

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: 253P228

Luminaire Tested: **1215-XX-36-CFL/3/70-T5C/1/40**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-66-11  
Report Number: 253P228  
Test Lab: METALUX LABORATORIES  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 1215-XX-36-CFL/3/70-T5C/1/40  
Description: SHAPER 36 INCH 1215 SERIES DIRECT/INDIRECT INDOOR PENDANT FIXTURE  
WITH SHALLOW BOWL  
Light Source: THREE 70 WATT FLUORESCENT LAMPS AND ONE 40 WATTS  
(3)PLT70/830 - 5200 LUMENS AND (1)TL5C40W/830 - 3300 LUMENS  
Ballast/Driver: -

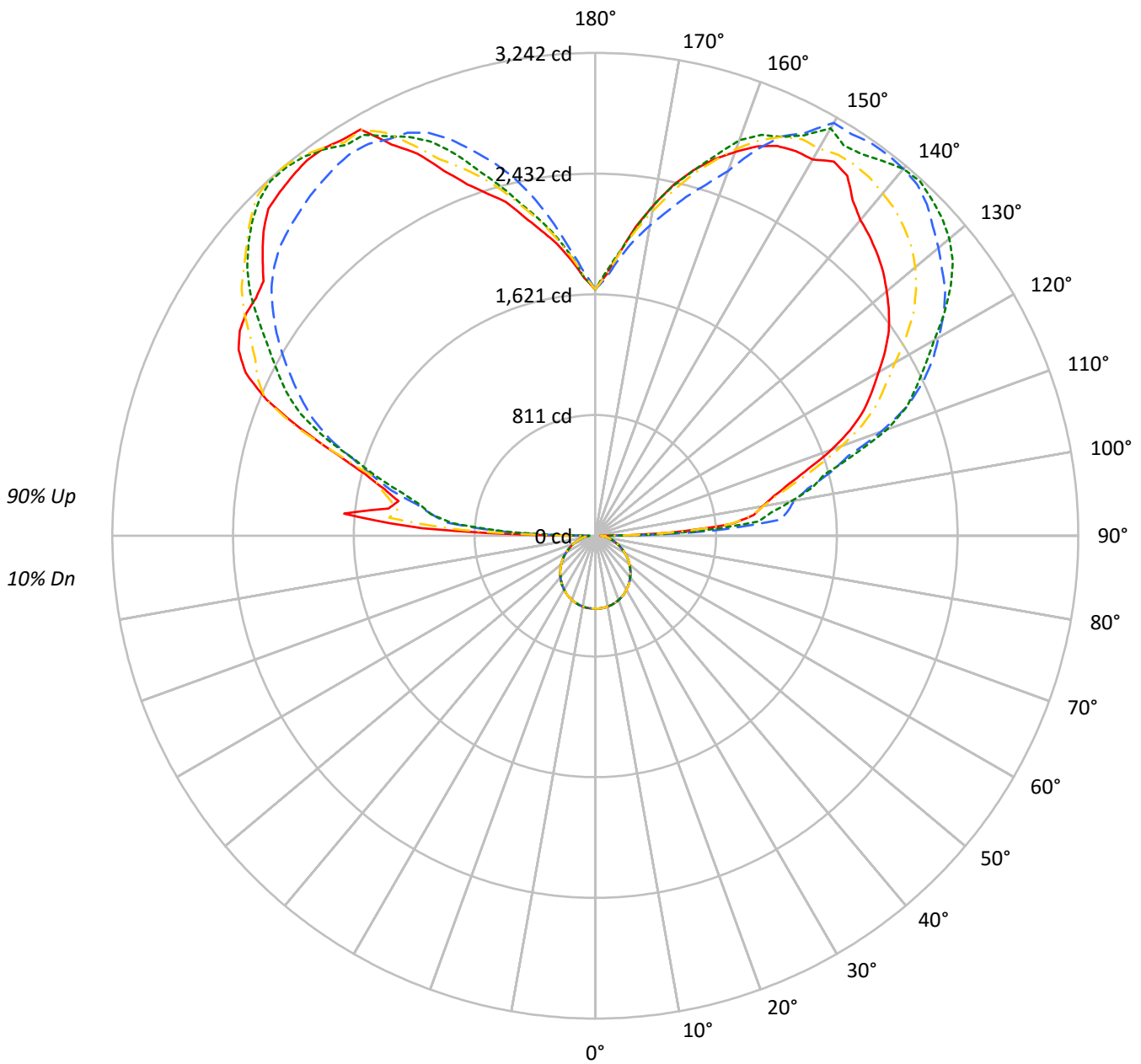
**Summary**

Lumens per Lamp: 18900 (1 lamp)  
Luminaire Lumens: 15421.9 lumens  
Efficiency: 81.6%  
Efficacy: 61.7 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39  
Luminous Opening: Vertical Cylinder (Dia: 3' x H: 0.52')  
CIE Type: Indirect

Input Watts (W): 250  
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

TEST NUMBER: 253P228  
CATALOG NUMBER: 1215-XX-36-CFL/3/70-T5C/1/40

### Luminous Intensity Polar Plot



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



TEST NUMBER: 253P228

CATALOG NUMBER: 1215-XX-36-CFL/3/70-T5C/1/40

**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	50	50	50	32	32	32	16	16	16	8
1	72	69	66	63	63	60	58	55	43	42	40	28	27	26	14	13	13	6
2	66	60	55	51	57	52	48	45	38	35	33	24	23	22	12	11	11	5
3	60	53	47	43	52	46	41	38	33	30	28	21	20	18	10	10	9	4
4	55	46	40	36	47	40	35	32	29	26	23	19	17	15	9	8	8	4
