

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: P273410

Luminaire Tested: **0.05-03W-840-30-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273410
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-840-30-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 30 DEGREE OPTIC.
STANDARD OUTPUT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

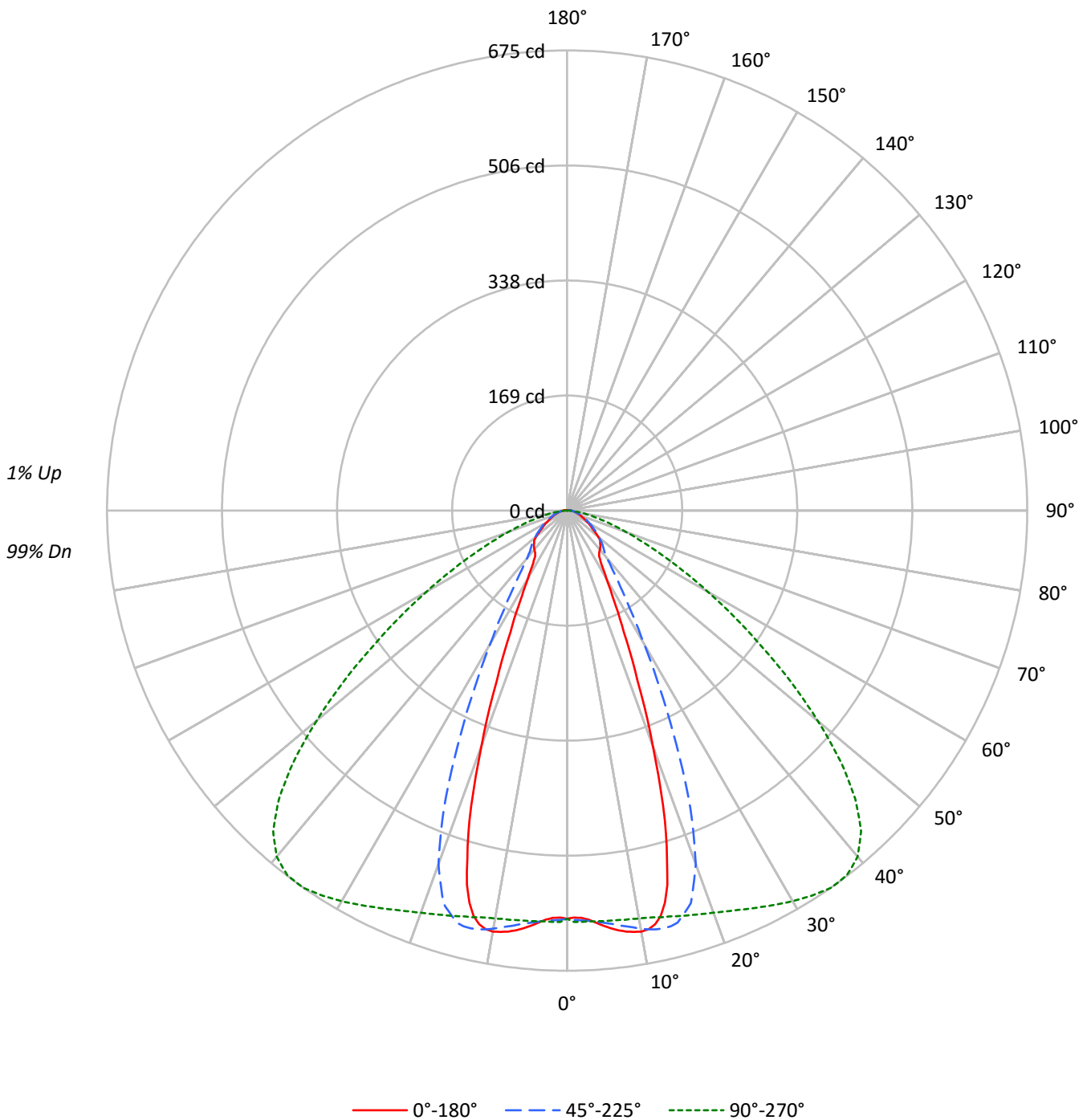
Lumens per Lamp: N/A
Luminaire Lumens: 858.7 lumens
Efficiency: N/A
Efficacy: 53.7 lumens/watt
Spacing Criteria (0/90/45): 0.73 / 1.67 / 0.84
Luminous Opening: Rectangular (W 2.92' x L: 0.21' x H: 0')
CIE Type: Direct

