

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: P273403

Luminaire Tested: **0.05-03W-835-10-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273403
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-246-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 0.05-03W-835-10-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 10 DEGREE OPTIC.
STANDARD OUTPUT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 743.9 lumens
Efficiency: N/A
Efficacy: 46.5 lumens/watt
Spacing Criteria (0/90/45): 0.12 / 0.93 / 0.2
Luminous Opening: Rectangular (W 2.92' x L: 0.21' x H: 0')
CIE Type: Direct

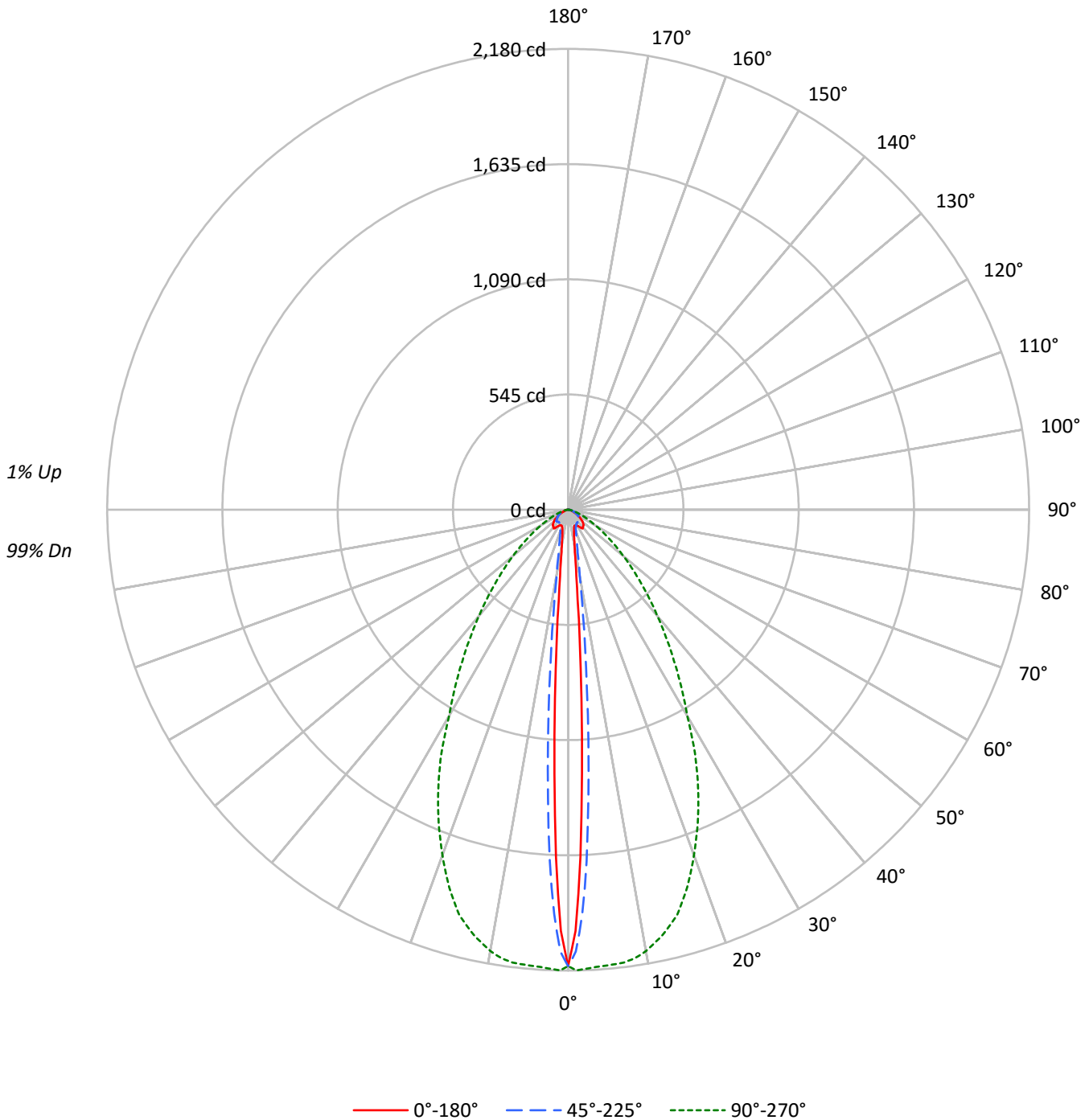
Input Watts (W): 16
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	99					99			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	82	80	78					78			
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	71	70					70			
4	90	80	73	68	88	79	72	67	76	71	66	74	69	65	72	68	64	63					63			
5	84	74	66	61	82	73	66	61	71	65	60	69	63	59	67	62	59	57					57			
6	79	68	61	55	77	67	60	55	66	59	55	64	58	54	62	58	54	52					52			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45					45			
9	67	56	49	44	66	55	48	44	54	48	44	53	47	44	52	47	43	42					42			
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	38252	38252	38252
5°	10938	19452	38470
10°	3101	5634	38137
15°	1929	2865	36447
20°	1584	2021	32790
25°	1587	1677	28415
30°	1788	1604	23022
35°	2266	1609	18855
40°	2507	1720	15195
45°	2585	1964	12052
50°	2442	1924	9359
55°	2199	1915	7153
60°	1750	1821	5314
65°	1375	1693	3806
70°	1139	1523	2673
75°	1013	1355	1834
80°	1061	1285	1306
85°	1504	1626	813



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.4	13.5
10°-20°	127.0	17.1
20°-30°	123.2	16.6
30°-40°	117.4	15.8
40°-50°	108.2	14.6
50°-60°	83.5	11.2
60°-70°	49.3	6.6
70°-80°	22.6	3.0
80°-90°	8.4	1.1
90°-100°	2.9	0.4
100°-110°	0.9	0.1
110°-120°	0.1	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°	350.6	47.1
0°-40°	468.0	62.9
0°-60°	659.7	88.7
0°-90°	740.0	99.5
90°-120°	3.8	0.5
90°-150°	3.8	0.5
90°-180°	4.0	0.5
0°-180°	743.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2159	2159	2159	2159	2159	