5	50	41	35	30	43	36	31	27	26	23	20	17	15	13	8	7	7	3
6	46	37	30	26	40	32	27	23	23	20	17	15	13	11	7	7	6	3
7	42	33	27	22	36	29	24	20	21	17	15	14	12	10	7	6	5	2
8	39	30	24	20	34	26	21	17	19	15	13	12	10	9	6	5	4	2
9	36	27	21	17	31	23	19	15	17	14	11	11	9	8	6	5	4	2
10	34	24	19	15	29	21	17	14	16	12	10	10	8	7	5	4	4	2

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

	0°	90°	180°	270°
0°	745	745	745	745
5°	732	732	732	732
10°	719	719	719	719
15°	704	704	704	704
20°	688	688	688	688
25°	672	672	672	672
30°	652	652	652	652
35°	633	633	633	633
40°	610	610	610	610
45°	587	587	587	587
50°	561	561	561	561
55°	533	533	533	533
60°	500	500	500	500
65°	464	464	464	464
70°	427	427	427	427
75°	390	390	390	390
80°	354	354	354	354
85°	322	322	322	322



TEST NUMBER: 253P228

CATALOG NUMBER: 1215-XX-36-CFL/3/70-T5C/1/40

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	46.4	0.3	0.2
10°-20°	133.5	0.9	0.7
20°-30°	203.1	1.3	1.1
30°-40°	245.8	1.6	1.3
40°-50°	256.7	1.7	1.4
50°-60°	235.8	1.5	1.2
60°-70°	188.3	1.2	1.0
70°-80°	128.2	0.8	0.7
80°-90°	72.2	0.5	0.4
90°-100°	1012.6	6.6	5.4
100°-110°	1646.3	10.7	8.7
110°-120°	2258.3	14.6	11.9
120°-130°	2449.4	15.9	13.0
130°-140°	2346.3	15.2	12.4
140°-150°	1951.0	12.7	10.3
150°-160°	1355.6	8.8	7.2
160°-170°	702.5	4.6	3.7
170°-180°	190.0	1.2	1.0
0°-30°	382.9	2.5	2.0
0°-40°	628.7	4.1	3.3
0°-60°	1121.2	7.3	5.9
0°-90°	1509.8	9.8	8.0
90°-120°	4917.2	31.9	26.0
90°-150°	11664.0	75.6	61.7
90°-180°	13912.0	90.2	73.6
0°-180°	15421.9	100.0	81.6

