

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: P273437

Luminaire Tested: **0.05-06W-840-90SYM-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273437
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-840-90SYM-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 90 DEGREE SYMMETRIC OPTIC.
HIGH OUTPUT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1469.0 lumens
Efficiency: N/A
Efficacy: 63.3 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

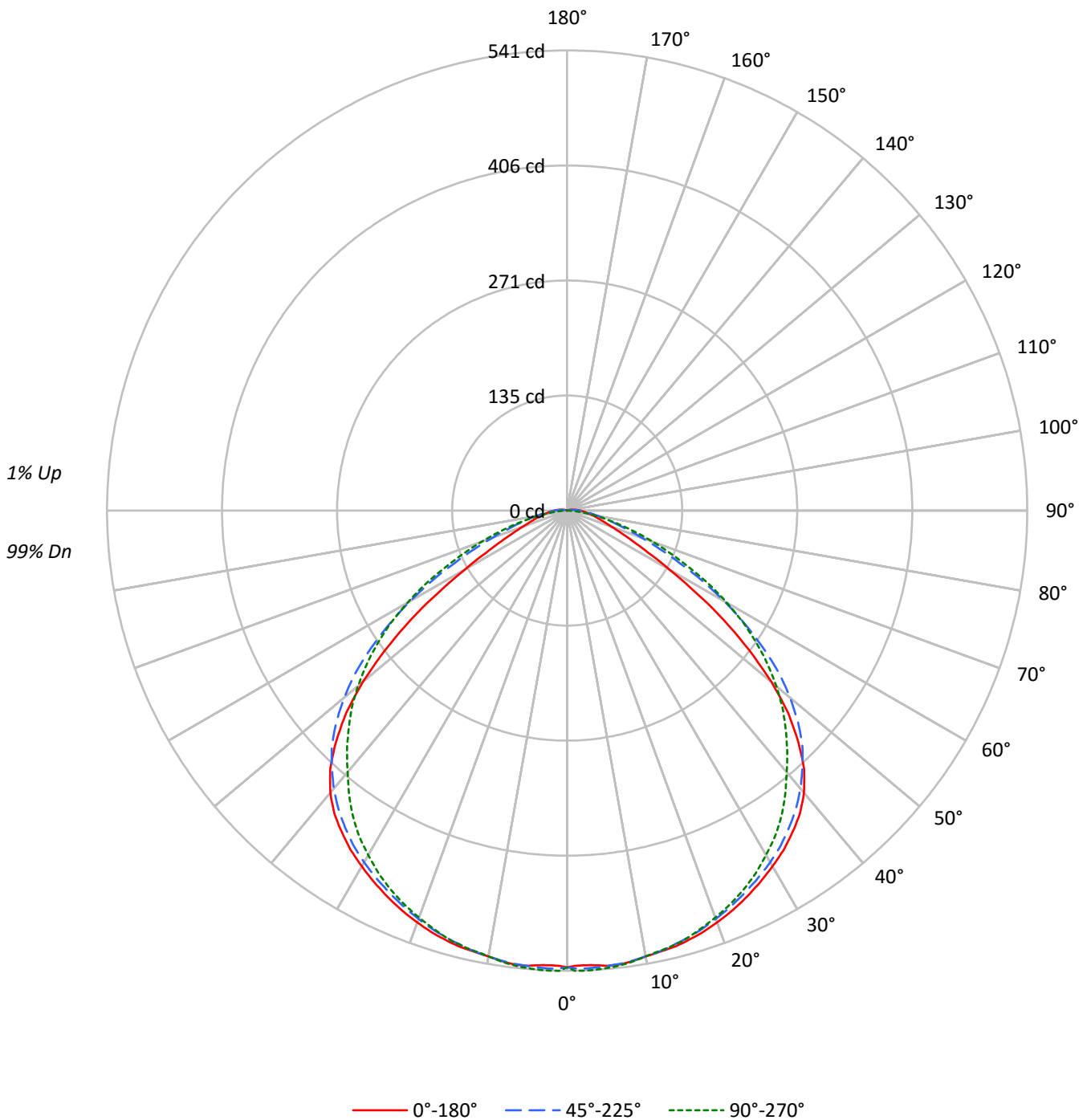
Input Watts (W): 23.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	11893	11893	11893
5°	11945	11945	11998
10°	11968	11968	11968
15°	12063	12001	12017
20°	12143	12039	11999
25°	12231	12099	12006
30°	12347	12209	11956
35°	12483	12299	11867
40°	12522	12334	11606
45°	12037	12250	11377
50°	10800	11788	11058
55°	8709	10856	10501
60°	6173	9464	9601
65°	4464	7660	8284
70°	3600	6047	6927
75°	3379	4988	5484
80°	3736	4731	4170
85°	5462	5970	2769



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.1	3.5
10°-20°	147.8	10.1
20°-30°	228.4	15.5
30°-40°	282.5	19.2
40°-50°	293.0	19.9
50°-60°	235.5	16.0
60°-70°	135.7	9.2
70°-80°	62.1	4.2
80°-90°	23.8	1.6
90°-100°	7.5	0.5
100°-110°	1.7	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°	427.3	29.1
0°-40°	709.8	48.3
0°-60°	1238.2	84.3
0°-90°	1459.8	99.4
90°-120°	9.2	0.6
90°-150°	9.2	0.6
90°-180°	9.0	0.6
0°-180°	1469.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	537	537	537	537	537	
5°	537	537	537	535	540	51
15°	526	526	524	521	524	149
25°	501	499	495	490	491	231
35°	462	459	455	442	439	289
45°	384	389	391	373	363	294
55°	226	246	281	283	272	201
65°	85	100	146	171	158	88
75°	40	43	58	74	64	43
85°	22	22	24	22	11	19
90°	15	15	15	9	0	8
95°	11	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°	537.1	537.1	537.1	537.1	537.1	537.1	537.1	537.1	537.1	537.1	537.1
1°	535.4	535.1	534.0	534.4	536.8	538.8	539.5	539.2	539.5	538.5	538.1
2°	535.1	534.7	533.7	534.7	536.8	538.5	539.5	539.2	539.2	538.8	538.5
