

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: P273399

Luminaire Tested: **0.05-03W-830-60-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273399
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-830-60-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 60 DEGREE OPTIC.
STANDARD OUTPUT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 673.6 lumens
Efficiency: N/A
Efficacy: 42.1 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

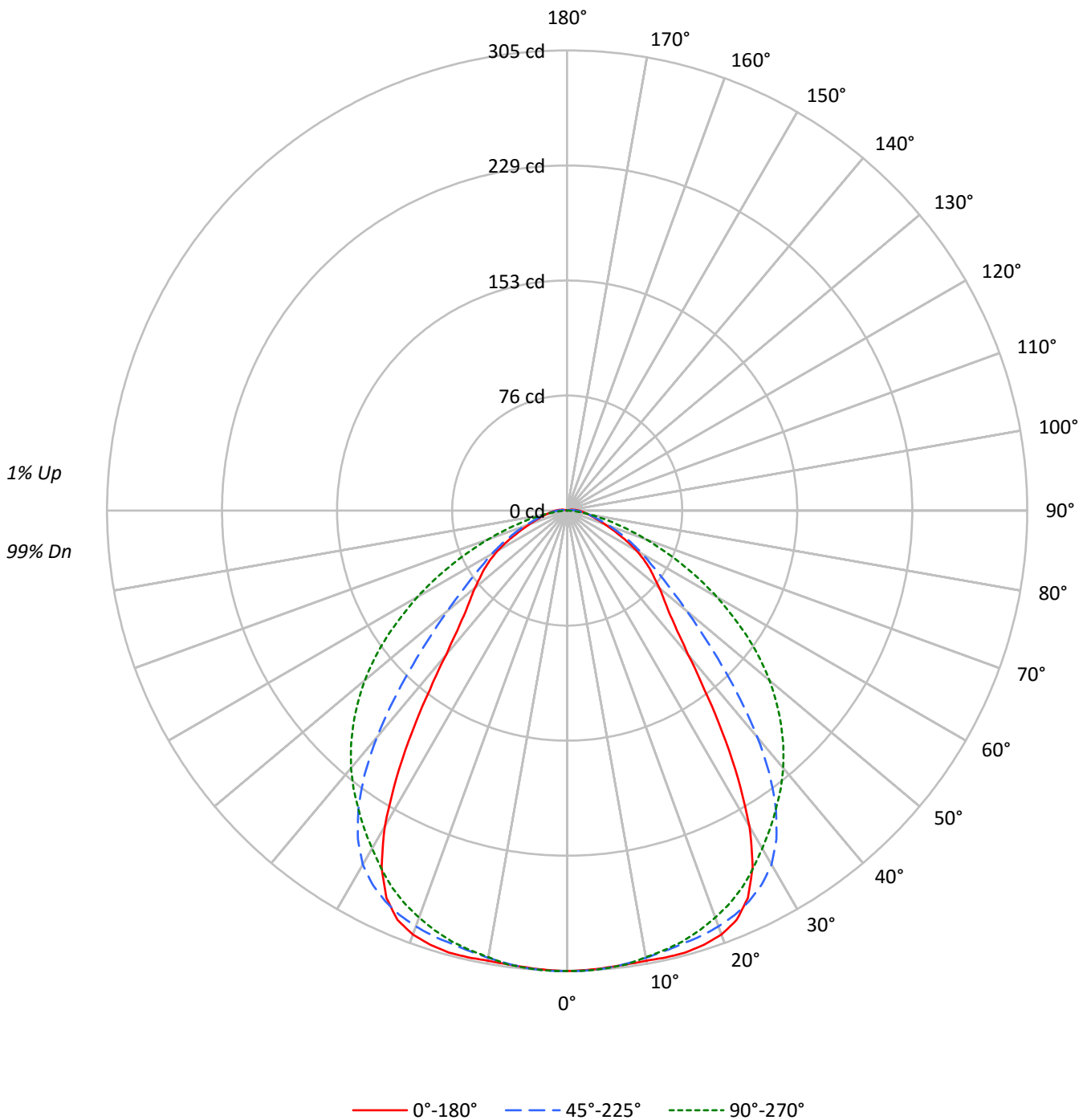
Input Watts (W): 16
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									70									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°	6976	6976	6976
5°	6878	6912	6979
10°	6836	6841	6966
15°	6880	6811	6978
20°	6870	6835	6961
25°	6645	6820	6912
30°	5836	6685	6790
35°	4495	6210	6691
40°	3277	5320	6598
45°	2655	4175	6424
50°	2377	3219	6161
55°	2157	2578	5741
60°	1897	2183	5164
65°	1531	1836	4431
70°	1232	1507	3614
75°	1042	1243	2795
80°	956	1087	1980
85°	959	1016	1095



