

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: SHAPER

Report Number: P368733

Luminaire Tested: **673-37-L4/835**

Issue Date: 11/13/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P368733  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1804-721-7)  
Test Lab: INNOVATIONS CENTER  
Issue Date: 11/13/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 673-37-L4/835  
Description: 37" 673 SERIES LUMINOUS WALL SCONCE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

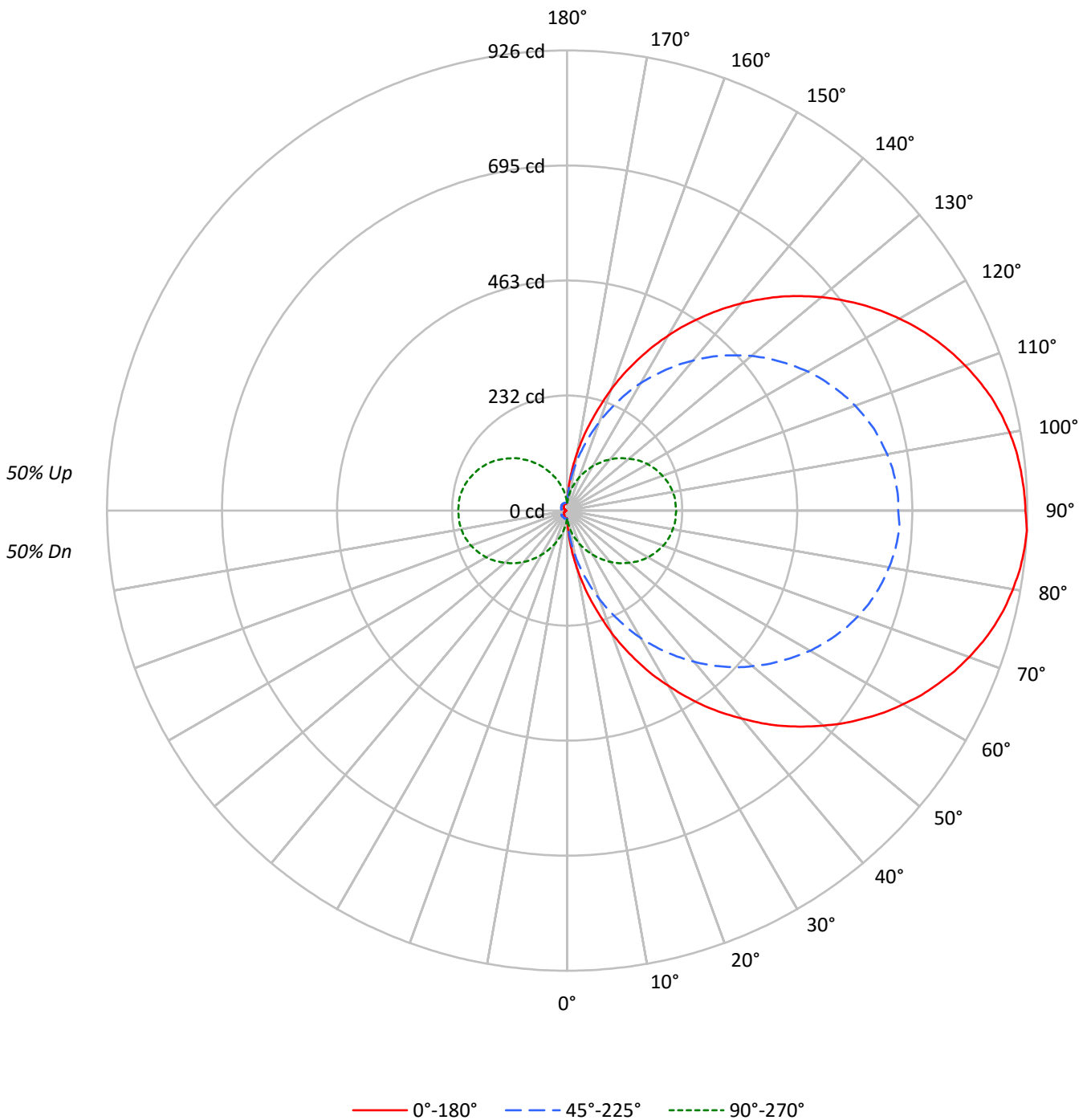
Lumens per Lamp: N/A  
Luminaire Lumens: 3283.0 lumens  
Efficiency: N/A  
Efficacy: 102.0 lumens/watt  
Spacing Criteria (0/90/45): 7.34 / 5.53 / 6  
Luminous Opening: Rectangular w/ Sides (W: 0.71' x L: 0.25' x H: 3.08')  
CIE Type: General Diffuse

