

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: P248761

Luminaire Tested: **LD8B90D010 ER8B90827 8LBSW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248761
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 8LBSW0GPH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8185.0 lumens
Efficiency: N/A
Efficacy: 95.1 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

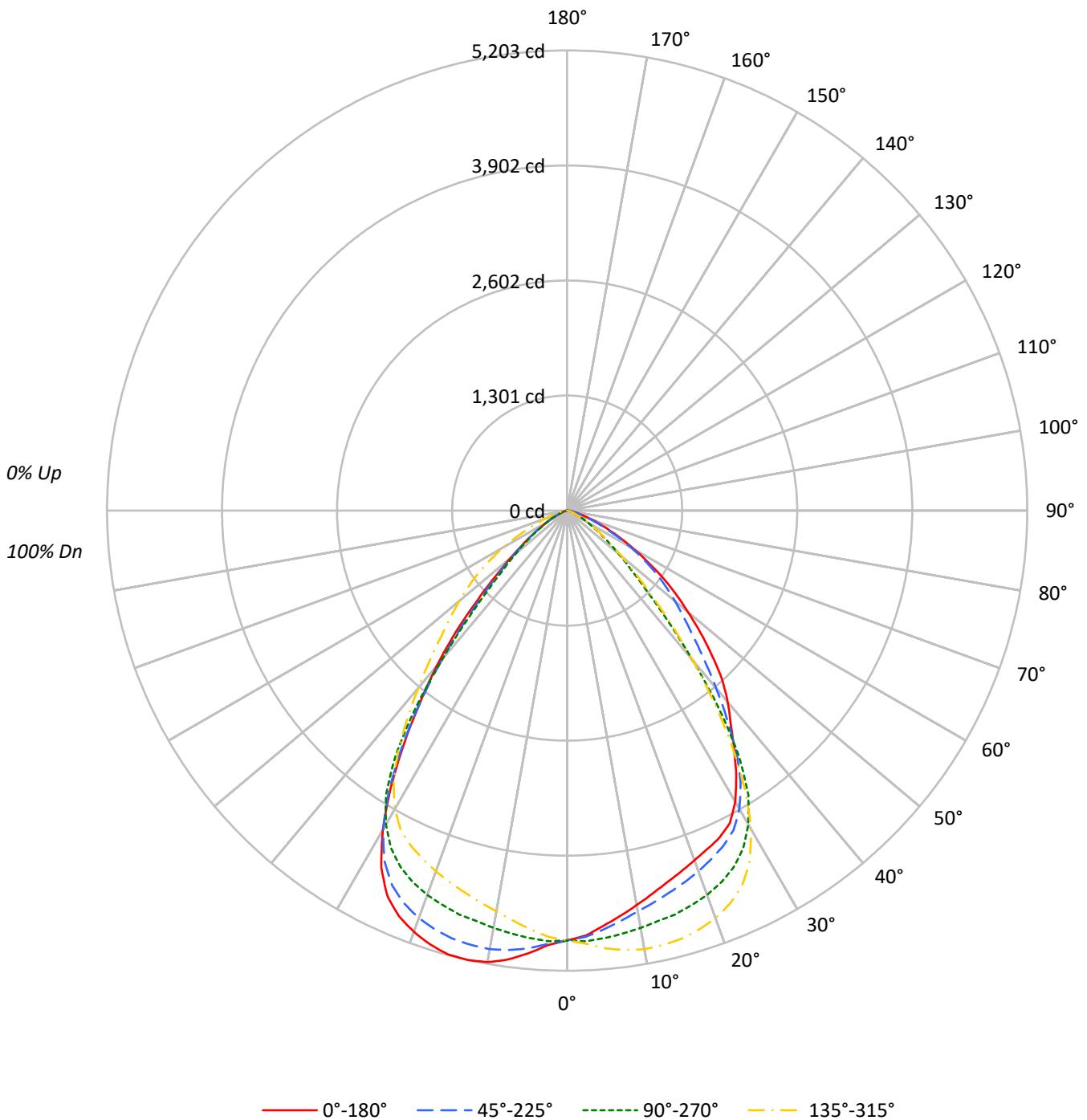
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	149840	149840	149840	149840
5°	145859	150189	155554	150189
10°	141825	149994	162328	149994
15°	138991	150886	165881	150886
20°	138044	151748	166308	151748
25°	138771	151445	163636	151445
30°	135338	145898	148523	145898
35°	123793	127275	120755	127275
40°	113657	88535	92455	88535
45°	100986	54010	62496	54010
50°	85478	36080	40067	36080
55°	70793	24617	26021	24617
60°	53994	16386	16534	16386
65°	38256	10208	9347	10208
70°	27598	6843	6212	6843
75°	17526	3396	2824	3396
80°	12235	2539	2095	2539
85°	10933	0	814	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.5	5.7
10°-20°	1339.3	16.4
20°-30°	2028.0	24.8
30°-40°	2032.6	24.8
40°-50°	1276.3	15.6
50°-60°	680.2	8.3
60°-70°	279.7	3.4
70°-80°	73.9	0.9
80°-90°	12.5	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°	3829.8	46.8
0°-40°	5862.4	71.6
0°-60°	7818.9	95.5
0°-90°	8185.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8185.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4859	4859	4859	4859	4859	
5°	4712	4852	5025	4852	4712	444
15°	4354	4726	5196	4726	4354	1231
25°	4079	4451	4809	4451	4079	1871
35°	3288	3381	3208	3381	3288	2060
45°	2316	1238	1433	1238	2316	1781
55°	1317	458	484	458	1317	1174
65°	524	140	128	140	524	544
75°	147	28	24	28	147	167
85°	31	0	2	0	31	34
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°	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2
2.5°	4809.4	4804.6	4802.2	4807.0	4809.4	4818.8	4816.5	4821.2	4821.2	4823.6	4828.3
5°	4712.1	4709.7	4712.1	4712.1	4721.6	4731.0	4728.7	4735.8	4740.5	4752.4	4757.1
7.5°	4622.0	4622.0	4619.5	4629.0	4633.8	4648.0	4645.6	4657.5	4664.6	4676.5	4693.1
10°	4529.4	4529.4	4531.7	4538.9	4541.3	4562.6	4562.6	4579.2	4588.7	4600.6	4622.0
12.5°	4439.2	4439.2	4453.5	4448.7	4458.2	4474.8	4481.9	4498.5	4512.8	4536.5	4557.9
15°	4353.8	4353.8	4358.6	4370.4	4377.5	4398.9	4410.7	4429.8	4446.4	4470.1	4501.0
17.5°	4280.2	4277.9	4280.2	4294.5	4308.8	4327.7	4337.2	4360.9	4377.5	4408.4	4436.9
20°	4206.7	4211.5	4211.5	4223.3	4232.8	4256.5	4266.0	4292.2	4311.1	4339.5	4372.8
