

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: P273397

Luminaire Tested: **0.05-03W-830-10-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273397
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-830-10-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 10 DEGREE OPTIC.
STANDARD OUTPUT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 715.2 lumens
Efficiency: N/A
Efficacy: 44.7 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

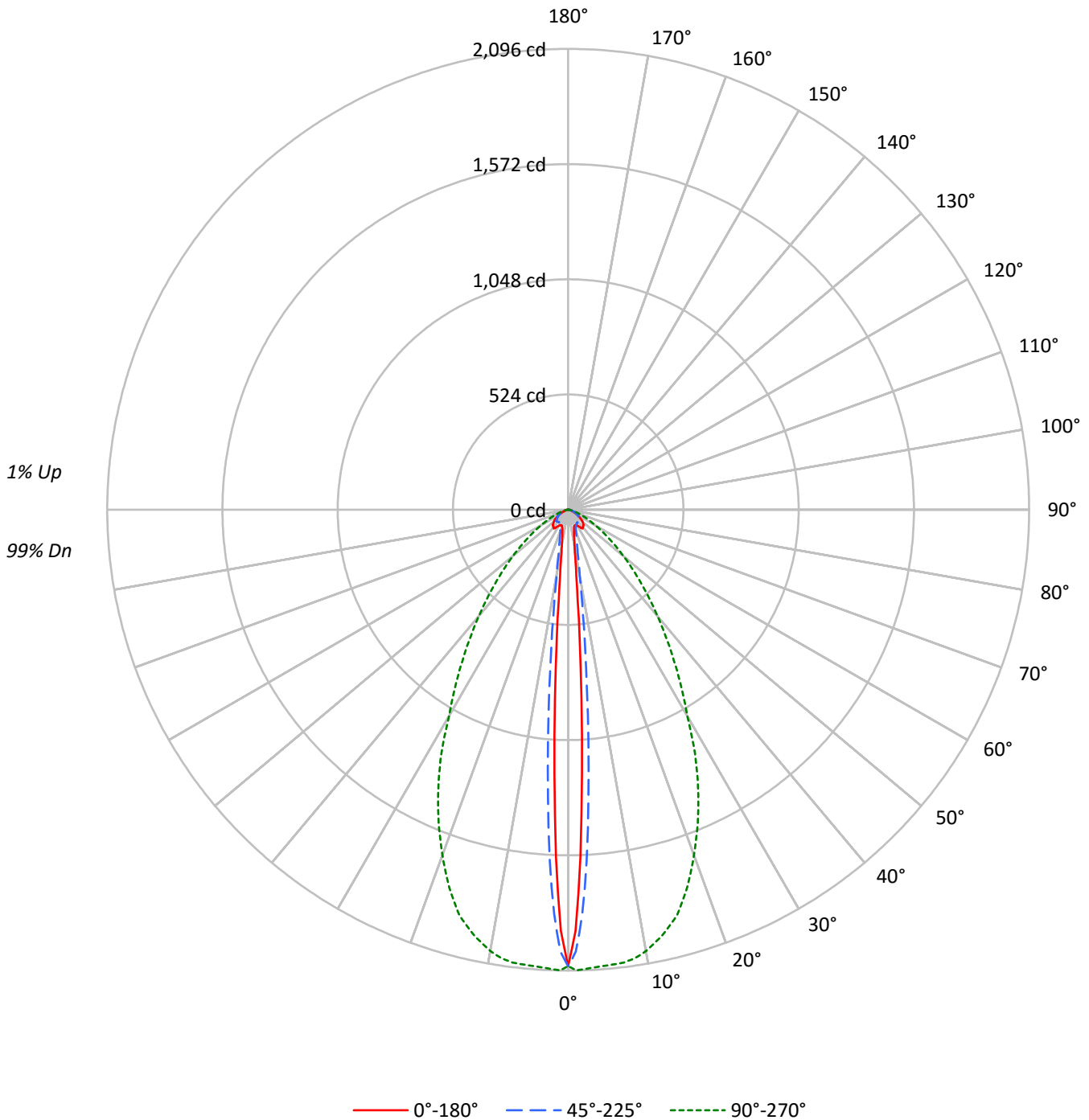
Input Watts (W): 16
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	36780	36780	36780
5°	10518	18703	36990
10°	2982	5416	36670
15°	1854	2755	35044
20°	1523	1944	31529
25°	1527	1613	27323
30°	1718	1542	22136
35°	2180	1546	18131
40°	2410	1653	14612
45°	2485	1889	11589
50°	2348	1849	8998
55°	2116	1841	6878
60°	1683	1750	5109
65°	1320	1626	3659
70°	1098	1466	2569
75°	972	1300	1766
80°	1020	1234	1255
85°	1443	1565	772



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.5	13.5
10°-20°	122.1	17.1
20°-30°	118.5	16.6
30°-40°	112.9	15.8
40°-50°	104.1	14.6
50°-60°	80.2	11.2
60°-70°	47.4	6.6
70°-80°	21.7	3.0
80°-90°	8.1	1.1
90°-100°	2.8	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°	337.1	47.1
0°-40°	450.0	62.9
0°-60°	634.3	88.7
0°-90°	711.5	99.5
90°-120°	3.7	0.5
90°-150°	3.7	0.5
90°-180°	4.0	0.6
0°-180°	715.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2076	2076	2076	2076	2076	
5°	592	709	1052	1664	2080	47
15°	101	109	150	486	1911	30
25°	78	77	82	194	1398	37
35°	101	87	72	133	838	62
45°	99	90	75	125	463	75
55°	68	69	60	106	223	60
65°	32	34	39	62	87	32
75°	14	15	19	25	26	16
85°	7	7	8	8	4	6
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°	2076.3	2076.3	2076.3	2076.3	2076.3	2076.3	2076.3	2076.3	2076.3	2076.3	2076.3
1°	1916.1	1932.3	1906.9	1955.4	1936.7	1951.5	1976.9	1993.6	2008.0	2009.6	2025.4
