

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: P251213

Luminaire Tested: **LD8B70D010 ER8B70940 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P251213
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B70D010 ER8B70940 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 4000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6836.0 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

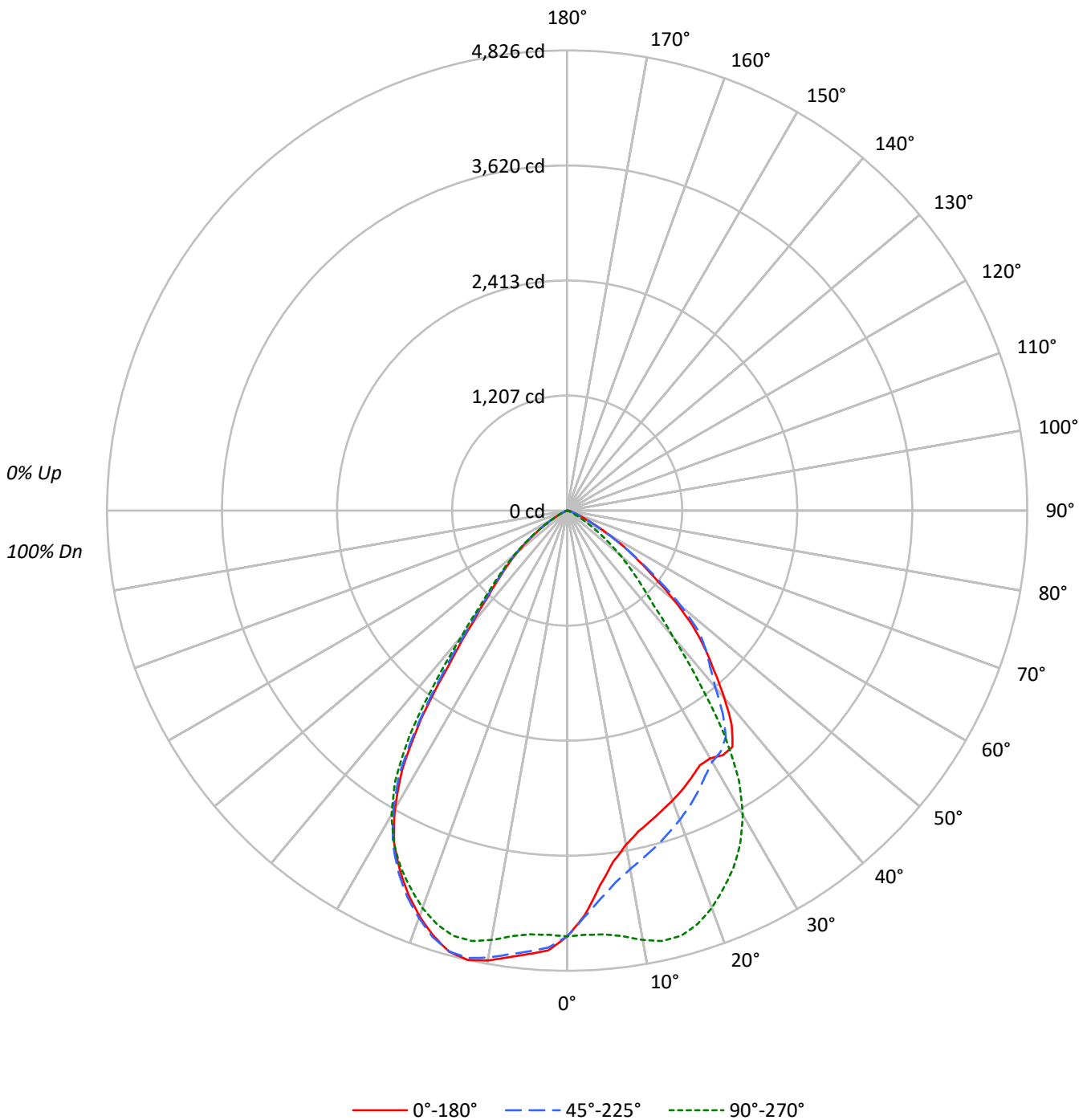
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82					82			
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67					67			
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	137709	137709	137709
5°	122182	138055	144519
10°	111396	143177	150010
15°	107654	147362	152869
20°	106118	145546	148548
25°	105077	140526	141408
30°	106788	131147	128722
35°	113828	108528	100664
40°	103155	69478	62913
45°	89037	47538	44263
50°	70251	34675	32650
55°	48762	21322	20058
60°	31046	10780	9627
65°	15498	4283	3254
70°	8565	2119	1163
75°	6148	1537	560
80°	5008	1048	213
85°	5413	814	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	416.2	6.1
10°-20°	1202.2	17.6
20°-30°	1744.9	25.5
30°-40°	1718.5	25.1
40°-50°	1077.3	15.8
50°-60°	519.8	7.6
60°-70°	125.8	1.8
70°-80°	25.4	0.4
80°-90°	5.8	0.1
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°	3363.3	49.2
0°-40°	5081.9	74.3
0°-60°	6678.9	97.7
0°-90°	6836.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6836.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4466	4466	4466	4466	4466	
5°	3947	4081	4460	4641	4669	365
15°	3372	3637	4616	4785	4788	953
25°	3088	3249	4130	4187	4156	1429
35°	3024	2901	2883	2719	2674	1830
45°	2042	2056	1090	1044	1015	1561
55°	907	936	397	392	373	835
65°	212	210	59	50	45	242
75°	52	45	13	6	5	58
85°	15	12	2	0	0	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8
2.5°	4245.2	4218.2	4167.8	4228.8	4228.8	4194.8	4262.8	4221.8	4254.6	4306.2	4260.5
5°	3947.2	3924.9	3882.7	3947.2	3955.4	3923.7	4005.9	3975.4	4023.5	4086.8	4081.0
7.5°	3711.3	3683.2	3644.5	3711.3	3724.3	3703.1	3781.7	3767.7	3831.0	3913.2	3927.2
10°	3557.6	3528.3	3494.3	3555.3	3564.7	3550.6	3630.4	3622.2	3684.4	3779.4	3817.0
12.5°	3448.5	3423.9	3386.3	3450.9	3461.4	3441.5	3516.6	3513.0	3577.6	3677.3	3724.3
15°	3372.2	3342.9	3308.9	3364.0	3378.1	3355.8	3427.4	3420.4	3486.1	3584.6	3637.4