22.5°	4142.6	4140.3	4140.3	4156.9	4164.0	4185.3	4194.8	4218.5	4239.9	4263.6	4294.5
25°	4078.6	4073.8	4083.4	4085.7	4090.4	4114.1	4121.3	4137.9	4159.2	4180.6	4211.5
27.5°	3983.7	3979.0	3981.3	3990.8	3997.9	4016.9	4021.6	4038.2	4054.8	4073.8	4100.0
30°	3800.9	3796.2	3793.9	3810.5	3817.6	3831.8	3838.9	3867.4	3872.1	3893.5	3912.5
32.5°	3558.9	3556.6	3561.4	3575.5	3582.7	3601.7	3611.2	3627.8	3639.6	3651.5	3670.5
35°	3288.5	3283.7	3288.5	3302.8	3302.8	3319.4	3326.5	3333.5	3331.2	3333.5	3328.8
37.5°	3037.0	3034.6	3037.0	3044.1	3037.0	3044.1	3037.0	3022.8	2996.7	2968.2	2939.7
40°	2823.5	2825.8	2811.6	2821.1	2794.9	2790.2	2764.2	2728.5	2676.4	2619.4	2538.8
42.5°	2595.7	2588.6	2579.1	2583.8	2562.5	2545.8	2503.1	2458.1	2391.6	2296.8	2199.4
45°	2315.7	2313.4	2308.6	2306.2	2292.0	2275.4	2239.7	2187.6	2114.0	2016.8	1900.5
47.5°	2042.9	2035.7	2035.7	2038.1	2021.5	2019.1	1990.6	1945.6	1881.5	1786.6	1665.6
50°	1781.8	1779.5	1784.2	1793.7	1781.8	1777.1	1758.2	1727.3	1670.4	1589.7	1475.7
52.5°	1546.9	1544.6	1549.4	1561.2	1556.4	1561.2	1542.2	1518.5	1480.5	1402.2	1302.6
55°	1316.8	1316.8	1316.8	1331.0	1331.0	1331.0	1321.5	1307.4	1271.7	1214.8	1122.3
57.5°	1077.2	1079.5	1093.8	1096.1	1093.8	1098.6	1096.1	1081.9	1058.2	1017.9	946.7
60°	875.5	875.5	882.7	889.8	887.3	889.8	889.8	882.7	858.9	825.7	768.8
62.5°	692.8	699.9	695.1	699.9	709.4	699.9	695.1	690.5	673.9	652.5	605.0
65°	524.3	529.1	529.1	531.5	526.7	529.1	519.6	512.5	503.0	479.3	448.5
67.5°	398.6	398.6	398.6	398.6	396.2	393.9	391.5	384.4	367.8	358.3	325.0
70°	306.1	291.8	291.8	291.8	291.8	294.2	287.1	277.6	272.9	256.3	232.5
72.5°	204.0	208.8	204.0	204.0	199.3	201.7	192.2	187.4	182.7	173.2	159.0
75°	147.1	135.3	139.9	142.4	135.3	139.9	130.5	121.0	121.0	113.9	106.7
77.5°	94.9	92.6	94.9	97.3	94.9	92.6	87.8	83.0	83.0	80.7	73.5
80°	68.9	66.4	66.4	66.4	64.1	66.4	61.7	61.7	56.9	54.6	49.8
82.5°	45.1	45.1	42.7	45.1	42.7	45.1	38.0	38.0	38.0	35.5	30.9
85°	30.9	26.1	26.1	28.5	23.7	28.5	26.1	23.7	21.4	21.4	18.9
87.5°	14.3	16.6	14.3	16.6	14.3	14.3	16.6	14.3	14.3	9.5	9.5
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°	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2
2.5°	4835.4	4837.8	4837.8	4847.4	4852.0	4854.4	4854.4	4873.4	4866.3	4871.1	4875.8
5°	4766.7	4780.9	4785.6	4785.6	4811.7	4821.2	4830.7	4852.0	4854.4	4868.6	4885.3
7.5°	4700.2	4716.8	4726.4	4747.6	4764.2	4780.9	4809.4	4823.6	4837.8	4856.8	4878.1
10°	4636.1	4655.2	4674.1	4690.7	4716.8	4738.2	4757.1	4790.3	4807.0	4833.1	4861.5
