

Scaled data based on original data using  
LM-66-11 Electrical and Photometric Measurements of Single-Ended Compact  
Fluorescent Lamps

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: SHAPER

Report Number: 253P251

Luminaire Tested: **1215-XX-44-CFL/4/57-T5C/1/40**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-66-11  
Report Number: 253P251  
Test Lab: METALUX LABORATORIES  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 1215-XX-44-CFL/4/57-T5C/1/40  
Description: SHAPER 44 INCH 1215 SERIES DIRECT/INDIRECT INDOOR PENDANT FIXTURE  
WITH SHALLOW BOWL  
Light Source: FOUR 57 WATT COMPACT FLUORESCENT LAMP AND ONE 40 WATTS T5 CIRCLINE  
(4)F57BX/840 - 4300 LUMENS AND (1)TL5C40W/830 - 3300 LUMENS  
Ballast/Driver: -

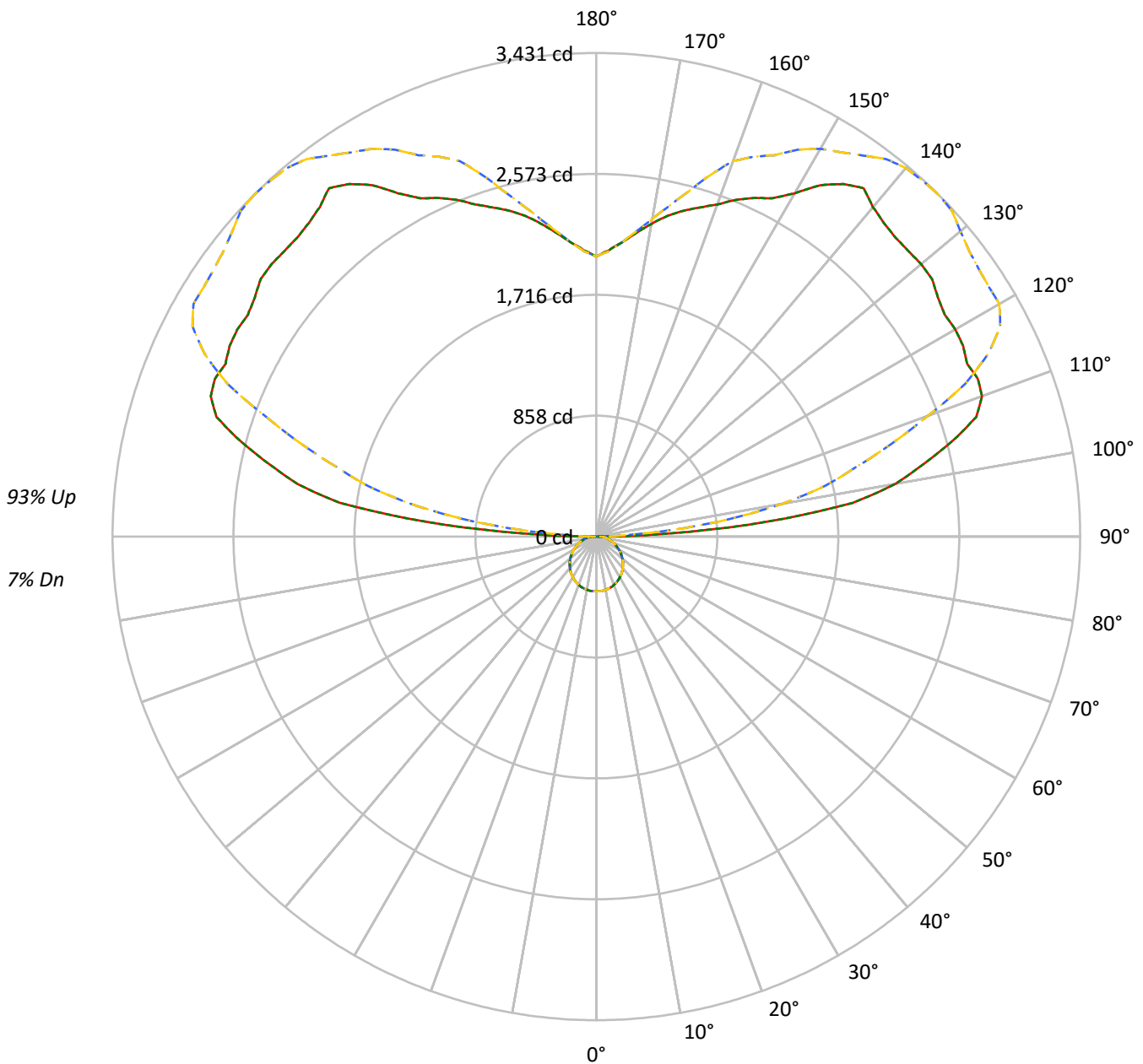
**Summary**

Lumens per Lamp: 20500 (1 lamp)  
Luminaire Lumens: 16953.0 lumens  
Efficiency: 82.7%  
Efficacy: 63.3 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4  
Luminous Opening: Vertical Cylinder (Dia: 3.67' x H: 0.69')  
CIE Type: Indirect