Input Watts (W): 32.2  
Input Voltage (V): 120  
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



TEST NUMBER: P368733  
CATALOG NUMBER: 673-37-L4/835

### Luminous Intensity Polar Plot





TEST NUMBER: P368733  
 CATALOG NUMBER: 673-37-L4/835

**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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	92	85	79	74	84	78	73	68	64	60	56	52	49	46	41	38	36	30
2	81	71	63	56	74	65	57	51	53	47	42	42	38	34	32	29	26	21
3	73	61	51	44	66	55	47	40	45	38	33	36	31	26	27	23	20	15
4	66	53	43	35	60	48	39	32	39	32	27	31	25	21	23	19	15	11
5	60	46	36	29	54	42	33	27	34	27	22	27	21	17	20	16	12	9
6	55	41	31	24	50	37	29	22	30	23	18	24	18	14	18	14	10	7
7	50	36	27	21	46	33	25	19	27	20	15	21	16	12	16	12	9	6
8	47	33	24	18	42	30	22	16	24	18	13	19	14	10	14	10	7	5
9	43	30	21	16	39	27	19	14	22	16	12	18	13	9	13	9	6	4
10	40	27	19	14	36	25	17	12	20	14	10	16	11	8	12	8	6	3

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	985	985	985
5°	1823	1180	449
10°	2376	1400	297
15°	2763	1609	209
20°	3095	1770	169
25°	3329	1901	123
30°	3515	2042	99
35°	3691	2170	81
40°	3818	2296	66
45°	3952	2407	55
50°	4055	2496	52
55°	4153	2593	43
60°	4241	2678	36
65°	4318	2750	30
70°	4387	2828	24
75°	4449	2887	19
80°	4494	2941	14
85°	4536	3004	9



TEST NUMBER: P368733  
 CATALOG NUMBER: 673-37-L4/835

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3.8	0.1
10°-20°	22.9	0.7
20°-30°	60.7	1.8
30°-40°	114.6	3.5
40°-50°	178.5	5.4
50°-60°	244.1	7.4
60°-70°	303.4	9.2
70°-80°	347.9	10.6
80°-90°	370.7	11.3
90°-100°	369.0	11.2
100°-110°	345.2	10.5
110°-120°	300.7	9.2
120°-130°	242.2	7.4
130°-140°	177.4	5.4
140°-150°	114.4	3.5
150°-160°	60.9	1.9
160°-170°	22.9	0.7
170°-180°	3.8	0.1
0°-30°	87.3	2.7
0°-40°	201.9	6.2
0°-60°	624.5	19.0
0°-90°	1646.6	50.2
90°-120°	1014.9	30.9
90°-150°	1548.9	47.2
90°-180°	1636.0	49.8
0°-180°	3283.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	16	16	16	16	16	
5°	62	48	27	16	15	8
15°	189	138	55	17	14	56
25°	335	242	86	16	12	157
35°	479	348	118	15	10	302
45°	613	444	150	14	9	475
55°	730	527	177	14	8	655
65°	824	596	198	13	6	818
75°	891	644	212	12	4	941
85°	923	667	219	10	2	752
90°	922	666	220	12	2	506
95°	917	664	219	10	2	746
105°	883	639	211	12	4	933
115°	816	590	197	13	6	809
125°	723	523	176	14	8	649
135°	609	441	149	15	10	472
145°	476	346	118	16	12	301
155°	334	242	87	16	13	156
165°	185	138	55	16	14	55
175°	61	50	27	16	14	8
180°	16	16	16	16	16	