12.5°	4574.5	4600.6	4617.2	4645.6	4674.1	4693.1	4721.6	4752.4	4778.5	4804.6	4837.8
15°	4519.9	4550.8	4569.7	4600.6	4631.4	4657.5	4688.4	4726.4	4745.3	4776.2	4807.0
17.5°	4460.5	4493.8	4517.6	4546.0	4584.0	4612.4	4638.6	4676.5	4700.2	4733.4	4769.0
20°	4398.9	4432.1	4460.5	4489.0	4527.0	4555.5	4586.3	4624.3	4650.4	4683.6	4712.1
22.5°	4325.4	4356.2	4387.0	4420.2	4458.2	4481.9	4517.6	4550.8	4579.2	4610.0	4638.6
25°	4230.4	4268.4	4292.2	4322.9	4353.8	4379.9	4417.8	4451.1	4474.8	4503.3	4529.4
27.5°	4118.9	4147.4	4166.4	4192.4	4223.3	4247.0	4275.5	4308.8	4332.5	4358.6	4377.5
30°	3929.1	3955.2	3971.8	3990.8	4021.6	4043.0	4066.8	4097.5	4114.1	4133.2	4149.8
32.5°	3679.9	3701.3	3710.8	3725.0	3746.4	3767.7	3786.8	3812.8	3820.0	3831.8	3831.8
35°	3319.4	3324.1	3321.7	3326.5	3336.0	3347.8	3364.4	3381.0	3390.5	3390.5	3383.4
37.5°	2897.0	2868.6	2837.7	2814.0	2806.8	2802.1	2811.6	2818.7	2828.2	2832.9	2821.1
40°	2458.1	2394.0	2325.2	2263.5	2220.8	2201.8	2194.7	2199.4	2199.4	2216.0	2216.0
42.5°	2080.8	1981.1	1879.2	1786.6	1724.9	1677.5	1656.1	1656.1	1658.5	1670.4	1677.5
45°	1767.6	1641.9	1523.2	1421.2	1335.8	1274.1	1245.7	1238.5	1236.2	1240.9	1257.5
47.5°	1528.0	1397.5	1274.1	1148.4	1058.2	996.5	970.4	960.9	951.4	960.9	963.3
50°	1340.6	1205.3	1074.8	949.1	854.1	799.5	766.3	752.1	749.7	749.7	754.5
52.5°	1169.7	1044.0	913.5	785.4	685.7	633.5	602.7	595.5	586.1	595.5	595.5
55°	1008.3	882.7	754.5	633.5	550.4	495.9	467.4	457.9	453.1	460.3	460.3
57.5°	832.8	726.0	607.4	498.3	415.3	377.3	355.9	344.1	341.6	346.4	341.6
60°	683.3	593.2	491.1	391.5	327.5	287.1	270.5	265.7	260.9	265.7	265.7
62.5°	540.9	465.1	381.9	306.1	251.5	223.1	204.0	204.0	201.7	201.7	204.0
65°	401.0	341.6	282.3	218.3	175.6	154.2	139.9	139.9	137.6	139.9	137.6
67.5°	291.8	251.5	204.0	159.0	125.8	113.9	104.4	97.3	102.1	97.3	94.9
70°	213.6	180.3	147.1	121.0	97.3	85.5	78.3	75.9	71.2	71.2	71.2
72.5°	142.4	121.0	99.6	78.3	64.1	52.2	49.8	45.1	40.3	42.7	47.5
75°	94.9	80.7	71.2	56.9	42.7	42.7	28.5	28.5	23.7	28.5	21.4
77.5°	66.4	54.6	42.7	35.5	28.5	26.1	18.9	18.9	16.6	16.6	16.6
80°	47.5	40.3	30.9	26.1	18.9	18.9	16.6	14.3	11.8	11.8	14.3
82.5°	28.5	21.4	21.4	18.9	11.8	9.5	7.1	9.5	4.8	4.8	4.8
85°	16.6	14.3	11.8	7.1	4.8	4.8	2.3	0.0	2.3	2.3	0.0
87.5°	9.5	4.8	4.8	2.3	0.0	2.3	2.3	0.0	0.0	0.0	4.8
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°	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2
2.5°	4887.7	4885.3	4890.0	4890.0	4904.3	4901.9	4909.0	4909.0	4904.3	4906.6	4916.1
5°	4904.3	4911.4	4925.6	4937.5	4958.8	4968.4	4980.2	4992.1	4994.4	5001.6	5008.7
