

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: P273398

Luminaire Tested: **0.05-03W-830-30-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P273398  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-246-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: 0.05-03W-830-30-STD-UNV-AN-3F0  
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 30 DEGREE OPTIC.  
STANDARD OUTPUT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 810.1 lumens  
Efficiency: N/A  
Efficacy: 50.6 lumens/watt  
Spacing Criteria (0/90/45): 0.73 / 1.67 / 0.84  
Luminous Opening: Rectangular (W 2.92' x L: 0.21' x H: 0')  
CIE Type: Direct

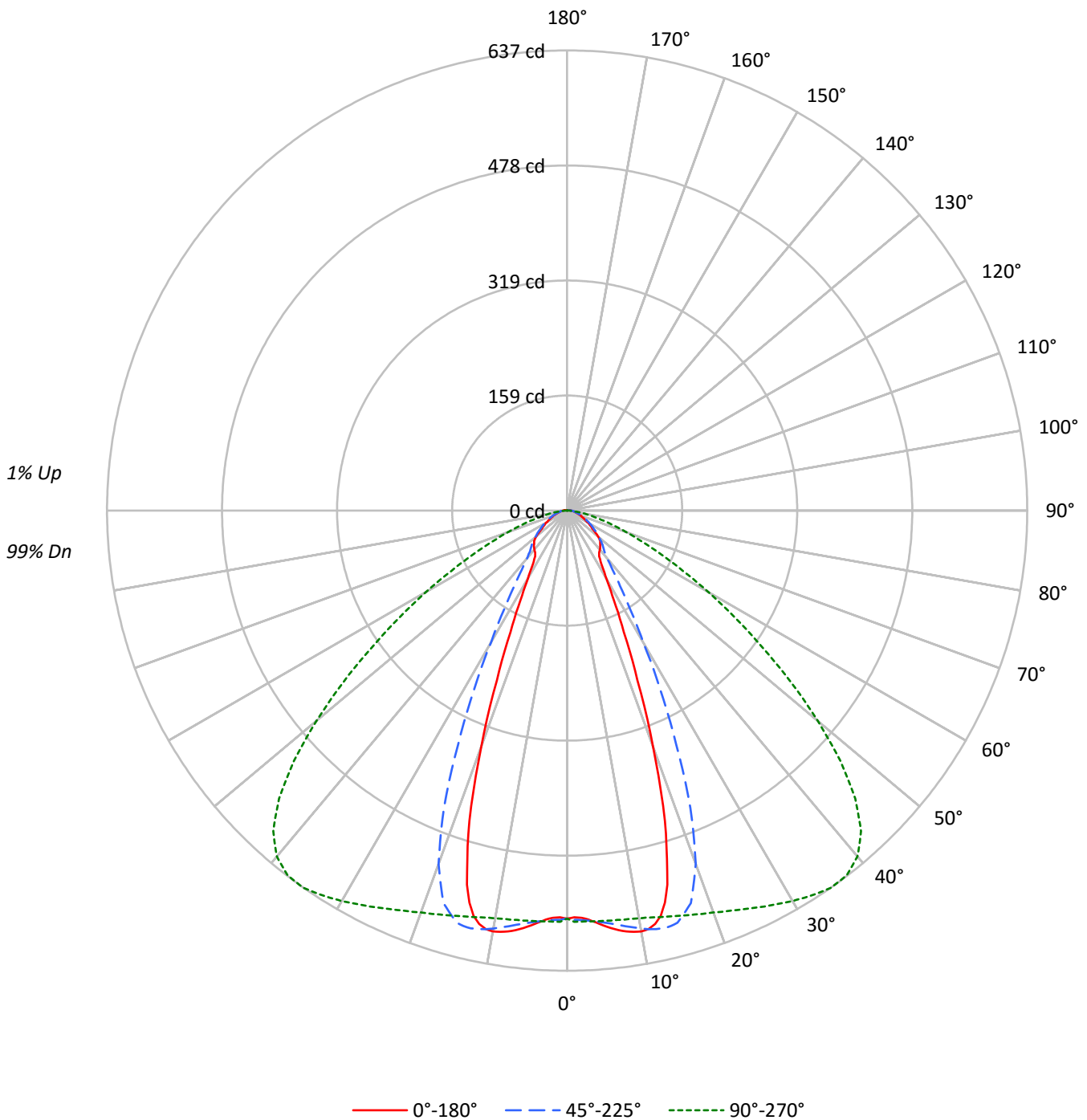
Input Watts (W): 16  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	69
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56
6	79	67	60	55	77	67	59	54	65	59	54	63	58	53	62	57	53	51
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	52	49	47
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43
9	66	54	47	42	64	54	47	42	52	46	42	51	46	42	50	45	41	40
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	47	42	39	37

