

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: io LED

Report Number: P273396

Luminaire Tested: **0.05-03W-830-5-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273396
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-246-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 0.05-03W-830-5-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 5 DEGREE OPTIC.
STANDARD OUTPUT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 683.3 lumens
Efficiency: N/A
Efficacy: 42.7 lumens/watt
Spacing Criteria (0/90/45): 0.17 / 1.31 / 0.22
Luminous Opening: Rectangular (W 2.92' x L: 0.21' x H: 0')
CIE Type: Direct

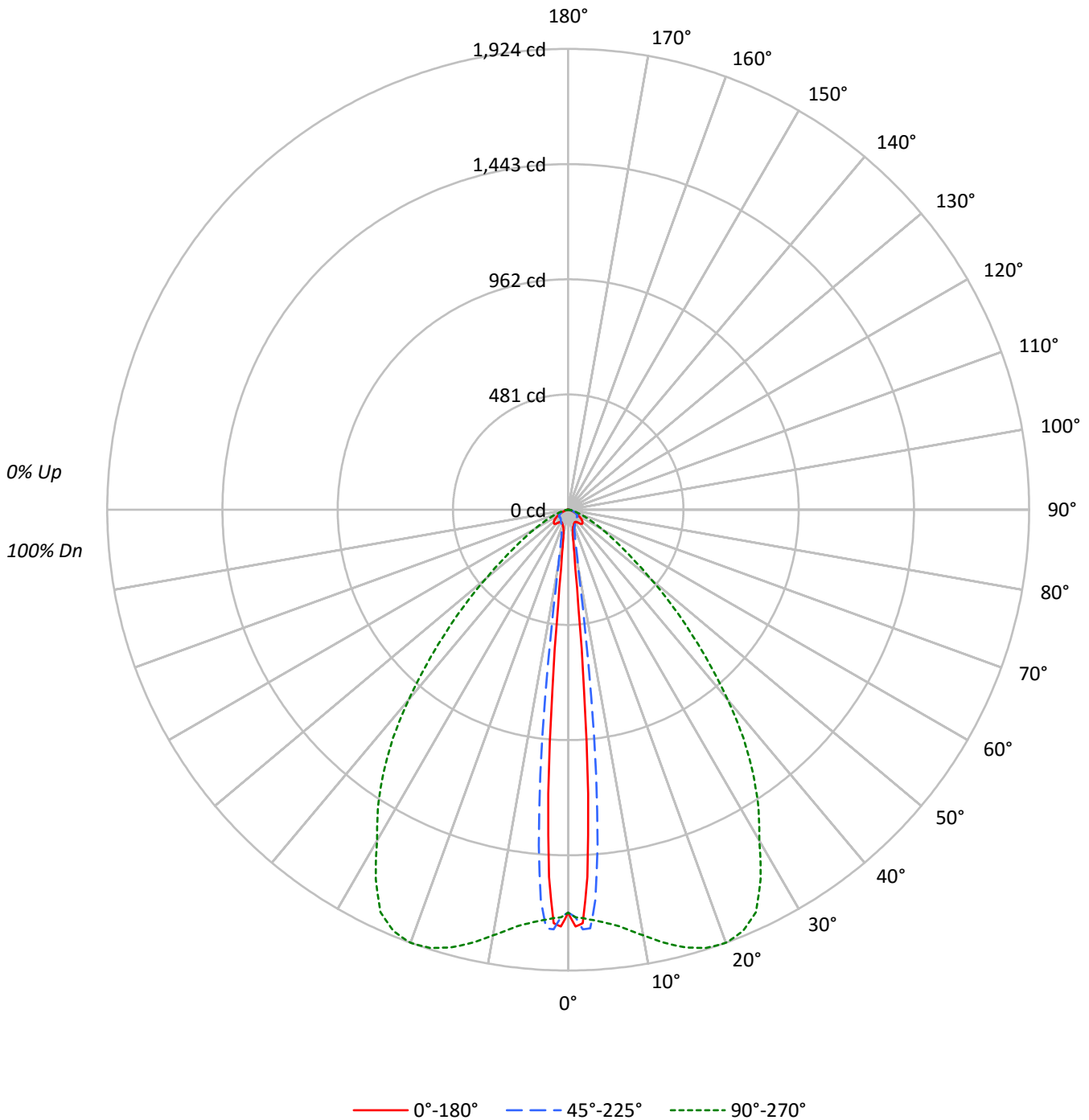
Input Watts (W): 16
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	101	109	105	102	100	101	99	96	97	95	93	94	92	91	89
2	104	97	92	87	101	95	91	86	92	88	84	89	85	82	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	74	79	75	72	70
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	63	60	58
6	80	69	62	57	78	68	61	56	67	61	56	65	60	56	64	59	55	53
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	49
8	72	60	53	49	70	60	53	48	59	53	48	57	52	48	56	51	48	46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	65	54	47	43	64	53	47	43	52	47	43	52	46	42	51	46	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	29797	29797	29797
5°	13486	25025	30766
10°	2110	4179	32457
15°	1418	1918	34700
20°	1257	1472	36277
25°	1196	1312	36224
30°	1211	1231	32638
35°	1356	1161	29088
40°	1734	1133	23936
45°	2082	1180	18000
50°	2136	1304	12423
55°	2051	1455	8292
60°	1732	1484	5807
65°	1345	1467	3948
70°	1046	1362	2667
75°	897	1184	1738
80°	888	1061	1102
85°	1098	1179	711



