

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: P368732

Luminaire Tested: **673-37-L4/830**

Issue Date: 11/13/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P368732  
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-L4/830  
Description: 37" 673 SERIES LUMINOUS WALL SCONCE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

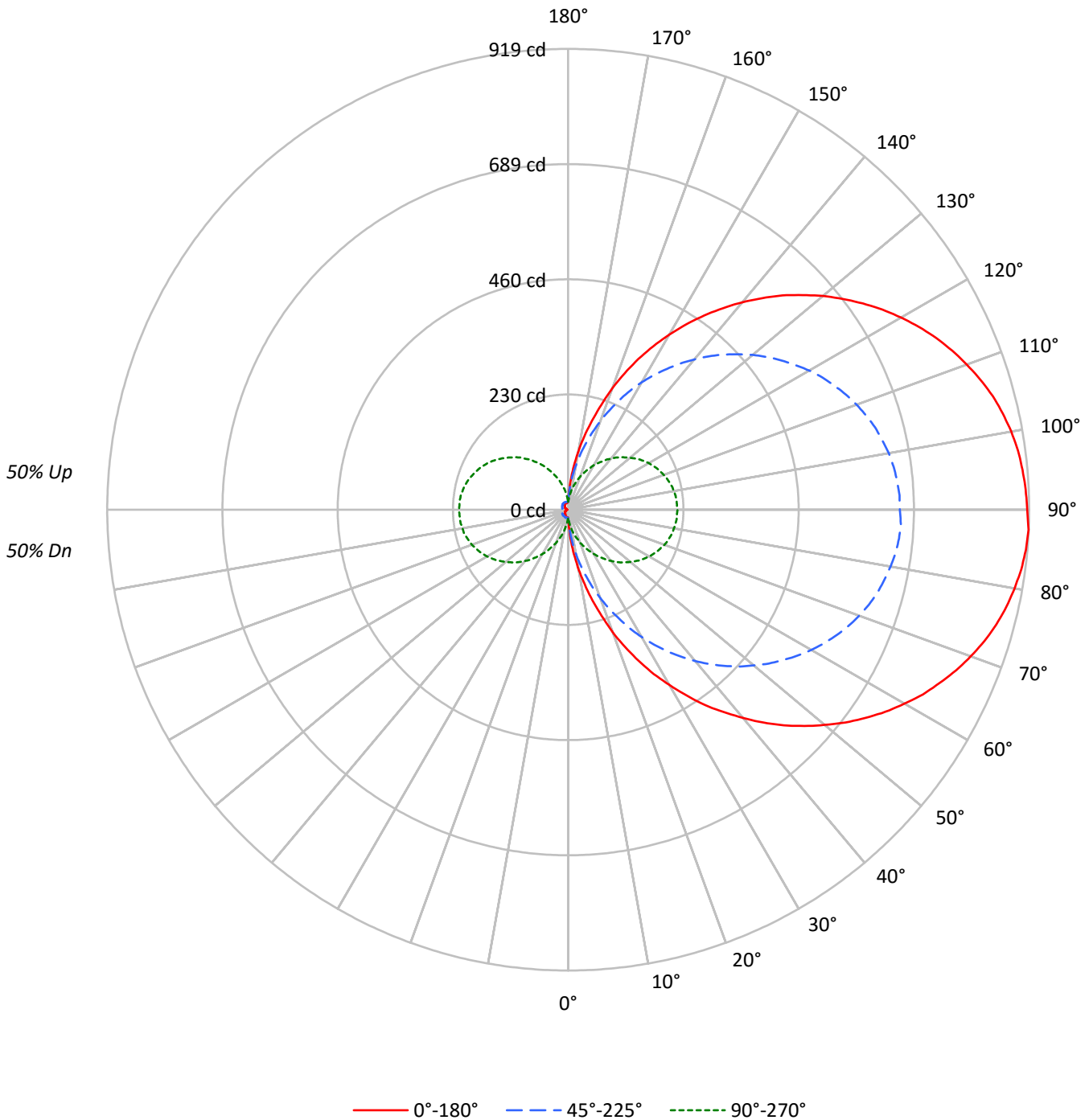
Lumens per Lamp: N/A  
Luminaire Lumens: 3256.6 lumens  
Efficiency: N/A  
Efficacy: 101.1 lumens/watt  
Spacing Criteria (0/90/45): 7.34 / 5.53 / 6  
Luminous Opening: Rectangular w/ Sides (W: 0.71' x L: 0.25' x H: 3.08')  
CIE Type: General Diffuse

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



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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	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°	979	979	979
5°	1808	1171	446
10°	2356	1390	296
15°	2741	1595	208
20°	3070	1755	167
25°	3302	1886	122
30°	3488	2024	99
35°	3662	2152	80
40°	3787	2277	66
45°	3920	2388	55
50°	4022	2476	51
55°	4120	2573	43
60°	4207	2656	36
65°	4283	2729	30
70°	4352	2806	24
75°	4413	2864	19
80°	4458	2916	14
85°	4499	2980	9



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3.7	0.1
10°-20°	22.7	0.7
20°-30°	60.2	1.8
30°-40°	113.7	3.5
40°-50°	177.0	5.4
50°-60°	242.2	7.4
60°-70°	301.0	9.2
70°-80°	345.1	10.6
80°-90°	367.7	11.3
90°-100°	366.0	11.2
100°-110°	342.5	10.5
110°-120°	298.3	9.2
120°-130°	240.2	7.4
130°-140°	175.9	5.4
140°-150°	113.5	3.5
150°-160°	60.4	1.9
160°-170°	22.7	0.7
170°-180°	3.7	0.1
0°-30°	86.6	2.7
0°-40°	200.3	6.2
0°-60°	619.5	19.0
0°-90°	1633.4	50.2
90°-120°	1006.8	30.9
90°-150°	1536.5	47.2
90°-180°	1623.0	49.8
0°-180°	3256.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	16	16	16	16	16	
5°	62	47	26	16	15	8
15°	188	137	55	17	14	55
25°	332	240	85	16	12	156
35°	476	345	117	15	10	299
45°	608	440	149	14	8	471