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.0	4.3
10°-20°	84.2	12.5
20°-30°	128.9	19.1
30°-40°	139.2	20.7
40°-50°	115.8	17.2
50°-60°	85.5	12.7
60°-70°	51.8	7.7
70°-80°	24.8	3.7
80°-90°	9.9	1.5
90°-100°	3.4	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°	242.1	35.9
0°-40°	381.4	56.6
0°-60°	582.8	86.5
0°-90°	669.3	99.4
90°-120°	4.3	0.6
90°-150°	4.3	0.6
90°-180°	4.0	0.6
0°-180°	673.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	305	305	305	305	305	
5°	304	304	304	304	304	29
15°	303	301	297	295	296	86
25°	283	285	286	277	275	128
35°	179	200	241	245	241	112
45°	95	104	145	199	200	76
55°	67	67	76	131	146	59
65°	38	39	43	64	84	38
75°	19	19	20	26	33	20
85°	10	10	9	8	5	9
90°	8	7	6	3	0	4
95°	5	5	4	1	0	4
105°	2	2	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°	305.2	305.2	305.2	305.2	305.2	305.2	305.2	305.2	305.2	305.2	305.2
2.5°	304.8	304.8	304.8	304.8	304.8	304.9	304.9	305.0	305.1	305.2	305.2
5°	304.0	304.1	304.2	304.3	304.4	304.4	304.4	304.4	304.4	304.4	304.4
7.5°	303.3	303.3	303.3	303.3	303.3	303.2	303.2	303.0	303.0	302.9	302.9
10°	302.9	302.7	302.5	302.4	302.2	302.0	301.7	301.5	301.2	301.0	300.9
12.5°	303.3	302.9	302.6	302.2	301.9	301.4	300.8	300.2	299.7	299.0	298.8
15°	303.3	302.8	302.2	301.7	301.2	300.5	299.7	298.8	298.0	297.1	296.5
17.5°	301.7	301.3	300.9	300.5	300.0	299.3	298.4	297.5	296.5	295.6	294.5
20°	299.0	298.6	298.2	297.8	297.3	296.7	295.8	295.0	294.1	293.3	291.8
22.5°	293.7	293.4	293.2	292.9	292.6	292.2	291.7	291.2	290.7	290.2	288.5
25°	283.3	283.7	284.1	284.5	285.0	285.2	285.3	285.4	285.5	285.6	283.6
27.5°	266.3	267.7	269.1	270.4	271.8	273.3	274.8	276.3	277.9	279.4	277.4
30°	241.7	244.3	247.0	249.7	252.3	255.5	259.4	263.2	267.1	270.9	269.1
32.5°	210.9	214.8	218.6	222.5	226.3	231.6	238.2	244.9	251.6	258.2	257.3
35°	179.3	183.7	188.1	192.4	196.8	203.7	213.1	222.5	231.9	241.3	242.2
37.5°	149.3	153.3	157.4	161.4	165.4	173.3	185.1	196.9	208.7	220.5	224.1
40°	124.7	128.2	131.7	135.2	138.7	146.7	159.1	171.5	183.9	196.3	203.1
42.5°	107.8	110.1	112.5	115.0	117.3	124.3	135.7	147.2	158.6	170.1	180.0
45°	95.4	96.9	98.4	99.8	101.3	106.7	116.2	125.7	135.2	144.7	157.4
47.5°	87.0	87.7	88.5	89.3	90.1	93.9	100.9	108.0	115.0	122.0	136.5
50°	79.7	80.0	80.4	80.7	81.1	83.7	88.6	93.6	98.6	103.5	118.5
52.5°	72.7	73.0	73.2	73.5	73.8	75.5	78.6	81.8	85.0	88.1	102.4
55°	66.6	66.6	66.6	66.6	66.6	67.6	69.7	71.7	73.8	75.8	88.6
57.5°	60.0	60.0	59.9	59.8	59.7	60.3	61.7	63.1	64.4	65.8	76.5
60°	53.1	53.0	53.0	52.8	52.8	53.3	54.4	55.5	56.6	57.7	66.1
62.5°	45.4	45.5	45.6	45.7	45.8	46.3	47.2	48.1	49.1	50.0	56.5
65°	38.1	38.4	38.6	38.9	39.1	39.6	40.4	41.2	42.0	42.7	47.5
67.5°	31.6	31.8	32.1	32.3	32.6	33.1	33.8	34.4	35.1	35.8	39.4
70°	26.6	26.7	26.9	27.1	27.2	27.6	28.2	28.8	29.4	30.0	32.6
72.5°	22.3	22.4	22.5	22.6	22.7	22.9	23.4	23.8	24.2	24.6	26.5
75°	18.9	18.9	19.0	19.1	19.2	19.4	19.6	19.9	20.1	20.4	21.6
77.5°	16.2	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	16.9	17.5