Input Watts (W): 16
Input Voltage (V): 120
Input Current (A_{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	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°	10606	10606	10606
5°	10868	10788	10747
10°	11280	11203	10931
15°	10419	11480	11295
20°	6924	10402	11833
25°	3843	7410	12580
30°	2352	4580	13531
35°	1769	2919	14606
40°	1730	2109	15327
45°	1721	1864	14979
50°	1640	1681	13228
55°	1374	1504	10794
60°	1244	1389	8453
65°	1111	1241	6392
70°	1057	1150	4755
75°	1061	1143	3545
80°	1143	1245	2540
85°	1707	1829	1565



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.3	6.8
10°-20°	166.8	19.4
20°-30°	188.6	22.0
30°-40°	155.1	18.1
40°-50°	120.6	14.0
50°-60°	83.1	9.7
60°-70°	48.2	5.6
70°-80°	23.9	2.8
80°-90°	9.5	1.1
90°-100°	3.4	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°	413.7	48.2
0°-40°	568.8	66.2
0°-60°	772.5	90.0
0°-90°	854.1	99.5
90°-120°	4.7	0.5
90°-150°	4.7	0.5
90°-180°	5.0	0.6
0°-180°	858.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	599	599	599	599	599	
5°	611	609	607	600	604	59
15°	568	590	626	622	616	149
25°	197	232	379	607	644	96
35°	82	87	135	373	675	54
45°	69	67	74	168	598	53
55°	44	46	49	91	350	41
65°	26	27	30	51	152	27
75°	16	16	17	23	52	16
85°	8	9	9	8	8	7
90°	6	6	6	4	0	3
95°	4	4	4	2	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°	598.7	598.7	598.7	598.7	598.7	598.7	598.7	598.7	598.7	598.7	598.7
1°	596.9	596.7	595.5	596.3	598.5	600.6	601.6	601.2	601.0	600.6	600.4
2°	597.9	597.7	596.7	597.5	599.7	601.8	602.6	602.2	601.6	601.4	600.8
3°	601.0	600.8	599.5	600.1	602.2	603.6	604.0	603.6	603.0	602.6	601.8
4°	605.9	605.5	603.8	603.8	605.2	606.1	606.3	605.7	605.2	604.4	603.4
5°	611.2	610.3	608.3	608.1	608.9	609.5	609.1	608.5	607.7	606.7	605.7
6°	616.1	615.4	613.0	612.6	613.2	613.2	612.4	611.4	610.8	609.3	607.9
7°	620.3	619.5	617.3	616.9	617.5	617.3	616.5	615.2	614.2	612.4	610.8
8°	623.6	622.8	620.7	620.3	621.4	621.2	620.5	619.3	618.1	615.9	613.6
9°	625.8	624.8	623.0	623.0	624.4	624.6	624.2	623.2	622.0	619.1	617.1
10°	627.1	625.6	624.4	624.4	626.3	627.3	627.1	626.3	625.2	622.8	620.5
11°	625.8	624.0	623.6	624.2	626.5	628.1	628.7	628.7	628.1	625.8	623.8
12°	620.3	618.7	619.1	619.5	623.4	626.3	628.1	629.3	629.7	627.9	626.9
13°	610.1	608.3	608.9	611.2	616.7	620.9	624.8	627.7	629.9	629.1	629.3
14°	592.8	590.6	594.2	595.9	604.0	610.8	617.1	622.6	627.3	628.5	630.5
15°	568.1	566.1	571.4	573.6	584.9	594.6	604.0	613.2	621.6	626.0	630.1
