

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: P273404

Luminaire Tested: **0.05-03W-835-30-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273404
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-835-30-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 30 DEGREE OPTIC.
STANDARD OUTPUT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

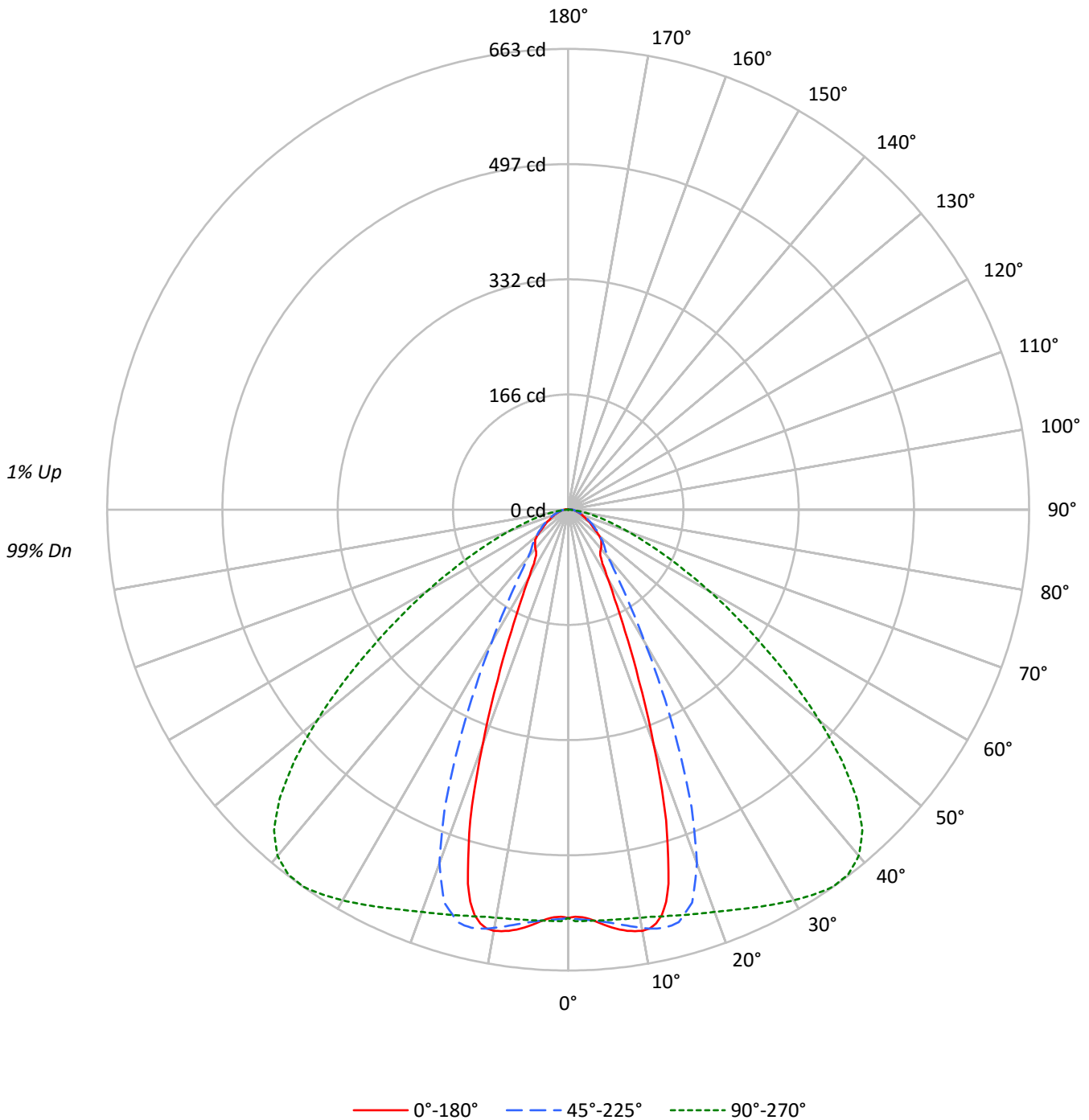
Lumens per Lamp: N/A
Luminaire Lumens: 842.5 lumens
Efficiency: N/A
Efficacy: 52.7 lumens/watt
Spacing Criteria (0/90/45): 0.73 / 1.67 / 0.84
Luminous Opening: Rectangular (W 2.92' x L: 0.21' x H: 0')
CIE Type: Direct