55°	724	523	175	14	8	649
65°	817	591	196	13	6	811
75°	884	638	210	12	4	933
85°	916	662	217	10	2	746
90°	915	661	218	11	2	502
95°	909	658	217	10	2	740
105°	876	634	209	12	4	925
115°	810	585	195	13	6	803
125°	717	519	174	14	8	643
135°	604	438	148	15	10	468
145°	473	343	117	16	11	298
155°	332	241	86	16	13	155
165°	184	137	55	16	14	55
175°	61	49	26	16	14	8
180°	16	16	16	16	16	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
2.5°	34.1	32.2	33.1	30.3	29.4	27.5	25.6	24.6	21.8	20.8	19.9
5°	61.6	60.6	59.7	55.9	52.1	47.4	43.6	37.9	33.1	28.4	26.5
7.5°	90.0	89.0	87.1	82.4	75.8	68.2	60.6	53.0	43.6	36.9	33.1
10°	121.2	118.4	115.5	108.9	100.4	90.0	78.6	67.2	55.9	45.5	39.8
12.5°	152.5	150.6	146.8	137.3	126.9	112.7	98.5	82.4	67.2	54.0	47.4
15°	187.5	184.7	180.0	168.6	154.4	137.3	118.4	98.5	79.6	62.5	54.9
17.5°	221.6	220.7	214.0	199.8	182.8	162.0	138.3	115.5	92.8	71.0	61.6
20°	260.5	258.6	250.0	232.0	212.2	187.5	161.0	132.6	105.1	81.5	70.1
22.5°	296.4	294.6	285.1	267.1	242.5	213.1	181.8	149.6	118.4	90.9	77.7
25°	332.4	330.5	321.1	300.2	273.7	239.6	203.6	166.7	131.6	100.4	85.2
27.5°	369.4	367.5	356.1	333.4	304.0	267.1	225.4	184.7	144.9	109.9	93.8
30°	403.5	403.5	391.2	365.6	333.4	293.6	250.0	201.7	158.2	120.3	101.3
32.5°	439.5	439.5	424.3	398.7	362.7	319.2	271.8	218.8	172.4	128.8	109.9
35°	475.5	474.5	459.4	430.0	392.1	344.7	292.7	237.7	184.7	139.2	117.4
37.5°	508.6	508.6	493.4	461.2	420.5	369.4	313.5	254.8	197.9	148.7	126.0
40°	541.7	542.7	525.6	492.5	447.0	394.0	333.4	271.8	211.2	158.2	133.5
42.5°	575.8	575.8	557.9	521.9	473.6	417.7	353.3	287.9	223.5	166.7	141.1
45°	608.0	607.1	588.2	552.2	500.1	440.4	374.1	304.0	235.8	175.2	148.7
47.5°	638.4	636.5	617.5	579.6	525.6	463.1	392.1	319.2	250.0	183.7	155.3
50°	667.7	667.7	646.9	606.2	549.3	483.0	410.1	333.4	260.5	192.3	162.0
52.5°	697.1	695.2	673.4	631.7	573.0	503.9	427.1	347.6	271.8	199.8	168.6
55°	723.6	720.8	699.9	655.4	594.8	522.8	443.2	360.9	281.3	207.4	175.2
