

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: P273431

Luminaire Tested: **0.05-06W-835-90SYM-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P273431  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-246-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: 0.05-06W-835-90SYM-STD-UNV-AN-3F0  
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 90 DEGREE SYMMETRIC OPTIC.  
HIGH OUTPUT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

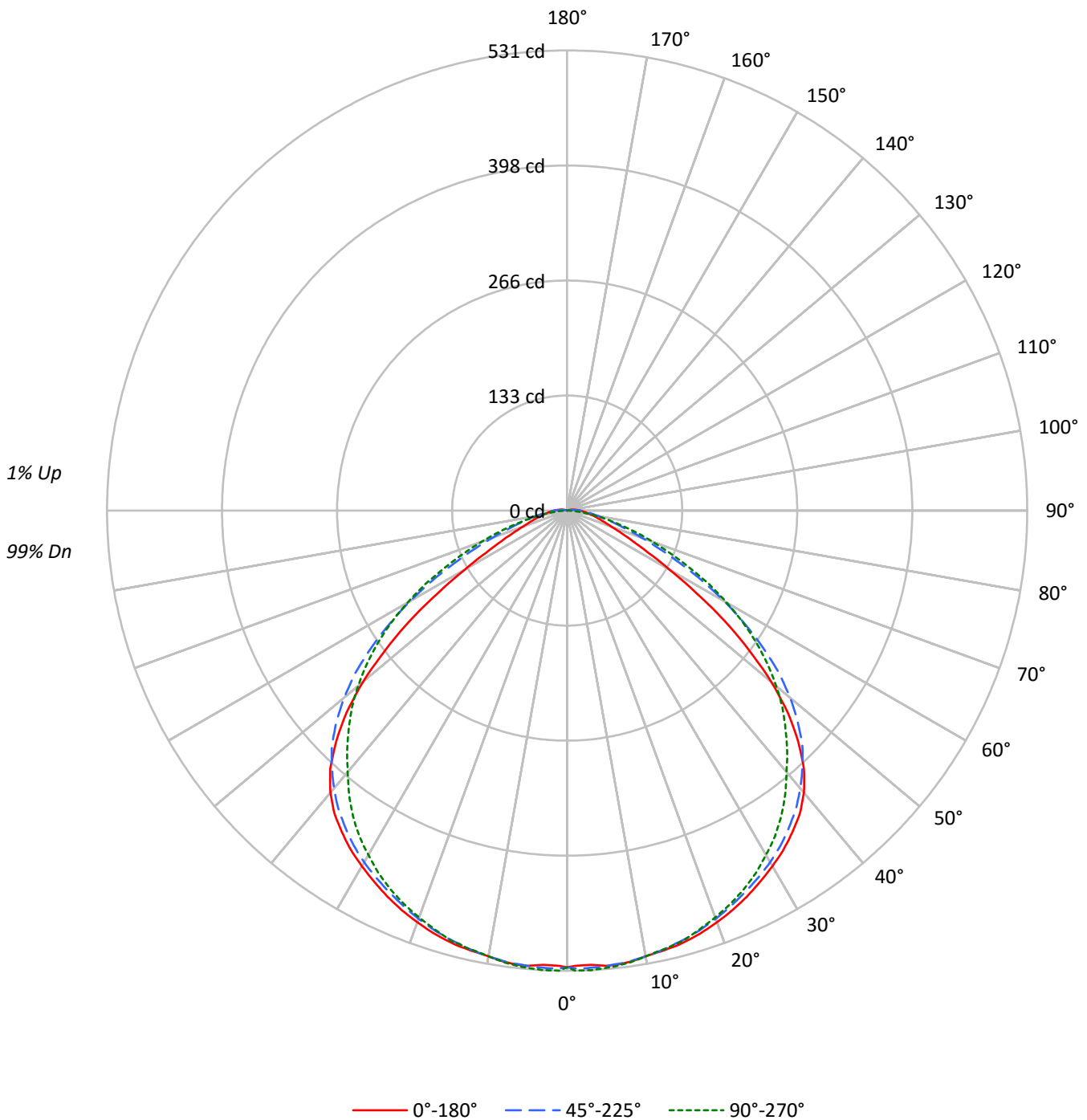
Lumens per Lamp: N/A  
Luminaire Lumens: 1441.3 lumens  
Efficiency: N/A  
Efficacy: 62.1 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.29 / 1.43  
Luminous Opening: Rectangular (W 2.92' x L: 0.17' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23.2  
Input Voltage (V): 120  
Input Current (A<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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	81	98	90	85	80	87	82	78	84	79	76	80	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	63	61
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53
5	78	65	56	50	75	64	56	50	62	55	49	60	53	49	58	52	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