5°	615	738	1094	1730	2163	49
15°	105	114	156	505	1987	31
25°	81	80	86	202	1454	38
35°	105	90	74	139	872	65
45°	103	94	78	130	481	78
55°	71	72	62	110	232	63
65°	33	36	40	64	91	33
75°	15	16	20	26	27	16
85°	7	7	8	8	4	7
90°	5	5	5	4	0	3
95°	4	4	3	1	0	3
105°	2	2	1	0	0	2
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°	2159.4	2159.4	2159.4	2159.4	2159.4	2159.4	2159.4	2159.4	2159.4	2159.4	2159.4
1°	1992.8	2009.6	1983.2	2033.6	2014.2	2029.6	2056.0	2073.4	2088.4	2090.0	2106.4
2°	1644.4	1689.6	1652.4	1725.4	1718.8	1750.8	1798.2	1837.2	1875.8	1913.8	1945.6
3°	1251.1	1301.7	1292.1	1342.7	1353.3	1399.2	1464.4	1524.8	1589.2	1664.8	1720.8
4°	893.7	931.9	943.9	970.3	1009.7	1047.3	1117.1	1191.9	1275.9	1367.0	1463.2
5°	615.1	646.7	655.7	678.1	717.1	757.9	822.1	898.7	989.3	1093.9	1204.1
6°	427.8	450.6	458.3	475.7	504.7	539.7	592.9	659.1	743.1	850.1	963.9
7°	316.0	331.0	336.8	349.6	370.2	396.2	436.6	489.1	558.1	653.9	776.3
8°	250.0	255.0	259.2	268.8	283.8	302.2	332.0	371.6	425.2	504.5	608.5
9°	202.0	206.6	209.8	217.0	228.0	241.6	264.0	294.2	335.2	389.8	470.7
10°	172.4	175.0	177.4	182.8	190.8	201.0	217.6	240.0	272.0	313.2	386.6
12.5°	128.8	128.4	130.4	133.8	139.0	144.8	153.6	166.0	183.0	205.6	246.8
15°	105.2	105.4	106.8	109.0	111.8	115.2	120.6	128.8	139.6	156.2	179.2
17.5°	90.8	91.0	91.8	93.2	95.2	98.2	102.2	107.2	114.8	126.2	142.0
20°	84.0	83.8	84.2	85.0	86.2	87.8	90.0	92.8	98.4	107.2	119.4
22.5°	81.4	81.4	81.4	81.2	81.4	81.8	83.2	85.4	88.4	93.6	102.4
25°	81.2	81.4	81.2	80.6	80.6	80.4	80.2	80.8	82.2	85.8	91.4
27.5°	83.0	82.8	82.2	81.2	80.4	79.8	79.4	79.2	79.4	80.8	84.6
30°	87.4	87.0	85.8	84.0	82.2	80.4	78.8	78.0	77.8	78.4	80.0
32.5°	94.0	93.4	92.0	89.0	86.6	83.4	80.6	77.6	76.0	76.0	77.0
35°	104.8	103.6	101.4	97.8	92.8	88.2	84.0	79.6	76.2	74.4	74.6
37.5°	112.6	112.2	111.2	107.8	103.0	96.6	89.2	82.4	77.8	73.8	72.2
40°	108.4	107.8	106.4	104.6	103.2	101.8	96.0	87.4	80.4	74.4	71.0
42.5°	105.0	104.6	103.2	100.2	98.2	96.0	94.0	91.4	83.8	76.2	71.0
45°	103.2	102.8	101.6	99.0	95.8	92.2	88.6	86.0	83.8	78.4	71.6
