

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: P273391

Luminaire Tested: **0.05-03W-827-10-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P273391  
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-827-10-STD-UNV-AN-3F0  
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 10 DEGREE OPTIC.  
STANDARD OUTPUT  
Light Source: 2700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 668.7 lumens  
Efficiency: N/A  
Efficacy: 41.8 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

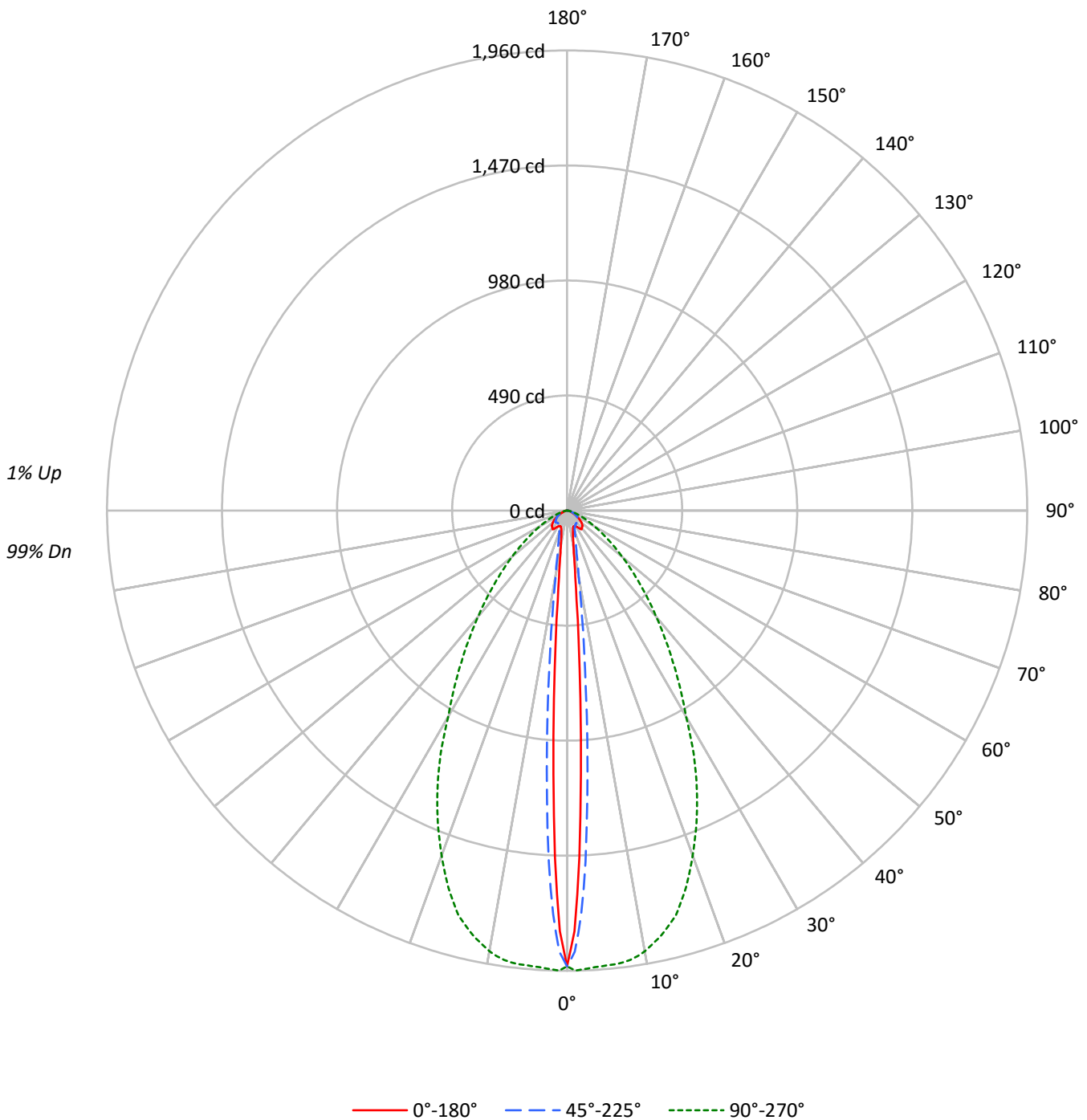
Input Watts (W): 16  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	34389	34389	34389
5°	9833	17487	34584
10°	2788	5064	34286
15°	1735	2575	32767
20°	1423	1817	29480
25°	1427	1507	25548
30°	1608	1442	20696
35°	2037	1447	16952
40°	2252	1547	13662
45°	2325	1766	10837
50°	2194	1728	8414
55°	1977	1720	6430
60°	1573	1637	4776
65°	1237	1522	3420
70°	1026	1367	2403
75°	910	1218	1649
80°	949	1153	1173
85°	1362	1463	732



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.2	13.5
10°-20°	114.2	17.1
20°-30°	110.8	16.6
30°-40°	105.6	15.8
40°-50°	97.3	14.6
50°-60°	75.0	11.2
60°-70°	44.3	6.6
70°-80°	20.3	3.0
80°-90°	7.6	1.1
90°-100°	2.6	0.4
100°-110°	0.8	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°	315.2	47.1
0°-40°	420.8	62.9
0°-60°	593.1	88.7
0°-90°	665.3	99.5
90°-120°	3.5	0.5
90°-150°	3.5	0.5
90°-180°	3.0	0.4
0°-180°	668.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1941	1941	1941	1941	1941	
5°	553	663	983	1556	1945	44
15°	95	102	140	454	1787	28
25°	73	72	77	182	1307	35
35°	94	81	67	125	784	58
45°	93	84	70	117	433	70
55°	64	64	56	99	208	56
65°	30	32	36	58	82	30
75°	13	14	18	23	24	15
85°	7	7	7	7	4	6
90°	5	5	5	3	0	3
95°	3	3	3	1	0	3
105°	1	1	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°	1941.3	1941.3	1941.3	1941.3	1941.3	1941.3	1941.3	1941.3	1941.3	1941.3	1941.3
1°	1791.6	1806.7	1783.0	1828.3	1810.8	1824.7	1848.4	1864.0	1877.5	1879.0	1893.7