17.5°	3300.7	3273.7	3238.5	3290.1	3304.2	3280.7	3351.1	3339.4	3395.7	3489.6	3543.6
20°	3233.8	3204.5	3172.8	3225.6	3233.8	3206.8	3277.2	3261.9	3312.4	3399.2	3452.0
22.5°	3164.6	3134.1	3101.2	3152.8	3161.0	3134.1	3198.6	3181.0	3227.9	3306.5	3354.6
25°	3088.3	3060.1	3027.3	3075.4	3082.4	3053.1	3121.1	3098.9	3139.9	3209.1	3249.0
27.5°	3012.0	2985.0	2948.7	2997.9	3001.5	2973.3	3035.5	3005.0	3039.0	3102.4	3136.4
30°	2999.1	2968.6	2931.1	2971.0	2972.1	2935.8	2994.4	2958.0	2976.8	3023.8	3043.7
32.5°	3040.2	3009.7	2971.0	3003.8	3000.3	2960.4	3016.7	2972.1	2978.0	3002.6	2997.9
35°	3023.8	2987.4	2941.6	2976.8	2976.8	2928.7	2985.0	2932.2	2926.4	2929.9	2900.6
37.5°	2837.2	2809.0	2765.6	2799.6	2796.1	2759.8	2803.2	2759.8	2739.8	2731.6	2678.8
40°	2562.6	2528.6	2495.7	2532.1	2535.6	2496.9	2553.2	2504.0	2498.1	2474.6	2412.4
42.5°	2284.5	2272.8	2241.1	2271.6	2288.1	2255.2	2302.1	2278.7	2282.2	2276.3	2217.7
45°	2041.7	2021.7	1998.2	2033.4	2044.0	2027.6	2074.5	2060.4	2074.5	2103.8	2055.7
47.5°	1780.0	1760.0	1734.2	1771.8	1790.6	1760.0	1799.9	1795.2	1816.4	1866.8	1862.1
50°	1464.4	1450.3	1445.6	1450.3	1462.0	1447.9	1476.1	1477.3	1491.3	1560.6	1565.3
52.5°	1159.3	1155.8	1139.3	1154.6	1154.6	1132.3	1160.5	1147.5	1161.6	1208.6	1239.1
55°	907.0	903.5	892.9	907.0	891.8	883.5	891.8	878.8	868.3	904.7	936.3
57.5°	706.4	694.6	681.7	687.6	686.4	668.8	678.2	663.0	654.7	667.6	695.8
60°	503.4	499.9	488.1	494.0	498.7	485.8	495.2	488.1	474.0	484.6	485.8
62.5°	334.4	336.8	329.7	330.9	327.4	325.0	330.9	334.4	330.9	326.2	327.4
65°	212.4	211.2	210.0	211.2	213.6	208.9	212.4	214.7	211.2	211.2	210.0
67.5°	140.8	137.3	133.8	136.1	138.5	134.9	138.5	137.3	138.5	137.3	133.8
70°	95.0	93.9	92.7	93.9	93.9	91.5	93.9	92.7	93.9	92.7	89.2
72.5°	69.2	69.2	68.1	69.2	69.2	66.9	68.1	65.7	66.9	65.7	63.4
75°	51.6	51.6	50.5	51.6	50.5	49.3	50.5	49.3	46.9	46.9	44.6
77.5°	37.5	37.5	37.5	37.5	37.5	36.4	36.4	35.2	34.0	32.9	32.9
80°	28.2	27.0	27.0	27.0	27.0	25.8	27.0	25.8	24.6	23.5	22.3
82.5°	19.9	21.1	19.9	19.9	19.9	18.8	19.9	18.8	18.8	17.6	15.3
85°	15.3	15.3	15.3	15.3	15.3	14.1	14.1	14.1	12.9	12.9	11.7
87.5°	8.2	8.2	8.2	9.4	8.2	8.2	8.2	7.0	7.0	5.9	5.9
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8
2.5°	4321.5	4327.4	4314.5	4334.4	4411.8	4349.7	4375.5	4383.7	4442.4	4452.9	4445.9
5°	4157.2	4183.0	4199.5	4244.1	4329.7	4285.1	4330.9	4360.2	4435.3	4460.0	4465.8