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	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	71	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	42	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°	10405	10405	10405
5°	10662	10584	10545
10°	11066	10990	10724
15°	10222	11264	11081
20°	6792	10206	11609
25°	3770	7269	12341
30°	2307	4494	13275
35°	1734	2865	14331
40°	1697	2067	15036
45°	1688	1829	14695
50°	1609	1648	12980
55°	1347	1476	10590
60°	1219	1360	8294
65°	1090	1216	6275
70°	1036	1129	4661
75°	1040	1122	3477
80°	1122	1224	2489
85°	1667	1789	1545



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.2	6.8
10°-20°	163.7	19.4
20°-30°	185.1	22.0
30°-40°	152.2	18.1
40°-50°	118.3	14.0
50°-60°	81.5	9.7
60°-70°	47.3	5.6
70°-80°	23.4	2.8
80°-90°	9.3	1.1
90°-100°	3.3	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°	405.9	48.2
0°-40°	558.0	66.2
0°-60°	757.9	90.0
0°-90°	837.9	99.5
90°-120°	4.6	0.5
90°-150°	4.6	0.5
90°-180°	5.0	0.6
0°-180°	842.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	587	587	587	587	587	
5°	600	598	595	589	593	58
15°	557	579	614	610	604	147
25°	193	228	372	596	631	94
35°	80	86	132	366	663	53
45°	67	66	73	165	587	52
55°	44	45	48	90	343	40
65°	26	26	29	50	150	26
75°	15	16	16	23	51	16
85°	8	8	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°	587.4	587.4	587.4	587.4	587.4	587.4	587.4	587.4	587.4	587.4	587.4
1°	585.6	585.4	584.2	585.0	587.2	589.2	590.2	589.8	589.6	589.2	589.0
2°	586.6	586.4	585.4	586.2	588.4	590.4	591.2	590.8	590.2	590.0	589.4
3°	589.6	589.4	588.2	588.8	590.8	592.2	592.6	592.2	591.6	591.2	590.4
4°	594.4	594.0	592.4	592.4	593.8	594.6	594.8	594.2	593.8	593.0	592.0
5°	599.6	598.8	596.8	596.6	597.4	598.0	597.6	597.0	596.2	595.2	594.2
6°	604.4	603.8	601.4	601.0	601.6	601.6	600.8	599.8	599.2	597.8	596.4
7°	608.6	607.8	605.6	605.2	605.8	605.6	604.8	603.6	602.6	600.8	599.2
8°	611.8	611.0	609.0	608.6	609.6	609.4	608.8	607.6	606.4	604.2	602.0
9°	614.0	613.0	611.2	611.2	612.6	612.8	612.4	611.4	610.2	607.4	605.4
10°	615.2	613.8	612.6	612.6	614.4	615.4	615.2	614.4	613.4	611.0	608.8
11°	614.0	612.2	611.8	612.4	614.6	616.2	616.8	616.8	616.2	614.0	612.0
12°	608.6	607.0	607.4	607.8	611.6	614.4	616.2	617.4	617.8	616.0	615.0
13°	598.6	596.8	597.4	599.6	605.0	609.2	613.0	615.8	618.0	617.2	617.4
14°	581.6	579.4	583.0	584.6	592.6	599.2	605.4	610.8	615.4	616.6	618.6