57.5°	750.1	747.3	722.6	679.1	616.6	541.7	459.4	374.1	291.7	215.0	180.9
60°	773.8	771.9	748.2	701.8	636.5	559.7	474.5	386.4	301.2	221.6	186.6
62.5°	797.5	793.7	770.0	721.7	655.4	575.8	487.8	396.8	308.8	227.3	191.3
65°	817.4	814.5	789.9	740.6	672.5	591.0	501.0	407.3	317.3	233.0	196.1
67.5°	837.2	833.5	808.8	757.7	688.6	605.2	512.4	416.7	324.9	239.6	199.8
70°	854.3	851.5	825.9	774.7	703.7	617.5	523.8	425.3	331.5	244.4	204.6
72.5°	870.4	867.6	840.1	788.0	716.0	628.9	533.2	432.8	337.2	248.1	207.4
75°	883.7	879.9	852.4	800.3	727.4	638.4	540.8	439.5	341.9	252.9	210.3
77.5°	895.0	891.2	863.8	810.7	736.9	645.9	547.4	444.2	345.7	255.7	213.1
80°	903.5	900.7	872.3	818.3	743.5	652.6	553.1	448.9	348.5	257.6	214.0
82.5°	911.1	908.3	879.9	824.9	750.1	658.2	557.9	452.7	352.3	259.5	215.9
85°	915.9	912.1	884.6	829.7	753.9	662.0	559.7	454.6	353.3	260.5	216.9
87.5°	918.7	914.9	887.4	832.5	755.8	663.9	561.6	455.6	354.2	261.4	216.9
90°	914.9	911.1	882.7	828.7	753.0	661.1	559.7	454.6	353.3	260.5	217.8
92.5°	913.0	910.2	881.8	827.8	753.0	661.1	558.8	454.6	353.3	261.4	216.9
95°	909.2	906.4	878.9	824.9	750.1	658.2	556.9	452.7	352.3	259.5	216.9
97.5°	904.5	900.7	873.2	819.3	745.4	654.5	553.1	450.8	350.4	258.6	215.9
100°	896.9	894.1	865.7	812.6	738.7	648.8	549.3	447.0	347.6	256.7	214.0
102.5°	887.4	883.7	856.2	803.2	731.2	641.2	543.6	442.3	343.8	253.8	212.2
105°	876.1	872.3	845.8	793.7	721.7	633.6	537.0	436.6	340.0	251.9	209.3
107.5°	861.9	858.1	831.6	780.4	710.3	623.2	527.5	430.0	334.3	246.2	206.5
110°	845.8	842.9	817.4	766.2	697.1	611.8	518.1	422.4	328.6	242.5	202.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	828.7	825.9	799.4	750.1	682.9	599.5	507.7	413.9	322.0	237.7	198.9
115°	809.8	806.0	781.4	733.1	666.8	585.3	496.3	404.4	314.4	231.1	195.1
117.5°	788.9	786.1	761.5	714.1	650.7	571.1	483.0	394.0	306.9	225.4	190.4
