

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: P250897

Luminaire Tested: **LD8B70D010 ER8B70850 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250897
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 ER8B70850 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8061.0 lumens
Efficiency: N/A
Efficacy: 106.2 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

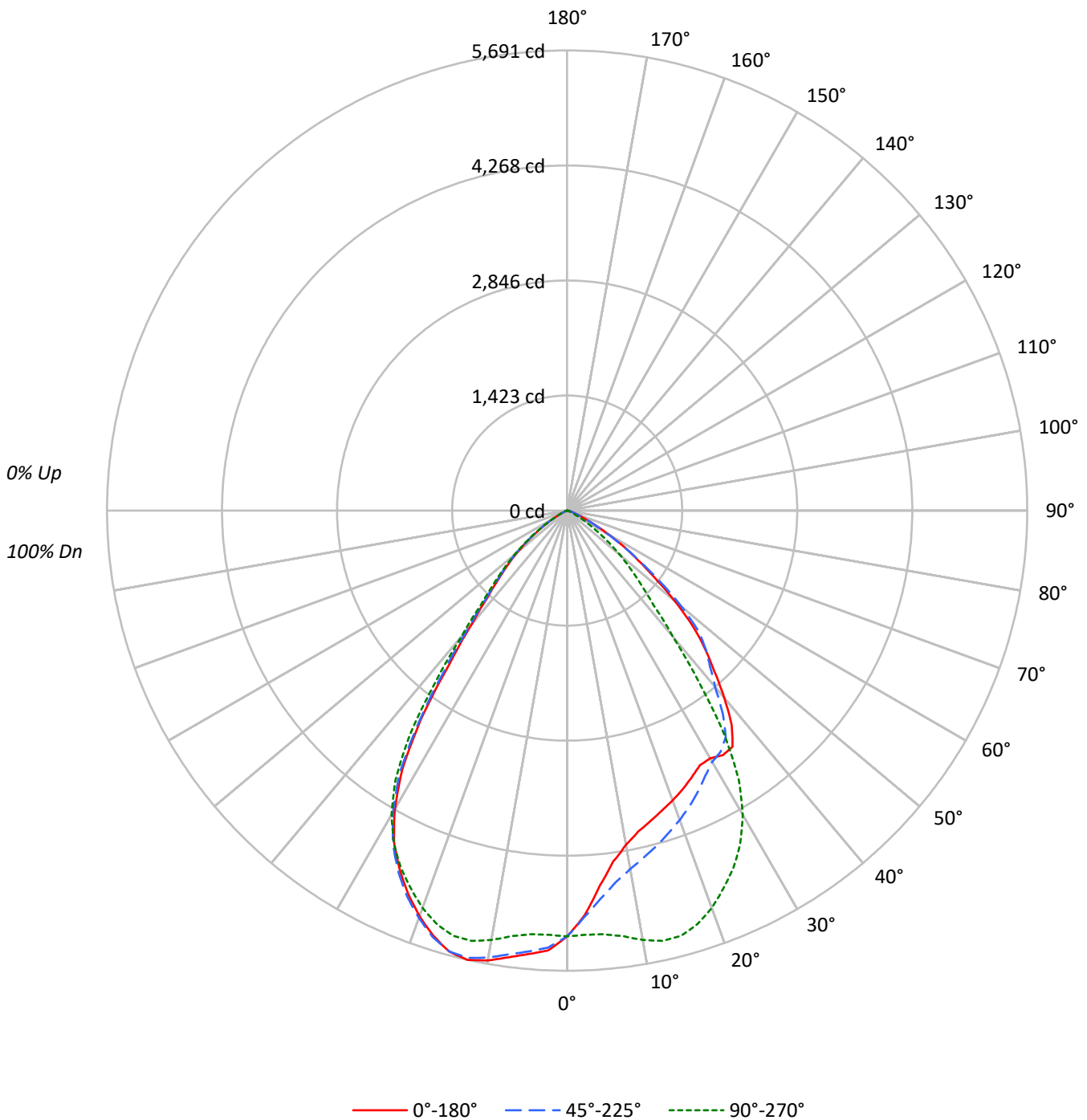
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	162387	162387	162387
5°	144076	162794	170418
10°	131360	168834	176894
15°	126946	173769	180263
20°	125135	171627	175168
25°	123906	165711	166745
30°	125927	154647	151791
35°	134224	127975	118703
40°	121639	81929	74188
45°	104989	56055	52191
50°	82839	40887	38498
55°	57498	25144	23655
60°	36609	12717	11348
65°	18270	5049	3838
70°	10107	2497	1370
75°	7256	1811	655
80°	5896	1225	249
85°	6369	991	0



