

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: 253P231

Luminaire Tested: **1215-XX-36-CFL/3/39-T5C/1/40**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-66-11  
Report Number: 253P231  
Test Lab: METALUX LABORATORIES  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 1215-XX-36-CFL/3/39-T5C/1/40  
Description: SHAPER 36 INCH 1215 SERIES DIRECT/INDIRECT INDOOR PENDANT FIXTURE  
WITH SHALLOW BOWL  
Light Source: THREE 39 WATT BIAx COMPACT FLUORESCENT AND ONE 40 WATT T5 CIRCLINE  
(3)F39BX - 2850 LUMENS AND (1)TL5C40W/830 - 3300 LUMENS  
Ballast/Driver: -

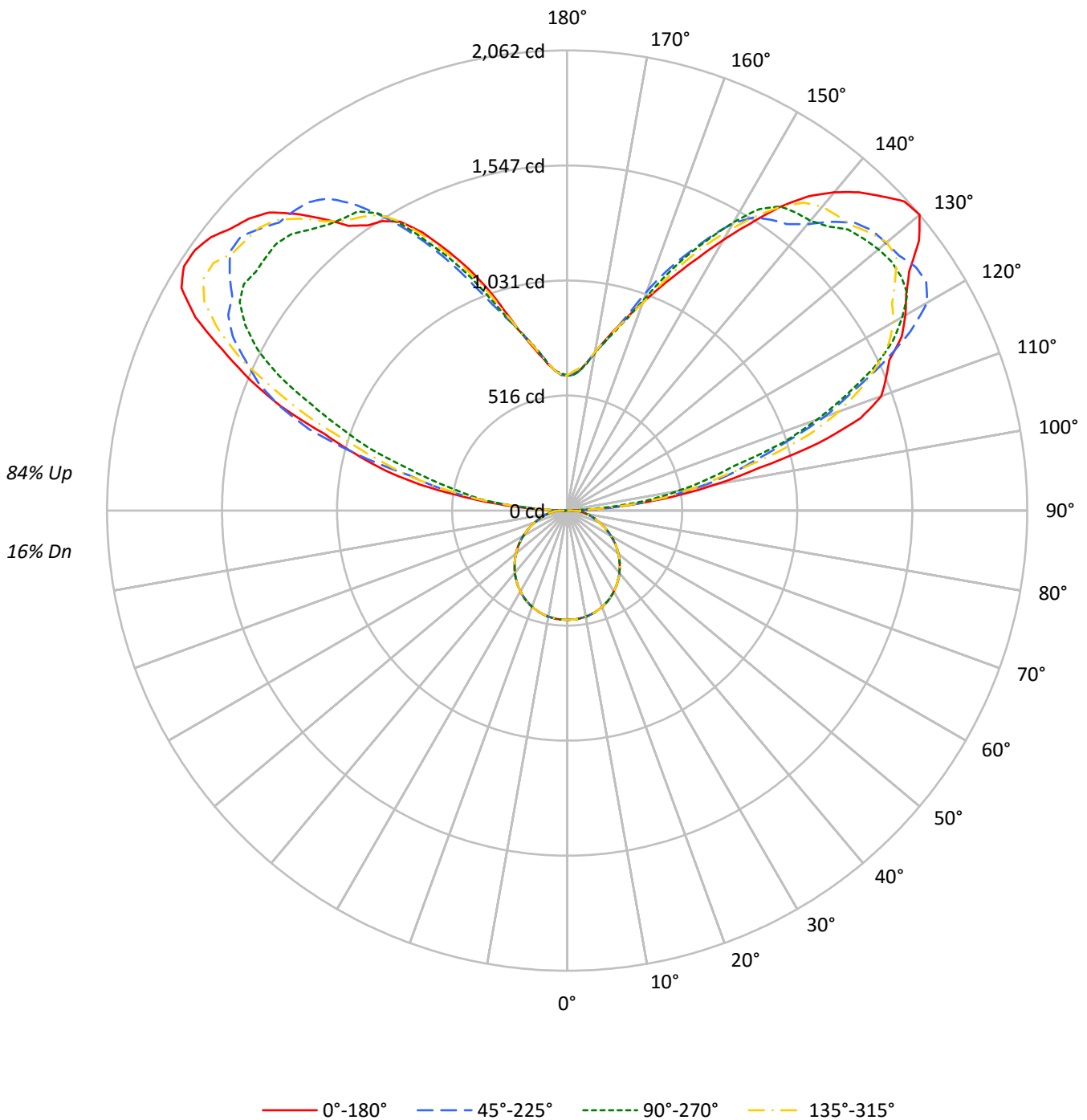
**Summary**

Lumens per Lamp: 11850 (1 lamp)  
Luminaire Lumens: 9300.4 lumens  
Efficiency: 78.5%  
Efficacy: 59.2 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: Semi-Indirect

Input Watts (W): 157  
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: 253P231  
CATALOG NUMBER: 1215-XX-36-CFL/3/39-T5C/1/40

### Luminous Intensity Polar Plot





TEST NUMBER: 253P231

CATALOG NUMBER: 1215-XX-36-CFL/3/39-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	78	78	78	78	68	68	68	68	51	51	51	35	35	35	20	20	20	13
1	71	67	64	62	62	59	57	55	44	42	41	30	29	28	17	17	16	10
2	64	59	54	50	56	52	48	44	38	36	34	26	25	23	15	14	13	8
3	58	51	46	42	51	45	41	37	34	31	28	23	21	20	13	12	11	7
4	53	45	39	35	47	40	35	31	30	26	24	20	18	17	12	11	10	6
5	49	40	34	30	43	35	30	26	26	23	20	18	16	14	10	9	8	5