7.5°	4028.2	4082.1	4122.0	4194.8	4295.7	4261.7	4330.9	4379.0	4470.5	4502.2	4517.4
10°	3931.9	4014.1	4083.3	4183.0	4296.9	4274.6	4364.9	4433.0	4535.0	4572.6	4591.4
12.5°	3859.2	3958.9	4051.6	4178.3	4301.5	4291.0	4400.1	4477.6	4585.5	4623.1	4645.3
15°	3779.4	3894.4	4002.3	4144.3	4276.9	4274.6	4391.9	4474.0	4584.3	4616.0	4637.1
17.5°	3684.4	3807.6	3926.1	4079.8	4211.2	4213.5	4332.1	4413.0	4521.0	4546.8	4560.9
20°	3588.1	3710.2	3828.7	3987.1	4116.2	4119.7	4235.8	4310.9	4414.2	4435.3	4438.8
22.5°	3486.1	3599.9	3718.4	3875.6	4000.0	4002.3	4117.3	4187.7	4275.7	4286.3	4295.7
25°	3369.9	3481.4	3592.8	3748.9	3867.4	3874.4	3978.9	4041.1	4122.0	4130.2	4133.8
27.5°	3249.0	3340.6	3447.3	3581.1	3700.8	3696.1	3794.7	3865.1	3937.8	3933.1	3931.9
30°	3127.0	3203.3	3269.0	3398.1	3486.1	3489.6	3582.3	3616.3	3692.6	3683.2	3682.0
32.5°	3041.4	3061.3	3078.9	3144.6	3227.9	3198.6	3261.9	3304.2	3357.0	3353.5	3354.6
35°	2884.1	2847.8	2795.0	2804.3	2854.8	2809.0	2843.1	2841.9	2895.9	2883.0	2898.2
37.5°	2615.4	2512.2	2394.8	2328.0	2337.3	2279.8	2268.1	2296.3	2315.0	2278.7	2291.6
40°	2329.1	2176.6	1993.5	1841.0	1832.8	1761.2	1748.3	1720.2	1756.5	1726.0	1735.4
42.5°	2117.9	1916.1	1675.6	1490.2	1450.3	1390.4	1355.2	1350.5	1361.1	1340.0	1334.1
45°	1956.0	1741.3	1465.5	1253.2	1208.6	1144.0	1108.8	1095.9	1097.1	1090.1	1084.2
47.5°	1765.9	1550.0	1270.8	1053.7	1003.2	942.2	907.0	898.8	903.5	894.1	887.1
50°	1503.1	1309.5	1054.9	856.6	812.0	767.4	739.2	731.0	729.8	722.8	718.1
52.5°	1220.3	1059.5	839.0	673.5	633.6	590.2	570.3	559.7	560.9	553.8	546.8
55°	944.6	844.8	650.0	509.2	472.9	438.8	420.1	407.2	403.6	396.6	393.1
57.5°	702.8	636.0	486.9	367.3	346.1	313.3	294.5	279.3	276.9	273.4	272.2
60°	492.8	444.7	342.6	261.7	237.0	217.1	198.3	183.0	176.0	174.8	171.3
62.5°	319.2	289.8	225.3	174.8	156.1	142.0	123.2	112.6	107.9	103.3	104.4
65°	198.3	176.0	140.8	112.6	102.1	91.5	77.4	68.1	63.4	58.7	59.8
67.5°	123.2	110.3	89.2	72.7	65.7	57.5	46.9	39.9	36.4	32.9	30.5
70°	83.3	71.6	61.0	51.6	46.9	41.1	34.0	28.2	25.8	23.5	21.1
72.5°	58.7	52.8	44.6	38.7	35.2	30.5	25.8	22.3	19.9	17.6	15.3
75°	42.2	37.5	32.9	28.2	25.8	23.5	19.9	17.6	15.3	12.9	10.6
77.5°	30.5	27.0	23.5	21.1	19.9	16.4	14.1	12.9	11.7	9.4	7.0
80°	21.1	18.8	15.3	14.1	14.1	11.7	10.6	9.4	8.2	5.9	4.7
82.5°	14.1	12.9	11.7	10.6	9.4	8.2	8.2	5.9	4.7	3.5	2.3
85°	10.6	9.4	8.2	7.0	7.0	5.9	4.7	3.5	3.5	2.3	1.2