3°	535.1	535.1	533.7	535.1	536.8	538.1	538.8	538.8	538.8	538.5	538.1
4°	536.1	536.1	534.4	535.4	536.4	537.8	538.5	538.1	538.5	538.1	537.8
5°	537.4	536.4	534.7	535.4	536.8	537.4	538.1	537.4	537.8	537.4	537.4
6°	537.4	536.8	535.1	535.1	536.4	536.4	537.1	536.8	537.4	536.8	536.8
7°	536.8	536.1	534.4	534.7	535.4	536.1	536.8	536.4	536.4	536.1	535.7
8°	535.7	534.7	533.0	533.0	534.7	535.4	536.1	535.7	535.7	535.1	535.1
9°	534.0	533.0	531.0	531.3	533.0	534.0	534.7	534.7	534.4	533.7	533.7
10°	532.3	531.3	530.0	530.3	531.7	532.7	533.4	533.7	533.4	532.3	532.0
11°	531.0	530.3	528.6	528.9	531.0	531.7	532.0	532.3	532.0	531.0	531.0
12°	530.0	529.3	527.2	527.6	529.3	530.3	530.3	530.6	530.6	529.3	529.3
13°	528.9	527.9	526.2	526.5	527.6	529.3	529.3	529.3	529.3	527.6	527.9
14°	527.9	526.5	525.2	524.8	525.9	527.6	527.6	527.2	527.2	525.2	526.2
15°	526.2	525.5	524.2	524.2	525.2	525.9	525.9	525.9	525.2	523.5	524.8
17.5°	521.4	520.4	519.4	518.7	520.1	520.7	520.4	520.4	519.4	517.7	519.0
20°	515.3	514.3	513.3	512.6	513.3	513.6	513.6	513.3	512.2	510.9	511.5
22.5°	508.5	507.5	506.4	505.4	506.1	507.1	506.1	506.1	505.1	503.4	503.7
25°	500.6	500.0	498.9	497.9	498.9	499.3	498.3	498.3	497.2	495.2	495.2
27.5°	492.1	492.1	490.8	489.7	491.1	491.1	489.7	490.4	488.4	486.7	487.0
30°	482.9	482.9	481.6	480.5	481.2	481.6	480.2	480.2	478.8	477.5	476.8
32.5°	473.4	473.4	472.0	470.3	470.7	471.3	469.6	468.9	467.6	467.2	466.9
35°	461.8	461.8	460.4	458.7	459.1	459.1	457.7	456.7	455.7	455.0	454.0
37.5°	449.5	449.2	447.8	446.1	446.1	446.8	445.1	443.7	442.4	442.0	441.3
40°	433.2	433.2	431.8	430.8	430.8	431.1	430.1	429.1	427.7	426.7	425.7
42.5°	412.4	412.7	411.0	410.7	412.0	413.1	413.4	412.7	411.4	409.6	409.6
45°	384.4	385.8	384.8	385.1	387.5	389.9	390.9	391.9	391.9	391.2	389.9
47.5°	352.4	351.7	352.1	354.1	356.8	361.6	364.7	367.4	369.1	368.1	368.1
50°	313.5	313.9	314.2	318.0	321.4	328.2	333.6	337.4	340.5	342.2	341.8
52.5°	269.6	272.0	273.0	277.8	282.2	290.0	297.9	304.0	309.8	313.9	314.6