6	45	36	30	25	39	32	26	23	24	20	17	16	14	12	9	8	7	4
7	41	32	26	22	36	28	23	20	21	18	15	15	12	11	9	7	6	4
8	38	29	23	19	33	26	21	17	19	16	13	13	11	9	8	7	6	4
9	35	26	21	17	31	23	18	15	18	14	12	12	10	8	7	6	5	3
10	33	24	19	15	29	21	17	13	16	13	10	11	9	7	7	5	5	3

**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: 253P231

CATALOG NUMBER: 1215-XX-36-CFL/3/39-T5C/1/40

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	46.4	0.5	0.4
10°-20°	133.5	1.4	1.1
20°-30°	203.1	2.2	1.7
30°-40°	245.8	2.6	2.1
40°-50°	256.7	2.8	2.2
50°-60°	235.8	2.5	2.0
60°-70°	188.3	2.0	1.6
70°-80°	128.2	1.4	1.1
80°-90°	66.6	0.7	0.6
90°-100°	285.3	3.1	2.4
100°-110°	972.5	10.5	8.2
110°-120°	1543.4	16.6	13.0
120°-130°	1668.0	17.9	14.1
130°-140°	1415.8	15.2	11.9
140°-150°	1021.6	11.0	8.6
150°-160°	581.7	6.3	4.9
160°-170°	244.9	2.6	2.1
170°-180°	63.0	0.7	0.5
0°-30°	382.9	4.1	3.2
0°-40°	628.7	6.8	5.3
0°-60°	1121.2	12.1	9.5
0°-90°	1504.2	16.2	12.7
90°-120°	2801.2	30.1	23.6
90°-150°	6906.6	74.3	58.3
90°-180°	7796.0	83.8	65.8
0°-180°	9300.4	100.0	78.5

**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°	3	2	13	5	3	21
95°	269	202	282	237	269	308
105°	1164	775	983	748	1164	1190
115°	1592	1517	1705	1421	1592	1600
125°	1871	1828	2036	1769	1871	1694
135°	1991	1781	1889	1751	1991	1539
145°	1659	1664	1560	1636	1659	1041
155°	1174	1253	1293	1247	1174	553
165°	844	833	837	836	844	244
175°	629	626	631	629	629	63
180°	605	605	605	605	605	



