

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: P273393

Luminaire Tested: **0.05-03W-827-60-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273393
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ITL89169-GONIOPHOTOMETRY)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 0.05-03W-827-60-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 60 DEGREE OPTIC.
STANDARD OUTPUT
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 629.8 lumens
Efficiency: N/A
Efficacy: 39.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 2.92' x L: 0.16' x H: 0.03')
CIE Type: Direct

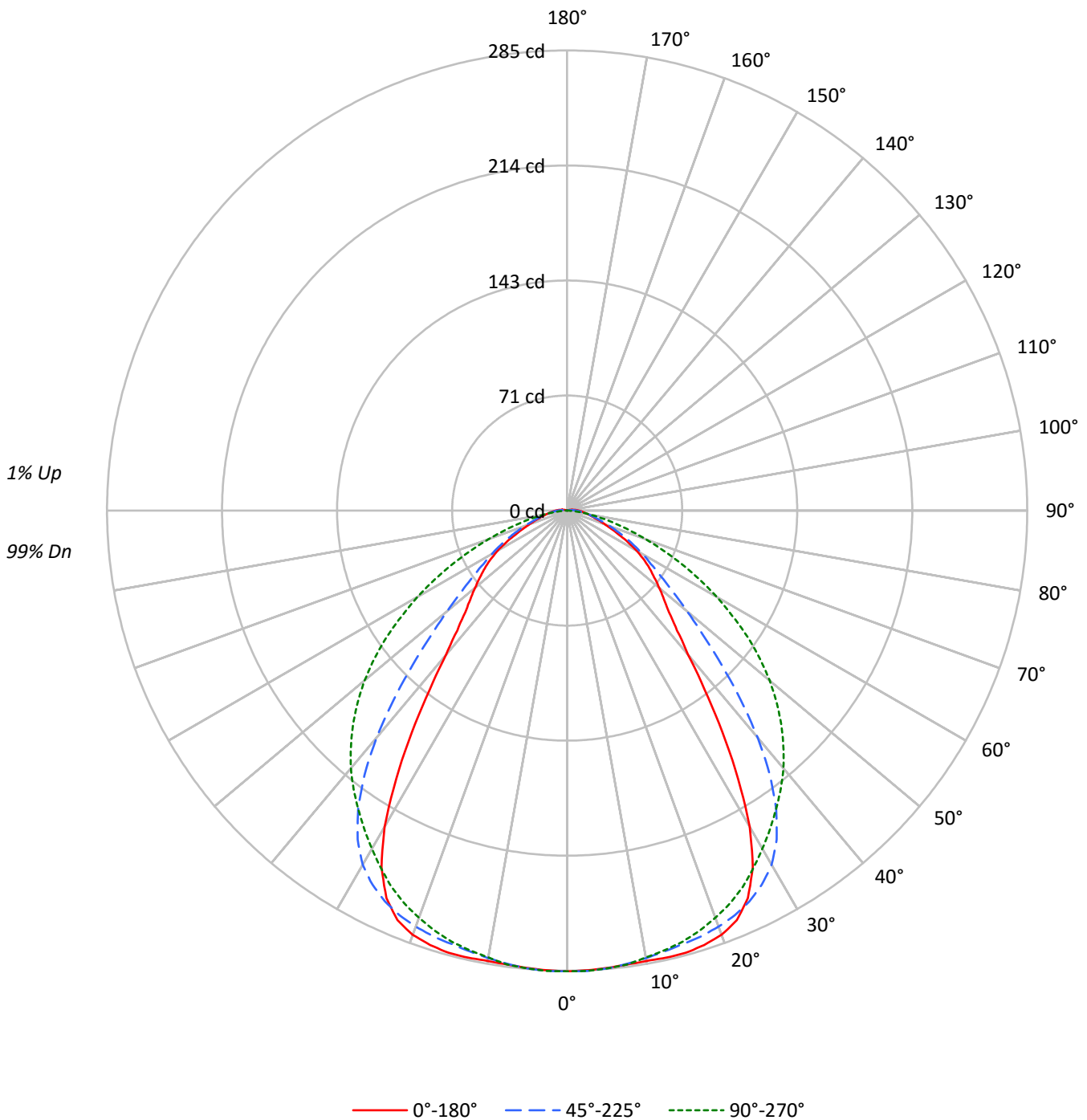
Input Watts (W): 16
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	99	107	104	100	97	99	96	94	95	93	91	92	90	88	86								
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	74								
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	64								
4	86	75	68	62	84	74	67	61	72	65	60	69	64	59	67	62	59	56								
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50								
6	74	62	54	48	72	61	53	48	59	52	47	58	51	47	56	51	46	44								
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40								
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36								
9	61	48	40	35	59	47	40	35	46	40	35	45	39	35	44	39	34	33								
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6523	6523	6523
5°	6432	6462	6525
10°	6391	6396	6512
15°	6433	6368	6525
20°	6424	6390	6507
25°	6211	6376	6462
30°	5457	6251	6349
35°	4205	5806	6256
40°	3064	4973	6172
45°	2483	3904	6007
50°	2222	3010	5760
55°	2018	2411	5367
60°	1776	2043	4826
65°	1431	1715	4145
70°	1148	1411	3379
75°	970	1164	2615
80°	894	1017	1854
85°	895	949	1023



