1	901.2	899.1	899.1	899.1	885.4	881.6	873.7	863.9
50°	683.7	685.6	687.6	689.6	687.6	685.6	683.7	679.7	677.8	673.9	671.9
52.5°	525.0	526.9	523.1	526.9	523.1	526.9	525.0	526.9	521.1	521.1	519.1
55°	397.7	395.8	397.7	399.6	397.7	395.8	397.7	397.7	395.8	395.8	395.8
57.5°	291.9	287.9	287.9	287.9	287.9	287.9	291.9	290.0	295.8	291.9	293.8
60°	217.5	219.4	219.4	221.3	219.4	219.4	217.5	221.3	221.3	223.4	223.4
62.5°	160.6	166.5	162.6	166.5	162.6	166.5	160.6	162.6	162.6	164.6	166.5
65°	103.9	103.9	103.9	105.8	103.9	103.9	103.9	105.8	107.7	105.8	111.7
67.5°	70.6	72.5	76.4	74.4	76.4	72.5	70.6	72.5	72.5	78.4	76.4
70°	56.8	51.0	51.0	56.8	51.0	51.0	56.8	52.9	51.0	54.8	52.9
72.5°	33.3	29.4	33.3	33.3	33.3	29.4	33.3	29.4	31.4	31.4	35.2
75°	17.7	15.6	13.7	19.6	13.7	15.6	17.7	17.7	17.7	17.7	19.6
77.5°	11.8	9.8	13.7	13.7	13.7	9.8	11.8	9.8	11.8	9.8	11.8
80°	5.9	7.8	5.9	9.8	5.9	7.8	5.9	9.8	5.9	7.8	7.8
82.5°	1.9	4.0	4.0	4.0	4.0	4.0	1.9	1.9	4.0	4.0	1.9
85°	0.0	4.0	1.9	1.9	1.9	4.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	0.0	0.0	1.9	0.0	0.0	1.9	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: P248869

CATALOG NUMBER: LD8B90D010 ER8B90827 8LBSW0B

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0
2.5°	4053.1	4047.2	4049.3	4037.5	4037.5	4033.5	4035.6	4025.7	4021.8	4017.9	4023.8
5°	4111.9	4102.2	4094.3	4076.7	4066.8	4055.1	4049.3	4033.5	4019.8	4008.1	4006.1
7.5°	4158.9	4137.4	4123.7	4100.1	4082.6	4068.9	4049.3	4027.7	4010.1	3994.4	3982.7
10°	4178.5	4157.0	4135.5	4106.0	4086.4	4061.0	4041.4	4013.9	3990.5	3969.0	3955.2
12.5°	4180.5	4153.0	4133.4	4100.1	4074.7	4047.2	4025.7	3994.4	3966.9	3945.4	3923.9
15°	4162.9	4137.4	4113.9	4078.6	4053.1	4027.7	4002.3	3969.0	3943.5	3918.0	3902.3
17.5°	4123.7	4100.1	4072.7	4039.4	4016.0	3992.4	3965.0	3937.6	3908.2	3880.7	3861.1
20°	4072.7	4047.2	4023.8	3990.5	3970.9	3945.4	3919.9	3890.6	3867.0	3839.6	3818.1
22.5°	3996.4	3972.8	3951.3	3931.7	3900.3	3880.7	3863.2	3829.9	3806.3	3780.8	3757.4
25°	3886.6	3863.2	3845.5	3822.0	3808.2	3786.7	3769.1	3739.7	3718.2	3694.6	3675.0
27.5°	3706.4	3692.7	3682.9	3669.2	3657.5	3647.6	3637.9	3614.3	3598.7	3577.2	3557.6
30°	3436.0	3434.1	3428.2	3422.3	3430.2	3430.2	3430.2	3426.3	3412.6	3396.9	3383.1
32.5°	3089.3	3093.3	3101.1	3107.0	3122.6	3140.3	3155.9	3163.7	3163.7	3154.0	3148.1
35°	2676.0	2681.9	2693.6	2709.3	2728.9	2750.4	2785.7	2793.6	2799.4	2799.4	2791.5
37.5°	2246.9	2245.0	2256.8	2270.5	2282.3	2297.9	2323.4	2329.3	2339.0	2335.2	2327.2
40°	1829.7	1819.9	1816.0	1819.9	1833.6	1827.7	1833.6	1829.7	1829.7	1816.0	1816.0
42.5°	1443.7	1432.1	1424.2	1418.3	1418.3	1404.6	1394.8	1385.0	1379.2	1369.3	1367.4
45°	1112.7	1099.0	1089.2	1085.2	1079.4	1061.8	1050.0	1038.2	1024.5	1020.7	1022.6
47.5°	863.9	850.2	846.3	836.5	826.7	816.9	809.1	795.4	793.4	785.5	793.4
50°	666.0	662.2	656.3	652.3	646.4	638.6	630.8	623.0	619.0	619.0	621.0
52.5°	517.2	519.1	513.2	507.3	503.5	503.5	493.6	491.7	491.7	483.9	491.7
55°	395.8	393.7	395.8	391.8	391.8	385.9	385.9	380.0	380.0	374.1	378.1
57.5°	290.0	293.8	290.0	291.9	295.8	290.0	287.9	282.1	286.0	282.1	284.1
60°	225.3	225.3	225.3	223.4	223.4	221.3	221.3	219.4	219.4	215.5	219.4
62.5°	166.5	168.4	168.4	168.4	170.5	168.4	166.5	168.4	166.5	166.5	168.4
65°	109.7	111.7	111.7	109.7	113.6	109.7	111.7	113.6	115.5	113.6	115.5
67.5°	74.4	74.4	76.4	78.4	76.4	78.4	80.3	78.4	80.3	84.3	80.3
70°	54.8	56.8	56.8	54.8	52.9	54.8	52.9	58.8	58.8	58.8	62.7
72.5°	35.2	35.2	33.3	33.3	33.3	33.3	33.3	39.2	35.2	33.3	37.3
75°	19.6	21.5	21.5	15.6	17.7	21.5	15.6	17.7	23.5	19.6	23.5
77.5°	11.8	11.8	11.8	11.8	11.8	11.8	15.6	13.7	13.7	13.7	15.6
80°	9.8	7.8	7.8	5.9	7.8	7.8	7.8	11.8	9.8	9.8	11.8
82.5°	4.0	4.0	1.9	0.0	4.0	4.0	4.0	4.0	4.0	4.0	7.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	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: P248869