TEST NUMBER: 253P231

CATALOG NUMBER: 1215-XX-36-CFL/3/39-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°	3.0	6.0	5.0	8.0	13.0	4.0	2.0	5.0	3.0	6.0	5.0
92.5°	91.4	93.2	88.7	109.5	105.9	63.3	49.8	56.1	91.4	93.2	88.7
95°	268.7	248.8	237.0	263.3	282.3	215.3	201.8	208.1	268.7	248.8	237.0
97.5°	476.8	425.2	391.8	423.4	460.5	398.1	377.3	401.7	476.8	425.2	391.8
100°	680.4	532.9	485.9	569.1	665.9	532.0	501.2	545.6	680.4	532.9	485.9
102.5°	880.3	657.8	608.0	712.0	838.7	701.2	641.5	668.6	880.3	657.8	608.0
105°	1164.4	855.0	748.2	839.6	982.6	836.0	775.4	914.7	1164.4	855.0	748.2
107.5°	1378.9	1060.4	930.1	1001.6	1139.1	994.3	1012.4	1155.4	1378.9	1060.4	930.1
110°	1498.3	1226.9	1075.8	1180.7	1365.3	1192.5	1193.4	1330.9	1498.3	1226.9	1075.8



TEST NUMBER: 253P231

CATALOG NUMBER: 1215-XX-36-CFL/3/39-T5C/1/40

**CANDELA DISTRIBUTION (continued):**

	0°	20°	30°	40°	60°	80°	90°	100°	120°	140°	150°
112.5°	1546.2	1378.9	1238.6	1323.7	1541.7	1380.7	1353.5	1482.0	1546.2	1378.9	1238.6
115°	1592.4	1510.0	1421.4	1511.9	1704.6	1586.0	1517.3	1588.8	1592.4	1510.0	1421.4
117.5°	1691.0	1603.2	1565.2	1682.9	1878.3	1725.4	1645.8	1689.2	1691.0	1603.2	1565.2
120°	1749.8	1669.3	1665.7	1817.7	1995.9	1837.6	1734.4	1755.2	1749.8	1669.3	1665.7
122.5°	1801.4	1701.0	1739.9	1865.6	2036.6	1899.1	1807.7	1771.5	1801.4	1701.0	1739.9
125°	1871.0	1767.9	1768.8	1862.0	2035.7	1900.0	1827.6	1838.5	1871.0	1767.9	1768.8
127.5°	1986.9	1817.7	1758.0	1830.3	2012.2	1852.0	1832.1	1876.5	1986.9	1817.7	1758.0
130°	2062.0	1805.9	1764.3	1831.2	1966.0	1853.9	1821.3	1858.4	2062.0	1805.9	1764.3
132.5°	2050.2	1773.3	1768.8	1830.3	1935.3	1853.9	1802.3	1808.6	2050.2	1773.3	1768.8
135°	1991.4	1745.3	1750.7	1802.3	1889.1	1825.8	1780.6	1769.7	1991.4	1745.3	1750.7
137.5°	1934.4	1744.4	1707.3	1739.0	1803.2	1764.3	1727.2	1778.8	1934.4	1744.4	1707.3
140°	1862.0	1748.9	1671.1	1663.9	1707.3	1686.5	1695.5	1784.2	1862.0	1748.9	1671.1
142.5°	1775.1	1727.2	1649.4	1621.3	1607.8	1645.8	1682.9	1758.9	1775.1	1727.2	1649.4
145°	1659.3	1659.3	1635.8	1601.4	1559.8	1622.2	1663.9	1685.6	1659.3	1659.3	1635.8
147.5°	1523.6	1571.6	1579.7	1563.4	1538.1	1580.6	1601.4	1590.6	1523.6	1571.6	1579.7
150°	1399.7	1465.7	1479.3	1483.8	1493.8	1495.6	1492.0	1481.1	1399.7	1465.7	1479.3
152.5°	1280.2	1356.2	1358.0	1370.7	1405.1	1378.9	1368.9	1361.7	1280.2	1356.2	1358.0
155°	1174.4	1230.5	1246.8	1258.5	1292.9	1264.9	1253.1	1227.8	1174.4	1230.5	1246.8
157.5°	1078.5	1102.9	1131.0	1152.7	1184.3	1154.5	1128.2	1096.6	1078.5	1102.9	1131.0
160°	991.6	988.0	1013.3	1037.8	1068.5	1037.8	1006.1	982.6	991.6	988.0	1013.3
162.5°	913.8	903.9	911.1	923.8	942.8	922.0	904.8	900.2	913.8	903.9	911.1
165°	844.1	839.6	836.0	834.2	836.9	836.0	833.3	836.0	844.1	839.6	836.0
167.5°	779.0	778.1	776.3	773.6	765.4	774.5	773.6	774.5	779.0	778.1	776.3
170°	719.3	722.0	720.2	717.5	709.3	718.4	717.5	718.4	719.3	722.0	720.2
172.5°	665.9	672.2	667.7	666.8	663.2	668.6	664.1	666.8	665.9	672.2	667.7
175°	628.8	645.1	628.8	628.8	630.6	628.8	626.1	627.9	628.8	645.1	628.8
177.5°	610.7	627.9	616.1	608.9	608.9	608.9	607.1	608.0	610.7	627.9	616.1
180°	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3