2°	1478.4	1519.0	1485.6	1551.2	1545.3	1574.0	1616.7	1651.7	1686.4	1720.6	1749.2
3°	1124.8	1170.2	1161.6	1207.1	1216.6	1258.0	1316.6	1370.9	1428.8	1496.7	1547.1
4°	803.5	837.8	848.6	872.3	907.7	941.5	1004.3	1071.5	1147.0	1229.0	1315.5
5°	553.0	581.4	589.5	609.7	644.7	681.4	739.1	808.0	889.4	983.4	1082.5
6°	384.6	405.1	412.1	427.7	453.8	485.2	533.1	592.6	668.1	764.3	866.6
7°	284.1	297.5	302.8	314.3	332.8	356.2	392.5	439.8	501.8	587.9	697.9
8°	224.7	229.2	233.0	241.6	255.1	271.7	298.4	334.0	382.2	453.6	547.1
9°	181.6	185.7	188.6	195.1	205.0	217.2	237.3	264.5	301.3	350.4	423.2
10°	155.0	157.3	159.5	164.3	171.5	180.7	195.6	215.7	244.5	281.5	347.5
12.5°	115.8	115.4	117.2	120.3	125.0	130.2	138.1	149.2	164.5	184.8	221.9
15°	94.6	94.7	96.0	98.0	100.5	103.6	108.4	115.8	125.5	140.4	161.1
17.5°	81.6	81.8	82.5	83.8	85.6	88.3	91.9	96.4	103.2	113.4	127.6
20°	75.5	75.3	75.7	76.4	77.5	78.9	80.9	83.4	88.5	96.4	107.3
22.5°	73.2	73.2	73.2	73.0	73.2	73.5	74.8	76.8	79.5	84.1	92.1
25°	73.0	73.2	73.0	72.5	72.5	72.3	72.1	72.6	73.9	77.1	82.2
27.5°	74.6	74.4	73.9	73.0	72.3	71.7	71.4	71.2	71.4	72.6	76.1
30°	78.6	78.2	77.1	75.5	73.9	72.3	70.8	70.1	69.9	70.5	71.9
32.5°	84.5	84.0	82.7	80.0	77.8	75.0	72.5	69.8	68.3	68.3	69.2
35°	94.2	93.1	91.2	87.9	83.4	79.3	75.5	71.6	68.5	66.9	67.1
37.5°	101.2	100.9	100.0	96.9	92.6	86.8	80.2	74.1	69.9	66.3	64.9
40°	97.4	96.9	95.6	94.0	92.8	91.5	86.3	78.6	72.3	66.9	63.8
42.5°	94.4	94.0	92.8	90.1	88.3	86.3	84.5	82.2	75.3	68.5	63.8
45°	92.8	92.4	91.3	89.0	86.1	82.9	79.6	77.3	75.3	70.5	64.4
47.5°	85.6	85.4	85.0	84.5	83.4	81.6	77.1	73.0	69.6	68.7	65.3
50°	79.6	79.6	79.5	78.4	77.3	75.9	74.6	70.7	65.6	62.7	62.4
52.5°	73.0	73.0	73.0	72.6	71.9	70.3	68.7	66.7	63.3	58.4	56.5
55°	64.0	64.2	64.5	64.7	64.9	64.0	63.1	60.8	58.8	55.7	51.8
57.5°	54.1	54.3	55.0	55.6	56.3	56.6	56.8	55.7	53.6	51.2	48.5
60°	44.4	44.6	45.3	46.2	47.5	48.5	49.4	49.8	48.4	46.2	44.4