7.5°	4904.3	4928.0	4944.6	4965.9	4994.4	5011.0	5037.1	5058.5	5068.0	5079.8	5094.0
10°	4894.7	4918.5	4949.3	4973.0	5008.7	5034.8	5060.8	5094.0	5108.3	5127.3	5146.3
12.5°	4875.8	4901.9	4935.1	4965.9	5006.3	5030.0	5063.2	5094.0	5115.4	5141.5	5162.9
15°	4847.4	4878.1	4909.0	4939.8	4982.5	5011.0	5041.9	5077.4	5098.8	5127.3	5146.3
17.5°	4802.2	4835.4	4864.0	4892.4	4932.7	4965.9	4994.4	5027.6	5049.0	5072.8	5098.8
20°	4747.6	4778.5	4809.4	4833.1	4873.4	4901.9	4932.7	4963.6	4980.2	4985.0	5025.3
22.5°	4678.9	4700.2	4723.9	4761.9	4785.6	4811.7	4840.2	4868.6	4885.3	4911.4	4925.6
25°	4564.9	4586.3	4612.4	4629.0	4657.5	4678.9	4707.3	4738.2	4747.6	4766.7	4780.9
27.5°	4406.0	4417.8	4429.8	4443.9	4460.5	4472.4	4489.0	4503.3	4512.8	4522.2	4531.7
30°	4154.5	4154.5	4154.5	4145.0	4152.1	4159.2	4161.6	4159.2	4159.2	4156.9	4156.9
32.5°	3822.3	3803.4	3782.0	3763.0	3755.9	3746.4	3741.7	3734.5	3722.7	3715.6	3717.9
35°	3373.9	3331.2	3305.1	3281.4	3262.4	3248.2	3241.0	3233.9	3231.6	3222.1	3212.5
37.5°	2814.0	2783.1	2764.2	2749.9	2733.3	2719.1	2721.4	2723.8	2730.9	2726.2	2728.5
40°	2220.8	2213.7	2220.8	2204.2	2199.4	2204.2	2216.0	2232.7	2242.2	2251.7	2268.3
42.5°	1689.3	1701.1	1717.8	1717.8	1724.9	1734.4	1748.6	1774.8	1788.9	1805.5	1824.6
45°	1271.7	1286.0	1307.4	1314.4	1319.2	1331.0	1347.7	1369.0	1378.5	1392.7	1409.3
47.5°	979.9	989.4	1001.2	1013.1	1024.9	1029.7	1046.3	1046.3	1058.2	1067.7	1072.4
50°	764.0	773.5	782.9	790.1	794.9	802.0	806.7	813.8	816.1	820.9	823.3
52.5°	597.9	609.8	609.8	614.5	621.6	628.7	626.4	628.7	631.1	631.1	638.2
55°	467.4	467.4	474.5	474.5	479.3	476.9	479.3	479.3	479.3	479.3	481.7
57.5°	348.7	351.2	358.3	353.5	351.2	355.9	351.2	355.9	353.5	358.3	351.2
60°	268.1	268.1	270.5	270.5	272.9	272.9	272.9	270.5	270.5	268.1	268.1
62.5°	201.7	204.0	206.5	204.0	204.0	204.0	201.7	201.7	199.3	196.9	196.9
65°	135.3	132.9	137.6	132.9	135.3	135.3	132.9	135.3	128.1	130.5	128.1
67.5°	97.3	94.9	92.6	94.9	92.6	90.1	90.1	92.6	94.9	87.8	87.8
70°	64.1	66.4	64.1	66.4	68.9	68.9	66.4	64.1	66.4	61.7	64.1
72.5°	40.3	40.3	40.3	40.3	40.3	42.7	42.7	42.7	38.0	38.0	35.5
75°	18.9	26.1	21.4	18.9	26.1	26.1	23.7	23.7	21.4	21.4	21.4
77.5°	18.9	14.3	14.3	14.3	14.3	14.3	14.3	14.3	11.8	14.3	11.8
80°	9.5	9.5	9.5	7.1	9.5	9.5	11.8	9.5	9.5	7.1	11.8
82.5°	4.8	4.8	4.8	0.0	2.3	4.8	4.8	2.3	4.8	4.8	2.3
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: P248761

CATALOG NUMBER: LD8B90D010 ER8B90827 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2