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.7	14.7
10°-20°	121.2	17.7
20°-30°	115.2	16.9
30°-40°	103.5	15.1
40°-50°	94.0	13.8
50°-60°	74.8	10.9
60°-70°	45.1	6.6
70°-80°	20.1	2.9
80°-90°	6.4	0.9
90°-100°	1.8	0.3
100°-110°	0.5	0.1
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	337.1	49.3
0°-40°	440.6	64.5
0°-60°	609.3	89.2
0°-90°	681.0	99.7
90°-120°	2.3	0.3
90°-150°	2.3	0.3
90°-180°	2.0	0.3
0°-180°	683.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1682	1682	1682	1682	1682	
5°	758	953	1407	1758	1730	50
15°	77	81	105	424	1892	23
25°	61	62	67	129	1853	28
35°	63	57	54	101	1345	41
45°	83	73	47	95	718	62
55°	66	64	47	78	268	58
65°	32	35	35	46	94	33
75°	13	14	17	22	25	14
85°	5	6	6	6	4	5
90°	4	4	3	2	0	2
95°	2	2	2	1	0	2
105°	1	1	0	0	0	1
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1682.1	1682.1	1682.1	1682.1	1682.1	1682.1	1682.1	1682.1	1682.1	1682.1	1682.1
1°	1740.4	1711.5	1709.8	1710.4	1715.6	1718.6	1724.2	1733.1	1711.9	1700.4	1698.5
2°	1727.7	1735.0	1737.5	1741.9	1754.6	1757.3	1762.1	1765.2	1762.3	1753.1	1746.7
3°	1534.8	1566.1	1581.5	1594.8	1629.8	1646.5	1669.0	1691.3	1728.8	1750.4	1759.0
4°	1188.2	1227.8	1246.1	1268.8	1327.8	1363.4	1418.6	1477.5	1561.7	1632.3	1678.8
5°	758.4	797.2	818.4	851.6	923.2	982.2	1066.5	1157.0	1289.2	1407.3	1505.2
6°	408.7	437.9	453.7	478.3	533.9	589.5	682.6	793.0	946.3	1114.0	1269.9
7°	245.6	257.9	266.0	278.5	307.1	340.2	398.7	467.9	613.0	788.7	984.9
8°	178.5	181.9	186.6	193.1	206.0	222.5	253.7	292.1	377.3	506.4	691.2
9°	140.2	142.9	146.0	150.6	158.9	169.1	183.9	207.7	251.8	327.5	457.9
10°	117.3	119.1	121.4	124.6	130.4	137.7	148.5	164.4	190.2	232.3	302.0
12.5°	88.1	88.3	88.9	90.6	93.5	97.1	103.9	111.0	123.5	141.2	166.7
15°	77.3	77.7	77.9	78.7	80.0	81.5	84.2	87.9	93.9	104.6	118.5
17.5°	71.9	72.1	72.1	72.9	73.9	74.8	75.8	78.1	81.2	86.7	95.0
20°	66.7	66.5	66.7	66.9	68.3	69.2	70.6	72.5	74.6	78.1	82.9
22.5°	63.7	63.5	63.5	63.5	63.9	64.2	65.2	66.7	69.4	72.7	76.7
25°	61.2	61.0	60.8	60.8	61.2	61.9	62.3	62.7	64.2	67.1	71.5
27.5°	59.0	59.2	58.9	58.5	58.7	59.0	59.6	60.8	61.4	62.7	66.4
30°	59.2	59.0	58.5	57.9	57.1	56.7	56.9	57.3	58.7	60.2	62.1
32.5°	60.0	59.6	58.9	58.1	57.5	56.5	55.2	54.8	55.2	57.1	59.2