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	489	489	489	489	489	
5°	488	488	488	488	488	46
15°	473	473	473	473	473	133
25°	441	441	441	441	441	203
35°	393	393	393	393	393	246
45°	333	333	333	333	333	257
55°	264	264	264	264	264	236
65°	190	190	190	190	190	188
75°	121	121	121	121	121	128
85°	65	65	65	65	65	58
90°	33	57	58	39	33	86
95°	919	1098	1693	957	919	766
105°	1345	1593	1599	1509	1345	1448
115°	1987	2381	2590	2290	1987	1950
125°	2405	2911	2781	2826	2405	2143
135°	2676	3194	3104	3189	2676	2066
145°	2950	3126	3177	3168	2950	1821
155°	2888	2953	2832	2954	2888	1328
165°	2538	2536	2321	2421	2538	722
175°	1914	1918	1859	1889	1914	194
180°	1654	1654	1654	1654	1654	



TEST NUMBER: 253P228

CATALOG NUMBER: 1215-XX-36-CFL/3/70-T5C/1/40

**CANDELA DISTRIBUTION (FULL):**

	0°	20°	30°	40°	60°	80°	90°	100°	120°	140°	150°
0°	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0
2.5°	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0
5°	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0
7.5°	486.0	486.0	486.0	486.0	486.0	486.0	486.0	486.0	486.0	486.0	486.0
10°	483.0	483.0	483.0	483.0	483.0	483.0	483.0	483.0	483.0	483.0	483.0
12.5°	478.0	478.0	478.0	478.0	478.0	478.0	478.0	478.0	478.0	478.0	478.0
15°	473.0	473.0	473.0	473.0	473.0	473.0	473.0	473.0	473.0	473.0	473.0
17.5°	466.0	466.0	466.0	466.0	466.0	466.0	466.0	466.0	466.0	466.0	466.0
20°	459.0	459.0	459.0	459.0	459.0	459.0	459.0	459.0	459.0	459.0	459.0
22.5°	450.0	450.0	450.0	450.0	450.0	450.0	450.0	450.0	450.0	450.0	450.0
25°	441.0	441.0	441.0	441.0	441.0	441.0	441.0	441.0	441.0	441.0	441.0
27.5°	430.0	430.0	430.0	430.0	430.0	430.0	430.0	430.0	430.0	430.0	430.0
30°	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0
32.5°	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0
35°	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0
37.5°	379.0	379.0	379.0	379.0	379.0	379.0	379.0	379.0	379.0	379.0	379.0
40°	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0
42.5°	349.0	349.0	349.0	349.0	349.0	349.0	349.0	349.0	349.0	349.0	349.0
45°	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0
47.5°	316.0	316.0	316.0	316.0	316.0	316.0	316.0	316.0	316.0	316.0	316.0
50°	299.0	299.0	299.0	299.0	299.0	299.0	299.0	299.0	299.0	299.0	299.0
52.5°	282.0	282.0	282.0	282.0	282.0	282.0	282.0	282.0	282.0	282.0	282.0
55°	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0
57.5°	245.0	245.0	245.0	245.0	245.0	245.0	245.0	245.0	245.0	245.0	245.0
60°	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0
62.5°	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0
65°	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0
67.5°	172.0	172.0	172.0	172.0	172.0	172.0	172.0	172.0	172.0	172.0	172.0
70°	154.0	154.0	154.0	154.0	154.0	154.0	154.0	154.0	154.0	154.0	154.0
72.5°	137.0	137.0	137.0	137.0	137.0	137.0	137.0	137.0	137.0	137.0	137.0
75°	121.0	121.0	121.0	121.0	121.0	121.0	121.0	121.0	121.0	121.0	121.0
77.5°	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0
80°	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
82.5°	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
85°	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
87.5°	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
90°	33.0	37.0	39.0	49.0	58.0	66.0	57.0	38.0	33.0	37.0	39.0
92.5°	509.1	532.1	555.1	662.7	1165.8	817.5	667.5	625.2	509.1	532.1	555.1
95°	919.1	911.8	956.6	1100.5	1693.0	1287.9	1098.0	1017.0	919.1	911.8	956.6
97.5°	1072.7	1065.4	1112.6	1275.8	1399.2	1321.8	1190.0	1121.0	1072.7	1065.4	1112.6
100°	1139.2	1146.4	1190.0	1360.5	1341.1	1420.9	1332.7	1243.2	1139.2	1146.4	1190.0
102.5°	1226.2	1251.6	1324.2	1462.0	1451.2	1487.4	1491.1	1456.0	1226.2	1251.6	1324.2
105°	1344.7	1411.3	1509.2	1638.6	1598.7	1528.6	1592.7	1607.2	1344.7	1411.3	1509.2
107.5°	1500.7	1599.9	1685.8	1768.0	1812.7	1798.2	1829.7	1763.2	1500.7	1599.9	1685.8
110°	1687.0	1784.9	1933.7	2019.5	2105.4	2142.9	2083.6	1963.9	1687.0	1784.9	1933.7