TEST NUMBER: P250897

CATALOG NUMBER: LD8B70D010 ER8B70850 8LBSW0LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	490.8	6.1
10°-20°	1417.6	17.6
20°-30°	2057.6	25.5
30°-40°	2026.5	25.1
40°-50°	1270.3	15.8
50°-60°	613.0	7.6
60°-70°	148.3	1.8
70°-80°	30.0	0.4
80°-90°	6.9	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°	3966.0	49.2
0°-40°	5992.5	74.3
0°-60°	7875.8	97.7
0°-90°	8061.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8061.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5266	5266	5266	5266	5266	
5°	4654	4812	5259	5472	5506	431
15°	3976	4289	5443	5642	5647	1124
25°	3642	3831	4870	4937	4901	1685
35°	3566	3420	3400	3206	3153	2157
45°	2408	2424	1285	1231	1197	1841
55°	1070	1104	468	462	440	984
65°	250	248	69	60	53	286
75°	61	53	15	7	6	68
85°	18	14	3	0	0	18
90°	0	0	0	0	0	



TEST NUMBER: P250897

CATALOG NUMBER: LD8B70D010 ER8B70850 8LBSW0LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1
2.5°	5006.0	4974.1	4914.6	4986.6	4986.6	4946.5	5026.7	4978.3	5017.0	5077.9	5024.0
5°	4654.5	4628.2	4578.4	4654.5	4664.2	4626.9	4723.7	4687.7	4744.5	4819.2	4812.3
7.5°	4376.4	4343.2	4297.5	4376.4	4391.6	4366.7	4459.4	4442.8	4517.5	4614.4	4631.0
10°	4195.2	4160.6	4120.4	4192.4	4203.5	4186.9	4280.9	4271.3	4344.6	4456.7	4500.9
12.5°	4066.5	4037.4	3993.2	4069.2	4081.7	4058.2	4146.7	4142.6	4218.7	4336.3	4391.6
15°	3976.5	3942.0	3901.8	3966.9	3983.5	3957.2	4041.6	4033.3	4110.8	4227.0	4289.2
17.5°	3892.1	3860.3	3818.8	3879.7	3896.3	3868.6	3951.6	3937.8	4004.2	4114.9	4178.6
20°	3813.3	3778.7	3741.3	3803.6	3813.3	3781.5	3864.5	3846.5	3906.0	4008.4	4070.6
22.5°	3731.6	3695.7	3656.9	3717.8	3727.5	3695.7	3771.8	3751.0	3806.4	3899.1	3955.8
25°	3641.7	3608.5	3569.8	3626.5	3634.8	3600.2	3680.5	3654.2	3702.6	3784.2	3831.3
27.5°	3551.8	3519.9	3477.1	3535.2	3539.3	3506.1	3579.4	3543.5	3583.6	3658.3	3698.4
30°	3536.6	3500.6	3456.3	3503.3	3504.7	3461.8	3531.0	3488.1	3510.3	3565.6	3589.1
32.5°	3585.0	3549.0	3503.3	3542.1	3537.9	3490.9	3557.3	3504.7	3511.6	3540.7	3535.2
35°	3565.6	3522.7	3468.8	3510.3	3510.3	3453.5	3519.9	3457.7	3450.8	3454.9	3420.3
37.5°	3345.6	3312.4	3261.2	3301.3	3297.2	3254.3	3305.5	3254.3	3230.8	3221.1	3158.8
40°	3021.8	2981.7	2943.0	2985.9	2990.0	2944.4	3010.8	2952.7	2945.7	2918.1	2844.7
42.5°	2693.9	2680.1	2642.7	2678.7	2698.1	2659.3	2714.7	2687.0	2691.2	2684.2	2615.1
45°	2407.5	2384.0	2356.3	2397.8	2410.3	2390.9	2446.3	2429.7	2446.3	2480.8	2424.1
47.5°	2099.0	2075.4	2045.0	2089.3	2111.4	2075.4	2122.5	2117.0	2141.9	2201.4	2195.8
50°	1726.8	1710.2	1704.6	1710.2	1724.0	1707.4	1740.6	1742.0	1758.6	1840.2	1845.8
52.5°	1367.0	1362.9	1343.5	1361.5	1361.5	1335.2	1368.4	1353.2	1369.8	1425.1	1461.1
55°	1069.5	1065.4	1052.9	1069.5	1051.6	1041.9	1051.6	1036.3	1023.9	1066.8	1104.1
57.5°	832.9	819.1	803.9	810.8	809.4	788.7	799.7	781.7	772.1	787.3	820.5
60°	593.6	589.4	575.6	582.5	588.0	572.8	583.9	575.6	559.0	571.4	572.8
62.5°	394.3	397.1	388.8	390.2	386.0	383.3	390.2	394.3	390.2	384.6	386.0
65°	250.4	249.1	247.7	249.1	251.8	246.3	250.4	253.2	249.1	249.1	247.7
67.5°	166.0	161.9	157.7	160.5	163.3	159.1	163.3	161.9	163.3	161.9	157.7
70°	112.1	110.7	109.3	110.7	110.7	107.9	110.7	109.3	110.7	109.3	105.2
72.5°	81.6	81.6	80.3	81.6	81.6	78.9	80.3	77.5	78.9	77.5	74.7
75°	60.9	60.9	59.5	60.9	59.5	58.1	59.5	58.1	55.3	55.3	52.6
77.5°	44.3	44.3	44.3	44.3	44.3	42.9	42.9	41.5	40.1	38.7	38.7
80°	33.2	31.8	31.8	31.8	31.8	30.4	31.8	30.4	29.1	27.7	26.3
82.5°	23.5	24.9	23.5	23.5	23.5	22.1	23.5	22.1	22.1	20.8	18.0
85°	18.0	18.0	18.0	18.0	18.0	16.6	16.6	16.6	15.2	15.2	13.8
87.5°	9.7	9.7	9.7	11.1	9.7	9.7	9.7	8.3	8.3	6.9	6.9
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: P250897