Input Watts (W): 268  
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



— 0°-180°    - - - 45°-225°    ···· 90°-270°    - · - · 135°-315°



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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	80	80	80	80	69	69	69	69	49	49	49	31	31	31	14	14	14	6
1	73	69	66	64	63	60	58	55	43	41	40	27	26	25	12	12	11	5
2	66	60	56	52	57	52	49	45	37	35	33	23	22	21	11	10	10	4
3	60	53	47	43	52	46	41	38	33	30	27	21	19	18	9	9	8	3
4	55	47	41	36	47	41	36	32	29	26	23	18	16	15	8	7	7	3
5	50	41	35	31	43	36	31	27	26	22	20	16	14	13	7	7	6	2
6	46	37	31	26	40	32	27	23	23	20	17	15	13	11	7	6	5	2
7	42	33	27	23	37	29	24	20	21	17	15	13	11	10	6	5	4	2
8	39	30	24	20	34	26	21	17	19	15	13	12	10	8	5	5	4	2
9	36	27	21	17	31	24	19	15	17	14	11	11	9	7	5	4	3	1
10	34	24	19	15	29	21	17	13	15	12	10	10	8	7	5	4	3	1

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

	0°	90°	180°	270°
0°	396	396	396	396
5°	389	389	389	389
10°	380	380	380	380
15°	373	373	373	373
20°	364	364	364	364
25°	355	355	355	355
30°	344	344	344	344
35°	335	335	335	335
40°	323	323	323	323
45°	311	311	311	311
50°	298	298	298	298
55°	282	282	282	282
60°	265	265	265	265
65°	249	249	249	249
70°	232	232	232	232
75°	215	215	215	215
80°	200	200	200	200
85°	185	185	185	185



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	36.9	0.2	0.2
10°-20°	106.1	0.6	0.5
20°-30°	161.6	1.0	0.8
30°-40°	196.3	1.2	1.0
40°-50°	205.9	1.2	1.0
50°-60°	190.3	1.1	0.9
60°-70°	154.6	0.9	0.8
70°-80°	109.4	0.6	0.5
80°-90°	59.9	0.4	0.3
90°-100°	843.0	5.0	4.1
100°-110°	2234.8	13.2	10.9
110°-120°	2895.6	17.1	14.1
120°-130°	2905.5	17.1	14.2
130°-140°	2569.1	15.2	12.5
140°-150°	2034.9	12.0	9.9
150°-160°	1335.5	7.9	6.5
160°-170°	708.3	4.2	3.5
170°-180°	205.4	1.2	1.0
0°-30°	304.5	1.8	1.5
0°-40°	500.8	3.0	2.4
0°-60°	896.9	5.3	4.4
0°-90°	1220.9	7.2	6.0
90°-120°	5973.4	35.2	29.1
90°-150°	13482.9	79.5	65.8
90°-180°	15732.0	92.8	76.7
0°-180°	16953.0	100.0	82.7