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.1	4.3
10°-20°	78.8	12.5
20°-30°	120.5	19.1
30°-40°	130.2	20.7
40°-50°	108.3	17.2
50°-60°	80.0	12.7
60°-70°	48.5	7.7
70°-80°	23.2	3.7
80°-90°	9.3	1.5
90°-100°	3.2	0.5
100°-110°	0.8	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°	226.4	35.9
0°-40°	356.6	56.6
0°-60°	544.9	86.5
0°-90°	625.8	99.4
90°-120°	4.0	0.6
90°-150°	4.0	0.6
90°-180°	4.0	0.6
0°-180°	629.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	285	285	285	285	285	
5°	284	285	285	285	285	27
15°	284	281	278	276	276	80
25°	265	267	267	259	257	120
35°	168	187	226	229	226	105
45°	89	97	135	186	188	71
55°	62	63	71	122	136	56
65°	36	37	40	60	78	36
75°	18	18	19	24	31	19
85°	10	10	9	7	4	9
90°	7	7	6	3	0	4
95°	5	5	3	1	0	4
105°	2	1	0	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°	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4
2.5°	285.0	285.0	285.0	285.0	285.0	285.0	285.1	285.2	285.3	285.4	285.4
5°	284.3	284.4	284.4	284.5	284.6	284.6	284.6	284.6	284.6	284.6	284.6
7.5°	283.6	283.6	283.6	283.6	283.6	283.5	283.5	283.3	283.3	283.2	283.2
10°	283.2	283.1	282.9	282.7	282.6	282.4	282.1	281.9	281.7	281.4	281.3
12.5°	283.6	283.2	282.9	282.6	282.3	281.8	281.3	280.7	280.2	279.6	279.3
15°	283.6	283.1	282.6	282.1	281.7	281.0	280.2	279.4	278.6	277.8	277.2
17.5°	282.1	281.7	281.3	280.9	280.5	279.9	279.0	278.1	277.2	276.4	275.4
20°	279.6	279.2	278.8	278.4	278.0	277.4	276.6	275.8	275.0	274.2	272.8
22.5°	274.6	274.3	274.1	273.8	273.6	273.2	272.8	272.3	271.8	271.3	269.7
25°	264.8	265.2	265.6	266.0	266.4	266.7	266.8	266.9	266.9	267.0	265.2
27.5°	249.0	250.3	251.6	252.9	254.1	255.5	256.9	258.4	259.8	261.2	259.3
30°	226.0	228.5	230.9	233.4	235.9	238.9	242.5	246.1	249.7	253.3	251.6
32.5°	197.2	200.8	204.4	208.0	211.6	216.5	222.7	229.0	235.2	241.5	240.6
35°	167.7	171.8	175.9	179.9	184.0	190.4	199.2	208.0	216.8	225.6	226.5
37.5°	139.6	143.4	147.1	150.9	154.7	162.0	173.1	184.1	195.1	206.2	209.5
40°	116.6	119.9	123.1	126.4	129.7	137.1	148.7	160.3	171.9	183.5	189.9
42.5°	100.8	103.0	105.2	107.5	109.7	116.2	126.9	137.6	148.3	159.1	168.3
45°	89.2	90.6	92.0	93.3	94.7	99.8	108.7	117.6	126.4	135.3	147.2
47.5°	81.3	82.0	82.8	83.5	84.2	87.8	94.4	101.0	107.5	114.1	127.7
50°	74.5	74.8	75.1	75.5	75.8	78.2	82.9	87.5	92.2	96.8	110.8
52.5°	68.0	68.3	68.5	68.7	69.0	70.6	73.5	76.5	79.5	82.4	95.8
55°	62.3	62.3	62.3	62.3	62.3	63.2	65.1	67.0	69.0	70.9	82.8
57.5°	56.1	56.1	56.0	55.9	55.8	56.4	57.7	59.0	60.2	61.5	71.5
60°	49.7	49.6	49.5	49.4	49.3	49.8	50.8	51.9	52.9	54.0	61.8
62.5°	42.5	42.5	42.6	42.7	42.8	43.3	44.2	45.0	45.9	46.8	52.8
65°	35.6	35.9	36.1	36.3	36.6	37.1	37.8	38.5	39.2	39.9	44.4
67.5°	29.5	29.8	30.0	30.2	30.5	30.9	31.6	32.2	32.8	33.5	36.8
70°	24.8	25.0	25.2	25.3	25.5	25.8	26.4	27.0	27.5	28.1	30.5
72.5°	20.9	20.9	21.0	21.1	21.2	21.4	21.8	22.2	22.6	23.0	24.8
75°	17.6	17.7	17.8	17.9	18.0	18.1	18.4	18.6	18.8	19.1	20.2
77.5°	15.1	15.2	15.3	15.4	15.4	15.5	15.6	15.7	15.8	15.8	16.4
80°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.1