TEST NUMBER: P368733  
 CATALOG NUMBER: 673-37-L4/835

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
2.5°	34.4	32.5	33.4	30.6	29.6	27.7	25.8	24.8	22.0	21.0	20.1
5°	62.1	61.1	60.2	56.3	52.5	47.7	43.9	38.2	33.4	28.6	26.7
7.5°	90.7	89.7	87.8	83.1	76.4	68.7	61.1	53.5	43.9	37.2	33.4
10°	122.2	119.3	116.5	109.8	101.2	90.7	79.2	67.8	56.3	45.8	40.1
12.5°	153.7	151.8	148.0	138.4	127.9	113.6	99.3	83.1	67.8	54.4	47.7
15°	189.0	186.2	181.4	170.0	155.6	138.4	119.3	99.3	80.2	63.0	55.4
17.5°	223.4	222.5	215.8	201.5	184.3	163.3	139.4	116.5	93.6	71.6	62.1
20°	262.6	260.7	252.1	233.9	213.9	189.0	162.3	133.7	106.0	82.1	70.7
22.5°	298.8	296.9	287.4	269.2	244.4	214.8	183.3	150.9	119.3	91.7	78.3
25°	335.1	333.2	323.7	302.7	275.9	241.6	205.3	168.0	132.7	101.2	85.9
27.5°	372.4	370.5	359.0	336.1	306.5	269.2	227.2	186.2	146.1	110.8	94.5
30°	406.7	406.7	394.3	368.5	336.1	296.0	252.1	203.4	159.4	121.3	102.2
32.5°	443.0	443.0	427.7	402.0	365.7	321.8	274.0	220.6	173.8	129.9	110.8
35°	479.3	478.3	463.1	433.5	395.3	347.5	295.0	239.7	186.2	140.4	118.4
37.5°	512.7	512.7	497.4	465.0	423.9	372.4	316.0	256.8	199.6	149.9	127.0
40°	546.1	547.1	529.9	496.5	450.7	397.2	336.1	274.0	212.9	159.4	134.6
42.5°	580.5	580.5	562.4	526.1	477.4	421.1	356.1	290.3	225.3	168.0	142.3
45°	613.0	612.0	592.9	556.6	504.1	444.0	377.1	306.5	237.7	176.6	149.9
47.5°	643.5	641.6	622.5	584.3	529.9	466.9	395.3	321.8	252.1	185.2	156.6
50°	673.1	673.1	652.1	611.1	553.8	486.9	413.4	336.1	262.6	193.8	163.3
52.5°	702.7	700.8	678.9	636.8	577.6	507.9	430.6	350.4	274.0	201.5	170.0
55°	729.5	726.6	705.6	660.7	599.6	527.0	446.8	363.8	283.6	209.1	176.6
57.5°	756.2	753.3	728.5	684.6	621.6	546.1	463.1	377.1	294.1	216.7	182.4
60°	780.1	778.2	754.3	707.5	641.6	564.3	478.3	389.6	303.6	223.4	188.1
62.5°	803.9	800.1	776.2	727.5	660.7	580.5	491.7	400.1	311.3	229.1	192.9
65°	824.0	821.1	796.3	746.6	677.9	595.8	505.1	410.6	319.9	234.9	197.6
67.5°	844.0	840.2	815.4	763.8	694.1	610.1	516.5	420.1	327.5	241.6	201.5
70°	861.2	858.4	832.6	781.0	709.4	622.5	528.0	428.7	334.2	246.3	206.2
72.5°	877.4	874.6	846.9	794.4	721.8	634.0	537.5	436.3	339.9	250.2	209.1
75°	890.8	887.0	859.3	806.8	733.3	643.5	545.2	443.0	344.7	254.9	212.0
77.5°	902.3	898.5	870.8	817.3	742.8	651.2	551.9	447.8	348.5	257.8	214.8
80°	910.9	908.0	879.4	824.9	749.5	657.8	557.6	452.6	351.4	259.7	215.8
82.5°	918.5	915.6	887.0	831.6	756.2	663.6	562.4	456.4	355.2	261.6	217.7
85°	923.3	919.5	891.8	836.4	760.0	667.4	564.3	458.3	356.1	262.6	218.6
87.5°	926.1	922.3	894.6	839.3	761.9	669.3	566.2	459.3	357.1	263.5	218.6
90°	922.3	918.5	889.9	835.4	759.1	666.4	564.3	458.3	356.1	262.6	219.6
92.5°	920.4	917.6	888.9	834.5	759.1	666.4	563.3	458.3	356.1	263.5	218.6
95°	916.6	913.7	886.0	831.6	756.2	663.6	561.4	456.4	355.2	261.6	218.6
97.5°	911.8	908.0	880.3	825.9	751.4	659.8	557.6	454.5	353.3	260.7	217.7
100°	904.2	901.3	872.7	819.2	744.7	654.0	553.8	450.7	350.4	258.7	215.8
102.5°	894.6	890.8	863.1	809.7	737.1	646.4	548.0	445.9	346.6	255.9	213.9
105°	883.2	879.4	852.6	800.1	727.5	638.8	541.4	440.2	342.8	254.0	211.0
107.5°	868.9	865.0	838.3	786.7	716.1	628.2	531.8	433.5	337.0	248.2	208.1
110°	852.6	849.8	824.0	772.4	702.7	616.8	522.3	425.8	331.3	244.4	204.3