15°	557.4	555.4	560.6	562.8	573.8	583.4	592.6	601.6	609.8	614.2	618.2
17.5°	468.4	466.2	473.8	483.6	497.8	518.2	534.8	555.6	575.8	592.6	606.8
20°	360.3	361.7	366.9	376.5	395.8	418.2	443.6	475.4	507.8	541.4	571.6
22.5°	264.7	266.3	270.7	279.7	296.9	320.3	344.3	379.1	417.4	463.4	509.6
25°	192.9	195.7	197.7	205.9	219.7	236.5	258.3	286.9	323.9	371.9	426.8
27.5°	145.1	146.7	148.7	154.5	163.7	176.1	193.9	216.1	247.5	289.3	340.1
30°	112.8	113.4	115.4	119.6	125.0	134.7	147.3	163.9	186.5	219.7	261.9
32.5°	91.6	92.0	93.2	95.2	99.8	106.0	115.2	127.8	144.1	169.7	202.7
35°	80.2	80.4	81.0	81.8	84.0	87.4	93.2	102.4	114.2	132.5	158.3
37.5°	75.8	75.8	76.0	76.2	76.8	78.0	80.8	85.8	93.6	107.2	126.4
40°	73.4	73.4	73.4	73.0	73.2	73.6	74.8	77.2	80.8	89.4	102.8
42.5°	70.6	70.4	70.2	69.8	69.6	70.0	71.4	72.6	74.6	79.0	87.2
45°	67.4	67.4	67.2	66.4	66.2	66.0	66.4	67.4	69.8	73.0	77.6
47.5°	64.4	64.2	63.6	62.4	62.0	62.0	62.4	62.6	63.6	66.8	71.0
50°	58.4	58.4	58.4	57.6	57.6	57.4	57.4	58.0	58.6	59.8	63.4
52.5°	50.4	50.4	50.6	50.4	51.6	51.8	52.0	52.2	52.8	54.2	56.4
55°	43.6	43.6	44.0	43.8	44.2	45.0	46.2	47.4	47.4	47.8	50.2
57.5°	39.0	39.0	39.2	38.8	39.0	39.2	39.8	41.2	42.4	43.0	44.4
60°	34.4	34.6	34.6	34.4	34.8	35.0	35.2	36.0	36.6	38.4	39.6
62.5°	29.6	29.8	29.8	29.8	30.2	30.6	30.8	31.4	32.0	33.0	35.0
65°	26.0	26.0	26.0	26.0	26.2	26.4	26.8	27.6	27.8	29.0	30.2
67.5°	22.8	22.8	23.0	22.8	23.0	23.2	23.2	23.8	24.4	25.4	26.2
70°	20.0	20.0	20.0	20.2	20.2	20.4	20.4	20.6	21.0	21.8	22.8
72.5°	17.4	17.6	17.6	17.8	17.8	17.8	17.8	18.2	18.2	18.8	19.6
75°	15.2	15.4	15.4	15.4	15.4	15.6	15.6	15.8	16.0	16.4	17.0
77.5°	13.2	13.2	13.2	13.2	13.4	13.4	13.6	13.6	13.8	14.2	14.6
80°	11.0	11.4	11.4	11.4	11.4	11.6	11.6	11.8	11.8	12.0	12.2
82.5°	9.6	9.6	9.6	9.8	9.8	9.8	9.8	10.2	10.2	10.4	10.4
85°	8.2	8.2	8.2	8.4	8.4	8.4	8.4	8.6	8.6	8.8	8.6
87.5°	7.0	7.0	7.0	7.0	7.0	7.2	7.2	7.2	7.2	7.2	7.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
90°	5.8	6.0	6.0	6.0	6.0	6.0	6.2	6.0	6.0	6.0	5.8
92.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.8	4.6
95°	4.4	4.4	4.4	4.4	4.4	4.4	4.2	4.2	4.0	3.8	3.4
97.5°	3.8	3.6	3.6	3.6	3.6	3.6	3.4	3.4	3.2	3.0	2.6
100°	3.2	3.2	3.2	3.2	3.2	3.0	2.8	2.8	2.6	2.2	1.8
102.5°	2.8	2.8	2.8	2.8	2.6	2.6	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°	587.4	587.4	587.4	587.4	587.4	587.4	587.4	587.4
1°	585.6	585.0	585.2	585.8	586.8	590.4	591.2	592.2