2°	1581.2	1624.6	1588.9	1659.0	1652.7	1683.5	1729.0	1766.5	1803.6	1840.2	1870.8
3°	1202.9	1251.6	1242.4	1291.0	1301.2	1345.4	1408.1	1466.2	1528.1	1600.8	1654.6
4°	859.3	896.1	907.6	933.0	970.9	1007.0	1074.1	1146.0	1226.8	1314.5	1407.0
5°	591.5	621.9	630.5	652.0	689.5	728.8	790.5	864.1	951.2	1051.8	1157.8
6°	411.3	433.2	440.7	457.4	485.3	519.0	570.1	633.8	714.5	817.4	926.8
7°	303.8	318.2	323.8	336.1	355.9	380.9	419.8	470.3	536.7	628.8	746.5
8°	240.4	245.2	249.2	258.4	272.9	290.5	319.2	357.3	408.8	485.1	585.1
9°	194.2	198.6	201.7	208.6	219.2	232.3	253.8	282.9	322.3	374.8	452.6
10°	165.8	168.3	170.6	175.7	183.4	193.2	209.2	230.7	261.5	301.1	371.7
12.5°	123.8	123.4	125.4	128.6	133.6	139.2	147.7	159.6	175.9	197.7	237.3
15°	101.1	101.3	102.7	104.8	107.5	110.8	115.9	123.8	134.2	150.2	172.3
17.5°	87.3	87.5	88.3	89.6	91.5	94.4	98.3	103.1	110.4	121.3	136.5
20°	80.8	80.6	81.0	81.7	82.9	84.4	86.5	89.2	94.6	103.1	114.8
22.5°	78.3	78.3	78.3	78.1	78.3	78.6	80.0	82.1	85.0	90.0	98.5
25°	78.1	78.3	78.1	77.5	77.5	77.3	77.1	77.7	79.0	82.5	87.9
27.5°	79.8	79.6	79.0	78.1	77.3	76.7	76.3	76.1	76.3	77.7	81.3
30°	84.0	83.6	82.5	80.8	79.0	77.3	75.8	75.0	74.8	75.4	76.9
32.5°	90.4	89.8	88.5	85.6	83.3	80.2	77.5	74.6	73.1	73.1	74.0
35°	100.8	99.6	97.5	94.0	89.2	84.8	80.8	76.5	73.3	71.5	71.7
37.5°	108.3	107.9	106.9	103.6	99.0	92.9	85.8	79.2	74.8	71.0	69.4
40°	104.2	103.6	102.3	100.6	99.2	97.9	92.3	84.0	77.3	71.5	68.3
42.5°	101.0	100.6	99.2	96.3	94.4	92.3	90.4	87.9	80.6	73.3	68.3
45°	99.2	98.8	97.7	95.2	92.1	88.6	85.2	82.7	80.6	75.4	68.8
47.5°	91.5	91.3	91.0	90.4	89.2	87.3	82.5	78.1	74.4	73.5	69.8
50°	85.2	85.2	85.0	83.8	82.7	81.1	79.8	75.6	70.2	67.1	66.7
52.5°	78.1	78.1	78.1	77.7	76.9	75.2	73.5	71.3	67.7	62.5	60.4
55°	68.5	68.6	69.0	69.2	69.4	68.5	67.5	65.0	62.9	59.6	55.4
57.5°	57.9	58.1	58.8	59.4	60.2	60.6	60.8	59.6	57.3	54.8	51.9