TEST NUMBER: 253P231

CATALOG NUMBER: 1215-XX-36-CFL/3/39-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°	8.0	13.0	4.0	2.0	5.0	3.0	6.0	5.0	8.0	13.0	4.0
92.5°	109.5	105.9	63.3	49.8	56.1	91.4	93.2	88.7	109.5	105.9	63.3
95°	263.3	282.3	215.3	201.8	208.1	268.7	248.8	237.0	263.3	282.3	215.3
97.5°	423.4	460.5	398.1	377.3	401.7	476.8	425.2	391.8	423.4	460.5	398.1
100°	569.1	665.9	532.0	501.2	545.6	680.4	532.9	485.9	569.1	665.9	532.0
102.5°	712.0	838.7	701.2	641.5	668.6	880.3	657.8	608.0	712.0	838.7	701.2
105°	839.6	982.6	836.0	775.4	914.7	1164.4	855.0	748.2	839.6	982.6	836.0
107.5°	1001.6	1139.1	994.3	1012.4	1155.4	1378.9	1060.4	930.1	1001.6	1139.1	994.3
110°	1180.7	1365.3	1192.5	1193.4	1330.9	1498.3	1226.9	1075.8	1180.7	1365.3	1192.5





TEST NUMBER: 253P231

CATALOG NUMBER: 1215-XX-36-CFL/3/39-T5C/1/40

**CANDELA DISTRIBUTION (continued):**

	160°	180°	200°	210°	220°	240°	260°	270°	280°	300°	320°
112.5°	1323.7	1541.7	1380.7	1353.5	1482.0	1546.2	1378.9	1238.6	1323.7	1541.7	1380.7
115°	1511.9	1704.6	1586.0	1517.3	1588.8	1592.4	1510.0	1421.4	1511.9	1704.6	1586.0
117.5°	1682.9	1878.3	1725.4	1645.8	1689.2	1691.0	1603.2	1565.2	1682.9	1878.3	1725.4
120°	1817.7	1995.9	1837.6	1734.4	1755.2	1749.8	1669.3	1665.7	1817.7	1995.9	1837.6
122.5°	1865.6	2036.6	1899.1	1807.7	1771.5	1801.4	1701.0	1739.9	1865.6	2036.6	1899.1
125°	1862.0	2035.7	1900.0	1827.6	1838.5	1871.0	1767.9	1768.8	1862.0	2035.7	1900.0
127.5°	1830.3	2012.2	1852.0	1832.1	1876.5	1986.9	1817.7	1758.0	1830.3	2012.2	1852.0
130°	1831.2	1966.0	1853.9	1821.3	1858.4	2062.0	1805.9	1764.3	1831.2	1966.0	1853.9
132.5°	1830.3	1935.3	1853.9	1802.3	1808.6	2050.2	1773.3	1768.8	1830.3	1935.3	1853.9
135°	1802.3	1889.1	1825.8	1780.6	1769.7	1991.4	1745.3	1750.7	1802.3	1889.1	1825.8
137.5°	1739.0	1803.2	1764.3	1727.2	1778.8	1934.4	1744.4	1707.3	1739.0	1803.2	1764.3
140°	1663.9	1707.3	1686.5	1695.5	1784.2	1862.0	1748.9	1671.1	1663.9	1707.3	1686.5
142.5°	1621.3	1607.8	1645.8	1682.9	1758.9	1775.1	1727.2	1649.4	1621.3	1607.8	1645.8
145°	1601.4	1559.8	1622.2	1663.9	1685.6	1659.3	1659.3	1635.8	1601.4	1559.8	1622.2
147.5°	1563.4	1538.1	1580.6	1601.4	1590.6	1523.6	1571.6	1579.7	1563.4	1538.1	1580.6