CATALOG NUMBER: LD8B70D010 ER8B70850 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1
2.5°	5095.9	5102.8	5087.6	5111.1	5202.4	5129.1	5159.5	5169.2	5238.4	5250.9	5242.6
5°	4902.2	4932.6	4952.0	5004.6	5105.6	5053.0	5107.0	5141.6	5230.1	5259.2	5266.1
7.5°	4750.0	4813.6	4860.7	4946.5	5065.5	5025.3	5107.0	5163.7	5271.6	5309.0	5327.0
10°	4636.5	4733.4	4815.0	4932.6	5066.8	5040.6	5147.1	5227.3	5347.7	5392.0	5414.1
12.5°	4550.8	4668.4	4777.7	4927.1	5072.4	5059.9	5188.6	5279.9	5407.2	5451.5	5477.8
15°	4456.7	4592.3	4719.6	4887.0	5043.3	5040.6	5178.9	5275.8	5405.8	5443.2	5468.1
17.5°	4344.6	4489.9	4629.6	4810.9	4965.8	4968.6	5108.4	5203.8	5331.1	5361.6	5378.2
20°	4231.1	4375.0	4514.8	4701.6	4853.8	4857.9	4994.9	5083.4	5205.2	5230.1	5234.3
22.5°	4110.8	4245.0	4384.7	4570.1	4716.8	4719.6	4855.2	4938.2	5041.9	5054.4	5065.5
25°	3973.8	4105.2	4236.7	4420.7	4560.4	4568.7	4691.9	4765.2	4860.7	4870.4	4874.5
27.5°	3831.3	3939.2	4065.1	4222.8	4364.0	4358.4	4474.7	4557.7	4643.5	4637.9	4636.5
30°	3687.4	3777.3	3854.8	4007.0	4110.8	4114.9	4224.2	4264.3	4354.3	4343.2	4341.8
32.5°	3586.4	3609.9	3630.6	3708.1	3806.4	3771.8	3846.5	3896.3	3958.6	3954.4	3955.8
35°	3401.0	3358.1	3295.8	3306.9	3366.4	3312.4	3352.5	3351.1	3414.8	3399.6	3417.6
37.5°	3084.1	2962.3	2824.0	2745.1	2756.2	2688.4	2674.6	2707.8	2729.9	2687.0	2702.2
40°	2746.5	2566.6	2350.8	2170.9	2161.2	2076.8	2061.6	2028.4	2071.3	2035.3	2046.4
42.5°	2497.4	2259.5	1975.8	1757.2	1710.2	1639.6	1598.1	1592.6	1605.0	1580.1	1573.2
45°	2306.5	2053.3	1728.2	1477.7	1425.1	1349.0	1307.5	1292.3	1293.7	1285.4	1278.5
47.5°	2082.4	1827.8	1498.5	1242.5	1183.0	1111.1	1069.5	1059.9	1065.4	1054.3	1046.0
50°	1772.4	1544.1	1243.9	1010.0	957.5	904.9	871.7	862.0	860.6	852.3	846.8
52.5°	1439.0	1249.4	989.3	794.2	747.2	696.0	672.4	660.0	661.4	653.1	644.8
55°	1113.8	996.2	766.5	600.5	557.6	517.5	495.3	480.1	476.0	467.7	463.5
57.5°	828.8	749.9	574.2	433.1	408.2	369.4	347.3	329.3	326.5	322.4	321.0
60°	581.1	524.4	404.0	308.5	279.5	256.0	233.8	215.8	207.5	206.2	202.0
62.5°	376.3	341.8	265.7	206.2	184.0	167.4	145.3	132.8	127.3	121.8	123.1
65°	233.8	207.5	166.0	132.8	120.4	107.9	91.3	80.3	74.7	69.2	70.6
67.5°	145.3	130.1	105.2	85.8	77.5	67.8	55.3	47.0	42.9	38.7	36.0
70°	98.2	84.4	71.9	60.9	55.3	48.4	40.1	33.2	30.4	27.7	24.9
72.5°	69.2	62.3	52.6	45.7	41.5	36.0	30.4	26.3	23.5	20.8	18.0
75°	49.8	44.3	38.7	33.2	30.4	27.7	23.5	20.8	18.0	15.2	12.5
77.5°	36.0	31.8	27.7	24.9	23.5	19.4	16.6	15.2	13.8	11.1	8.3
80°	24.9	22.1	18.0	16.6	16.6	13.8	12.5	11.1	9.7	6.9	5.5
82.5°	16.6	15.2	13.8	12.5	11.1	9.7	9.7	6.9	5.5	4.2	2.8
85°	12.5	11.1	9.7	8.3	8.3	6.9	5.5	4.2	4.2	2.8	1.4
87.5°	6.9	6.9	5.5	4.2	4.2	2.8	2.8	1.4	1.4	1.4	1.4
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: P250897

