

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: 253P255

Luminaire Tested: **1215-XX-44-CFL/8/39-T5C/1/40**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 253P255
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 1215-XX-44-CFL/8/39-T5C/1/40
Description: SHAPER 44 INCH 1215 SERIES DIRECT/INDIRECT INDOOR PENDANT FIXTURE
WITH SHALLOW BOWL
Light Source: EIGHT 39 WATT BIAx COMPACT FLUORESCENT LAMPS AND ONE 40 WATT T5 CIRCLINE
(8)F39BX - 2850 LUMENS AND (1)TL5C40W/830 - 3300 LUMENS
Ballast/Driver: -

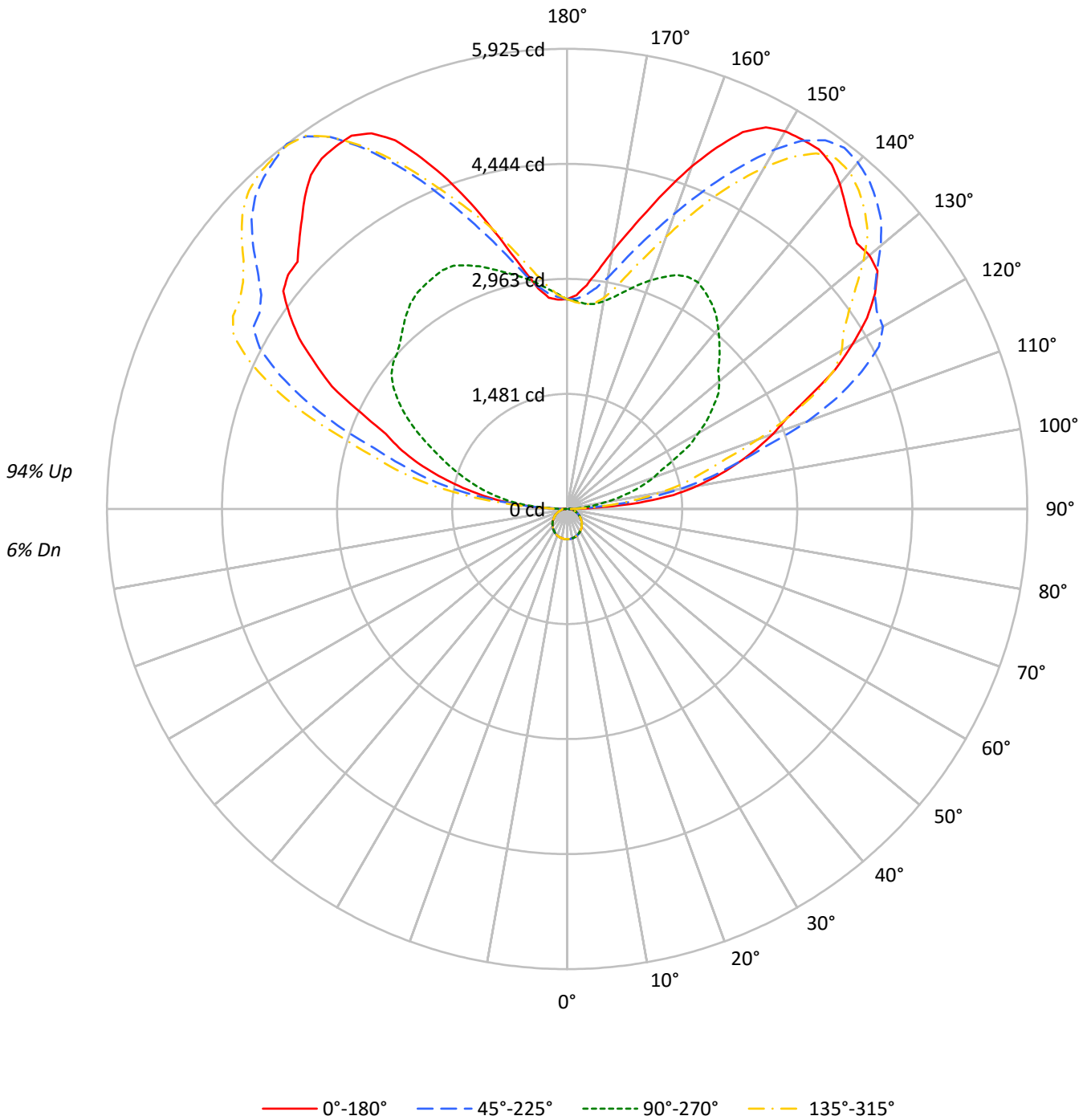
Summary

Lumens per Lamp: 26100 (1 lamp)
Luminaire Lumens: 21672.1 lumens
Efficiency: 83.0%
Efficacy: 61.6 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): 352
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	80	80	80	80	69	69	69	69	49	49	49	30	30	30	13	13	13	5
1	73	69	66	64	63	60	58	55	42	41	39	26	25	25	11	11	11	4
2	66	61	56	52	57	52	48	45	37	35	33	23	21	20	10	9	9	3
3	60	53	47	43	52	46	41	38	32	30	27	20	18	17	9	8	7	3
4	55	47	41	36	47	40	35	32	29	25	23	18	16	14	8	7	6	2
5	50	41	35	31	43	36	31	27	25	22	20	16	14	12	7	6	5	2
6	46	37	31	26	40	32	27	23	23	19	17	14	12	11	6	5	5	2
7	42	33	27	23	36	29	24	20	20	17	15	13	11	9	5	5	4	1