CATALOG NUMBER: LD8B90D010 ER8B90827 8LBSW0B

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0
2.5°	4008.1	4008.1	4006.1	4002.3	3994.4	3994.4	3992.4	3986.5	3982.7	3980.6	3980.6
5°	3988.5	3980.6	3972.8	3951.3	3951.3	3947.3	3935.7	3927.7	3923.9	3914.0	3910.2
7.5°	3970.9	3947.3	3933.6	3919.9	3902.3	3894.4	3880.7	3874.9	3861.1	3851.4	3845.5
10°	3927.7	3912.1	3894.4	3872.9	3859.2	3843.6	3827.8	3816.2	3798.5	3788.7	3780.8
12.5°	3898.4	3874.9	3859.2	3835.7	3812.2	3798.5	3777.0	3763.3	3745.6	3726.0	3714.2
15°	3871.0	3845.5	3824.0	3798.5	3773.0	3757.4	3731.9	3716.2	3690.8	3671.2	3657.5
17.5°	3829.9	3808.2	3784.8	3753.4	3730.0	3710.4	3682.9	3663.4	3639.8	3614.3	3600.6
20°	3786.7	3761.2	3737.8	3706.4	3682.9	3659.4	3632.0	3610.5	3583.0	3559.5	3543.9
22.5°	3730.0	3700.5	3680.9	3649.6	3622.1	3596.7	3571.3	3545.8	3520.3	3500.7	3483.1
25°	3647.6	3616.3	3594.7	3569.3	3543.9	3524.3	3492.9	3477.2	3451.8	3434.1	3416.5
27.5°	3530.1	3506.6	3487.0	3461.5	3440.0	3424.4	3400.8	3385.2	3363.6	3347.9	3334.2
30°	3357.7	3338.2	3320.5	3295.0	3279.4	3265.7	3244.1	3230.3	3214.7	3197.0	3193.2
32.5°	3126.6	3110.8	3093.3	3075.6	3063.8	3056.0	3038.4	3030.5	3014.9	3005.1	2995.3
35°	2777.8	2764.1	2754.4	2746.5	2742.6	2744.5	2740.7	2748.5	2752.4	2750.4	2752.4
37.5°	2321.4	2313.5	2317.5	2323.4	2343.0	2368.5	2391.9	2427.2	2450.7	2474.2	2495.8
40°	1812.1	1818.0	1833.6	1868.8	1919.8	1976.7	2029.6	2096.2	2162.8	2209.8	2252.8
42.5°	1367.4	1385.0	1424.2	1475.1	1551.6	1635.7	1718.1	1816.0	1896.3	1974.6	2029.6
45°	1028.5	1051.9	1102.9	1173.5	1257.6	1355.6	1459.5	1569.1	1665.2	1745.5	1806.2
47.5°	801.3	822.8	873.7	948.2	1051.9	1153.9	1261.6	1375.2	1475.1	1553.5	1606.4
50°	632.7	660.1	705.2	783.6	887.5	995.2	1106.9	1218.5	1312.6	1379.2	1426.2
52.5°	497.6	523.1	566.1	648.5	754.2	862.0	965.7	1075.5	1157.7	1222.4	1253.8
55°	385.9	409.5	454.5	523.1	623.0	728.8	832.5	926.6	1003.0	1050.0	1079.4
57.5°	293.8	311.5	342.9	411.4	501.5	599.4	687.6	781.7	840.4	873.7	893.3
60°	223.4	237.1	270.4	323.3	405.5	489.8	564.2	634.7	681.8	709.2	728.8
62.5°	168.4	184.2	207.6	252.7	315.4	384.0	446.6	499.5	538.7	556.4	570.1
65°	115.5	127.3	145.0	180.2	233.1	282.1	331.1	370.3	395.8	415.3	423.2
67.5°	86.2	94.0	103.9	131.3	168.4	207.6	240.9	268.3	295.8	303.7	317.4
70°	64.7	70.6	80.3	99.9	121.4	148.8	176.3	192.0	211.6	225.3	229.2
72.5°	41.1	43.1	52.9	64.7	82.2	99.9	117.6	131.3	143.0	150.9	154.7
75°	23.5	35.2	35.2	47.0	58.8	66.6	78.4	88.1	94.0	99.9	99.9
77.5°	15.6	21.5	23.5	29.4	35.2	45.1	54.8	60.7	66.6	68.5	68.5
80°	13.7	15.6	15.6	21.5	25.5	33.3	39.2	41.1	45.1	47.0	51.0
82.5°	5.9	7.8	9.8	15.6	17.7	17.7	23.5	25.5	29.4	31.4	31.4
85°	1.9	4.0	4.0	5.9	9.8	11.8	13.7	15.6	17.7	17.7	19.6
87.5°	1.9	1.9	0.0	1.9	4.0	4.0	7.8	7.8	7.8	11.8	11.8
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: P248869