62.5°	36.1	36.1	37.0	37.8	39.0	40.3	41.9	42.8	42.6	41.5	39.7
65°	29.5	29.7	30.2	30.7	31.6	32.9	34.7	36.1	36.9	36.3	35.1
67.5°	24.1	24.3	24.6	25.2	25.7	26.8	28.2	30.0	31.1	31.3	30.7
70°	19.8	20.0	20.1	20.5	21.0	21.8	22.8	24.5	25.7	26.4	26.4
72.5°	16.4	16.4	16.5	16.9	17.3	17.8	18.7	19.6	20.9	21.9	22.3
75°	13.3	13.5	13.7	13.7	14.0	14.2	14.9	15.6	16.5	17.8	18.3
77.5°	11.1	11.1	11.1	11.1	11.5	11.7	12.0	12.6	13.3	14.2	14.9
80°	9.3	9.3	9.3	9.3	9.3	9.5	9.9	10.1	10.4	11.3	12.0
82.5°	7.9	7.9	7.9	7.9	7.9	8.1	8.1	8.3	8.6	9.0	9.5
85°	6.7	6.7	6.7	6.7	6.7	6.7	6.8	6.8	7.0	7.2	7.4
87.5°	5.6	5.6	5.6	5.6	5.6	5.6	5.8	5.8	5.8	5.8	5.9
90°	4.9	4.9	4.9	4.9	4.9	4.7	4.7	4.7	4.7	4.7	4.7
92.5°	4.1	4.1	4.1	4.1	4.1	4.0	4.0	3.8	3.8	3.8	3.8
95°	3.4	3.4	3.4	3.2	3.2	3.2	3.2	3.1	3.1	3.1	2.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
97.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.5	2.5	2.3	2.3	2.0
100°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.0	1.8	1.6	1.6
102.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.4	1.4	1.3	0.9
105°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.1	1.1	0.7	0.5
107.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.7	0.5	0.4	0.0
110°	1.1	1.1	1.1	0.9	1.1	0.9	0.7	0.5	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°	1941.3	1941.3	1941.3	1941.3	1941.3	1941.3	1941.3	1941.3
1°	1888.0	1900.5	1909.0	1921.2	1923.5	1939.6	1952.9	1959.7
2°	1775.2	1815.7	1844.1	1877.9	1895.1	1924.1	1945.5	1955.0
3°	1613.8	1689.3	1746.8	1812.3	1854.2	1903.4	1936.3	1950.3
4°	1418.9	1531.4	1625.1	1727.2	1800.8	1877.7	1928.0	1947.1
5°	1213.9	1355.6	1485.2	1626.4	1736.9	1847.1	1919.1	1944.9
6°	1011.1	1175.1	1333.7	1511.7	1669.9	1810.5	1909.2	1942.8
7°	829.9	1001.6	1179.8	1389.0	1579.1	1765.9	1894.8	1939.9
8°	670.8	840.3	1029.8	1262.1	1488.6	1714.1	1873.2	1932.7
9°	541.3	699.6	892.1	1138.4	1392.6	1656.4	1849.5	1921.2
10°	436.5	577.8	765.5	1020.1	1297.9	1595.8	1820.4	1906.1