TEST NUMBER: P368733  
 CATALOG NUMBER: 673-37-L4/835

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	835.4	832.6	805.8	756.2	688.4	604.4	511.8	417.2	324.6	239.7	200.5
115°	816.3	812.5	787.7	739.0	672.2	590.1	500.3	407.7	317.0	233.0	196.7
117.5°	795.3	792.5	767.6	719.9	655.9	575.7	486.9	397.2	309.4	227.2	191.9
120°	772.4	769.6	745.7	698.9	636.8	559.5	473.6	386.7	301.7	221.5	187.1
122.5°	748.6	746.6	722.8	676.9	616.8	541.4	458.3	373.3	291.2	214.8	181.4
125°	722.8	721.8	697.9	654.0	595.8	523.2	443.0	360.9	282.6	208.1	175.7
127.5°	696.0	695.1	672.2	630.2	573.8	504.1	426.8	347.5	272.1	200.5	169.0
130°	668.4	667.4	646.4	605.3	551.9	484.1	409.6	334.2	261.6	192.9	162.3
132.5°	638.8	637.8	617.7	578.6	526.1	462.1	390.5	319.9	248.2	184.3	155.6
135°	609.2	608.2	588.1	550.9	501.3	441.1	373.3	304.6	235.8	176.6	148.9
137.5°	576.7	576.7	557.6	522.3	475.5	418.2	353.3	288.3	224.4	168.0	142.3
140°	544.2	544.2	527.0	493.6	448.7	394.3	333.2	273.1	212.0	158.5	133.7
142.5°	510.8	510.8	494.6	463.1	422.0	370.5	313.2	256.8	199.6	148.9	127.0
145°	476.4	476.4	461.2	431.6	393.4	345.6	292.2	238.7	186.2	140.4	118.4
147.5°	442.1	442.1	427.7	400.1	364.7	320.8	271.2	220.6	173.8	130.8	110.8
150°	406.7	407.7	394.3	368.5	336.1	296.0	250.2	203.4	160.4	121.3	103.1
152.5°	370.5	370.5	359.0	336.1	306.5	270.2	226.3	186.2	147.0	111.7	94.5
155°	334.2	334.2	323.7	302.7	276.9	242.5	204.3	169.0	133.7	101.2	86.9
157.5°	296.9	297.9	288.3	271.2	247.3	215.8	183.3	150.9	120.3	91.7	78.3
160°	259.7	260.7	252.1	233.9	212.9	190.0	161.4	133.7	106.9	82.1	70.7
162.5°	220.6	220.6	214.8	202.4	184.3	164.2	139.4	116.5	93.6	72.6	63.0
165°	185.2	185.2	180.5	170.9	154.7	138.4	119.3	99.3	80.2	63.0	55.4
167.5°	151.8	153.7	148.0	140.4	127.9	114.6	98.3	83.1	67.8	54.4	47.7
170°	120.3	120.3	117.4	110.8	101.2	92.6	79.2	68.7	56.3	45.8	41.1
172.5°	89.7	89.7	87.8	83.1	76.4	70.7	61.1	52.5	44.9	37.2	33.4
175°	61.1	61.1	60.2	57.3	53.5	49.6	43.9	39.1	33.4	28.6	26.7
177.5°	33.4	34.4	33.4	32.5	30.6	29.6	26.7	25.8	22.9	21.0	20.1
180°	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2