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

	0°	45°	90°
0°	10005	10005	10005
5°	10253	10177	10139
10°	10641	10568	10312
15°	9830	10831	10655
20°	6532	9814	11162
25°	3626	6990	11868
30°	2219	4320	12766
35°	1667	2755	13780
40°	1633	1989	14457
45°	1623	1759	14132
50°	1549	1585	12481
55°	1294	1421	10182
60°	1173	1307	7975
65°	1048	1169	6032
70°	994	1088	4485
75°	999	1081	3347
80°	1081	1173	2397
85°	1606	1728	1484



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.0	6.8
10°-20°	157.4	19.4
20°-30°	177.9	22.0
30°-40°	146.3	18.1
40°-50°	113.8	14.0
50°-60°	78.4	9.7
60°-70°	45.5	5.6
70°-80°	22.5	2.8
80°-90°	8.9	1.1
90°-100°	3.2	0.4
100°-110°	1.2	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°	390.3	48.2
0°-40°	536.6	66.2
0°-60°	728.8	90.0
0°-90°	805.7	99.5
90°-120°	4.4	0.5
90°-150°	4.4	0.5
90°-180°	4.0	0.5
0°-180°	810.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	565	565	565	565	565	
5°	577	575	572	566	570	56
15°	536	556	591	587	581	141
25°	186	219	358	573	607	90
35°	77	82	127	352	637	51
45°	65	64	70	158	564	50
55°	42	43	46	86	330	39
65°	25	25	28	48	144	25
75°	15	15	16	22	49	16
85°	8	8	8	7	7	7
90°	6	6	6	4	0	3
95°	4	4	4	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