12.5°	274.5	367.1	517.1	757.3	1073.5	1434.3	1735.3	1852.9
15°	193.3	251.5	357.8	550.2	863.0	1270.4	1637.3	1786.7
17.5°	149.6	188.4	259.1	409.2	696.9	1118.6	1525.3	1682.8
20°	122.8	151.0	203.3	319.3	568.7	982.7	1399.6	1563.8
22.5°	104.5	126.0	167.4	260.7	474.3	862.3	1275.6	1439.7
25°	90.8	108.4	141.9	221.7	411.4	759.8	1142.7	1307.1
27.5°	82.3	95.3	124.4	194.7	369.1	665.8	1009.9	1167.5
30°	76.4	87.0	110.2	175.3	337.1	575.0	861.7	1011.8
32.5°	72.1	79.8	100.7	162.9	317.9	503.9	747.9	894.6
35°	69.0	75.2	93.8	155.5	303.8	443.4	653.0	783.9
37.5°	66.5	71.7	88.8	152.1	289.8	386.9	568.5	682.8
40°	64.0	68.9	85.8	150.7	270.8	333.3	495.9	590.8
42.5°	62.4	66.3	84.0	151.7	248.8	289.1	429.3	507.7
45°	61.7	64.0	82.2	151.6	223.8	248.8	368.9	432.6
47.5°	61.3	62.0	80.7	149.2	196.5	216.1	319.5	365.7
50°	60.8	60.9	80.4	142.0	169.9	186.4	272.7	305.3
52.5°	57.5	59.7	80.0	132.9	143.8	161.6	233.0	253.9
55°	51.6	57.4	79.5	118.5	121.4	139.5	196.0	208.2
57.5°	46.7	52.3	77.5	103.0	102.7	120.1	162.5	168.6
60°	43.1	47.5	72.1	87.7	85.9	102.3	131.6	134.8
62.5°	39.4	43.5	64.2	73.4	72.3	84.9	104.1	104.3
65°	34.9	39.7	55.2	59.9	60.8	70.7	82.0	81.6
67.5°	30.7	35.1	46.2	48.4	50.9	57.5	63.6	62.2
70°	26.6	29.8	37.4	39.0	41.7	46.2	48.0	46.4
72.5°	22.7	25.0	29.5	31.1	33.3	35.6	35.6	33.8
75°	19.1	20.3	22.7	24.1	25.9	26.6	25.5	24.1
77.5°	15.6	16.4	17.3	18.2	19.2	18.7	17.8	16.9
80°	12.8	13.1	13.1	13.5	13.5	12.9	11.7	11.5
82.5°	10.2	10.6	10.1	9.5	9.0	8.1	7.4	6.8
85°	8.1	8.1	7.6	6.7	5.6	4.7	4.0	3.6
87.5°	6.1	6.1	5.4	4.5	3.2	2.3	1.6	1.4
90°	4.7	4.7	3.8	2.9	1.8	0.9	0.4	0.0
92.5°	3.6	3.2	2.5	1.6	0.7	0.4	0.0	0.0
95°	2.7	2.3	1.4	0.7	0.4	0.0	0.0	0.0





TEST NUMBER: P273391

CATALOG NUMBER: 0.05-03W-827-10-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
97.5°	1.8	1.4	0.7	0.4	0.0	0.0	0.0	0.0
100°	1.1	0.7	0.4	0.0	0.0	0.0	0.0	0.0
102.5°	0.5	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)