120°	766.2	763.4	739.7	693.3	631.7	555.0	469.8	383.6	299.3	219.7	185.6
122.5°	742.5	740.6	717.0	671.5	611.8	537.0	454.6	370.3	288.9	213.1	180.0
125°	717.0	716.0	692.3	648.8	591.0	519.0	439.5	358.0	280.3	206.5	174.3
127.5°	690.4	689.5	666.8	625.1	569.2	500.1	423.4	344.7	269.9	198.9	167.6
130°	663.0	662.0	641.2	600.5	547.4	480.2	406.3	331.5	259.5	191.3	161.0
132.5°	633.6	632.7	612.8	574.0	521.9	458.4	387.4	317.3	246.2	182.8	154.4
135°	604.3	603.3	583.4	546.5	497.2	437.6	370.3	302.1	233.9	175.2	147.7
137.5°	572.1	572.1	553.1	518.1	471.7	414.8	350.4	286.0	222.6	166.7	141.1
140°	539.9	539.9	522.8	489.7	445.1	391.2	330.5	270.9	210.3	157.2	132.6
142.5°	506.7	506.7	490.6	459.4	418.6	367.5	310.7	254.8	197.9	147.7	126.0
145°	472.6	472.6	457.5	428.1	390.2	342.9	289.8	236.8	184.7	139.2	117.4
147.5°	438.5	438.5	424.3	396.8	361.8	318.2	269.0	218.8	172.4	129.8	109.9
150°	403.5	404.4	391.2	365.6	333.4	293.6	248.1	201.7	159.1	120.3	102.3
152.5°	367.5	367.5	356.1	333.4	304.0	268.0	224.5	184.7	145.9	110.8	93.8
155°	331.5	331.5	321.1	300.2	274.7	240.6	202.7	167.6	132.6	100.4	86.2
157.5°	294.6	295.5	286.0	269.0	245.3	214.0	181.8	149.6	119.3	90.9	77.7
160°	257.6	258.6	250.0	232.0	211.2	188.5	160.1	132.6	106.1	81.5	70.1
162.5°	218.8	218.8	213.1	200.8	182.8	162.9	138.3	115.5	92.8	72.0	62.5
165°	183.7	183.7	179.0	169.5	153.4	137.3	118.4	98.5	79.6	62.5	54.9
167.5°	150.6	152.5	146.8	139.2	126.9	113.7	97.6	82.4	67.2	54.0	47.4
170°	119.3	119.3	116.5	109.9	100.4	91.9	78.6	68.2	55.9	45.5	40.7
172.5°	89.0	89.0	87.1	82.4	75.8	70.1	60.6	52.1	44.5	36.9	33.1
175°	60.6	60.6	59.7	56.8	53.0	49.2	43.6	38.8	33.1	28.4	26.5
177.5°	33.1	34.1	33.1	32.2	30.3	29.4	26.5	25.6	22.7	20.8	19.9
180°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
2.5°	18.9	18.0	17.0	16.1	16.1	15.2	15.2	15.2	15.2	15.2
5°	24.6	21.8	18.9	17.0	16.1	15.2	15.2	15.2	15.2	15.2
7.5°	30.3	25.6	20.8	18.0	16.1	16.1	15.2	15.2	15.2	15.2
10°	36.0	28.4	22.7	18.9	16.1	15.2	15.2	15.2	15.2	15.2