60°	47.5	47.7	48.5	49.4	50.8	51.9	52.9	53.3	51.7	49.4	47.5
62.5°	38.6	38.6	39.6	40.4	41.7	43.1	44.8	45.8	45.6	44.4	42.5
65°	31.5	31.7	32.3	32.9	33.8	35.2	37.1	38.6	39.4	38.8	37.5
67.5°	25.8	26.0	26.3	26.9	27.5	28.7	30.2	32.1	33.3	33.5	32.9
70°	21.2	21.3	21.5	21.9	22.5	23.3	24.4	26.2	27.5	28.3	28.3
72.5°	17.5	17.5	17.7	18.1	18.5	19.0	20.0	21.0	22.3	23.5	23.8
75°	14.2	14.4	14.6	14.6	15.0	15.2	16.0	16.7	17.7	19.0	19.6
77.5°	11.9	11.9	11.9	11.9	12.3	12.5	12.9	13.5	14.2	15.2	16.0
80°	10.0	10.0	10.0	10.0	10.0	10.2	10.6	10.8	11.2	12.1	12.9
82.5°	8.5	8.5	8.5	8.5	8.5	8.7	8.7	8.8	9.2	9.6	10.2
85°	7.1	7.1	7.1	7.1	7.1	7.1	7.3	7.3	7.5	7.7	7.9
87.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.2	6.2	6.2	6.2	6.3
90°	5.2	5.2	5.2	5.2	5.2	5.0	5.0	5.0	5.0	5.0	5.0
92.5°	4.4	4.4	4.4	4.4	4.4	4.2	4.2	4.0	4.0	4.0	4.0
95°	3.7	3.7	3.7	3.5	3.5	3.5	3.5	3.3	3.3	3.3	2.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
97.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.7	2.7	2.5	2.5	2.1
100°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.1	1.9	1.7	1.7
102.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.5	1.3	1.0
105°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	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°	2076.3	2076.3	2076.3	2076.3	2076.3	2076.3	2076.3	2076.3
1°	2019.2	2032.7	2041.7	2054.8	2057.3	2074.4	2088.6	2095.9
2°	1898.6	1941.9	1972.3	2008.4	2026.9	2057.8	2080.7	2090.9
3°	1726.0	1806.7	1868.3	1938.2	1983.0	2035.7	2070.9	2085.9
4°	1517.5	1637.9	1738.1	1847.3	1925.9	2008.2	2062.1	2082.5
5°	1298.3	1449.8	1588.5	1739.4	1857.7	1975.6	2052.5	2080.2
6°	1081.4	1256.8	1426.4	1616.7	1786.0	1936.3	2041.9	2077.8
7°	887.6	1071.2	1261.8	1485.6	1688.9	1888.6	2026.5	2074.8
8°	717.4	898.7	1101.4	1349.9	1592.1	1833.3	2003.4	2067.1
9°	579.0	748.2	954.1	1217.6	1489.5	1771.5	1978.1	2054.8