CATALOG NUMBER: LD8B90D010 ER8B90827 8LBSW0B

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0	4012.0
2.5°	3976.8	3978.7	3970.9	3969.0	3965.0	3966.9	3970.9
5°	3904.3	3906.2	3898.4	3890.6	3890.6	3888.6	3890.6
7.5°	3835.7	3837.7	3825.9	3822.0	3814.1	3816.2	3816.2
10°	3767.1	3767.1	3749.5	3747.5	3741.6	3739.7	3739.7
12.5°	3700.5	3694.6	3680.9	3673.1	3677.1	3665.3	3665.3
15°	3641.7	3632.0	3614.3	3608.4	3598.7	3594.7	3594.7
17.5°	3581.0	3573.2	3557.6	3545.8	3534.0	3532.1	3534.0
20°	3522.2	3514.4	3494.8	3487.0	3477.2	3477.2	3473.3
22.5°	3463.5	3455.6	3438.1	3432.2	3418.5	3418.5	3420.4
25°	3402.7	3396.9	3377.3	3373.4	3371.5	3363.6	3367.5
27.5°	3320.5	3316.5	3300.9	3295.0	3287.2	3285.3	3289.1
30°	3169.6	3163.7	3152.1	3146.2	3132.5	3134.4	3138.3
32.5°	2981.6	2973.8	2958.0	2952.2	2940.5	2936.5	2938.5
35°	2746.5	2740.7	2727.0	2727.0	2715.2	2711.2	2715.2
37.5°	2507.5	2513.4	2507.5	2513.4	2507.5	2505.5	2507.5
40°	2282.3	2303.8	2307.7	2329.3	2321.4	2333.1	2331.2
42.5°	2066.7	2102.0	2115.7	2133.3	2129.5	2137.3	2143.2
45°	1849.3	1878.7	1892.4	1904.2	1906.1	1910.1	1912.0
47.5°	1643.6	1667.1	1669.0	1682.7	1680.8	1680.8	1686.7
50°	1451.6	1467.3	1471.2	1481.0	1473.2	1469.2	1471.2
52.5°	1273.4	1289.0	1285.1	1289.0	1279.3	1275.3	1277.2
55°	1091.1	1099.0	1099.0	1099.0	1087.3	1087.3	1087.3
57.5°	905.0	907.0	903.1	905.0	903.1	891.3	889.4
60°	734.7	734.7	732.6	734.7	728.8	722.9	722.9
62.5°	574.0	577.9	585.7	577.9	574.0	577.9	572.0
65°	429.1	436.9	434.9	438.8	436.9	436.9	432.9
67.5°	323.3	325.2	327.1	329.1	329.1	329.1	329.1
70°	237.1	242.9	240.9	240.9	240.9	240.9	252.7
72.5°	158.7	166.5	164.6	168.4	168.4	172.4	168.4
75°	107.7	115.5	111.7	117.6	115.5	111.7	121.4
77.5°	72.5	76.4	78.4	80.3	78.4	76.4	78.4
80°	51.0	54.8	52.9	54.8	54.8	54.8	56.8
82.5°	31.4	37.3	35.2	37.3	35.2	37.3	37.3
85°	21.5	23.5	19.6	23.5	21.5	21.5	25.5
87.5°	13.7	11.8	11.8	13.7	11.8	13.7	11.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)