12.5°	41.7	32.2	24.6	19.9	17.0	15.2	15.2	15.2	15.2	15.2
15°	47.4	36.0	26.5	20.8	17.0	15.2	15.2	15.2	14.2	14.2
17.5°	54.0	38.8	28.4	20.8	16.1	14.2	14.2	14.2	14.2	14.2
20°	59.7	42.6	30.3	21.8	16.1	14.2	14.2	14.2	14.2	14.2
22.5°	66.3	46.4	32.2	22.7	16.1	13.3	13.3	13.3	13.3	13.3
25°	72.9	50.2	34.1	22.7	16.1	13.3	12.3	12.3	12.3	12.3
27.5°	78.6	54.0	36.0	23.7	15.2	12.3	12.3	12.3	11.4	11.4
30°	85.2	57.8	37.9	23.7	15.2	11.4	11.4	11.4	11.4	11.4
32.5°	91.9	62.5	39.8	24.6	15.2	11.4	11.4	11.4	10.4	10.4
35°	98.5	66.3	41.7	25.6	15.2	10.4	10.4	10.4	10.4	10.4
37.5°	105.1	70.1	43.6	25.6	15.2	10.4	10.4	10.4	10.4	10.4
40°	111.8	73.9	45.5	26.5	15.2	10.4	9.5	9.5	9.5	9.5
42.5°	117.4	77.7	47.4	27.5	15.2	9.5	9.5	9.5	9.5	9.5
45°	123.1	81.5	49.2	28.4	14.2	9.5	9.5	8.5	8.5	8.5
47.5°	129.8	85.2	51.1	28.4	14.2	8.5	8.5	8.5	8.5	8.5
50°	134.5	88.1	53.0	29.4	14.2	8.5	8.5	8.5	8.5	8.5
52.5°	140.2	91.9	54.9	30.3	14.2	7.6	7.6	7.6	7.6	7.6
55°	144.9	93.8	55.9	30.3	14.2	7.6	7.6	7.6	7.6	7.6
57.5°	149.6	97.6	57.8	30.3	14.2	6.6	6.6	6.6	6.6	6.6
60°	154.4	99.4	58.7	31.3	14.2	6.6	6.6	6.6	6.6	6.6
62.5°	158.2	102.3	59.7	31.3	13.3	5.7	5.7	5.7	5.7	5.7
65°	162.0	104.2	61.6	32.2	13.3	5.7	5.7	5.7	5.7	5.7
67.5°	165.7	106.1	62.5	32.2	13.3	5.7	4.7	4.7	4.7	4.7
70°	168.6	108.0	63.5	32.2	12.3	4.7	4.7	4.7	4.7	4.7
72.5°	171.4	109.9	63.5	32.2	12.3	4.7	3.8	3.8	3.8	3.8
75°	173.3	110.8	64.4	32.2	12.3	3.8	3.8	3.8	3.8	3.8
77.5°	175.2	112.7	64.4	32.2	11.4	3.8	3.8	3.8	3.8	3.8
80°	177.1	112.7	65.4	32.2	11.4	2.8	2.8	2.8	2.8	2.8
82.5°	178.1	113.7	65.4	32.2	11.4	2.8	2.8	2.8	1.9	2.8
85°	179.0	113.7	65.4	31.3	10.4	1.9	1.9	1.9	1.9	1.9
87.5°	179.0	114.6	65.4	31.3	10.4	1.9	1.9	1.9	1.9	1.9
90°	179.0	114.6	65.4	32.2	11.4	1.9	1.9	1.9	1.9	1.9
92.5°	179.0	113.7	65.4	31.3	10.4	1.9	1.9	1.9	1.9	1.9
95°	178.1	113.7	65.4	31.3	10.4	1.9	1.9	1.9	1.9	1.9
97.5°	178.1	113.7	65.4	32.2	11.4	2.8	2.8	2.8	2.8	2.8
100°	176.2	112.7	65.4	32.2	11.4	2.8	2.8	2.8	2.8	2.8