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

	0°	45°	90°
0°	11669	11669	11669
5°	11721	11721	11772
10°	11744	11744	11744
15°	11836	11774	11790
20°	11914	11810	11773
25°	12001	11869	11781
30°	12114	11979	11731
35°	12248	12067	11642
40°	12285	12100	11386
45°	11812	12022	11161
50°	10596	11564	10851
55°	8547	10651	10300
60°	6058	9287	9420
65°	4380	7513	8126
70°	3528	5930	6798
75°	3319	4894	5381
80°	3672	4642	4093
85°	5361	5869	2718



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.1	3.5
10°-20°	145.0	10.1
20°-30°	224.1	15.5
30°-40°	277.2	19.2
40°-50°	287.4	19.9
50°-60°	231.0	16.0
60°-70°	133.1	9.2
70°-80°	60.9	4.2
80°-90°	23.4	1.6
90°-100°	7.4	0.5
100°-110°	1.7	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°	419.2	29.1
0°-40°	696.4	48.3
0°-60°	1214.8	84.3
0°-90°	1432.2	99.4
90°-120°	9.1	0.6
90°-150°	9.1	0.6
90°-180°	9.0	0.6
0°-180°	1441.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	527	527	527	525	530	50
15°	516	516	514	511	514	146
25°	491	490	486	480	482	227
35°	453	450	446	434	431	283
45°	377	381	384	366	356	288
55°	221	241	276	278	267	197
65°	84	98	143	167	155	87
75°	39	42	57	73	63	42
85°	21	21	23	21	11	19
90°	15	15	14	9	0	8
95°	10	10	8	3	0	8
105°	4	3	1	0	0	4
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°	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0
1°	525.3	525.0	524.0	524.3	526.6	528.6	529.3	529.0	529.3	528.3	528.0
2°	525.0	524.6	523.6	524.6	526.6	528.3	529.3	529.0	529.0	528.6	528.3
3°	525.0	525.0	523.6	525.0	526.6	528.0	528.6	528.6	528.6	528.3	528.0
4°	526.0	526.0	524.3	525.3	526.3	527.6	528.3	528.0	528.3	528.0	527.6
5°	527.3	526.3	524.6	525.3	526.6	527.3	528.0	527.3	527.6	527.3	527.3
6°	527.3	526.6	525.0	525.0	526.3	526.3	527.0	526.6	527.3	526.6	526.6
7°	526.6	526.0	524.3	524.6	525.3	526.0	526.6	526.3	526.3	526.0	525.6
8°	525.6	524.6	523.0	523.0	524.6	525.3	526.0	525.6	525.6	525.0	525.0
9°	524.0	523.0	521.0	521.3	523.0	524.0	524.6	524.6	524.3	523.6	523.6
10°	522.3	521.3	520.0	520.3	521.6	522.6	523.3	523.6	523.3	522.3	522.0
11°	521.0	520.3	518.6	518.9	521.0	521.6	522.0	522.3	522.0	521.0	521.0
12°	520.0	519.3	517.3	517.6	519.3	520.3	520.3	520.6	520.6	519.3	519.3
13°	518.9	517.9	516.3	516.6	517.6	519.3	519.3	519.3	519.3	517.6	517.9
14°	517.9	516.6	515.3	514.9	515.9	517.6	517.6	517.3	517.3	515.3	516.3
15°	516.3	515.6	514.3	514.3	515.3	515.9	515.9	515.9	515.3	513.6	514.9
17.5°	511.6	510.6	509.6	508.9	510.3	510.9	510.6	510.6	509.6	507.9	509.3
20°	505.6	504.6	503.6	502.9	503.6	503.9	503.9	503.6	502.6	501.2	501.9
22.5°	498.9	497.9	496.9	495.9	496.5	497.5	496.5	496.5	495.5	493.9	494.2