8	39	30	24	20	34	26	21	17	18	15	13	12	10	8	5	4	4	1
9	36	27	21	17	31	23	19	15	17	13	11	10	9	7	5	4	3	1
10	34	24	19	15	29	21	17	13	15	12	10	10	8	6	4	3	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	0.1
10°-20°	106.1	0.5	0.4
20°-30°	161.6	0.7	0.6
30°-40°	196.3	0.9	0.8
40°-50°	205.9	0.9	0.8
50°-60°	190.3	0.9	0.7
60°-70°	154.6	0.7	0.6
70°-80°	109.4	0.5	0.4
80°-90°	62.0	0.3	0.2
90°-100°	682.3	3.1	2.6
100°-110°	2171.7	10.0	8.3
110°-120°	3348.1	15.4	12.8
120°-130°	3963.6	18.3	15.2
130°-140°	3766.7	17.4	14.4
140°-150°	3160.8	14.6	12.1
150°-160°	2085.6	9.6	8.0
160°-170°	997.1	4.6	3.8
170°-180°	273.3	1.3	1.0
0°-30°	304.5	1.4	1.2
0°-40°	500.8	2.3	1.9
0°-60°	896.9	4.1	3.4
0°-90°	1223.0	5.6	4.7
90°-120°	6202.1	28.6	23.8
90°-150°	17093.2	78.9	65.5
90°-180°	20449.0	94.4	78.3
0°-180°	21672.1	100.0	83.0

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°	19	24	17	12	19	62
95°	928	198	590	484	928	908
105°	2269	858	1766	1259	2269	2391
115°	3446	1526	2922	1981	3446	3448
125°	4840	2295	4364	2732	4840	4280
135°	5160	2774	4878	3040	5160	4022
145°	5652	3239	5509	3384	5652	3520
155°	5354	3325	5240	3456	5354	2453
165°	3966	2904	3735	3158	3966	1151
175°	2892	2652	2731	2844	2892	291
180°	2700	2700	2700	2700	2700	