55°	225.6	225.3	229.0	234.5	241.3	250.2	259.7	267.2	275.4	281.2	285.3
57.5°	179.3	181.3	184.4	190.5	198.3	210.3	220.2	229.7	238.9	247.4	253.6
60°	139.4	140.4	143.8	148.9	156.4	167.3	181.0	192.2	202.1	213.7	220.8
62.5°	107.7	108.7	112.1	116.2	123.4	131.6	142.8	154.0	166.3	179.3	187.8
65°	85.2	85.2	87.2	90.7	95.8	103.3	112.1	122.3	133.9	146.2	155.7
67.5°	68.2	68.5	70.2	71.9	75.7	81.5	88.3	96.1	106.3	117.6	127.1
70°	55.6	56.2	57.3	58.3	60.7	64.8	69.5	75.7	83.5	93.4	102.6
72.5°	46.7	46.7	47.4	48.1	49.8	52.5	56.2	60.3	66.8	74.0	81.5
75°	39.5	39.9	39.9	40.6	41.9	43.6	46.0	48.7	52.8	58.3	64.4
77.5°	34.1	33.7	34.4	34.4	35.4	36.5	38.2	39.9	43.3	46.3	50.4
80°	29.3	29.0	29.3	29.3	30.0	30.7	31.4	32.7	35.1	37.1	39.5
82.5°	24.9	24.9	24.9	25.2	25.2	25.6	26.6	27.3	28.3	29.7	31.0
85°	21.5	21.5	21.5	21.5	21.8	21.8	21.8	22.5	22.8	23.5	24.2
87.5°	18.4	18.4	18.4	18.1	17.7	18.4	18.4	18.4	18.7	18.7	18.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
90°	15.3	15.7	15.0	15.0	15.0	15.0	15.0	14.7	14.7	14.7	14.0
92.5°	13.0	13.0	12.6	12.6	12.6	12.3	11.9	11.9	11.2	11.2	10.6
95°	10.6	10.6	10.6	10.2	9.9	9.9	9.5	9.2	8.5	7.8	7.2
97.5°	8.5	8.5	8.2	7.8	7.8	7.8	7.2	6.8	6.5	5.8	4.8
100°	6.5	6.5	6.5	6.5	6.1	5.8	5.5	5.1	4.4	3.7	3.1
102.5°	5.1	5.1	5.1	4.8	4.4	4.1	3.7	3.4	2.7	2.0	1.4
105°	3.7	3.7	3.7	3.4	3.1	2.7	2.4	2.0	1.7	1.0	0.3
107.5°	2.4	2.4	2.4	2.0	2.0	1.7	1.4	1.0	0.3	0.3	0.0
110°	1.4	1.4	1.4	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°	537.1	537.1	537.1	537.1	537.1	537.1	537.1	537.1
1°	535.7	534.7	535.4	535.1	536.8	540.2	540.9	541.2
2°	535.7	534.7	535.7	535.4	536.8	539.8	540.9	541.2
3°	535.4	535.1	535.7	535.4	536.4	539.5	540.9	541.2
4°	535.4	534.7	535.4	535.1	535.7	538.8	540.2	540.5
5°	535.1	534.4	535.1	534.7	535.1	538.5	539.5	539.8
6°	534.4	533.4	534.7	534.0	534.4	537.4	538.8	539.2
7°	533.7	532.3	533.7	533.4	533.4	536.1	537.4	537.8
8°	533.0	531.3	532.7	532.3	532.3	534.7	535.7	536.4
9°	531.7	529.3	531.3	531.0	531.0	533.0	534.0	534.4
10°	530.3	527.9	529.6	530.0	529.3	531.3	532.3	532.3