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	388	388	388	388	388	
5°	388	388	388	388	388	37
15°	376	376	376	376	376	106
25°	351	351	351	351	351	162
35°	314	314	314	314	314	196
45°	267	267	267	267	267	206
55°	213	213	213	213	213	190
65°	156	156	156	156	156	155
75°	103	103	103	103	103	109
85°	59	59	59	59	59	53
90°	5	5	5	5	5	80
95°	1221	1221	1221	1221	1221	1195
105°	2611	2611	2611	2611	2611	2732
115°	2902	2902	2902	2902	2902	2900
125°	2956	2956	2956	2956	2956	2659
135°	3000	3000	3000	3000	3000	2332
145°	3054	3054	3054	3054	3054	1897
155°	2650	2650	2650	2650	2650	1230
165°	2394	2394	2394	2394	2394	681
175°	2096	2096	2096	2096	2096	205
180°	1988	1988	1988	1988	1988	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	388.0	388.0	388.0	388.0	388.0	388.0	388.0	388.0	388.0	388.0	388.0
2.5°	388.0	388.0	388.0	388.0	388.0	388.0	388.0	388.0	388.0	388.0	388.0
5°	388.0	388.0	388.0	388.0	388.0	388.0	388.0	388.0	388.0	388.0	388.0
7.5°	386.0	386.0	386.0	386.0	386.0	386.0	386.0	386.0	386.0	386.0	386.0
10°	383.0	383.0	383.0	383.0	383.0	383.0	383.0	383.0	383.0	383.0	383.0
12.5°	380.0	380.0	380.0	380.0	380.0	380.0	380.0	380.0	380.0	380.0	380.0
15°	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0
17.5°	371.0	371.0	371.0	371.0	371.0	371.0	371.0	371.0	371.0	371.0	371.0
20°	365.0	365.0	365.0	365.0	365.0	365.0	365.0	365.0	365.0	365.0	365.0
22.5°	358.0	358.0	358.0	358.0	358.0	358.0	358.0	358.0	358.0	358.0	358.0
25°	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0
27.5°	342.0	342.0	342.0	342.0	342.0	342.0	342.0	342.0	342.0	342.0	342.0
30°	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0
32.5°	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0
35°	314.0	314.0	314.0	314.0	314.0	314.0	314.0	314.0	314.0	314.0	314.0
37.5°	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0
40°	291.0	291.0	291.0	291.0	291.0	291.0	291.0	291.0	291.0	291.0	291.0
42.5°	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0
45°	267.0	267.0	267.0	267.0	267.0	267.0	267.0	267.0	267.0	267.0	267.0
47.5°	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0
50°	241.0	241.0	241.0	241.0	241.0	241.0	241.0	241.0	241.0	241.0	241.0
52.5°	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0
55°	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0
57.5°	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
60°	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0
62.5°	170.0	170.0	170.0	170.0	170.0	170.0	170.0	170.0	170.0	170.0	170.0
65°	156.0	156.0	156.0	156.0	156.0	156.0	156.0	156.0	156.0	156.0	156.0
67.5°	142.0	142.0	142.0	142.0	142.0	142.0	142.0	142.0	142.0	142.0	142.0
70°	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0
72.5°	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0
75°	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0
77.5°	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
80°	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
82.5°	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
85°	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0
87.5°	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
90°	5.0	4.0	3.0	4.0	5.0	4.0	3.0	4.0	5.0	4.0	3.0
92.5°	525.9	130.7	146.4	208.4	525.9	130.7	146.4	208.4	525.9	130.7	146.4
95°	1221.4	602.0	540.0	740.9	1221.4	602.0	540.0	740.9	1221.4	602.0	540.0
97.5°	1834.1	1018.8	952.6	1213.1	1834.1	1018.8	952.6	1213.1	1834.1	1018.8	952.6
100°	2152.5	1398.3	1334.7	1623.2	2152.5	1398.3	1334.7	1623.2	2152.5	1398.3	1334.7
102.5°	2374.9	1739.0	1660.5	1825.0	2374.9	1739.0	1660.5	1825.0	2374.9	1739.0	1660.5
105°	2611.4	1946.6	1906.1	1979.7	2611.4	1946.6	1906.1	1979.7	2611.4	1946.6	1906.1
107.5°	2824.8	2158.3	2198.0	2210.4	2824.8	2158.3	2198.0	2210.4	2824.8	2158.3	2198.0
110°	2909.9	2431.2	2498.1	2489.9	2909.9	2431.2	2498.1	2489.9	2909.9	2431.2	2498.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	2927.3	2667.7	2831.4	2747.9	2927.3	2667.7	2831.4	2747.9	2927.3	2667.7	2831.4
115°	2901.7	2876.0	3064.6	2922.3	2901.7	2876.0	3064.6	2922.3	2901.7	2876.0	3064.6
117.5°	2931.4	3066.2	3228.3	3084.4	2931.4	3066.2	3228.3	3084.4	2931.4	3066.2	3228.3
120°	2939.7	3189.4	3300.2	3208.5	2939.7	3189.4	3300.2	3208.5	2939.7	3189.4	3300.2
122.5°	2929.8	3271.3	3299.4	3322.6	2929.8	3271.3	3299.4	3322.6	2929.8	3271.3	3299.4
125°	2956.2	3320.1	3309.3	3411.9	2956.2	3320.1	3309.3	3411.9	2956.2	3320.1	3309.3
127.5°	3000.9	3344.1	3330.8	3426.8	3000.9	3344.1	3330.8	3426.8	3000.9	3344.1	3330.8
130°	3006.7	3363.9	3369.7	3450.8	3006.7	3363.9	3369.7	3450.8	3006.7	3363.9	3369.7
132.5°	2999.2	3355.7	3420.2	3464.8	2999.2	3355.7	3420.2	3464.8	2999.2	3355.7	3420.2
135°	3000.1	3341.6	3430.9	3484.7	3000.1	3341.6	3430.9	3484.7	3000.1	3341.6	3430.9
137.5°	3017.4	3327.5	3423.5	3553.3	3017.4	3327.5	3423.5	3553.3	3017.4	3327.5	3423.5
140°	3051.3	3364.8	3413.5	3512.8	3051.3	3364.8	3413.5	3512.8	3051.3	3364.8	3413.5
142.5°	3115.0	3336.6	3375.5	3491.3	3115.0	3336.6	3375.5	3491.3	3115.0	3336.6	3375.5
145°	3053.8	3260.6	3299.4	3430.9	3053.8	3260.6	3299.4	3430.9	3053.8	3260.6	3299.4
147.5°	2955.4	3129.9	3231.6	3297.8	2955.4	3129.9	3231.6	3297.8	2955.4	3129.9	3231.6
150°	2811.5	3075.3	3176.2	3096.8	2811.5	3075.3	3176.2	3096.8	2811.5	3075.3	3176.2
152.5°	2704.9	2995.1	3094.3	3033.2	2704.9	2995.1	3094.3	3033.2	2704.9	2995.1	3094.3
155°	2650.3	2895.9	2985.2	3025.7	2650.3	2895.9	2985.2	3025.7	2650.3	2895.9	2985.2
157.5°	2585.8	2788.4	2916.6	2873.6	2585.8	2788.4	2916.6	2873.6	2585.8	2788.4	2916.6
160°	2506.4	2666.8	2834.7	2738.8	2506.4	2666.8	2834.7	2738.8	2506.4	2666.8	2834.7
162.5°	2448.5	2561.0	2690.0	2652.8	2448.5	2561.0	2690.0	2652.8	2448.5	2561.0	2690.0
165°	2393.9	2464.2	2536.2	2503.1	2393.9	2464.2	2536.2	2503.1	2393.9	2464.2	2536.2
167.5°	2331.1	2363.3	2405.5	2370.8	2331.1	2363.3	2405.5	2370.8	2331.1	2363.3	2405.5
170°	2253.4	2268.2	2288.1	2269.1	2253.4	2268.2	2288.1	2269.1	2253.4	2268.2	2288.1
172.5°	2174.0	2174.0	2184.7	2176.5	2174.0	2174.0	2184.7	2176.5	2174.0	2174.0	2184.7
175°	2096.2	2089.6	2096.2	2093.8	2096.2	2089.6	2096.2	2093.8	2096.2	2089.6	2096.2
177.5°	2033.4	2021.0	2026.8	2019.3	2033.4	2021.0	2026.8	2019.3	2033.4	2021.0	2026.8
180°	1987.9	1987.9	1987.9	1987.9	1987.9	1987.9	1987.9	1987.9	1987.9	1987.9	1987.9