CATALOG NUMBER: LD8B70D010 ER8B70850 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1
2.5°	5313.1	5317.3	5340.8	5322.8	5368.5	5401.7	5385.1	5422.4	5410.0	5407.2	5450.1
5°	5349.1	5358.8	5390.6	5374.0	5423.8	5459.8	5443.2	5484.7	5472.2	5469.5	5513.8
7.5°	5418.3	5428.0	5455.6	5441.8	5494.4	5526.2	5505.5	5551.1	5534.5	5533.1	5576.0
10°	5505.5	5519.3	5542.8	5529.0	5577.4	5605.1	5584.3	5628.6	5613.4	5606.5	5653.5
12.5°	5570.5	5580.2	5603.7	5592.6	5639.7	5660.4	5642.4	5685.3	5666.0	5660.4	5701.9
15°	5555.3	5565.0	5584.3	5574.6	5618.9	5638.3	5614.8	5661.8	5642.4	5631.4	5668.7
17.5°	5458.4	5463.9	5477.8	5468.1	5515.1	5527.6	5501.3	5548.3	5530.4	5511.0	5547.0
20°	5315.9	5313.1	5321.4	5317.3	5356.0	5362.9	5346.3	5380.9	5360.2	5349.1	5369.9
22.5°	5138.8	5136.0	5141.6	5130.5	5169.2	5173.4	5148.5	5190.0	5169.2	5148.5	5183.1
25°	4942.3	4927.1	4924.3	4928.5	4954.8	4958.9	4932.6	4963.1	4936.8	4920.2	4953.4
27.5°	4700.2	4680.8	4676.7	4680.8	4707.1	4687.7	4665.6	4687.7	4661.4	4646.2	4667.0
30°	4401.3	4373.6	4361.2	4352.9	4380.6	4373.6	4322.5	4347.4	4305.9	4283.7	4298.9
32.5°	3998.7	3983.5	3950.3	3930.9	3957.2	3904.6	3872.8	3872.8	3856.2	3818.8	3827.1
35°	3439.7	3416.2	3385.7	3369.1	3373.3	3302.7	3250.1	3261.2	3205.9	3196.2	3200.3
37.5°	2732.7	2693.9	2682.9	2648.3	2656.6	2594.3	2522.4	2523.7	2494.7	2464.2	2454.6
40°	2053.3	2046.4	2035.3	2006.3	2017.3	1949.5	1921.9	1923.2	1903.9	1881.7	1892.8
42.5°	1587.0	1564.9	1558.0	1548.3	1551.0	1540.0	1504.0	1508.2	1491.6	1486.0	1480.5
45°	1289.5	1266.0	1249.4	1257.7	1257.7	1245.3	1231.4	1239.7	1231.4	1220.4	1225.9
47.5°	1062.6	1040.5	1032.2	1030.8	1040.5	1032.2	1018.4	1021.1	1019.7	1015.6	1012.8
50°	848.2	842.6	835.7	831.6	835.7	832.9	820.5	827.4	831.6	817.7	821.9
52.5°	646.2	646.2	644.8	635.1	643.4	635.1	633.7	636.5	632.3	626.8	625.4
55°	473.2	469.0	462.1	460.7	463.5	460.7	458.0	459.4	462.1	448.3	448.3
57.5°	323.8	321.0	316.9	316.9	322.4	315.5	311.3	316.9	311.3	305.8	305.8
60°	207.5	206.2	202.0	202.0	202.0	200.6	196.5	197.9	200.6	192.3	193.7
62.5°	124.5	120.4	119.0	117.6	119.0	117.6	117.6	116.2	114.8	114.8	110.7
65°	67.8	65.0	62.3	63.6	63.6	62.3	62.3	62.3	59.5	58.1	56.7
67.5°	34.6	31.8	31.8	30.4	30.4	30.4	30.4	29.1	29.1	29.1	27.7
70°	22.1	20.8	19.4	19.4	19.4	18.0	18.0	18.0	18.0	18.0	16.6
72.5°	15.2	13.8	12.5	12.5	12.5	11.1	11.1	11.1	11.1	9.7	9.7
75°	11.1	9.7	8.3	8.3	8.3	6.9	6.9	6.9	6.9	6.9	6.9
77.5°	6.9	5.5	5.5	5.5	5.5	4.2	4.2	4.2	4.2	4.2	2.8
80°	4.2	4.2	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4
82.5°	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0
85°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0
87.5°	1.4	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: P250897