35°	62.7	62.3	61.0	59.4	58.1	56.5	55.0	53.7	52.7	53.7	56.2
37.5°	68.5	67.7	66.0	63.5	60.6	57.9	55.2	52.7	51.4	50.8	52.3
40°	75.0	74.4	72.3	69.4	65.8	61.4	56.5	52.9	50.2	49.0	49.6
42.5°	80.6	80.2	78.3	75.2	71.2	66.4	60.2	54.6	50.4	47.7	47.5
45°	83.1	82.3	81.0	78.7	75.2	70.4	64.2	57.3	51.0	47.1	45.6
47.5°	81.2	80.8	79.8	78.3	75.8	72.3	66.7	60.0	52.7	47.1	44.0
50°	77.5	77.3	76.5	75.0	73.3	70.8	66.9	61.4	54.4	47.3	43.1
52.5°	72.7	72.5	72.3	71.0	69.4	67.5	64.4	60.2	54.4	47.9	42.3
55°	66.4	66.4	66.2	66.2	65.0	63.3	60.6	57.1	52.7	47.1	41.5
57.5°	58.3	58.7	58.5	58.9	59.2	58.3	56.2	53.5	49.8	44.8	40.0
60°	48.9	49.2	49.4	50.0	51.2	51.9	51.0	49.0	46.0	41.9	37.5
62.5°	40.2	40.6	40.8	41.5	42.3	43.9	44.6	44.0	41.9	38.7	34.6
65°	32.1	32.7	32.9	33.5	34.6	36.0	37.3	38.3	37.1	35.0	31.7
67.5°	25.6	25.6	26.2	26.9	27.9	29.2	30.6	31.9	32.1	31.0	28.5
70°	20.2	20.6	20.8	21.3	22.3	23.3	24.2	25.8	26.7	26.3	25.2
72.5°	16.2	16.5	16.7	17.1	17.7	18.7	19.4	20.4	21.5	21.9	21.3
75°	13.1	13.3	13.3	13.7	14.2	14.8	15.4	16.0	16.7	17.3	17.5
77.5°	10.8	10.8	10.8	10.8	11.3	11.5	12.1	12.5	12.9	13.7	14.2
80°	8.7	8.7	8.7	8.5	8.8	9.0	9.2	9.4	9.8	10.4	11.2
82.5°	6.7	6.7	6.7	6.7	6.9	7.1	7.1	7.1	7.5	7.7	8.5
85°	5.4	5.4	5.4	5.4	5.4	5.6	5.6	5.6	5.6	5.8	6.2
87.5°	4.2	4.2	4.2	4.2	4.4	4.4	4.4	4.4	4.4	4.4	4.4
90°	3.5	3.3	3.3	3.3	3.5	3.5	3.5	3.3	3.3	3.3	3.3
92.5°	2.7	2.7	2.7	2.7	2.7	3.1	2.7	2.7	2.7	2.7	2.3
95°	2.3	2.3	2.3	2.3	2.3	2.5	2.3	2.3	1.9	1.9	1.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
97.5°	1.9	1.9	1.9	1.9	1.9	2.1	1.9	1.9	1.5	1.5	1.2
100°	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.5	1.2	1.2	0.8
102.5°	1.2	1.2	1.2	1.2	1.2	1.5	1.2	1.2	0.8	0.8	0.4
105°	0.8	0.8	0.8	0.8	1.2	1.2	1.2	0.8	0.4	0.4	0.0
107.5°	0.6	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.0	0.0
110°	0.4	0.4	0.4	0.4	0.6	0.8	0.6	0.4	0.2	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1682.1	1682.1	1682.1	1682.1	1682.1	1682.1	1682.1	1682.1
1°	1697.7	1689.8	1686.3	1687.9	1687.7	1691.1	1697.1	1702.1
2°	1738.5	1723.5	1714.0	1707.1	1700.0	1697.7	1702.7	1706.3
3°	1761.2	1756.5	1748.5	1735.4	1720.8	1710.8	1711.3	1713.3
4°	1718.8	1752.1	1767.1	1761.0	1744.4	1727.5	1722.3	1721.0