TEST NUMBER: P273398

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	564.8	564.8	564.8	564.8	564.8	564.8	564.8	564.8	564.8	564.8	564.8
1°	563.1	562.9	561.8	562.5	564.6	566.6	567.5	567.1	566.9	566.6	566.4
2°	564.1	563.9	562.9	563.7	565.8	567.7	568.5	568.1	567.5	567.3	566.8
3°	566.9	566.8	565.6	566.2	568.1	569.4	569.8	569.4	568.9	568.5	567.7
4°	571.6	571.2	569.6	569.6	571.0	571.8	571.9	571.4	571.0	570.2	569.3
5°	576.6	575.8	573.9	573.7	574.5	575.0	574.6	574.1	573.3	572.3	571.4
6°	581.2	580.6	578.3	577.9	578.5	578.5	577.7	576.8	576.2	574.8	573.5
7°	585.2	584.5	582.3	582.0	582.5	582.3	581.6	580.4	579.5	577.7	576.2
8°	588.3	587.5	585.6	585.2	586.2	586.0	585.4	584.3	583.1	581.0	578.9
9°	590.4	589.5	587.7	587.7	589.1	589.3	588.9	587.9	586.8	584.1	582.1
10°	591.6	590.2	589.1	589.1	590.8	591.8	591.6	590.8	589.8	587.5	585.4
11°	590.4	588.7	588.3	588.9	591.0	592.5	593.1	593.1	592.5	590.4	588.5
12°	585.2	583.7	584.1	584.5	588.1	590.8	592.5	593.7	594.1	592.3	591.4
13°	575.6	573.9	574.5	576.6	581.8	585.8	589.5	592.1	594.3	593.5	593.7
14°	559.3	557.1	560.6	562.1	569.8	576.2	582.1	587.3	591.8	592.9	594.8
15°	536.0	534.1	539.1	541.2	551.7	561.0	569.8	578.5	586.4	590.6	594.5
17.5°	450.4	448.2	455.6	465.0	478.6	498.3	514.2	534.2	553.7	569.8	583.5
20°	346.5	347.8	352.8	362.1	380.5	402.1	426.5	457.1	488.3	520.6	549.6
22.5°	254.5	256.1	260.3	268.9	285.5	308.0	331.1	364.6	401.3	445.6	490.0
25°	185.5	188.1	190.1	198.0	211.2	227.4	248.4	275.9	311.5	357.6	410.3
27.5°	139.5	141.0	142.9	148.5	157.4	169.3	186.4	207.8	238.0	278.2	327.0
30°	108.5	109.1	111.0	115.0	120.2	129.5	141.6	157.6	179.3	211.2	251.8
32.5°	88.1	88.5	89.6	91.6	96.0	102.0	110.8	122.9	138.5	163.1	194.9
35°	77.1	77.3	77.9	78.7	80.8	84.1	89.6	98.5	109.8	127.4	152.2
37.5°	72.9	72.9	73.1	73.3	73.9	75.0	77.7	82.5	90.0	103.1	121.6
40°	70.6	70.6	70.6	70.2	70.4	70.8	72.0	74.3	77.7	86.0	98.9
42.5°	67.9	67.7	67.5	67.1	66.9	67.3	68.7	69.8	71.8	76.0	83.9
45°	64.8	64.8	64.6	63.9	63.7	63.5	63.9	64.8	67.1	70.2	74.6
47.5°	61.9	61.8	61.2	60.0	59.6	59.6	60.0	60.2	61.2	64.3	68.3
50°	56.2	56.2	56.2	55.4	55.4	55.2	55.2	55.8	56.4	57.5	61.0
52.5°	48.5	48.5	48.7	48.5	49.6	49.8	50.0	50.2	50.8	52.1	54.3
55°	41.9	41.9	42.3	42.1	42.5	43.3	44.4	45.6	45.6	46.0	48.3
57.5°	37.5	37.5	37.7	37.3	37.5	37.7	38.3	39.6	40.8	41.4	42.7
60°	33.1	33.3	33.3	33.1	33.5	33.7	33.9	34.6	35.2	36.9	38.1
62.5°	28.5	28.7	28.7	28.7	29.0	29.4	29.6	30.2	30.8	31.7	33.7
65°	25.0	25.0	25.0	25.0	25.2	25.4	25.8	26.5	26.7	27.9	29.0
67.5°	21.9	21.9	22.1	21.9	22.1	22.3	22.3	22.9	23.5	24.4	25.2
70°	19.2	19.2	19.2	19.4	19.4	19.6	19.6	19.8	20.2	21.0	21.9
72.5°	16.7	16.9	16.9	17.1	17.1	17.1	17.1	17.5	17.5	18.1	18.9
75°	14.6	14.8	14.8	14.8	14.8	15.0	15.0	15.2	15.4	15.8	16.4
77.5°	12.7	12.7	12.7	12.7	12.9	12.9	13.1	13.1	13.3	13.7	14.0
80°	10.6	11.0	11.0	11.0	11.0	11.2	11.2	11.4	11.4	11.5	11.7
82.5°	9.2	9.2	9.2	9.4	9.4	9.4	9.4	9.8	9.8	10.0	10.0
85°	7.9	7.9	7.9	8.1	8.1	8.1	8.1	8.3	8.3	8.5	8.3
87.5°	6.7	6.7	6.7	6.7	6.7	6.9	6.9	6.9	6.9	6.9	6.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
90°	5.6	5.8	5.8	5.8	5.8	5.8	6.0	5.8	5.8	5.8	5.6