TEST NUMBER: P368733  
 CATALOG NUMBER: 673-37-L4/835

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
2.5°	19.1	18.1	17.2	16.2	16.2	15.3	15.3	15.3	15.3	15.3
5°	24.8	22.0	19.1	17.2	16.2	15.3	15.3	15.3	15.3	15.3
7.5°	30.6	25.8	21.0	18.1	16.2	16.2	15.3	15.3	15.3	15.3
10°	36.3	28.6	22.9	19.1	16.2	15.3	15.3	15.3	15.3	15.3
12.5°	42.0	32.5	24.8	20.1	17.2	15.3	15.3	15.3	15.3	15.3
15°	47.7	36.3	26.7	21.0	17.2	15.3	15.3	15.3	14.3	14.3
17.5°	54.4	39.1	28.6	21.0	16.2	14.3	14.3	14.3	14.3	14.3
20°	60.2	43.0	30.6	22.0	16.2	14.3	14.3	14.3	14.3	14.3
22.5°	66.8	46.8	32.5	22.9	16.2	13.4	13.4	13.4	13.4	13.4
25°	73.5	50.6	34.4	22.9	16.2	13.4	12.4	12.4	12.4	12.4
27.5°	79.2	54.4	36.3	23.9	15.3	12.4	12.4	12.4	11.5	11.5
30°	85.9	58.2	38.2	23.9	15.3	11.5	11.5	11.5	11.5	11.5
32.5°	92.6	63.0	40.1	24.8	15.3	11.5	11.5	11.5	10.5	10.5
35°	99.3	66.8	42.0	25.8	15.3	10.5	10.5	10.5	10.5	10.5
37.5°	106.0	70.7	43.9	25.8	15.3	10.5	10.5	10.5	10.5	10.5
40°	112.7	74.5	45.8	26.7	15.3	10.5	9.5	9.5	9.5	9.5
42.5°	118.4	78.3	47.7	27.7	15.3	9.5	9.5	9.5	9.5	9.5
45°	124.1	82.1	49.6	28.6	14.3	9.5	9.5	8.6	8.6	8.6
47.5°	130.8	85.9	51.6	28.6	14.3	8.6	8.6	8.6	8.6	8.6
50°	135.6	88.8	53.5	29.6	14.3	8.6	8.6	8.6	8.6	8.6
52.5°	141.3	92.6	55.4	30.6	14.3	7.6	7.6	7.6	7.6	7.6
55°	146.1	94.5	56.3	30.6	14.3	7.6	7.6	7.6	7.6	7.6
57.5°	150.9	98.3	58.2	30.6	14.3	6.7	6.7	6.7	6.7	6.7
60°	155.6	100.3	59.2	31.5	14.3	6.7	6.7	6.7	6.7	6.7
62.5°	159.4	103.1	60.2	31.5	13.4	5.7	5.7	5.7	5.7	5.7
65°	163.3	105.0	62.1	32.5	13.4	5.7	5.7	5.7	5.7	5.7
67.5°	167.1	106.9	63.0	32.5	13.4	5.7	4.8	4.8	4.8	4.8
70°	170.0	108.8	64.0	32.5	12.4	4.8	4.8	4.8	4.8	4.8
72.5°	172.8	110.8	64.0	32.5	12.4	4.8	3.8	3.8	3.8	3.8
75°	174.7	111.7	64.9	32.5	12.4	3.8	3.8	3.8	3.8	3.8
77.5°	176.6	113.6	64.9	32.5	11.5	3.8	3.8	3.8	3.8	3.8
80°	178.5	113.6	65.9	32.5	11.5	2.9	2.9	2.9	2.9	2.9
82.5°	179.5	114.6	65.9	32.5	11.5	2.9	2.9	2.9	1.9	2.9
85°	180.5	114.6	65.9	31.5	10.5	1.9	1.9	1.9	1.9	1.9
87.5°	180.5	115.5	65.9	31.5	10.5	1.9	1.9	1.9	1.9	1.9
90°	180.5	115.5	65.9	32.5	11.5	1.9	1.9	1.9	1.9	1.9
92.5°	180.5	114.6	65.9	31.5	10.5	1.9	1.9	1.9	1.9	1.9
95°	179.5	114.6	65.9	31.5	10.5	1.9	1.9	1.9	1.9	1.9
97.5°	179.5	114.6	65.9	32.5	11.5	2.9	2.9	2.9	2.9	2.9
100°	177.6	113.6	65.9	32.5	11.5	2.9	2.9	2.9	2.9	2.9
102.5°	176.6	112.7	64.9	32.5	12.4	3.8	3.8	2.9	2.9	2.9
105°	174.7	111.7	64.9	32.5	12.4	3.8	3.8	3.8	3.8	3.8
107.5°	171.9	110.8	64.0	32.5	12.4	4.8	3.8	3.8	3.8	3.8
110°	169.0	108.8	64.0	32.5	12.4	4.8	4.8	4.8	4.8	4.8