87.5°	5.9	5.9	4.7	3.5	3.5	2.3	2.3	1.2	1.2	1.2	1.2
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8
2.5°	4505.7	4509.2	4529.2	4513.9	4552.6	4580.8	4566.7	4598.4	4587.8	4585.5	4621.9
5°	4536.2	4544.4	4571.4	4557.3	4599.6	4630.1	4616.0	4651.2	4640.7	4638.3	4675.9
7.5°	4594.9	4603.1	4626.6	4614.8	4659.4	4686.4	4668.8	4707.5	4693.5	4692.3	4728.7
10°	4668.8	4680.5	4700.5	4688.8	4729.8	4753.3	4735.7	4773.2	4760.3	4754.5	4794.4
12.5°	4724.0	4732.2	4752.1	4742.7	4782.6	4800.2	4785.0	4821.3	4804.9	4800.2	4835.4
15°	4711.1	4719.3	4735.7	4727.5	4765.0	4781.5	4761.5	4801.4	4785.0	4775.6	4807.3
17.5°	4628.9	4633.6	4645.3	4637.1	4677.0	4687.6	4665.3	4705.2	4689.9	4673.5	4704.0
20°	4508.1	4505.7	4512.8	4509.2	4542.1	4548.0	4533.9	4563.2	4545.6	4536.2	4553.8
22.5°	4357.9	4355.5	4360.2	4350.8	4383.7	4387.2	4366.1	4401.3	4383.7	4366.1	4395.4
25°	4191.3	4178.3	4176.0	4179.5	4201.8	4205.3	4183.0	4208.9	4186.6	4172.5	4200.6
27.5°	3985.9	3969.5	3966.0	3969.5	3991.8	3975.4	3956.6	3975.4	3953.1	3940.2	3957.8
30°	3732.5	3709.0	3698.4	3691.4	3714.9	3709.0	3665.6	3686.7	3651.5	3632.7	3645.6
32.5°	3391.0	3378.1	3350.0	3333.5	3355.8	3311.2	3284.2	3284.2	3270.2	3238.5	3245.5
35°	2917.0	2897.0	2871.2	2857.1	2860.7	2800.8	2756.2	2765.6	2718.7	2710.5	2714.0
37.5°	2317.4	2284.5	2275.2	2245.8	2252.9	2200.1	2139.0	2140.2	2115.6	2089.8	2081.5
40°	1741.3	1735.4	1726.0	1701.4	1710.8	1653.3	1629.8	1631.0	1614.5	1595.8	1605.2
42.5°	1345.8	1327.1	1321.2	1313.0	1315.3	1306.0	1275.4	1279.0	1264.9	1260.2	1255.5
45°	1093.6	1073.6	1059.5	1066.6	1066.6	1056.0	1044.3	1051.3	1044.3	1034.9	1039.6
47.5°	901.1	882.4	875.3	874.2	882.4	875.3	863.6	865.9	864.8	861.2	858.9
50°	719.3	714.6	708.7	705.2	708.7	706.4	695.8	701.7	705.2	693.5	697.0
52.5°	548.0	548.0	546.8	538.6	545.6	538.6	537.4	539.7	536.2	531.5	530.4
55°	401.3	397.8	391.9	390.7	393.1	390.7	388.4	389.6	391.9	380.2	380.2
57.5°	274.6	272.2	268.7	268.7	273.4	267.5	264.0	268.7	264.0	259.3	259.3
60°	176.0	174.8	171.3	171.3	171.3	170.1	166.6	167.8	170.1	163.1	164.3
62.5°	105.6	102.1	100.9	99.7	100.9	99.7	99.7	98.6	97.4	97.4	93.9
65°	57.5	55.1	52.8	54.0	54.0	52.8	52.8	52.8	50.5	49.3	48.1
67.5°	29.3	27.0	27.0	25.8	25.8	25.8	25.8	24.6	24.6	24.6	23.5
70°	18.8	17.6	16.4	16.4	16.4	15.3	15.3	15.3	15.3	15.3	14.1
72.5°	12.9	11.7	10.6	10.6	10.6	9.4	9.4	9.4	9.4	8.2	8.2