17.5°	477.4	475.1	482.9	492.9	507.4	528.2	545.1	566.3	586.9	604.0	618.5
20°	367.3	368.7	374.0	383.8	403.4	426.2	452.1	484.5	517.6	551.8	582.6
22.5°	269.8	271.4	275.9	285.1	302.6	326.5	351.0	386.4	425.4	472.3	519.4
25°	196.6	199.4	201.5	209.8	223.9	241.0	263.3	292.4	330.2	379.1	435.0
27.5°	147.8	149.5	151.5	157.4	166.8	179.5	197.6	220.2	252.3	294.9	346.7
30°	115.0	115.6	117.7	121.9	127.5	137.2	150.1	167.0	190.1	223.9	266.9
32.5°	93.4	93.8	95.0	97.1	101.8	108.1	117.5	130.3	146.8	172.9	206.6
35°	81.8	82.0	82.6	83.4	85.6	89.1	95.0	104.4	116.4	135.0	161.3
37.5°	77.3	77.3	77.5	77.7	78.3	79.5	82.4	87.5	95.4	109.3	128.9
40°	74.8	74.8	74.8	74.4	74.6	75.0	76.3	78.7	82.4	91.2	104.8
42.5°	72.0	71.8	71.6	71.2	71.0	71.4	72.8	74.0	76.1	80.6	88.9
45°	68.7	68.7	68.5	67.7	67.5	67.3	67.7	68.7	71.2	74.4	79.1
47.5°	65.7	65.5	64.8	63.6	63.2	63.2	63.6	63.8	64.8	68.1	72.4
50°	59.5	59.5	59.5	58.7	58.7	58.5	58.5	59.1	59.7	61.0	64.6
52.5°	51.4	51.4	51.6	51.4	52.6	52.8	53.0	53.2	53.8	55.3	57.5
55°	44.5	44.5	44.9	44.7	45.1	45.9	47.1	48.3	48.3	48.7	51.2
57.5°	39.8	39.8	40.0	39.6	39.8	40.0	40.6	42.0	43.2	43.8	45.3
60°	35.1	35.3	35.3	35.1	35.5	35.7	35.9	36.7	37.3	39.2	40.4
62.5°	30.2	30.4	30.4	30.4	30.8	31.2	31.4	32.0	32.6	33.6	35.7
65°	26.5	26.5	26.5	26.5	26.7	26.9	27.3	28.1	28.3	29.6	30.8
67.5°	23.2	23.2	23.5	23.2	23.5	23.7	23.7	24.3	24.9	25.9	26.7
70°	20.4	20.4	20.4	20.6	20.6	20.8	20.8	21.0	21.4	22.2	23.2
72.5°	17.7	17.9	17.9	18.1	18.1	18.1	18.1	18.6	18.6	19.2	20.0
75°	15.5	15.7	15.7	15.7	15.7	15.9	15.9	16.1	16.3	16.7	17.3
77.5°	13.5	13.5	13.5	13.5	13.7	13.7	13.9	13.9	14.1	14.5	14.9
80°	11.2	11.6	11.6	11.6	11.6	11.8	11.8	12.0	12.0	12.2	12.4
82.5°	9.8	9.8	9.8	10.0	10.0	10.0	10.0	10.4	10.4	10.6	10.6
85°	8.4	8.4	8.4	8.6	8.6	8.6	8.6	8.8	8.8	9.0	8.8
87.5°	7.1	7.1	7.1	7.1	7.1	7.3	7.3	7.3	7.3	7.3	7.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
90°	5.9	6.1	6.1	6.1	6.1	6.1	6.3	6.1	6.1	6.1	5.9
92.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	4.9	4.7
95°	4.5	4.5	4.5	4.5	4.5	4.5	4.3	4.3	4.1	3.9	3.5
97.5°	3.9	3.7	3.7	3.7	3.7	3.7	3.5	3.5	3.3	3.1	2.7
100°	3.3	3.3	3.3	3.3	3.3	3.1	2.9	2.9	2.7	2.2	1.8
102.5°	2.9	2.9	2.9	2.9	2.7	2.7	2.4	2.2	2.0	1.8	1.4
105°	2.2	2.2	2.2	2.2	2.2	2.0	1.8	1.8	1.4	1.2	0.8
107.5°	1.8	1.8	1.8	1.8	1.8	1.6	1.4	1.4	1.0	0.6	0.4
110°	1.4	1.4	1.4	1.4	1.4	1.4	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°	598.7	598.7	598.7	598.7	598.7	598.7	598.7	598.7
1°	596.9	596.3	596.5	597.1	598.1	601.8	602.6	603.6
2°	597.5	596.9	597.1	597.5	598.5	602.2	602.8	603.6