80°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	14.0
82.5°	11.9	11.9	11.9	11.9	11.9	11.9	11.8	11.7	11.6	11.5	11.4
85°	10.4	10.4	10.4	10.4	10.4	10.3	10.0	9.7	9.5	9.2	8.9
87.5°	8.9	8.9	8.9	8.9	8.9	8.7	8.5	8.2	8.0	7.7	7.2
90°	7.7	7.6	7.5	7.4	7.4	7.2	6.9	6.7	6.4	6.2	5.5
92.5°	6.5	6.5	6.4	6.3	6.2	6.0	5.7	5.3	5.0	4.6	4.0
95°	5.4	5.3	5.2	5.1	5.0	4.8	4.5	4.2	3.8	3.5	2.8
97.5°	4.2	4.2	4.1	4.0	3.9	3.7	3.3	3.0	2.7	2.3	1.9
100°	3.5	3.4	3.3	3.2	3.1	2.9	2.6	2.2	1.9	1.5	1.2
102.5°	2.7	2.6	2.5	2.4	2.3	2.2	1.8	1.5	1.1	0.8	0.6
105°	1.9	1.8	1.8	1.7	1.6	1.4	1.2	0.9	0.7	0.4	0.3
107.5°	1.2	1.1	1.0	0.9	0.8	0.7	0.5	0.3	0.2	0.0	0.0
110°	0.8	0.7	0.6	0.5	0.4	0.3	0.3	0.2	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°	305.2	305.2	305.2	305.2	305.2	305.2	305.2	305.2
2.5°	305.2	305.2	305.2	305.2	305.2	305.2	305.2	305.2
5°	304.4	304.4	304.4	304.4	304.4	304.4	304.4	304.4
7.5°	302.9	302.9	302.9	302.9	303.0	303.1	303.2	303.3
10°	300.8	300.7	300.6	300.6	300.6	300.6	300.6	300.6
12.5°	298.5	298.3	298.0	297.9	298.0	298.1	298.2	298.3
15°	295.9	295.3	294.7	294.5	294.8	295.1	295.3	295.6
17.5°	293.5	292.5	291.5	291.0	291.2	291.4	291.6	291.7
20°	290.3	288.9	287.5	286.8	286.8	287.0	287.0	287.1
22.5°	286.8	285.1	283.3	282.4	282.2	282.1	281.9	281.7
25°	281.6	279.7	277.7	276.6	276.2	275.9	275.5	275.2
27.5°	275.3	273.3	271.2	269.8	269.1	268.5	267.8	267.1
30°	267.2	265.3	263.4	262.1	261.2	260.3	259.5	258.6
32.5°	256.4	255.4	254.5	253.6	252.7	251.9	251.0	250.2
35°	243.2	244.1	245.1	245.1	244.1	243.2	242.2	241.3
37.5°	227.7	231.3	234.9	236.2	235.3	234.3	233.4	232.5
40°	209.8	216.6	223.3	226.3	225.4	224.5	223.7	222.8
42.5°	190.0	199.9	209.8	214.4	213.9	213.3	212.7	212.1
45°	170.2	182.9	195.7	201.9	201.6	201.2	200.9	200.5
47.5°	151.1	165.6	180.2	187.5	187.7	187.9	188.0	188.2
50°	133.5	148.4	163.4	171.3	172.3	173.2	174.2	175.1
52.5°	116.7	131.0	145.2	153.3	155.2	157.1	159.0	160.9
55°	101.3	114.0	126.8	134.6	137.4	140.2	143.1	145.9
57.5°	87.2	97.9	108.6	115.7	119.2	122.7	126.2	129.7
60°	74.5	82.9	91.3	97.6	101.9	106.1	110.4	114.7
62.5°	62.8	69.3	75.7	81.1	85.6	90.0	94.4	98.9
65°	52.3	57.1	61.9	66.4	70.7	75.0	79.2	83.5
67.5°	43.0	46.6	50.1	53.8	57.6	61.3	65.1	68.9
70°	35.1	37.7	40.3	43.1	46.2	49.3	52.3	55.4
72.5°	28.4	30.3	32.2	34.2	36.4	38.6	40.9	43.1
75°	22.8	24.0	25.2	26.6	28.1	29.6	31.2	32.7
77.5°	18.1	18.7	19.3	20.1	20.9	21.8	22.6	23.5
80°	14.2	14.4	14.5	14.7	15.0	15.3	15.5	15.8
82.5°	11.2	11.0	10.9	10.7	10.4	10.1	9.9	9.6
85°	8.5	8.2	7.9	7.4	6.7	6.0	5.3	4.6
87.5°	6.7	6.2	5.7	5.0	4.1	3.2	2.4	1.5
90°	5.0	4.3	3.8	3.1	2.3	1.5	0.8	0.0
92.5°	3.4	2.8	2.2	1.7	1.3	0.8	0.4	0.0
95°	2.3	1.7	1.1	0.7	0.5	0.3	0.2	0.0
97.5°	1.5	1.0	0.6	0.3	0.3	0.2	0.1	0.0
100°	0.8	0.5	0.2	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



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CATALOG NUMBER: 0.05-03W-830-60-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)