92.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.6	4.4
95°	4.2	4.2	4.2	4.2	4.2	4.2	4.0	4.0	3.8	3.7	3.3
97.5°	3.7	3.5	3.5	3.5	3.5	3.5	3.3	3.3	3.1	2.9	2.5
100°	3.1	3.1	3.1	3.1	3.1	2.9	2.7	2.7	2.5	2.1	1.7
102.5°	2.7	2.7	2.7	2.7	2.5	2.5	2.3	2.1	1.9	1.7	1.3
105°	2.1	2.1	2.1	2.1	2.1	1.9	1.7	1.7	1.3	1.2	0.8
107.5°	1.7	1.7	1.7	1.7	1.7	1.5	1.3	1.3	1.0	0.6	0.4
110°	1.3	1.3	1.3	1.3	1.3	1.3	1.0	0.8	0.6	0.4	0.4
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°	564.8	564.8	564.8	564.8	564.8	564.8	564.8	564.8
1°	563.1	562.5	562.7	563.3	564.3	567.7	568.5	569.4
2°	563.7	563.1	563.3	563.7	564.6	568.1	568.7	569.4
3°	564.6	563.7	564.1	564.3	564.6	568.1	568.9	569.4
4°	566.2	564.8	565.0	564.8	565.2	568.3	569.3	569.8
5°	567.9	566.2	566.4	566.0	565.8	568.9	569.6	570.2
6°	569.8	567.9	567.9	567.1	566.8	569.4	570.0	570.6
7°	572.3	569.6	569.4	568.5	567.9	570.2	570.4	571.0
8°	575.0	571.8	571.6	570.4	569.1	571.0	571.4	571.8
9°	577.7	574.1	573.5	571.9	570.4	571.9	572.1	572.1
10°	580.8	576.6	575.8	574.1	572.3	573.1	573.1	573.3
11°	583.9	579.3	578.3	576.0	574.1	574.6	574.3	574.1
12°	586.4	581.8	581.0	578.3	576.0	576.2	575.6	575.6
13°	589.1	584.6	583.3	580.8	578.1	578.1	577.3	577.5
14°	590.6	587.0	585.8	583.1	580.4	580.2	579.1	579.1
15°	591.6	588.7	587.9	585.8	582.9	582.5	580.8	581.0
17.5°	588.9	591.4	592.3	592.3	589.5	588.5	586.0	586.4
20°	571.0	582.5	592.5	596.4	595.2	595.2	592.3	592.1
22.5°	530.2	559.6	583.5	596.8	600.4	602.0	599.8	599.1
25°	464.4	513.1	557.9	587.7	602.0	608.5	607.2	607.2
27.5°	382.6	450.2	512.9	565.8	596.4	612.2	614.7	615.6
30°	306.7	374.0	450.6	523.5	578.9	611.2	621.4	624.1
32.5°	240.7	301.3	376.7	467.9	546.0	602.5	625.8	631.4
35°	188.9	237.6	307.2	397.1	498.3	580.2	624.3	637.2
37.5°	149.1	189.1	247.8	331.9	437.5	542.5	613.3	636.0
40°	120.2	151.4	198.0	272.8	374.2	493.8	589.6	625.2
42.5°	98.7	123.5	161.4	223.7	317.0	439.8	554.1	602.2
45°	83.9	102.2	132.4	184.3	267.6	385.9	508.8	564.1
47.5°	74.8	87.3	111.4	154.5	227.2	336.9	456.7	512.9
50°	67.1	77.3	95.8	131.4	193.9	290.5	400.7	452.9
52.5°	59.1	68.3	83.9	113.1	166.6	249.9	346.1	391.3
55°	52.3	59.6	73.5	99.1	143.7	213.4	292.2	329.7
57.5°	46.2	52.3	63.9	86.4	125.2	180.6	243.4	275.1
60°	40.4	45.8	55.8	74.5	106.6	150.1	198.5	225.1
62.5°	36.2	40.0	48.7	64.3	89.3	123.7	162.4	180.8
65°	31.9	35.4	41.9	54.6	74.1	99.8	129.9	143.9
67.5°	27.1	30.8	35.8	46.2	60.4	79.8	102.5	112.0
70°	23.5	25.8	30.4	38.1	48.9	63.3	79.6	86.6
72.5°	20.0	21.5	25.2	30.8	38.5	49.2	61.0	65.8
75°	17.1	18.3	20.2	24.0	29.8	37.3	45.2	48.9
77.5°	14.6	15.0	16.2	18.5	21.9	27.3	32.7	35.0
80°	12.1	12.5	12.5	13.7	15.6	18.9	21.9	23.5
82.5°	10.0	10.0	10.0	10.0	10.6	12.1	13.5	14.2
85°	8.1	7.9	7.5	7.1	6.9	6.7	7.1	7.3
87.5°	6.7	6.3	5.6	4.8	4.0	3.3	2.7	2.7





TEST NUMBER: P273398

CATALOG NUMBER: 0.05-03W-830-30-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
90°	5.2	4.8	4.0	3.3	2.3	1.3	0.8	0.4
92.5°	4.0	3.5	2.7	1.9	1.2	0.4	0.0	0.0
95°	2.9	2.5	1.7	1.2	0.4	0.0	0.0	0.0
97.5°	2.1	1.5	1.0	0.4	0.0	0.0	0.0	0.0
100°	1.3	1.0	0.4	0.0	0.0	0.0	0.0	0.0
102.5°	1.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.2	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)