47.5°	95.2	95.0	94.6	94.0	92.8	90.8	85.8	81.2	77.4	76.4	72.6
50°	88.6	88.6	88.4	87.2	86.0	84.4	83.0	78.6	73.0	69.8	69.4
52.5°	81.2	81.2	81.2	80.8	80.0	78.2	76.4	74.2	70.4	65.0	62.8
55°	71.2	71.4	71.8	72.0	72.2	71.2	70.2	67.6	65.4	62.0	57.6
57.5°	60.2	60.4	61.2	61.8	62.6	63.0	63.2	62.0	59.6	57.0	54.0
60°	49.4	49.6	50.4	51.4	52.8	54.0	55.0	55.4	53.8	51.4	49.4
62.5°	40.2	40.2	41.2	42.0	43.4	44.8	46.6	47.6	47.4	46.2	44.2
65°	32.8	33.0	33.6	34.2	35.2	36.6	38.6	40.2	41.0	40.4	39.0
67.5°	26.8	27.0	27.4	28.0	28.6	29.8	31.4	33.4	34.6	34.8	34.2
70°	22.0	22.2	22.4	22.8	23.4	24.2	25.4	27.2	28.6	29.4	29.4
72.5°	18.2	18.2	18.4	18.8	19.2	19.8	20.8	21.8	23.2	24.4	24.8
75°	14.8	15.0	15.2	15.2	15.6	15.8	16.6	17.4	18.4	19.8	20.4
77.5°	12.4	12.4	12.4	12.4	12.8	13.0	13.4	14.0	14.8	15.8	16.6
80°	10.4	10.4	10.4	10.4	10.4	10.6	11.0	11.2	11.6	12.6	13.4
82.5°	8.8	8.8	8.8	8.8	8.8	9.0	9.0	9.2	9.6	10.0	10.6
85°	7.4	7.4	7.4	7.4	7.4	7.4	7.6	7.6	7.8	8.0	8.2
87.5°	6.2	6.2	6.2	6.2	6.2	6.2	6.4	6.4	6.4	6.4	6.6
90°	5.4	5.4	5.4	5.4	5.4	5.2	5.2	5.2	5.2	5.2	5.2
92.5°	4.6	4.6	4.6	4.6	4.6	4.4	4.4	4.2	4.2	4.2	4.2
95°	3.8	3.8	3.8	3.6	3.6	3.6	3.6	3.4	3.4	3.4	3.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
97.5°	3.0	3.0	3.0	3.0	3.0	3.0	2.8	2.8	2.6	2.6	2.2
100°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.2	2.0	1.8	1.8
102.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.6	1.6	1.4	1.0
105°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.2	1.2	0.8	0.6
107.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.6	0.4	0.0
110°	1.2	1.2	1.2	1.0	1.2	1.0	0.8	0.6	0.4	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°	2159.4	2159.4	2159.4	2159.4	2159.4	2159.4	2159.4	2159.4
1°	2100.0	2114.0	2123.4	2137.0	2139.6	2157.4	2172.2	2179.8
2°	1974.6	2019.6	2051.2	2088.8	2108.0	2140.2	2164.0	2174.6
3°	1795.0	1879.0	1943.0	2015.8	2062.4	2117.2	2153.8	2169.4
4°	1578.2	1703.4	1807.6	1921.2	2003.0	2088.6	2144.6	2165.8
5°	1350.3	1507.8	1652.0	1809.0	1932.0	2054.6	2134.6	2163.4
6°	1124.7	1307.1	1483.4	1681.4	1857.4	2013.8	2123.6	2161.0
7°	923.1	1114.1	1312.3	1545.0	1756.4	1964.2	2107.6	2157.8