75°	9.4	8.2	7.0	7.0	7.0	5.9	5.9	5.9	5.9	5.9	5.9
77.5°	5.9	4.7	4.7	4.7	4.7	3.5	3.5	3.5	3.5	3.5	2.3
80°	3.5	3.5	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2
82.5°	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0	0.0	0.0	0.0
87.5°	1.2	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: P251213

CATALOG NUMBER: LD8B70D010 ER8B70940 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8	4465.8
2.5°	4609.0	4599.6	4605.5	4648.9	4630.1	4624.2	4574.9	4618.4
5°	4664.1	4657.1	4657.1	4706.4	4684.1	4679.4	4631.3	4668.8
7.5°	4715.7	4708.7	4709.9	4760.3	4742.7	4735.7	4687.6	4725.1
10°	4782.6	4777.9	4779.1	4827.2	4808.4	4801.4	4752.1	4790.8
12.5°	4822.5	4815.5	4815.5	4867.1	4846.0	4835.4	4788.5	4826.0
15°	4792.0	4781.5	4781.5	4833.1	4809.6	4794.4	4753.3	4788.5
17.5°	4687.6	4677.0	4677.0	4721.6	4704.0	4681.7	4639.5	4672.3
20°	4542.1	4529.2	4525.7	4577.3	4552.6	4532.7	4495.2	4526.8
22.5°	4377.8	4372.0	4361.4	4413.0	4390.7	4369.6	4329.7	4354.4
25°	4180.7	4171.3	4160.7	4211.2	4188.9	4167.8	4136.1	4156.1
27.5°	3935.5	3936.6	3930.8	3970.7	3948.4	3936.6	3897.9	3930.8
30°	3638.6	3625.7	3621.0	3667.9	3646.8	3631.6	3583.5	3615.1
32.5°	3251.4	3232.6	3208.0	3260.8	3224.4	3211.5	3170.4	3216.2
35°	2688.2	2682.3	2660.0	2704.6	2684.7	2661.2	2635.4	2674.1
37.5°	2078.0	2082.7	2080.4	2092.1	2080.4	2065.1	2037.0	2022.9
40°	1586.4	1574.7	1565.3	1586.4	1561.7	1561.7	1545.3	1562.9
42.5°	1243.8	1239.1	1250.8	1255.5	1241.4	1239.1	1236.7	1235.6
45°	1026.7	1026.7	1029.0	1033.7	1029.0	1026.7	1019.7	1015.0
47.5°	846.0	850.7	846.0	861.2	853.0	850.7	836.6	842.5
50°	685.2	679.4	685.2	689.9	691.1	684.1	677.0	680.6
52.5°	531.5	522.1	519.8	526.8	522.1	522.1	517.5	516.3
55°	374.3	377.8	372.0	377.8	375.5	372.0	368.4	373.1
57.5°	253.4	254.6	252.3	255.8	249.9	251.1	249.9	248.8
60°	164.3	159.6	159.6	163.1	157.2	157.2	156.1	156.1
62.5°	93.9	92.7	92.7	91.5	90.3	90.3	90.3	88.0
65°	48.1	46.9	45.8	45.8	45.8	45.8	44.6	44.6
67.5°	23.5	22.3	22.3	23.5	22.3	22.3	22.3	22.3
70°	14.1	14.1	12.9	14.1	12.9	12.9	12.9	12.9
72.5°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
75°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
77.5°	3.5	2.3	2.3	2.3	2.3	2.3	2.3	2.3
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	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
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)