TEST NUMBER: 253P228

CATALOG NUMBER: 1215-XX-36-CFL/3/70-T5C/1/40

**CANDELA DISTRIBUTION (continued):**

	0°	20°	30°	40°	60°	80°	90°	100°	120°	140°	150°
112.5°	1850.2	1967.5	2142.9	2219.1	2389.6	2398.0	2261.4	2118.7	1850.2	1967.5	2142.9
115°	1986.9	2117.5	2290.4	2364.2	2590.3	2471.8	2381.1	2242.0	1986.9	2117.5	2290.4
117.5°	2092.1	2232.4	2408.9	2502.0	2699.2	2532.3	2498.4	2369.0	2092.1	2232.4	2408.9
120°	2196.1	2364.2	2534.7	2629.0	2756.0	2646.0	2626.6	2496.0	2196.1	2364.2	2534.7
122.5°	2306.1	2522.6	2675.0	2770.5	2777.8	2802.0	2775.3	2614.5	2306.1	2522.6	2675.0
125°	2405.3	2673.8	2826.1	2896.3	2781.4	2937.4	2910.8	2720.9	2405.3	2673.8	2826.1
127.5°	2483.9	2789.9	2944.7	2976.1	2806.8	3025.7	3024.5	2824.9	2483.9	2789.9	2944.7
130°	2552.8	2887.8	3040.2	3036.6	2914.4	3100.7	3101.9	2901.1	2552.8	2887.8	3040.2
132.5°	2620.6	2961.6	3124.8	3091.0	3022.0	3179.3	3156.3	2954.3	2620.6	2961.6	3124.8
135°	2676.2	3013.6	3188.9	3162.3	3104.3	3253.0	3193.8	2988.2	2676.2	3013.6	3188.9
137.5°	2725.8	3058.3	3228.8	3220.4	3132.1	3278.4	3226.4	3017.2	2725.8	3058.3	3228.8
140°	2768.1	3077.7	3228.8	3236.1	3157.5	3268.7	3215.5	3048.7	2768.1	3077.7	3228.8
142.5°	2837.0	3091.0	3209.5	3239.7	3178.0	3233.7	3170.8	3060.7	2837.0	3091.0	3209.5
145°	2949.5	3066.8	3168.4	3236.1	3176.8	3180.5	3126.0	3058.3	2949.5	3066.8	3168.4
147.5°	2979.7	3051.1	3111.5	3213.1	3153.9	3124.8	3105.5	3070.4	2979.7	3051.1	3111.5
150°	2916.8	3029.3	3107.9	3218.0	3150.2	3144.2	3158.7	3080.1	2916.8	3029.3	3107.9
152.5°	2912.0	3032.9	3023.3	3077.7	2960.4	3081.3	3030.5	3030.5	2912.0	3032.9	3023.3
155°	2887.8	2976.1	2954.3	3000.3	2832.2	2913.2	2953.1	3017.2	2887.8	2976.1	2954.3
157.5°	2829.8	2886.6	2861.2	2845.5	2650.8	2764.5	2913.2	2962.8	2829.8	2886.6	2861.2
160°	2741.5	2770.5	2722.1	2638.7	2510.5	2670.1	2824.9	2860.0	2741.5	2770.5	2722.1
162.5°	2649.6	2632.7	2560.1	2492.4	2408.9	2556.5	2673.8	2724.6	2649.6	2632.7	2560.1
165°	2538.3	2497.2	2421.0	2366.6	2320.7	2421.0	2535.9	2598.8	2538.3	2497.2	2421.0
167.5°	2408.9	2341.2	2277.1	2243.3	2190.0	2289.2	2404.1	2458.5	2408.9	2341.2	2277.1
170°	2252.9	2197.3	2155.0	2127.2	2078.8	2165.9	2255.3	2295.3	2252.9	2197.3	2155.0
172.5°	2093.3	2054.6	2029.2	2008.7	1977.2	2031.6	2081.2	2110.2	2093.3	2054.6	2029.2
175°	1914.3	1907.1	1888.9	1874.4	1858.7	1888.9	1918.0	1932.5	1914.3	1907.1	1888.9
177.5°	1757.1	1754.7	1737.8	1734.1	1734.1	1753.5	1780.1	1778.9	1757.1	1754.7	1737.8
180°	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3