82.5°	11.2	11.2	11.2	11.2	11.2	11.1	11.0	10.9	10.9	10.8	10.7
85°	9.7	9.7	9.7	9.7	9.7	9.6	9.4	9.1	8.9	8.6	8.3
87.5°	8.3	8.3	8.3	8.3	8.3	8.2	7.9	7.7	7.4	7.2	6.7
90°	7.2	7.1	7.1	6.9	6.9	6.7	6.5	6.2	6.0	5.8	5.2
92.5°	6.1	6.0	6.0	5.9	5.8	5.6	5.3	5.0	4.6	4.3	3.7
95°	5.0	5.0	4.9	4.8	4.7	4.5	4.2	3.9	3.6	3.2	2.7
97.5°	4.0	3.9	3.8	3.7	3.6	3.5	3.1	2.8	2.5	2.2	1.8
100°	3.2	3.2	3.1	3.0	2.9	2.7	2.4	2.1	1.8	1.4	1.1
102.5°	2.5	2.4	2.4	2.3	2.2	2.0	1.7	1.4	1.0	0.7	0.6
105°	1.8	1.7	1.7	1.5	1.5	1.3	1.1	0.8	0.6	0.4	0.3
107.5°	1.1	1.0	0.9	0.8	0.8	0.6	0.5	0.3	0.1	0.0	0.0
110°	0.7	0.6	0.6	0.5	0.4	0.3	0.3	0.1	0.1	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.4	0.3	0.2	0.1	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°	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4
2.5°	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4
5°	284.6	284.6	284.6	284.6	284.6	284.6	284.6	284.6
7.5°	283.2	283.2	283.2	283.2	283.3	283.4	283.5	283.6
10°	281.3	281.1	281.1	281.0	281.0	281.0	281.0	281.0
12.5°	279.1	278.9	278.6	278.6	278.6	278.7	278.8	278.9
15°	276.7	276.1	275.6	275.4	275.6	275.9	276.1	276.4
17.5°	274.5	273.5	272.5	272.1	272.3	272.4	272.6	272.8
20°	271.5	270.1	268.8	268.1	268.2	268.3	268.4	268.4
22.5°	268.1	266.5	264.9	264.1	263.9	263.7	263.6	263.4
25°	263.3	261.5	259.7	258.6	258.3	257.9	257.6	257.3
27.5°	257.4	255.5	253.6	252.3	251.6	251.0	250.4	249.7
30°	249.8	248.0	246.3	245.0	244.2	243.4	242.6	241.8
32.5°	239.7	238.8	237.9	237.1	236.3	235.5	234.7	233.9
35°	227.4	228.3	229.2	229.2	228.3	227.4	226.5	225.6
37.5°	212.9	216.3	219.6	220.9	220.0	219.1	218.2	217.3
40°	196.2	202.5	208.8	211.6	210.8	209.9	209.1	208.4
42.5°	177.6	186.9	196.2	200.5	200.0	199.4	198.9	198.3
45°	159.1	171.0	182.9	188.8	188.5	188.1	187.8	187.5
47.5°	141.3	154.8	168.4	175.3	175.5	175.6	175.8	176.0
50°	124.8	138.8	152.8	160.2	161.1	162.0	162.9	163.7
52.5°	109.1	122.5	135.8	143.4	145.1	146.9	148.7	150.4
55°	94.7	106.6	118.5	125.8	128.5	131.1	133.8	136.4
57.5°	81.5	91.5	101.5	108.2	111.4	114.7	118.0	121.3
60°	69.7	77.5	85.3	91.3	95.3	99.2	103.2	107.2
62.5°	58.8	64.8	70.8	75.9	80.0	84.2	88.3	92.5
65°	48.9	53.4	57.9	62.1	66.1	70.1	74.1	78.1
67.5°	40.2	43.5	46.9	50.3	53.9	57.4	60.9	64.4
70°	32.9	35.3	37.7	40.3	43.2	46.1	48.9	51.8
72.5°	26.6	28.3	30.1	32.0	34.1	36.1	38.2	40.3
75°	21.3	22.4	23.5	24.8	26.3	27.7	29.1	30.6
77.5°	16.9	17.5	18.1	18.7	19.5	20.4	21.2	22.0
80°	13.3	13.4	13.6	13.8	14.0	14.3	14.5	14.8
82.5°	10.5	10.3	10.1	10.0	9.7	9.5	9.2	9.0
85°	8.0	7.7	7.3	6.9	6.2	5.6	5.0	4.3
87.5°	6.2	5.8	5.3	4.6	3.9	3.0	2.2	1.4
90°	4.6	4.1	3.5	2.9	2.2	1.4	0.7	0.0
92.5°	3.2	2.6	2.1	1.6	1.2	0.8	0.4	0.0
95°	2.1	1.5	1.0	0.6	0.5	0.3	0.1	0.0
97.5°	1.4	1.0	0.6	0.3	0.3	0.1	0.1	0.0
100°	0.8	0.5	0.1	0.0	0.0	0.0	0.0	0.0
102.5°	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0
105°	0.2	0.1	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



TEST NUMBER: P273393

CATALOG NUMBER: 0.05-03W-827-60-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
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)