25°	491.2	490.5	489.5	488.5	489.5	489.9	488.9	488.9	487.9	485.8	485.8
27.5°	482.8	482.8	481.5	480.5	481.8	481.8	480.5	481.2	479.2	477.5	477.8
30°	473.8	473.8	472.5	471.5	472.1	472.5	471.1	471.1	469.8	468.5	467.8
32.5°	464.4	464.4	463.1	461.4	461.8	462.4	460.8	460.1	458.8	458.4	458.1
35°	453.1	453.1	451.7	450.1	450.4	450.4	449.1	448.1	447.1	446.4	445.4
37.5°	441.0	440.7	439.4	437.7	437.7	438.4	436.7	435.4	434.0	433.7	433.0
40°	425.0	425.0	423.7	422.6	422.6	423.0	422.0	421.0	419.6	418.6	417.6
42.5°	404.6	404.9	403.3	402.9	404.3	405.3	405.6	404.9	403.6	401.9	401.9
45°	377.2	378.5	377.5	377.8	380.2	382.5	383.5	384.5	384.5	383.9	382.5
47.5°	345.7	345.1	345.4	347.4	350.1	354.8	357.8	360.5	362.1	361.1	361.1
50°	307.6	308.0	308.3	312.0	315.3	322.0	327.4	331.0	334.0	335.7	335.4
52.5°	264.5	266.8	267.8	272.5	276.9	284.6	292.2	298.3	303.9	308.0	308.6
55°	221.4	221.0	224.7	230.0	236.7	245.4	254.8	262.1	270.2	275.9	279.9
57.5°	175.9	177.9	180.9	186.9	194.6	206.3	216.0	225.4	234.4	242.8	248.8
60°	136.8	137.8	141.1	146.1	153.5	164.2	177.6	188.6	198.3	209.7	216.7
62.5°	105.7	106.7	110.0	114.0	121.0	129.1	140.1	151.1	163.2	175.9	184.2
65°	83.6	83.6	85.6	88.9	94.0	101.3	110.0	120.0	131.4	143.4	152.8
67.5°	66.9	67.2	68.9	70.6	74.2	79.9	86.6	94.3	104.3	115.4	124.7
70°	54.5	55.2	56.2	57.2	59.5	63.5	68.2	74.2	81.9	91.6	100.6
72.5°	45.8	45.8	46.5	47.1	48.8	51.5	55.2	59.2	65.5	72.6	79.9
75°	38.8	39.1	39.1	39.8	41.1	42.8	45.1	47.8	51.8	57.2	63.2
77.5°	33.4	33.1	33.8	33.8	34.8	35.8	37.4	39.1	42.5	45.5	49.5
80°	28.8	28.4	28.8	28.8	29.4	30.1	30.8	32.1	34.4	36.4	38.8
82.5°	24.4	24.4	24.4	24.7	24.7	25.1	26.1	26.7	27.8	29.1	30.4
85°	21.1	21.1	21.1	21.1	21.4	21.4	21.4	22.1	22.4	23.1	23.7
87.5°	18.1	18.1	18.1	17.7	17.4	18.1	18.1	18.1	18.4	18.4	18.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
90°	15.0	15.4	14.7	14.7	14.7	14.7	14.7	14.4	14.4	14.4	13.7
92.5°	12.7	12.7	12.4	12.4	12.4	12.0	11.7	11.7	11.0	11.0	10.4
95°	10.4	10.4	10.4	10.0	9.7	9.7	9.4	9.0	8.4	7.7	7.0
97.5°	8.4	8.4	8.0	7.7	7.7	7.7	7.0	6.7	6.4	5.7	4.7
100°	6.4	6.4	6.4	6.4	6.0	5.7	5.3	5.0	4.3	3.7	3.0
102.5°	5.0	5.0	5.0	4.7	4.3	4.0	3.7	3.3	2.7	2.0	1.3
105°	3.7	3.7	3.7	3.3	3.0	2.7	2.3	2.0	1.7	1.0	0.3
107.5°	2.3	2.3	2.3	2.0	2.0	1.7	1.3	1.0	0.3	0.3	0.0
110°	1.3	1.3	1.3	1.0	1.0	1.0	0.3	0.3	0.0	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°	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0
1°	525.6	524.6	525.3	525.0	526.6	530.0	530.7	531.0
2°	525.6	524.6	525.6	525.3	526.6	529.6	530.7	531.0
3°	525.3	525.0	525.6	525.3	526.3	529.3	530.7	531.0