TEST NUMBER: 253P228

CATALOG NUMBER: 1215-XX-36-CFL/3/70-T5C/1/40

**CANDELA DISTRIBUTION (continued):**

	160°	180°	200°	210°	220°	240°	260°	270°	280°	300°	320°
0°	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0
2.5°	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0	489.0
5°	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0
7.5°	486.0	486.0	486.0	486.0	486.0	486.0	486.0	486.0	486.0	486.0	486.0
10°	483.0	483.0	483.0	483.0	483.0	483.0	483.0	483.0	483.0	483.0	483.0
12.5°	478.0	478.0	478.0	478.0	478.0	478.0	478.0	478.0	478.0	478.0	478.0
15°	473.0	473.0	473.0	473.0	473.0	473.0	473.0	473.0	473.0	473.0	473.0
17.5°	466.0	466.0	466.0	466.0	466.0	466.0	466.0	466.0	466.0	466.0	466.0
20°	459.0	459.0	459.0	459.0	459.0	459.0	459.0	459.0	459.0	459.0	459.0
22.5°	450.0	450.0	450.0	450.0	450.0	450.0	450.0	450.0	450.0	450.0	450.0
25°	441.0	441.0	441.0	441.0	441.0	441.0	441.0	441.0	441.0	441.0	441.0
27.5°	430.0	430.0	430.0	430.0	430.0	430.0	430.0	430.0	430.0	430.0	430.0
30°	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0
32.5°	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0
35°	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0
37.5°	379.0	379.0	379.0	379.0	379.0	379.0	379.0	379.0	379.0	379.0	379.0
40°	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0
42.5°	349.0	349.0	349.0	349.0	349.0	349.0	349.0	349.0	349.0	349.0	349.0
45°	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0
47.5°	316.0	316.0	316.0	316.0	316.0	316.0	316.0	316.0	316.0	316.0	316.0
50°	299.0	299.0	299.0	299.0	299.0	299.0	299.0	299.0	299.0	299.0	299.0
52.5°	282.0	282.0	282.0	282.0	282.0	282.0	282.0	282.0	282.0	282.0	282.0
55°	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0
57.5°	245.0	245.0	245.0	245.0	245.0	245.0	245.0	245.0	245.0	245.0	245.0
60°	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0
62.5°	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0
65°	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0
67.5°	172.0	172.0	172.0	172.0	172.0	172.0	172.0	172.0	172.0	172.0	172.0
70°	154.0	154.0	154.0	154.0	154.0	154.0	154.0	154.0	154.0	154.0	154.0
72.5°	137.0	137.0	137.0	137.0	137.0	137.0	137.0	137.0	137.0	137.0	137.0
75°	121.0	121.0	121.0	121.0	121.0	121.0	121.0	121.0	121.0	121.0	121.0
77.5°	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0
80°	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
82.5°	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
85°	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
87.5°	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
90°	49.0	58.0	66.0	57.0	38.0	33.0	37.0	39.0	49.0	58.0	66.0
92.5°	662.7	1165.8	817.5	667.5	625.2	509.1	532.1	555.1	662.7	1165.8	817.5
95°	1100.5	1693.0	1287.9	1098.0	1017.0	919.1	911.8	956.6	1100.5	1693.0	1287.9
97.5°	1275.8	1399.2	1321.8	1190.0	1121.0	1072.7	1065.4	1112.6	1275.8	1399.2	1321.8
100°	1360.5	1341.1	1420.9	1332.7	1243.2	1139.2	1146.4	1190.0	1360.5	1341.1	1420.9
102.5°	1462.0	1451.2	1487.4	1491.1	1456.0	1226.2	1251.6	1324.2	1462.0	1451.2	1487.4
105°	1638.6	1598.7	1528.6	1592.7	1607.2	1344.7	1411.3	1509.2	1638.6	1598.7	1528.6
107.5°	1768.0	1812.7	1798.2	1829.7	1763.2	1500.7	1599.9	1685.8	1768.0	1812.7	1798.2
110°	2019.5	2105.4	2142.9	2083.6	1963.9	1687.0	1784.9	1933.7	2019.5	2105.4	2142.9