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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°	19.0	17.0	17.0	23.0	24.0	25.0	26.0	28.0	17.0	14.0	12.0
92.5°	364.6	200.9	162.9	212.6	80.5	171.9	199.0	203.6	221.7	181.0	198.1
95°	928.3	655.0	563.7	557.3	198.1	447.0	528.4	557.3	589.9	576.3	605.3
97.5°	1378.9	1150.0	1000.7	919.2	341.1	716.6	864.0	933.7	919.2	1004.3	1030.5
100°	1694.6	1701.9	1473.9	1263.0	504.9	1041.4	1222.3	1294.7	1197.0	1462.1	1475.7
102.5°	1986.9	2222.1	1888.2	1677.4	678.6	1420.5	1547.1	1656.6	1482.0	1933.5	1870.1
105°	2269.1	2590.3	2240.2	2053.8	857.7	1731.7	1807.7	2005.0	1766.1	2301.7	2217.6
107.5°	2546.0	2917.0	2682.6	2358.7	1029.6	1986.0	2140.7	2322.5	2049.3	2632.0	2599.4
110°	2816.5	3221.0	3282.5	2549.6	1183.4	2233.9	2610.2	2558.7	2304.4	2869.9	3145.9



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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°	3065.3	3487.0	3778.3	2791.2	1316.4	2536.0	3082.5	2889.8	2524.3	3125.0	3639.9
115°	3446.2	3877.8	4186.3	3210.1	1526.3	2870.8	3525.0	3336.8	2922.4	3531.3	4081.4
117.5°	3893.2	4275.0	4524.7	3602.8	1776.0	3191.1	3879.6	3791.0	3413.7	3959.2	4453.2
120°	4242.4	4658.6	4695.7	3875.1	1948.9	3498.7	4082.3	4190.9	3741.2	4374.5	4669.5
122.5°	4578.1	4998.8	4729.2	4139.3	2141.6	3767.4	4213.5	4563.6	4092.2	4732.8	4696.6
125°	4839.6	5231.3	4829.6	4326.6	2295.4	3961.0	4426.1	4840.5	4363.7	5024.1	4807.0
127.5°	5036.8	5319.1	5022.3	4427.0	2456.4	4056.0	4684.9	4944.5	4608.0	5168.0	5021.4
130°	5082.0	5271.1	5269.3	4477.7	2557.8	4033.4	4984.3	4992.5	4690.3	5148.1	5278.4
132.5°	5061.2	5311.0	5487.4	4528.3	2638.3	4045.2	5249.4	5158.0	4709.3	5254.9	5512.7
135°	5159.9	5422.2	5629.4	4521.1	2774.0	4065.1	5422.2	5281.1	4877.6	5424.0	5681.0
137.5°	5303.7	5547.1	5748.9	4514.8	2901.6	4062.4	5559.8	5439.4	5056.7	5582.4	5786.9
140°	5463.0	5650.2	5824.0	4496.7	3028.2	4054.2	5662.0	5571.5	5252.1	5731.7	5862.0
142.5°	5593.2	5683.7	5862.0	4444.2	3151.3	4021.7	5689.1	5619.5	5421.3	5810.4	5925.3
145°	5652.0	5662.0	5795.9	4395.3	3239.0	3969.2	5590.5	5620.4	5509.1	5825.8	5857.4
147.5°	5639.4	5622.2	5620.4	4338.3	3309.6	3924.9	5372.5	5602.3	5539.0	5829.4	5678.3
150°	5615.0	5567.0	5343.5	4239.7	3370.2	3856.1	5075.7	5501.0	5551.6	5779.6	5402.3
152.5°	5539.9	5414.1	5023.2	4095.9	3369.3	3724.0	4750.9	5291.0	5453.9	5593.2	5084.8
155°	5354.4	5125.5	4694.8	3912.2	3325.0	3555.7	4415.2	4961.7	5239.5	5279.3	4761.8
157.5°	5037.7	4786.2	4361.9	3708.6	3230.9	3371.1	4062.4	4592.6	4889.3	4907.4	4422.5
160°	4691.2	4430.6	4047.9	3511.4	3131.4	3195.6	3732.1	4228.0	4515.7	4516.6	4097.7
162.5°	4323.0	4085.9	3754.8	3303.3	3020.1	3031.9	3430.0	3844.3	4123.9	4118.5	3791.0
165°	3965.6	3772.9	3491.5	3116.9	2904.3	2883.5	3168.5	3503.2	3734.9	3740.3	3522.2
167.5°	3648.9	3496.0	3239.0	2955.9	2796.6	2763.1	2930.5	3210.1	3385.6	3402.8	3265.3
170°	3367.5	3245.4	3027.3	2823.8	2714.3	2679.9	2760.4	2961.3	3096.1	3114.2	3051.8
172.5°	3102.4	3021.0	2869.0	2740.5	2661.8	2640.1	2668.1	2793.9	2862.7	2893.4	2890.7
175°	2891.6	2840.0	2765.9	2707.0	2651.9	2633.8	2645.5	2722.4	2730.6	2758.6	2786.7
177.5°	2755.9	2730.6	2709.8	2703.4	2679.9	2665.4	2661.8	2710.7	2697.1	2717.0	2733.3
180°	2699.8	2699.8	2699.8	2699.8	2699.8	2699.8	2699.8	2699.8	2699.8	2699.8	2699.8