4°	525.3	524.6	525.3	525.0	525.6	528.6	530.0	530.3
5°	525.0	524.3	525.0	524.6	525.0	528.3	529.3	529.6
6°	524.3	523.3	524.6	524.0	524.3	527.3	528.6	529.0
7°	523.6	522.3	523.6	523.3	523.3	526.0	527.3	527.6
8°	523.0	521.3	522.6	522.3	522.3	524.6	525.6	526.3
9°	521.6	519.3	521.3	521.0	521.0	523.0	524.0	524.3
10°	520.3	517.9	519.6	520.0	519.3	521.3	522.3	522.3
11°	518.9	516.3	518.3	518.3	517.9	520.0	521.0	520.3
12°	517.3	514.6	516.6	516.6	516.6	517.9	518.9	518.9
13°	515.3	513.3	514.9	514.6	514.9	516.6	517.6	517.6
14°	513.6	511.3	512.9	512.9	512.9	514.9	515.6	515.6
15°	511.9	509.6	510.6	510.9	511.3	513.3	513.9	514.3
17.5°	505.6	504.2	503.9	504.9	505.2	506.2	506.6	506.9
20°	499.2	496.9	497.2	497.2	497.5	499.6	499.2	499.6
22.5°	492.2	488.9	488.9	489.9	489.5	491.9	490.9	491.5
25°	483.8	480.5	479.5	481.2	480.8	482.5	482.2	482.2
27.5°	474.8	472.1	469.8	471.8	470.8	471.8	471.1	471.5
30°	465.8	461.1	459.8	460.4	459.4	460.4	459.4	458.8
32.5°	455.4	450.1	447.4	448.7	447.1	448.1	446.4	446.1
35°	443.4	438.4	434.0	433.7	432.7	432.0	431.0	430.7
37.5°	430.7	425.3	420.6	418.3	416.0	415.3	413.6	413.3
40°	415.6	410.3	403.9	401.6	398.2	397.2	394.6	393.9
42.5°	398.2	393.6	387.2	383.5	380.9	378.5	375.8	375.8
45°	379.5	374.2	367.8	364.8	362.1	359.8	356.8	356.4
47.5°	358.4	353.4	348.1	344.1	342.1	339.7	337.4	337.0
50°	334.7	331.0	327.0	323.0	320.3	317.3	314.6	315.0
52.5°	309.6	307.0	303.9	300.3	297.3	293.9	291.6	291.6
55°	282.2	281.5	279.2	275.9	272.5	269.2	266.8	266.8
57.5°	253.1	254.1	253.5	249.8	247.1	242.8	241.1	240.7
60°	223.0	226.0	226.0	223.0	220.4	216.0	213.7	212.7
62.5°	191.6	195.6	196.9	194.9	192.6	188.6	185.6	185.2
65°	160.5	165.5	168.2	166.5	163.8	159.2	156.5	155.1
67.5°	133.1	138.1	138.8	139.4	136.8	133.4	130.4	129.1
70°	108.3	112.7	114.7	114.4	112.3	109.0	106.0	105.0
72.5°	86.6	90.9	93.0	91.6	89.9	87.3	84.6	82.9
75°	68.5	71.6	73.2	71.9	69.9	66.9	65.5	62.9
77.5°	53.2	55.5	56.5	55.2	52.8	50.5	48.1	46.1
80°	41.5	42.8	43.1	40.8	38.5	36.1	33.4	32.1
82.5°	31.8	32.4	31.8	29.1	26.4	23.7	21.4	20.1
85°	24.4	24.1	22.7	20.1	17.1	14.4	11.7	10.7
87.5°	18.1	17.4	15.7	13.0	10.0	7.4	5.0	4.0





TEST NUMBER: P273431

CATALOG NUMBER: 0.05-06W-835-90SYM-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
90°	13.0	12.4	10.4	8.0	5.3	3.0	1.3	0.0
92.5°	9.4	8.0	6.4	4.3	2.3	0.7	0.0	0.0
95°	6.4	5.0	3.7	2.0	0.7	0.0	0.0	0.0
97.5°	3.7	2.7	1.7	0.3	0.0	0.0	0.0	0.0
100°	2.0	1.0	0.3	0.0	0.0	0.0	0.0	0.0
102.5°	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.3	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)