3°	598.5	597.5	597.9	598.1	598.5	602.2	603.0	603.6
4°	600.1	598.7	598.9	598.7	599.1	602.4	603.4	604.0
5°	602.0	600.1	600.4	599.9	599.7	603.0	603.8	604.4
6°	604.0	602.0	602.0	601.2	600.8	603.6	604.2	604.8
7°	606.7	603.8	603.6	602.6	602.0	604.4	604.6	605.2
8°	609.5	606.1	605.9	604.6	603.2	605.2	605.7	606.1
9°	612.4	608.5	607.9	606.3	604.6	606.3	606.5	606.5
10°	615.6	611.2	610.3	608.5	606.7	607.5	607.5	607.7
11°	618.9	614.0	613.0	610.5	608.5	609.1	608.7	608.5
12°	621.6	616.7	615.9	613.0	610.5	610.8	610.1	610.1
13°	624.4	619.7	618.3	615.6	612.8	612.8	612.0	612.2
14°	626.0	622.2	620.9	618.1	615.2	615.0	613.8	613.8
15°	627.1	624.0	623.2	620.9	617.9	617.5	615.6	615.9
17.5°	624.2	626.9	627.9	627.9	624.8	623.8	621.2	621.6
20°	605.2	617.5	628.1	632.2	630.9	630.9	627.9	627.7
22.5°	562.0	593.2	618.5	632.6	636.4	638.1	635.8	635.0
25°	492.3	543.9	591.4	623.0	638.1	645.0	643.6	643.6
27.5°	405.6	477.2	543.7	599.7	632.2	648.9	651.5	652.6
30°	325.1	396.4	477.6	554.9	613.6	647.9	658.7	661.5
32.5°	255.1	319.3	399.3	495.9	578.7	638.7	663.4	669.3
35°	200.3	251.8	325.7	420.9	528.2	615.0	661.7	675.4
37.5°	158.0	200.5	262.7	351.8	463.7	575.1	650.1	674.2
40°	127.5	160.5	209.8	289.2	396.6	523.5	625.0	662.8
42.5°	104.6	130.9	171.1	237.2	336.1	466.2	587.3	638.3
45°	88.9	108.3	140.3	195.4	283.7	409.1	539.4	597.9
47.5°	79.3	92.6	118.1	163.8	240.8	357.1	484.1	543.7
50°	71.2	82.0	101.6	139.3	205.6	307.9	424.8	480.0
52.5°	62.6	72.4	88.9	119.9	176.6	264.9	366.9	414.8
55°	55.5	63.2	77.9	105.0	152.3	226.2	309.8	349.5
57.5°	48.9	55.5	67.7	91.6	132.8	191.5	258.0	291.6
60°	42.8	48.5	59.1	78.9	113.0	159.1	210.4	238.6
62.5°	38.3	42.4	51.6	68.1	94.6	131.1	172.1	191.7
65°	33.9	37.5	44.5	57.9	78.5	105.8	137.6	152.5
67.5°	28.8	32.6	37.9	48.9	64.0	84.6	108.7	118.7
70°	24.9	27.3	32.2	40.4	51.8	67.1	84.4	91.8
72.5°	21.2	22.8	26.7	32.6	40.8	52.2	64.6	69.7
75°	18.1	19.4	21.4	25.5	31.6	39.6	47.9	51.8
77.5°	15.5	15.9	17.1	19.6	23.2	29.0	34.7	37.1
80°	12.8	13.3	13.3	14.5	16.5	20.0	23.2	24.9
82.5°	10.6	10.6	10.6	10.6	11.2	12.8	14.3	15.1
85°	8.6	8.4	8.0	7.5	7.3	7.1	7.5	7.7
87.5°	7.1	6.7	5.9	5.1	4.3	3.5	2.9	2.9



TEST NUMBER: P273410

CATALOG NUMBER: 0.05-03W-840-30-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
90°	5.5	5.1	4.3	3.5	2.4	1.4	0.8	0.4
92.5°	4.3	3.7	2.9	2.0	1.2	0.4	0.0	0.0
95°	3.1	2.7	1.8	1.2	0.4	0.0	0.0	0.0
97.5°	2.2	1.6	1.0	0.4	0.0	0.0	0.0	0.0
100°	1.4	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)