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CATALOG NUMBER: 1215-XX-44-CFL/8/39-T5C/1/40

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°	19.0	12.0	12.0	13.0	26.0	19.0
92.5°	241.6	187.3	220.8	268.7	319.4	364.6
95°	652.3	484.0	677.7	785.3	864.0	928.3
97.5°	1081.2	726.5	1128.2	1277.5	1412.3	1378.9
100°	1451.2	910.2	1610.5	1777.9	1904.5	1694.6
102.5°	1860.2	1085.7	2121.7	2193.1	2333.4	1986.9
105°	2236.6	1259.4	2478.1	2554.1	2716.1	2269.1
107.5°	2560.5	1428.6	2761.3	3014.7	3047.2	2546.0
110°	2800.2	1606.9	3017.4	3602.8	3335.9	2816.5



TEST NUMBER: 253P255

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	3088.0	1779.7	3279.8	4102.2	3651.6	3065.3
115°	3493.3	1981.4	3606.4	4522.0	4128.4	3446.2
117.5°	3886.0	2194.0	3930.3	4843.2	4568.1	3893.2
120°	4143.8	2394.0	4217.1	4969.9	4926.4	4242.4
122.5°	4405.3	2575.0	4429.7	4998.8	5240.4	4578.1
125°	4589.9	2731.5	4577.2	5092.9	5442.1	4839.6
127.5°	4676.7	2852.7	4641.4	5252.1	5501.9	5036.8
130°	4680.3	2924.2	4598.0	5472.9	5508.2	5082.0
132.5°	4657.7	2968.5	4555.5	5667.4	5600.5	5061.2
135°	4621.5	3040.0	4530.1	5795.9	5694.6	5159.9
137.5°	4587.1	3135.9	4513.9	5863.8	5826.7	5303.7
140°	4534.7	3233.6	4483.1	5893.6	5931.6	5463.0
142.5°	4455.0	3321.4	4425.2	5909.9	5972.3	5593.2
145°	4347.4	3383.8	4350.1	5867.4	5950.6	5652.0
147.5°	4232.5	3415.5	4278.6	5680.1	5909.0	5639.4
150°	4123.9	3442.6	4213.5	5425.9	5837.5	5615.0
152.5°	4000.0	3468.0	4123.9	5140.0	5671.0	5539.9
155°	3839.8	3456.2	3982.8	4838.7	5367.0	5354.4
157.5°	3671.5	3395.6	3821.7	4528.3	5026.0	5037.7
160°	3507.8	3325.0	3654.3	4245.1	4669.5	4691.2
162.5°	3346.7	3240.9	3493.3	3985.5	4293.1	4323.0
165°	3212.8	3158.5	3348.5	3736.7	3955.6	3965.6
167.5°	3097.0	3085.2	3218.2	3481.5	3649.8	3648.9
170°	2996.6	3011.0	3095.2	3244.5	3360.3	3367.5
172.5°	2905.2	2928.7	2972.1	3044.5	3105.1	3102.4
175°	2821.0	2843.7	2856.3	2879.9	2910.6	2891.6
177.5°	2751.4	2771.3	2769.5	2759.5	2774.9	2755.9
180°	2699.8	2699.8	2699.8	2699.8	2699.8	2699.8

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