CATALOG NUMBER: LD8B70D010 ER8B70850 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1	5266.1
2.5°	5434.9	5423.8	5430.7	5481.9	5459.8	5452.9	5394.8	5446.0
5°	5499.9	5491.6	5491.6	5549.7	5523.4	5517.9	5461.2	5505.5
7.5°	5560.8	5552.5	5553.9	5613.4	5592.6	5584.3	5527.6	5571.9
10°	5639.7	5634.1	5635.5	5692.2	5670.1	5661.8	5603.7	5649.4
12.5°	5686.7	5678.4	5678.4	5739.3	5714.4	5701.9	5646.6	5690.9
15°	5650.7	5638.3	5638.3	5699.2	5671.5	5653.5	5605.1	5646.6
17.5°	5527.6	5515.1	5515.1	5567.7	5547.0	5520.7	5470.9	5509.6
20°	5356.0	5340.8	5336.7	5397.5	5368.5	5345.0	5300.7	5338.0
22.5°	5162.3	5155.4	5142.9	5203.8	5177.5	5152.6	5105.6	5134.6
25°	4929.9	4918.8	4906.3	4965.8	4939.6	4914.6	4877.3	4900.8
27.5°	4640.7	4642.1	4635.2	4682.2	4655.9	4642.1	4596.4	4635.2
30°	4290.6	4275.4	4269.9	4325.2	4300.3	4282.3	4225.6	4263.0
32.5°	3834.0	3811.9	3782.8	3845.1	3802.2	3787.0	3738.6	3792.5
35°	3169.9	3163.0	3136.7	3189.3	3165.7	3138.1	3107.6	3153.3
37.5°	2450.4	2455.9	2453.2	2467.0	2453.2	2435.2	2402.0	2385.4
40°	1870.7	1856.8	1845.8	1870.7	1841.6	1841.6	1822.2	1843.0
42.5°	1466.6	1461.1	1474.9	1480.5	1463.9	1461.1	1458.3	1457.0
45°	1210.7	1210.7	1213.4	1219.0	1213.4	1210.7	1202.4	1196.8
47.5°	997.6	1003.1	997.6	1015.6	1005.9	1003.1	986.5	993.4
50°	808.0	801.1	808.0	813.6	815.0	806.7	798.4	802.5
52.5°	626.8	615.7	612.9	621.2	615.7	615.7	610.2	608.8
55°	441.4	445.5	438.6	445.5	442.8	438.6	434.5	440.0
57.5°	298.9	300.2	297.5	301.6	294.7	296.1	294.7	293.3
60°	193.7	188.2	188.2	192.3	185.4	185.4	184.0	184.0
62.5°	110.7	109.3	109.3	107.9	106.5	106.5	106.5	103.8
65°	56.7	55.3	54.0	54.0	54.0	54.0	52.6	52.6
67.5°	27.7	26.3	26.3	27.7	26.3	26.3	26.3	26.3
70°	16.6	16.6	15.2	16.6	15.2	15.2	15.2	15.2
72.5°	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
75°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
77.5°	4.2	2.8	2.8	2.8	2.8	2.8	2.8	2.8
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
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)