2.5°	4913.8	4911.4	4913.8	4916.1	4913.8	4911.4	4913.8	4916.1	4906.6	4904.3	4909.0
5°	5018.2	5018.2	5022.9	5025.3	5022.9	5018.2	5018.2	5008.7	5001.6	4994.4	4992.1
7.5°	5108.3	5113.1	5117.8	5120.1	5117.8	5113.1	5108.3	5094.0	5079.8	5068.0	5058.5
10°	5162.9	5170.0	5179.5	5184.2	5179.5	5170.0	5162.9	5146.3	5127.3	5108.3	5094.0
12.5°	5186.6	5193.8	5205.6	5203.2	5205.6	5193.8	5186.6	5162.9	5141.5	5115.4	5094.0
15°	5170.0	5179.5	5191.3	5196.1	5191.3	5179.5	5170.0	5146.3	5127.3	5098.8	5077.4
17.5°	5117.8	5132.0	5139.2	5146.3	5139.2	5132.0	5117.8	5098.8	5072.8	5049.0	5027.6
20°	5046.6	5056.2	5065.6	5068.0	5065.6	5056.2	5046.6	5025.3	4985.0	4980.2	4963.6
22.5°	4944.6	4951.8	4973.0	4965.9	4973.0	4951.8	4944.6	4925.6	4911.4	4885.3	4868.6
25°	4797.5	4804.6	4807.0	4809.4	4807.0	4804.6	4797.5	4780.9	4766.7	4747.6	4738.2
27.5°	4543.6	4543.6	4548.3	4550.8	4548.3	4543.6	4543.6	4531.7	4522.2	4512.8	4503.3
30°	4159.2	4159.2	4159.2	4171.2	4159.2	4159.2	4159.2	4156.9	4156.9	4159.2	4159.2
32.5°	3715.6	3710.8	3706.1	3710.8	3706.1	3710.8	3715.6	3717.9	3715.6	3722.7	3734.5
35°	3212.5	3210.2	3217.3	3207.8	3217.3	3210.2	3212.5	3212.5	3222.1	3231.6	3233.9
37.5°	2730.9	2726.2	2735.7	2726.2	2735.7	2726.2	2730.9	2728.5	2726.2	2730.9	2723.8
40°	2273.0	2277.7	2277.7	2296.8	2277.7	2277.7	2273.0	2268.3	2251.7	2242.2	2232.7
42.5°	1834.1	1848.3	1843.5	1857.8	1843.5	1848.3	1834.1	1824.6	1805.5	1788.9	1774.8
45°	1418.8	1428.4	1428.4	1433.1	1428.4	1428.4	1418.8	1409.3	1392.7	1378.5	1369.0
47.5°	1089.0	1089.0	1089.0	1091.4	1089.0	1089.0	1089.0	1072.4	1067.7	1058.2	1046.3
50°	828.1	830.4	832.8	835.2	832.8	830.4	828.1	823.3	820.9	816.1	813.8
52.5°	635.9	638.2	633.5	638.2	633.5	638.2	635.9	638.2	631.1	631.1	628.7
55°	481.7	479.3	481.7	484.0	481.7	479.3	481.7	481.7	479.3	479.3	479.3
57.5°	353.5	348.7	348.7	348.7	348.7	348.7	353.5	351.2	358.3	353.5	355.9
60°	263.4	265.7	265.7	268.1	265.7	265.7	263.4	268.1	268.1	270.5	270.5
62.5°	194.5	201.7	196.9	201.7	196.9	201.7	194.5	196.9	196.9	199.3	201.7
65°	125.8	125.8	125.8	128.1	125.8	125.8	125.8	128.1	130.5	128.1	135.3
67.5°	85.5	87.8	92.6	90.1	92.6	87.8	85.5	87.8	87.8	94.9	92.6
70°	68.9	61.7	61.7	68.9	61.7	61.7	68.9	64.1	61.7	66.4	64.1
72.5°	40.3	35.5	40.3	40.3	40.3	35.5	40.3	35.5	38.0	38.0	42.7
75°	21.4	18.9	16.6	23.7	16.6	18.9	21.4	21.4	21.4	21.4	23.7
77.5°	14.3	11.8	16.6	16.6	16.6	11.8	14.3	11.8	14.3	11.8	14.3
80°	7.1	9.5	7.1	11.8	7.1	9.5	7.1	11.8	7.1	9.5	9.5
82.5°	2.3	4.8	4.8	4.8	4.8	4.8	2.3	2.3	4.8	4.8	2.3