TEST NUMBER: 253P228

CATALOG NUMBER: 1215-XX-36-CFL/3/70-T5C/1/40

**CANDELA DISTRIBUTION (continued):**

	160°	180°	200°	210°	220°	240°	260°	270°	280°	300°	320°
112.5°	2219.1	2389.6	2398.0	2261.4	2118.7	1850.2	1967.5	2142.9	2219.1	2389.6	2398.0
115°	2364.2	2590.3	2471.8	2381.1	2242.0	1986.9	2117.5	2290.4	2364.2	2590.3	2471.8
117.5°	2502.0	2699.2	2532.3	2498.4	2369.0	2092.1	2232.4	2408.9	2502.0	2699.2	2532.3
120°	2629.0	2756.0	2646.0	2626.6	2496.0	2196.1	2364.2	2534.7	2629.0	2756.0	2646.0
122.5°	2770.5	2777.8	2802.0	2775.3	2614.5	2306.1	2522.6	2675.0	2770.5	2777.8	2802.0
125°	2896.3	2781.4	2937.4	2910.8	2720.9	2405.3	2673.8	2826.1	2896.3	2781.4	2937.4
127.5°	2976.1	2806.8	3025.7	3024.5	2824.9	2483.9	2789.9	2944.7	2976.1	2806.8	3025.7
130°	3036.6	2914.4	3100.7	3101.9	2901.1	2552.8	2887.8	3040.2	3036.6	2914.4	3100.7
132.5°	3091.0	3022.0	3179.3	3156.3	2954.3	2620.6	2961.6	3124.8	3091.0	3022.0	3179.3
135°	3162.3	3104.3	3253.0	3193.8	2988.2	2676.2	3013.6	3188.9	3162.3	3104.3	3253.0
137.5°	3220.4	3132.1	3278.4	3226.4	3017.2	2725.8	3058.3	3228.8	3220.4	3132.1	3278.4
140°	3236.1	3157.5	3268.7	3215.5	3048.7	2768.1	3077.7	3228.8	3236.1	3157.5	3268.7
142.5°	3239.7	3178.0	3233.7	3170.8	3060.7	2837.0	3091.0	3209.5	3239.7	3178.0	3233.7
145°	3236.1	3176.8	3180.5	3126.0	3058.3	2949.5	3066.8	3168.4	3236.1	3176.8	3180.5
147.5°	3213.1	3153.9	3124.8	3105.5	3070.4	2979.7	3051.1	3111.5	3213.1	3153.9	3124.8
150°	3218.0	3150.2	3144.2	3158.7	3080.1	2916.8	3029.3	3107.9	3218.0	3150.2	3144.2
152.5°	3077.7	2960.4	3081.3	3030.5	3030.5	2912.0	3032.9	3023.3	3077.7	2960.4	3081.3
155°	3000.3	2832.2	2913.2	2953.1	3017.2	2887.8	2976.1	2954.3	3000.3	2832.2	2913.2
157.5°	2845.5	2650.8	2764.5	2913.2	2962.8	2829.8	2886.6	2861.2	2845.5	2650.8	2764.5
160°	2638.7	2510.5	2670.1	2824.9	2860.0	2741.5	2770.5	2722.1	2638.7	2510.5	2670.1
162.5°	2492.4	2408.9	2556.5	2673.8	2724.6	2649.6	2632.7	2560.1	2492.4	2408.9	2556.5
165°	2366.6	2320.7	2421.0	2535.9	2598.8	2538.3	2497.2	2421.0	2366.6	2320.7	2421.0
167.5°	2243.3	2190.0	2289.2	2404.1	2458.5	2408.9	2341.2	2277.1	2243.3	2190.0	2289.2
170°	2127.2	2078.8	2165.9	2255.3	2295.3	2252.9	2197.3	2155.0	2127.2	2078.8	2165.9
172.5°	2008.7	1977.2	2031.6	2081.2	2110.2	2093.3	2054.6	2029.2	2008.7	1977.2	2031.6
175°	1874.4	1858.7	1888.9	1918.0	1932.5	1914.3	1907.1	1888.9	1874.4	1858.7	1888.9
177.5°	1734.1	1734.1	1753.5	1780.1	1778.9	1757.1	1754.7	1737.8	1734.1	1734.1	1753.5
180°	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3