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	388.0	388.0	388.0	388.0	388.0	388.0
2.5°	388.0	388.0	388.0	388.0	388.0	388.0
5°	388.0	388.0	388.0	388.0	388.0	388.0
7.5°	386.0	386.0	386.0	386.0	386.0	386.0
10°	383.0	383.0	383.0	383.0	383.0	383.0
12.5°	380.0	380.0	380.0	380.0	380.0	380.0
15°	376.0	376.0	376.0	376.0	376.0	376.0
17.5°	371.0	371.0	371.0	371.0	371.0	371.0
20°	365.0	365.0	365.0	365.0	365.0	365.0
22.5°	358.0	358.0	358.0	358.0	358.0	358.0
25°	351.0	351.0	351.0	351.0	351.0	351.0
27.5°	342.0	342.0	342.0	342.0	342.0	342.0
30°	333.0	333.0	333.0	333.0	333.0	333.0
32.5°	324.0	324.0	324.0	324.0	324.0	324.0
35°	314.0	314.0	314.0	314.0	314.0	314.0
37.5°	303.0	303.0	303.0	303.0	303.0	303.0
40°	291.0	291.0	291.0	291.0	291.0	291.0
42.5°	279.0	279.0	279.0	279.0	279.0	279.0
45°	267.0	267.0	267.0	267.0	267.0	267.0
47.5°	254.0	254.0	254.0	254.0	254.0	254.0
50°	241.0	241.0	241.0	241.0	241.0	241.0
52.5°	227.0	227.0	227.0	227.0	227.0	227.0
55°	213.0	213.0	213.0	213.0	213.0	213.0
57.5°	198.0	198.0	198.0	198.0	198.0	198.0
60°	184.0	184.0	184.0	184.0	184.0	184.0
62.5°	170.0	170.0	170.0	170.0	170.0	170.0
65°	156.0	156.0	156.0	156.0	156.0	156.0
67.5°	142.0	142.0	142.0	142.0	142.0	142.0
70°	129.0	129.0	129.0	129.0	129.0	129.0
72.5°	116.0	116.0	116.0	116.0	116.0	116.0
75°	103.0	103.0	103.0	103.0	103.0	103.0
77.5°	91.0	91.0	91.0	91.0	91.0	91.0
80°	80.0	80.0	80.0	80.0	80.0	80.0
82.5°	69.0	69.0	69.0	69.0	69.0	69.0
85°	59.0	59.0	59.0	59.0	59.0	59.0
87.5°	50.0	50.0	50.0	50.0	50.0	50.0
90°	4.0	5.0	4.0	3.0	4.0	5.0
92.5°	208.4	525.9	130.7	146.4	208.4	525.9
95°	740.9	1221.4	602.0	540.0	740.9	1221.4
97.5°	1213.1	1834.1	1018.8	952.6	1213.1	1834.1
100°	1623.2	2152.5	1398.3	1334.7	1623.2	2152.5
102.5°	1825.0	2374.9	1739.0	1660.5	1825.0	2374.9
105°	1979.7	2611.4	1946.6	1906.1	1979.7	2611.4
107.5°	2210.4	2824.8	2158.3	2198.0	2210.4	2824.8
110°	2489.9	2909.9	2431.2	2498.1	2489.9	2909.9