85°	0.0	4.8	2.3	2.3	2.3	4.8	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	0.0	0.0	2.3	0.0	0.0	2.3	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: P248761

CATALOG NUMBER: LD8B90D010 ER8B90827 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2
2.5°	4909.0	4901.9	4904.3	4890.0	4890.0	4885.3	4887.7	4875.8	4871.1	4866.3	4873.4
5°	4980.2	4968.4	4958.8	4937.5	4925.6	4911.4	4904.3	4885.3	4868.6	4854.4	4852.0
7.5°	5037.1	5011.0	4994.4	4965.9	4944.6	4928.0	4904.3	4878.1	4856.8	4837.8	4823.6
10°	5060.8	5034.8	5008.7	4973.0	4949.3	4918.5	4894.7	4861.5	4833.1	4807.0	4790.3
12.5°	5063.2	5030.0	5006.3	4965.9	4935.1	4901.9	4875.8	4837.8	4804.6	4778.5	4752.4
15°	5041.9	5011.0	4982.5	4939.8	4909.0	4878.1	4847.4	4807.0	4776.2	4745.3	4726.4
17.5°	4994.4	4965.9	4932.7	4892.4	4864.0	4835.4	4802.2	4769.0	4733.4	4700.2	4676.5
20°	4932.7	4901.9	4873.4	4833.1	4809.4	4778.5	4747.6	4712.1	4683.6	4650.4	4624.3
22.5°	4840.2	4811.7	4785.6	4761.9	4723.9	4700.2	4678.9	4638.6	4610.0	4579.2	4550.8
25°	4707.3	4678.9	4657.5	4629.0	4612.4	4586.3	4564.9	4529.4	4503.3	4474.8	4451.1
27.5°	4489.0	4472.4	4460.5	4443.9	4429.8	4417.8	4406.0	4377.5	4358.6	4332.5	4308.8
30°	4161.6	4159.2	4152.1	4145.0	4154.5	4154.5	4154.5	4149.8	4133.2	4114.1	4097.5
32.5°	3741.7	3746.4	3755.9	3763.0	3782.0	3803.4	3822.3	3831.8	3831.8	3820.0	3812.8
35°	3241.0	3248.2	3262.4	3281.4	3305.1	3331.2	3373.9	3383.4	3390.5	3390.5	3381.0
37.5°	2721.4	2719.1	2733.3	2749.9	2764.2	2783.1	2814.0	2821.1	2832.9	2828.2	2818.7
40°	2216.0	2204.2	2199.4	2204.2	2220.8	2213.7	2220.8	2216.0	2216.0	2199.4	2199.4
42.5°	1748.6	1734.4	1724.9	1717.8	1717.8	1701.1	1689.3	1677.5	1670.4	1658.5	1656.1
45°	1347.7	1331.0	1319.2	1314.4	1307.4	1286.0	1271.7	1257.5	1240.9	1236.2	1238.5
47.5°	1046.3	1029.7	1024.9	1013.1	1001.2	989.4	979.9	963.3	960.9	951.4	960.9
50°	806.7	802.0	794.9	790.1	782.9	773.5	764.0	754.5	749.7	749.7	752.1
52.5°	626.4	628.7	621.6	614.5	609.8	609.8	597.9	595.5	595.5	586.1	595.5
55°	479.3	476.9	479.3	474.5	474.5	467.4	467.4	460.3	460.3	453.1	457.9
57.5°	351.2	355.9	351.2	353.5	358.3	351.2	348.7	341.6	346.4	341.6	344.1
60°	272.9	272.9	272.9	270.5	270.5	268.1	268.1	265.7	265.7	260.9	265.7
62.5°	201.7	204.0	204.0	204.0	206.5	204.0	201.7	204.0	201.7	201.7	204.0
65°	132.9	135.3	135.3	132.9	137.6	132.9	135.3	137.6	139.9	137.6	139.9
67.5°	90.1	90.1	92.6	94.9	92.6	94.9	97.3	94.9	97.3	102.1	97.3
70°	66.4	68.9	68.9	66.4	64.1	66.4	64.1	71.2	71.2	71.2	75.9
72.5°	42.7	42.7	40.3	40.3	40.3	40.3	40.3	47.5	42.7	40.3	45.1
75°	23.7	26.1	26.1	18.9	21.4	26.1	18.9	21.4	28.5	23.7	28.5