150°	1483.8	1493.8	1495.6	1492.0	1481.1	1399.7	1465.7	1479.3	1483.8	1493.8	1495.6
152.5°	1370.7	1405.1	1378.9	1368.9	1361.7	1280.2	1356.2	1358.0	1370.7	1405.1	1378.9
155°	1258.5	1292.9	1264.9	1253.1	1227.8	1174.4	1230.5	1246.8	1258.5	1292.9	1264.9
157.5°	1152.7	1184.3	1154.5	1128.2	1096.6	1078.5	1102.9	1131.0	1152.7	1184.3	1154.5
160°	1037.8	1068.5	1037.8	1006.1	982.6	991.6	988.0	1013.3	1037.8	1068.5	1037.8
162.5°	923.8	942.8	922.0	904.8	900.2	913.8	903.9	911.1	923.8	942.8	922.0
165°	834.2	836.9	836.0	833.3	836.0	844.1	839.6	836.0	834.2	836.9	836.0
167.5°	773.6	765.4	774.5	773.6	774.5	779.0	778.1	776.3	773.6	765.4	774.5
170°	717.5	709.3	718.4	717.5	718.4	719.3	722.0	720.2	717.5	709.3	718.4
172.5°	666.8	663.2	668.6	664.1	666.8	665.9	672.2	667.7	666.8	663.2	668.6
175°	628.8	630.6	628.8	626.1	627.9	628.8	645.1	628.8	628.8	630.6	628.8
177.5°	608.9	608.9	608.9	607.1	608.0	610.7	627.9	616.1	608.9	608.9	608.9
180°	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3



TEST NUMBER: 253P231

CATALOG NUMBER: 1215-XX-36-CFL/3/39-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°	2.0	5.0	3.0
92.5°	49.8	56.1	91.4
95°	201.8	208.1	268.7
97.5°	377.3	401.7	476.8
100°	501.2	545.6	680.4
102.5°	641.5	668.6	880.3
105°	775.4	914.7	1164.4
107.5°	1012.4	1155.4	1378.9
110°	1193.4	1330.9	1498.3



TEST NUMBER: 253P231

CATALOG NUMBER: 1215-XX-36-CFL/3/39-T5C/1/40

**CANDELA DISTRIBUTION (continued):**

	330°	340°	360°
112.5°	1353.5	1482.0	1546.2
115°	1517.3	1588.8	1592.4
117.5°	1645.8	1689.2	1691.0
120°	1734.4	1755.2	1749.8
122.5°	1807.7	1771.5	1801.4
125°	1827.6	1838.5	1871.0
127.5°	1832.1	1876.5	1986.9
130°	<i>1821.3</i>	<i>1858.4</i>	<i>2062.0</i>
132.5°	1802.3	1808.6	2050.2
135°	1780.6	1769.7	1991.4
137.5°	1727.2	1778.8	1934.4
140°	1695.5	1784.2	1862.0
142.5°	1682.9	1758.9	1775.1
145°	1663.9	1685.6	1659.3
147.5°	1601.4	1590.6	1523.6
150°	1492.0	1481.1	1399.7
152.5°	1368.9	1361.7	1280.2
155°	1253.1	1227.8	1174.4
157.5°	1128.2	1096.6	1078.5
160°	1006.1	982.6	991.6
162.5°	904.8	900.2	913.8
165°	833.3	836.0	844.1
167.5°	773.6	774.5	779.0
170°	717.5	718.4	719.3
172.5°	664.1	666.8	665.9
175°	626.1	627.9	628.8
177.5°	607.1	608.0	610.7
180°	605.3	605.3	605.3

(END OF REPORT)