8°	746.1	934.7	1145.5	1403.8	1655.8	1906.6	2083.6	2149.8
9°	602.1	778.1	992.3	1266.3	1549.0	1842.4	2057.2	2137.0
10°	485.5	642.7	851.5	1134.7	1443.6	1775.0	2024.8	2120.2
12.5°	305.4	408.4	575.1	842.3	1194.1	1595.4	1930.2	2061.0
15°	215.0	279.8	398.0	611.9	959.9	1413.0	1821.2	1987.4
17.5°	166.4	209.6	288.2	455.1	775.1	1244.3	1696.6	1871.8
20°	136.6	168.0	226.2	355.2	632.5	1093.1	1556.8	1739.4
22.5°	116.2	140.2	186.2	290.0	527.5	959.1	1418.8	1601.4
25°	101.0	120.6	157.8	246.6	457.5	845.1	1271.1	1453.8
27.5°	91.6	106.0	138.4	216.6	410.6	740.5	1123.3	1298.7
30°	85.0	96.8	122.6	195.0	375.0	639.5	958.5	1125.5
32.5°	80.2	88.8	112.0	181.2	353.6	560.5	831.9	995.1
35°	76.8	83.6	104.4	173.0	338.0	493.1	726.3	871.9
37.5°	74.0	79.8	98.8	169.2	322.4	430.4	632.3	759.5
40°	71.2	76.6	95.4	167.6	301.2	370.8	551.5	657.1
42.5°	69.4	73.8	93.4	168.8	276.8	321.6	477.5	564.7
45°	68.6	71.2	91.4	168.6	249.0	276.8	410.4	481.1
47.5°	68.2	69.0	89.8	166.0	218.6	240.4	355.4	406.8
50°	67.6	67.8	89.4	158.0	189.0	207.4	303.4	339.6
52.5°	64.0	66.4	89.0	147.8	160.0	179.8	259.2	282.4
55°	57.4	63.8	88.4	131.8	135.0	155.2	218.0	231.6
57.5°	52.0	58.2	86.2	114.6	114.2	133.6	180.8	187.6
60°	48.0	52.8	80.2	97.6	95.6	113.8	146.4	150.0
62.5°	43.8	48.4	71.4	81.6	80.4	94.4	115.8	116.0
65°	38.8	44.2	61.4	66.6	67.6	78.6	91.2	90.8
67.5°	34.2	39.0	51.4	53.8	56.6	64.0	70.8	69.2
70°	29.6	33.2	41.6	43.4	46.4	51.4	53.4	51.6
72.5°	25.2	27.8	32.8	34.6	37.0	39.6	39.6	37.6
75°	21.2	22.6	25.2	26.8	28.8	29.6	28.4	26.8
77.5°	17.4	18.2	19.2	20.2	21.4	20.8	19.8	18.8
80°	14.2	14.6	14.6	15.0	15.0	14.4	13.0	12.8
82.5°	11.4	11.8	11.2	10.6	10.0	9.0	8.2	7.6
85°	9.0	9.0	8.4	7.4	6.2	5.2	4.4	4.0
87.5°	6.8	6.8	6.0	5.0	3.6	2.6	1.8	1.6
90°	5.2	5.2	4.2	3.2	2.0	1.0	0.4	0.0
92.5°	4.0	3.6	2.8	1.8	0.8	0.4	0.0	0.0
95°	3.0	2.6	1.6	0.8	0.4	0.0	0.0	0.0



TEST NUMBER: P273403

CATALOG NUMBER: 0.05-03W-835-10-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
97.5°	2.0	1.6	0.8	0.4	0.0	0.0	0.0	0.0
100°	1.2	0.8	0.4	0.0	0.0	0.0	0.0	0.0
102.5°	0.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.2	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)