77.5°	14.3	14.3	14.3	14.3	14.3	14.3	18.9	16.6	16.6	16.6	18.9
80°	11.8	9.5	9.5	7.1	9.5	9.5	9.5	14.3	11.8	11.8	14.3
82.5°	4.8	4.8	2.3	0.0	4.8	4.8	4.8	4.8	4.8	4.8	9.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	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: P248761

CATALOG NUMBER: LD8B90D010 ER8B90827 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2
2.5°	4854.4	4854.4	4852.0	4847.4	4837.8	4837.8	4835.4	4828.3	4823.6	4821.2	4821.2
5°	4830.7	4821.2	4811.7	4785.6	4785.6	4780.9	4766.7	4757.1	4752.4	4740.5	4735.8
7.5°	4809.4	4780.9	4764.2	4747.6	4726.4	4716.8	4700.2	4693.1	4676.5	4664.6	4657.5
10°	4757.1	4738.2	4716.8	4690.7	4674.1	4655.2	4636.1	4622.0	4600.6	4588.7	4579.2
12.5°	4721.6	4693.1	4674.1	4645.6	4617.2	4600.6	4574.5	4557.9	4536.5	4512.8	4498.5
15°	4688.4	4657.5	4631.4	4600.6	4569.7	4550.8	4519.9	4501.0	4470.1	4446.4	4429.8
17.5°	4638.6	4612.4	4584.0	4546.0	4517.6	4493.8	4460.5	4436.9	4408.4	4377.5	4360.9
20°	4586.3	4555.5	4527.0	4489.0	4460.5	4432.1	4398.9	4372.8	4339.5	4311.1	4292.2
22.5°	4517.6	4481.9	4458.2	4420.2	4387.0	4356.2	4325.4	4294.5	4263.6	4239.9	4218.5
25°	4417.8	4379.9	4353.8	4322.9	4292.2	4268.4	4230.4	4211.5	4180.6	4159.2	4137.9
27.5°	4275.5	4247.0	4223.3	4192.4	4166.4	4147.4	4118.9	4100.0	4073.8	4054.8	4038.2
30°	4066.8	4043.0	4021.6	3990.8	3971.8	3955.2	3929.1	3912.5	3893.5	3872.1	3867.4
32.5°	3786.8	3767.7	3746.4	3725.0	3710.8	3701.3	3679.9	3670.5	3651.5	3639.6	3627.8
35°	3364.4	3347.8	3336.0	3326.5	3321.7	3324.1	3319.4	3328.8	3333.5	3331.2	3333.5
37.5°	2811.6	2802.1	2806.8	2814.0	2837.7	2868.6	2897.0	2939.7	2968.2	2996.7	3022.8
40°	2194.7	2201.8	2220.8	2263.5	2325.2	2394.0	2458.1	2538.8	2619.4	2676.4	2728.5
42.5°	1656.1	1677.5	1724.9	1786.6	1879.2	1981.1	2080.8	2199.4	2296.8	2391.6	2458.1
45°	1245.7	1274.1	1335.8	1421.2	1523.2	1641.9	1767.6	1900.5	2016.8	2114.0	2187.6
47.5°	970.4	996.5	1058.2	1148.4	1274.1	1397.5	1528.0	1665.6	1786.6	1881.5	1945.6
50°	766.3	799.5	854.1	949.1	1074.8	1205.3	1340.6	1475.7	1589.7	1670.4	1727.3
52.5°	602.7	633.5	685.7	785.4	913.5	1044.0	1169.7	1302.6	1402.2	1480.5	1518.5
55°	467.4	495.9	550.4	633.5	754.5	882.7	1008.3	1122.3	1214.8	1271.7	1307.4
57.5°	355.9	377.3	415.3	498.3	607.4	726.0	832.8	946.7	1017.9	1058.2	1081.9
60°	270.5	287.1	327.5	391.5	491.1	593.2	683.3	768.8	825.7	858.9	882.7
62.5°	204.0	223.1	251.5	306.1	381.9	465.1	540.9	605.0	652.5	673.9	690.5
65°	139.9	154.2	175.6	218.3	282.3	341.6	401.0	448.5	479.3	503.0	512.5
67.5°	104.4	113.9	125.8	159.0	204.0	251.5	291.8	325.0	358.3	367.8	384.4