TEST NUMBER: P368733  
 CATALOG NUMBER: 673-37-L4/835

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	166.1	106.9	63.0	31.5	13.4	4.8	4.8	4.8	4.8	4.8
115°	162.3	105.0	62.1	31.5	13.4	5.7	5.7	5.7	5.7	5.7
117.5°	158.5	103.1	60.2	31.5	13.4	5.7	5.7	5.7	5.7	5.7
120°	154.7	100.3	59.2	31.5	14.3	6.7	6.7	6.7	6.7	6.7
122.5°	149.9	97.4	58.2	30.6	14.3	6.7	6.7	6.7	6.7	6.7
125°	145.1	94.5	56.3	30.6	14.3	7.6	7.6	7.6	7.6	7.6
127.5°	140.4	91.7	55.4	30.6	14.3	8.6	7.6	7.6	7.6	7.6
130°	135.6	88.8	53.5	29.6	15.3	8.6	8.6	8.6	8.6	8.6
132.5°	129.9	85.0	51.6	28.6	15.3	9.5	8.6	8.6	8.6	8.6
135°	124.1	82.1	49.6	28.6	15.3	9.5	9.5	9.5	9.5	9.5
137.5°	118.4	78.3	48.7	27.7	15.3	10.5	10.5	9.5	9.5	9.5
140°	112.7	74.5	46.8	27.7	15.3	10.5	10.5	10.5	10.5	10.5
142.5°	106.0	70.7	44.9	26.7	16.2	11.5	11.5	10.5	10.5	10.5
145°	99.3	66.8	43.0	25.8	16.2	11.5	11.5	11.5	11.5	11.5
147.5°	93.6	63.0	41.1	25.8	16.2	12.4	12.4	12.4	11.5	11.5
150°	86.9	59.2	39.1	24.8	16.2	12.4	12.4	12.4	12.4	12.4
152.5°	80.2	55.4	37.2	23.9	16.2	13.4	12.4	12.4	12.4	12.4
155°	74.5	51.6	34.4	23.9	16.2	13.4	13.4	13.4	13.4	13.4
157.5°	67.8	47.7	32.5	22.9	16.2	13.4	13.4	13.4	13.4	13.4
160°	61.1	43.9	30.6	22.0	16.2	14.3	14.3	13.4	13.4	13.4
162.5°	54.4	40.1	28.6	21.0	16.2	14.3	14.3	14.3	14.3	13.4
165°	48.7	36.3	26.7	21.0	16.2	15.3	14.3	14.3	14.3	14.3
167.5°	42.0	32.5	24.8	20.1	16.2	15.3	14.3	14.3	14.3	14.3
170°	36.3	28.6	22.9	19.1	16.2	15.3	15.3	15.3	14.3	14.3
172.5°	30.6	24.8	21.0	18.1	16.2	15.3	15.3	14.3	14.3	14.3
175°	24.8	22.0	19.1	17.2	16.2	15.3	15.3	15.3	14.3	14.3
177.5°	20.1	18.1	17.2	17.2	16.2	15.3	15.3	15.3	15.3	14.3
180°	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2

(END OF REPORT)