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2747.9	2927.3	2667.7	2831.4	2747.9	2927.3
115°	2922.3	2901.7	2876.0	3064.6	2922.3	2901.7
117.5°	3084.4	2931.4	3066.2	3228.3	3084.4	2931.4
120°	3208.5	2939.7	3189.4	3300.2	3208.5	2939.7
122.5°	3322.6	2929.8	3271.3	3299.4	3322.6	2929.8
125°	3411.9	2956.2	3320.1	3309.3	3411.9	2956.2
127.5°	3426.8	3000.9	3344.1	3330.8	3426.8	3000.9
130°	3450.8	3006.7	3363.9	3369.7	3450.8	3006.7
132.5°	3464.8	2999.2	3355.7	3420.2	3464.8	2999.2
135°	3484.7	3000.1	3341.6	3430.9	3484.7	3000.1
137.5°	3553.3	3017.4	3327.5	3423.5	3553.3	3017.4
140°	3512.8	3051.3	3364.8	3413.5	3512.8	3051.3
142.5°	3491.3	3115.0	3336.6	3375.5	3491.3	3115.0
145°	3430.9	3053.8	3260.6	3299.4	3430.9	3053.8
147.5°	3297.8	2955.4	3129.9	3231.6	3297.8	2955.4
150°	3096.8	2811.5	3075.3	3176.2	3096.8	2811.5
152.5°	3033.2	2704.9	2995.1	3094.3	3033.2	2704.9
155°	3025.7	2650.3	2895.9	2985.2	3025.7	2650.3
157.5°	2873.6	2585.8	2788.4	2916.6	2873.6	2585.8
160°	2738.8	2506.4	2666.8	2834.7	2738.8	2506.4
162.5°	2652.8	2448.5	2561.0	2690.0	2652.8	2448.5
165°	2503.1	2393.9	2464.2	2536.2	2503.1	2393.9
167.5°	2370.8	2331.1	2363.3	2405.5	2370.8	2331.1
170°	2269.1	2253.4	2268.2	2288.1	2269.1	2253.4
172.5°	2176.5	2174.0	2174.0	2184.7	2176.5	2174.0
175°	2093.8	2096.2	2089.6	2096.2	2093.8	2096.2
177.5°	2019.3	2033.4	2021.0	2026.8	2019.3	2033.4
180°	1987.9	1987.9	1987.9	1987.9	1987.9	1987.9

(END OF REPORT)