70°	78.3	85.5	97.3	121.0	147.1	180.3	213.6	232.5	256.3	272.9	277.6
72.5°	49.8	52.2	64.1	78.3	99.6	121.0	142.4	159.0	173.2	182.7	187.4
75°	28.5	42.7	42.7	56.9	71.2	80.7	94.9	106.7	113.9	121.0	121.0
77.5°	18.9	26.1	28.5	35.5	42.7	54.6	66.4	73.5	80.7	83.0	83.0
80°	16.6	18.9	18.9	26.1	30.9	40.3	47.5	49.8	54.6	56.9	61.7
82.5°	7.1	9.5	11.8	18.9	21.4	21.4	28.5	30.9	35.5	38.0	38.0
85°	2.3	4.8	4.8	7.1	11.8	14.3	16.6	18.9	21.4	21.4	23.7
87.5°	2.3	2.3	0.0	2.3	4.8	4.8	9.5	9.5	9.5	14.3	14.3
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: P248761

CATALOG NUMBER: LD8B90D010 ER8B90827 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2	4859.2
2.5°	4816.5	4818.8	4809.4	4807.0	4802.2	4804.6	4809.4
5°	4728.7	4731.0	4721.6	4712.1	4712.1	4709.7	4712.1
7.5°	4645.6	4648.0	4633.8	4629.0	4619.5	4622.0	4622.0
10°	4562.6	4562.6	4541.3	4538.9	4531.7	4529.4	4529.4
12.5°	4481.9	4474.8	4458.2	4448.7	4453.5	4439.2	4439.2
15°	4410.7	4398.9	4377.5	4370.4	4358.6	4353.8	4353.8
17.5°	4337.2	4327.7	4308.8	4294.5	4280.2	4277.9	4280.2
20°	4266.0	4256.5	4232.8	4223.3	4211.5	4211.5	4206.7
22.5°	4194.8	4185.3	4164.0	4156.9	4140.3	4140.3	4142.6
25°	4121.3	4114.1	4090.4	4085.7	4083.4	4073.8	4078.6
27.5°	4021.6	4016.9	3997.9	3990.8	3981.3	3979.0	3983.7
30°	3838.9	3831.8	3817.6	3810.5	3793.9	3796.2	3800.9
32.5°	3611.2	3601.7	3582.7	3575.5	3561.4	3556.6	3558.9
35°	3326.5	3319.4	3302.8	3302.8	3288.5	3283.7	3288.5
37.5°	3037.0	3044.1	3037.0	3044.1	3037.0	3034.6	3037.0
40°	2764.2	2790.2	2794.9	2821.1	2811.6	2825.8	2823.5
42.5°	2503.1	2545.8	2562.5	2583.8	2579.1	2588.6	2595.7
45°	2239.7	2275.4	2292.0	2306.2	2308.6	2313.4	2315.7
47.5°	1990.6	2019.1	2021.5	2038.1	2035.7	2035.7	2042.9
50°	1758.2	1777.1	1781.8	1793.7	1784.2	1779.5	1781.8
52.5°	1542.2	1561.2	1556.4	1561.2	1549.4	1544.6	1546.9
55°	1321.5	1331.0	1331.0	1331.0	1316.8	1316.8	1316.8
57.5°	1096.1	1098.6	1093.8	1096.1	1093.8	1079.5	1077.2
60°	889.8	889.8	887.3	889.8	882.7	875.5	875.5
62.5°	695.1	699.9	709.4	699.9	695.1	699.9	692.8
65°	519.6	529.1	526.7	531.5	529.1	529.1	524.3
67.5°	391.5	393.9	396.2	398.6	398.6	398.6	398.6
70°	287.1	294.2	291.8	291.8	291.8	291.8	306.1
72.5°	192.2	201.7	199.3	204.0	204.0	208.8	204.0
75°	130.5	139.9	135.3	142.4	139.9	135.3	147.1
77.5°	87.8	92.6	94.9	97.3	94.9	92.6	94.9
80°	61.7	66.4	64.1	66.4	66.4	66.4	68.9
82.5°	38.0	45.1	42.7	45.1	42.7	45.1	45.1
85°	26.1	28.5	23.7	28.5	26.1	26.1	30.9
87.5°	16.6	14.3	14.3	16.6	14.3	16.6	14.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)