TEST NUMBER: 253P228

CATALOG NUMBER: 1215-XX-36-CFL/3/70-T5C/1/40

**CANDELA DISTRIBUTION (continued):**

	330°	340°	360°
0°	489.0	489.0	489.0
2.5°	489.0	489.0	489.0
5°	488.0	488.0	488.0
7.5°	486.0	486.0	486.0
10°	483.0	483.0	483.0
12.5°	478.0	478.0	478.0
15°	473.0	473.0	473.0
17.5°	466.0	466.0	466.0
20°	459.0	459.0	459.0
22.5°	450.0	450.0	450.0
25°	441.0	441.0	441.0
27.5°	430.0	430.0	430.0
30°	418.0	418.0	418.0
32.5°	406.0	406.0	406.0
35°	393.0	393.0	393.0
37.5°	379.0	379.0	379.0
40°	364.0	364.0	364.0
42.5°	349.0	349.0	349.0
45°	333.0	333.0	333.0
47.5°	316.0	316.0	316.0
50°	299.0	299.0	299.0
52.5°	282.0	282.0	282.0
55°	264.0	264.0	264.0
57.5°	245.0	245.0	245.0
60°	227.0	227.0	227.0
62.5°	208.0	208.0	208.0
65°	190.0	190.0	190.0
67.5°	172.0	172.0	172.0
70°	154.0	154.0	154.0
72.5°	137.0	137.0	137.0
75°	121.0	121.0	121.0
77.5°	105.0	105.0	105.0
80°	91.0	91.0	91.0
82.5°	77.0	77.0	77.0
85°	65.0	65.0	65.0
87.5°	54.0	54.0	54.0
90°	57.0	38.0	33.0
92.5°	667.5	625.2	509.1
95°	1098.0	1017.0	919.1
97.5°	1190.0	1121.0	1072.7
100°	1332.7	1243.2	1139.2
102.5°	1491.1	1456.0	1226.2
105°	1592.7	1607.2	1344.7
107.5°	1829.7	1763.2	1500.7
110°	2083.6	1963.9	1687.0



TEST NUMBER: 253P228

CATALOG NUMBER: 1215-XX-36-CFL/3/70-T5C/1/40

**CANDELA DISTRIBUTION (continued):**

	330°	340°	360°
112.5°	2261.4	2118.7	1850.2
115°	2381.1	2242.0	1986.9
117.5°	2498.4	2369.0	2092.1
120°	2626.6	2496.0	2196.1
122.5°	2775.3	2614.5	2306.1
125°	2910.8	2720.9	2405.3
127.5°	3024.5	2824.9	2483.9
130°	3101.9	2901.1	2552.8
132.5°	3156.3	2954.3	2620.6
135°	3193.8	2988.2	2676.2
137.5°	3226.4	3017.2	2725.8
140°	3215.5	3048.7	2768.1
142.5°	3170.8	3060.7	2837.0
145°	3126.0	3058.3	2949.5
147.5°	3105.5	3070.4	2979.7
150°	3158.7	3080.1	2916.8
152.5°	3030.5	3030.5	2912.0
155°	2953.1	3017.2	2887.8
157.5°	2913.2	2962.8	2829.8
160°	2824.9	2860.0	2741.5
162.5°	2673.8	2724.6	2649.6
165°	2535.9	2598.8	2538.3
167.5°	2404.1	2458.5	2408.9
170°	2255.3	2295.3	2252.9
172.5°	2081.2	2110.2	2093.3
175°	1918.0	1932.5	1914.3
177.5°	1780.1	1778.9	1757.1
180°	1654.3	1654.3	1654.3

(END OF REPORT)