10°	466.9	618.0	818.8	1091.0	1388.1	1706.7	1946.9	2038.6
12.5°	293.6	392.6	553.0	809.9	1148.1	1534.1	1855.9	1981.7
15°	206.7	269.0	382.6	588.4	923.0	1358.7	1751.2	1910.9
17.5°	160.0	201.5	277.1	437.6	745.3	1196.4	1631.4	1799.8
20°	131.3	161.5	217.5	341.5	608.2	1051.0	1496.9	1672.5
22.5°	111.7	134.8	179.0	278.8	507.3	922.2	1364.3	1539.8
25°	97.1	115.9	151.7	237.1	440.0	812.6	1222.2	1397.9
27.5°	88.1	101.9	133.1	208.2	394.8	712.0	1080.1	1248.7
30°	81.7	93.1	117.9	187.5	360.5	614.9	921.6	1082.2
32.5°	77.1	85.4	107.7	174.2	340.0	539.0	799.9	956.8
35°	73.8	80.4	100.4	166.3	325.0	474.2	698.4	838.4
37.5°	71.1	76.7	95.0	162.7	310.0	413.8	608.0	730.3
40°	68.5	73.6	91.7	161.1	289.6	356.5	530.3	631.9
42.5°	66.7	71.0	89.8	162.3	266.1	309.2	459.2	543.0
45°	66.0	68.5	87.9	162.1	239.4	266.1	394.6	462.6
47.5°	65.6	66.3	86.3	159.6	210.2	231.1	341.7	391.1
50°	65.0	65.2	86.0	151.9	181.7	199.4	291.7	326.5
52.5°	61.5	63.8	85.6	142.1	153.8	172.9	249.2	271.5
55°	55.2	61.3	85.0	126.7	129.8	149.2	209.6	222.7
57.5°	50.0	56.0	82.9	110.2	109.8	128.4	173.8	180.4
60°	46.1	50.8	77.1	93.8	91.9	109.4	140.8	144.2
62.5°	42.1	46.5	68.6	78.5	77.3	90.8	111.3	111.5
65°	37.3	42.5	59.0	64.0	65.0	75.6	87.7	87.3
67.5°	32.9	37.5	49.4	51.7	54.4	61.5	68.1	66.5
70°	28.5	31.9	40.0	41.7	44.6	49.4	51.3	49.6
72.5°	24.2	26.7	31.5	33.3	35.6	38.1	38.1	36.1
75°	20.4	21.7	24.2	25.8	27.7	28.5	27.3	25.8
77.5°	16.7	17.5	18.5	19.4	20.6	20.0	19.0	18.1
80°	13.7	14.0	14.0	14.4	14.4	13.8	12.5	12.3
82.5°	11.0	11.3	10.8	10.2	9.6	8.7	7.9	7.3
85°	8.7	8.7	8.1	7.1	6.0	5.0	4.2	3.8
87.5°	6.5	6.5	5.8	4.8	3.5	2.5	1.7	1.5
90°	5.0	5.0	4.0	3.1	1.9	1.0	0.4	0.0
92.5°	3.8	3.5	2.7	1.7	0.8	0.4	0.0	0.0
95°	2.9	2.5	1.5	0.8	0.4	0.0	0.0	0.0



TEST NUMBER: P273397

CATALOG NUMBER: 0.05-03W-830-10-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
97.5°	1.9	1.5	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)