2°	586.2	585.6	585.8	586.2	587.2	590.8	591.4	592.2
3°	587.2	586.2	586.6	586.8	587.2	590.8	591.6	592.2
4°	588.8	587.4	587.6	587.4	587.8	591.0	592.0	592.6
5°	590.6	588.8	589.0	588.6	588.4	591.6	592.4	593.0
6°	592.6	590.6	590.6	589.8	589.4	592.2	592.8	593.4
7°	595.2	592.4	592.2	591.2	590.6	593.0	593.2	593.8
8°	598.0	594.6	594.4	593.2	591.8	593.8	594.2	594.6
9°	600.8	597.0	596.4	594.8	593.2	594.8	595.0	595.0
10°	604.0	599.6	598.8	597.0	595.2	596.0	596.0	596.2
11°	607.2	602.4	601.4	599.0	597.0	597.6	597.2	597.0
12°	609.8	605.0	604.2	601.4	599.0	599.2	598.6	598.6
13°	612.6	608.0	606.6	604.0	601.2	601.2	600.4	600.6
14°	614.2	610.4	609.2	606.4	603.6	603.4	602.2	602.2
15°	615.2	612.2	611.4	609.2	606.2	605.8	604.0	604.2
17.5°	612.4	615.0	616.0	616.0	613.0	612.0	609.4	609.8
20°	593.8	605.8	616.2	620.2	619.0	619.0	616.0	615.8
22.5°	551.4	582.0	606.8	620.6	624.4	626.0	623.8	623.0
25°	483.0	533.6	580.2	611.2	626.0	632.8	631.4	631.4
27.5°	398.0	468.2	533.4	588.4	620.2	636.6	639.2	640.2
30°	318.9	388.9	468.6	544.4	602.0	635.6	646.2	649.0
32.5°	250.3	313.3	391.7	486.6	567.8	626.6	650.8	656.7
35°	196.5	247.1	319.5	413.0	518.2	603.4	649.2	662.7
37.5°	155.1	196.7	257.7	345.1	455.0	564.2	637.8	661.5
40°	125.0	157.5	205.9	283.7	389.1	513.6	613.2	650.2
42.5°	102.6	128.4	167.9	232.7	329.7	457.4	576.2	626.2
45°	87.2	106.2	137.7	191.7	278.3	401.4	529.2	586.6
47.5°	77.8	90.8	115.8	160.7	236.3	350.3	475.0	533.4
50°	69.8	80.4	99.6	136.7	201.7	302.1	416.8	471.0
52.5°	61.4	71.0	87.2	117.6	173.3	259.9	359.9	407.0
55°	54.4	62.0	76.4	103.0	149.5	221.9	303.9	342.9
57.5°	48.0	54.4	66.4	89.8	130.2	187.9	253.1	286.1
60°	42.0	47.6	58.0	77.4	110.8	156.1	206.5	234.1
62.5°	37.6	41.6	50.6	66.8	92.8	128.6	168.9	188.1
65°	33.2	36.8	43.6	56.8	77.0	103.8	135.1	149.7
67.5°	28.2	32.0	37.2	48.0	62.8	83.0	106.6	116.4
70°	24.4	26.8	31.6	39.6	50.8	65.8	82.8	90.0
72.5°	20.8	22.4	26.2	32.0	40.0	51.2	63.4	68.4
75°	17.8	19.0	21.0	25.0	31.0	38.8	47.0	50.8
77.5°	15.2	15.6	16.8	19.2	22.8	28.4	34.0	36.4
80°	12.6	13.0	13.0	14.2	16.2	19.6	22.8	24.4
82.5°	10.4	10.4	10.4	10.4	11.0	12.6	14.0	14.8
85°	8.4	8.2	7.8	7.4	7.2	7.0	7.4	7.6
87.5°	7.0	6.6	5.8	5.0	4.2	3.4	2.8	2.8



TEST NUMBER: P273404

CATALOG NUMBER: 0.05-03W-835-30-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
90°	5.4	5.0	4.2	3.4	2.4	1.4	0.8	0.4
92.5°	4.2	3.6	2.8	2.0	1.2	0.4	0.0	0.0
95°	3.0	2.6	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)