11°	528.9	526.2	528.2	528.2	527.9	530.0	531.0	530.3
12°	527.2	524.5	526.5	526.5	526.5	527.9	528.9	528.9
13°	525.2	523.1	524.8	524.5	524.8	526.5	527.6	527.6
14°	523.5	521.1	522.8	522.8	522.8	524.8	525.5	525.5
15°	521.8	519.4	520.4	520.7	521.1	523.1	523.8	524.2
17.5°	515.3	513.9	513.6	514.6	515.0	516.0	516.3	516.7
20°	508.8	506.4	506.8	506.8	507.1	509.2	508.8	509.2
22.5°	501.7	498.3	498.3	499.3	498.9	501.3	500.3	501.0
25°	493.1	489.7	488.7	490.4	490.1	491.8	491.4	491.4
27.5°	483.9	481.2	478.8	480.9	479.9	480.9	480.2	480.5
30°	474.7	470.0	468.6	469.3	468.3	469.3	468.3	467.6
32.5°	464.2	458.7	456.0	457.4	455.7	456.7	455.0	454.6
35°	451.9	446.8	442.4	442.0	441.0	440.3	439.3	439.0
37.5°	439.0	433.5	428.7	426.3	424.0	423.3	421.6	421.2
40°	423.6	418.2	411.7	409.3	405.9	404.9	402.1	401.5
42.5°	405.9	401.1	394.7	390.9	388.2	385.8	383.1	383.1
45°	386.8	381.4	374.9	371.8	369.1	366.7	363.6	363.3
47.5°	365.3	360.2	354.8	350.7	348.6	346.3	343.9	343.5
50°	341.1	337.4	333.3	329.2	326.5	323.4	320.7	321.0
52.5°	315.6	312.9	309.8	306.0	303.0	299.6	297.2	297.2
55°	287.6	287.0	284.6	281.2	277.8	274.3	272.0	272.0
57.5°	258.0	259.0	258.3	254.6	251.9	247.4	245.7	245.4
60°	227.3	230.4	230.4	227.3	224.6	220.2	217.8	216.8
62.5°	195.3	199.4	200.7	198.7	196.3	192.2	189.1	188.8
65°	163.6	168.7	171.4	169.7	167.0	162.2	159.5	158.1
67.5°	135.6	140.8	141.4	142.1	139.4	136.0	132.9	131.6
70°	110.4	114.9	116.9	116.6	114.5	111.1	108.0	107.0
72.5°	88.3	92.7	94.7	93.4	91.7	89.0	86.2	84.5
75°	69.9	72.9	74.6	73.3	71.2	68.2	66.8	64.1
77.5°	54.2	56.6	57.6	56.2	53.8	51.5	49.1	47.0
80°	42.3	43.6	44.0	41.6	39.2	36.8	34.1	32.7
82.5°	32.4	33.1	32.4	29.7	26.9	24.2	21.8	20.4
85°	24.9	24.5	23.2	20.4	17.4	14.7	11.9	10.9
87.5°	18.4	17.7	16.0	13.3	10.2	7.5	5.1	4.1



TEST NUMBER: P273437

CATALOG NUMBER: 0.05-06W-840-90SYM-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
90°	13.3	12.6	10.6	8.2	5.5	3.1	1.4	0.0
92.5°	9.5	8.2	6.5	4.4	2.4	0.7	0.0	0.0
95°	6.5	5.1	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)