102.5°	175.2	111.8	64.4	32.2	12.3	3.8	3.8	2.8	2.8	2.8
105°	173.3	110.8	64.4	32.2	12.3	3.8	3.8	3.8	3.8	3.8
107.5°	170.5	109.9	63.5	32.2	12.3	4.7	3.8	3.8	3.8	3.8
110°	167.6	108.0	63.5	32.2	12.3	4.7	4.7	4.7	4.7	4.7





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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	164.8	106.1	62.5	31.3	13.3	4.7	4.7	4.7	4.7	4.7
115°	161.0	104.2	61.6	31.3	13.3	5.7	5.7	5.7	5.7	5.7
117.5°	157.2	102.3	59.7	31.3	13.3	5.7	5.7	5.7	5.7	5.7
120°	153.4	99.4	58.7	31.3	14.2	6.6	6.6	6.6	6.6	6.6
122.5°	148.7	96.6	57.8	30.3	14.2	6.6	6.6	6.6	6.6	6.6
125°	144.0	93.8	55.9	30.3	14.2	7.6	7.6	7.6	7.6	7.6
127.5°	139.2	90.9	54.9	30.3	14.2	8.5	7.6	7.6	7.6	7.6
130°	134.5	88.1	53.0	29.4	15.2	8.5	8.5	8.5	8.5	8.5
132.5°	128.8	84.3	51.1	28.4	15.2	9.5	8.5	8.5	8.5	8.5
135°	123.1	81.5	49.2	28.4	15.2	9.5	9.5	9.5	9.5	9.5
137.5°	117.4	77.7	48.3	27.5	15.2	10.4	10.4	9.5	9.5	9.5
140°	111.8	73.9	46.4	27.5	15.2	10.4	10.4	10.4	10.4	10.4
142.5°	105.1	70.1	44.5	26.5	16.1	11.4	11.4	10.4	10.4	10.4
145°	98.5	66.3	42.6	25.6	16.1	11.4	11.4	11.4	11.4	11.4
147.5°	92.8	62.5	40.7	25.6	16.1	12.3	12.3	12.3	11.4	11.4
150°	86.2	58.7	38.8	24.6	16.1	12.3	12.3	12.3	12.3	12.3
152.5°	79.6	54.9	36.9	23.7	16.1	13.3	12.3	12.3	12.3	12.3
155°	73.9	51.1	34.1	23.7	16.1	13.3	13.3	13.3	13.3	13.3
157.5°	67.2	47.4	32.2	22.7	16.1	13.3	13.3	13.3	13.3	13.3
160°	60.6	43.6	30.3	21.8	16.1	14.2	14.2	13.3	13.3	13.3
162.5°	54.0	39.8	28.4	20.8	16.1	14.2	14.2	14.2	14.2	13.3
165°	48.3	36.0	26.5	20.8	16.1	15.2	14.2	14.2	14.2	14.2
167.5°	41.7	32.2	24.6	19.9	16.1	15.2	14.2	14.2	14.2	14.2
170°	36.0	28.4	22.7	18.9	16.1	15.2	15.2	15.2	14.2	14.2
172.5°	30.3	24.6	20.8	18.0	16.1	15.2	15.2	14.2	14.2	14.2
175°	24.6	21.8	18.9	17.0	16.1	15.2	15.2	15.2	14.2	14.2
177.5°	19.9	18.0	17.0	17.0	16.1	15.2	15.2	15.2	15.2	14.2
180°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1

(END OF REPORT)