5°	1600.0	1689.2	1745.2	1771.0	1765.2	1746.9	1733.5	1730.2
6°	1412.5	1567.7	1676.9	1751.2	1776.5	1765.4	1746.0	1739.8
7°	1177.8	1394.0	1566.9	1701.5	1773.7	1781.5	1760.6	1752.1
8°	916.4	1188.0	1418.0	1622.9	1752.7	1795.6	1778.5	1769.0
9°	656.2	958.4	1242.8	1514.2	1712.3	1804.0	1798.7	1786.7
10°	450.4	725.3	1047.0	1382.5	1651.5	1801.5	1819.0	1804.4
12.5°	211.6	313.9	553.3	979.9	1423.6	1740.0	1857.9	1852.1
15°	141.9	184.1	280.2	568.3	1109.5	1602.1	1872.7	1892.1
17.5°	110.4	134.8	184.1	317.7	766.8	1409.4	1844.2	1918.3
20°	91.9	110.2	142.9	217.3	479.9	1172.2	1771.7	1924.4
22.5°	82.5	94.8	120.0	175.4	328.7	931.1	1662.5	1904.8
25°	76.9	85.6	106.0	152.1	263.3	705.3	1525.0	1853.3
27.5°	71.7	79.8	96.9	137.5	233.3	528.7	1339.8	1739.4
30°	66.9	74.4	90.0	129.1	217.5	421.6	1139.0	1595.6
32.5°	62.5	69.8	85.2	124.1	209.6	369.5	969.9	1478.6
35°	59.2	65.8	81.2	121.6	205.2	335.4	808.4	1345.1
37.5°	56.5	62.5	77.9	119.6	201.0	307.3	685.1	1200.1
40°	52.9	59.8	75.8	118.7	195.2	278.9	580.6	1035.1
42.5°	49.8	56.5	73.9	118.5	187.1	252.0	510.2	872.8
45°	47.1	53.5	72.5	117.7	176.0	226.8	450.0	718.5
47.5°	44.6	50.8	70.6	114.6	161.6	202.5	399.3	577.8
50°	42.3	48.3	68.5	109.4	145.8	179.4	351.8	450.8
52.5°	40.6	45.6	65.8	102.1	128.5	158.7	304.5	347.0
55°	39.0	43.7	62.9	92.9	112.3	139.6	265.4	268.5
57.5°	37.1	41.4	59.4	82.3	97.7	121.2	225.6	209.3
60°	35.0	38.9	54.8	71.0	83.7	103.5	184.8	163.9
62.5°	32.3	36.2	49.4	59.6	70.2	86.2	142.9	124.6
65°	29.4	32.7	43.1	49.8	58.1	73.3	109.4	94.2
67.5°	26.5	29.4	36.9	42.1	48.1	61.2	81.4	70.8
70°	23.7	25.4	31.0	35.4	39.6	49.0	58.3	51.5
72.5°	20.6	21.5	25.2	29.2	31.5	37.9	41.2	36.5
75°	17.1	17.7	20.4	23.7	24.6	28.7	28.3	25.4
77.5°	14.2	14.2	15.8	18.3	19.0	20.4	18.7	16.9
80°	11.3	11.2	11.5	13.1	13.8	13.3	11.9	10.8
82.5°	8.8	8.8	8.7	9.0	9.0	8.3	7.1	6.5
85°	6.5	6.5	6.3	5.8	5.4	4.4	3.5	3.5
87.5°	4.8	4.8	4.2	3.5	2.9	1.9	1.2	1.2
90°	3.3	3.1	2.7	1.9	1.2	0.6	0.0	0.0
92.5°	2.3	1.9	1.5	1.2	0.4	0.0	0.0	0.0
95°	1.5	1.2	0.8	0.4	0.0	0.0	0.0	0.0



TEST NUMBER: P273396

CATALOG NUMBER: 0.05-03W-830-5-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
97.5°	1.2	0.8	0.4	0.0	0.0	0.0	0.0	0.0
100°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)