

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: P273405

Luminaire Tested: **0.05-03W-835-60-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P273405  
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-835-60-STD-UNV-AN-3F0  
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 60 DEGREE OPTIC.  
STANDARD OUTPUT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

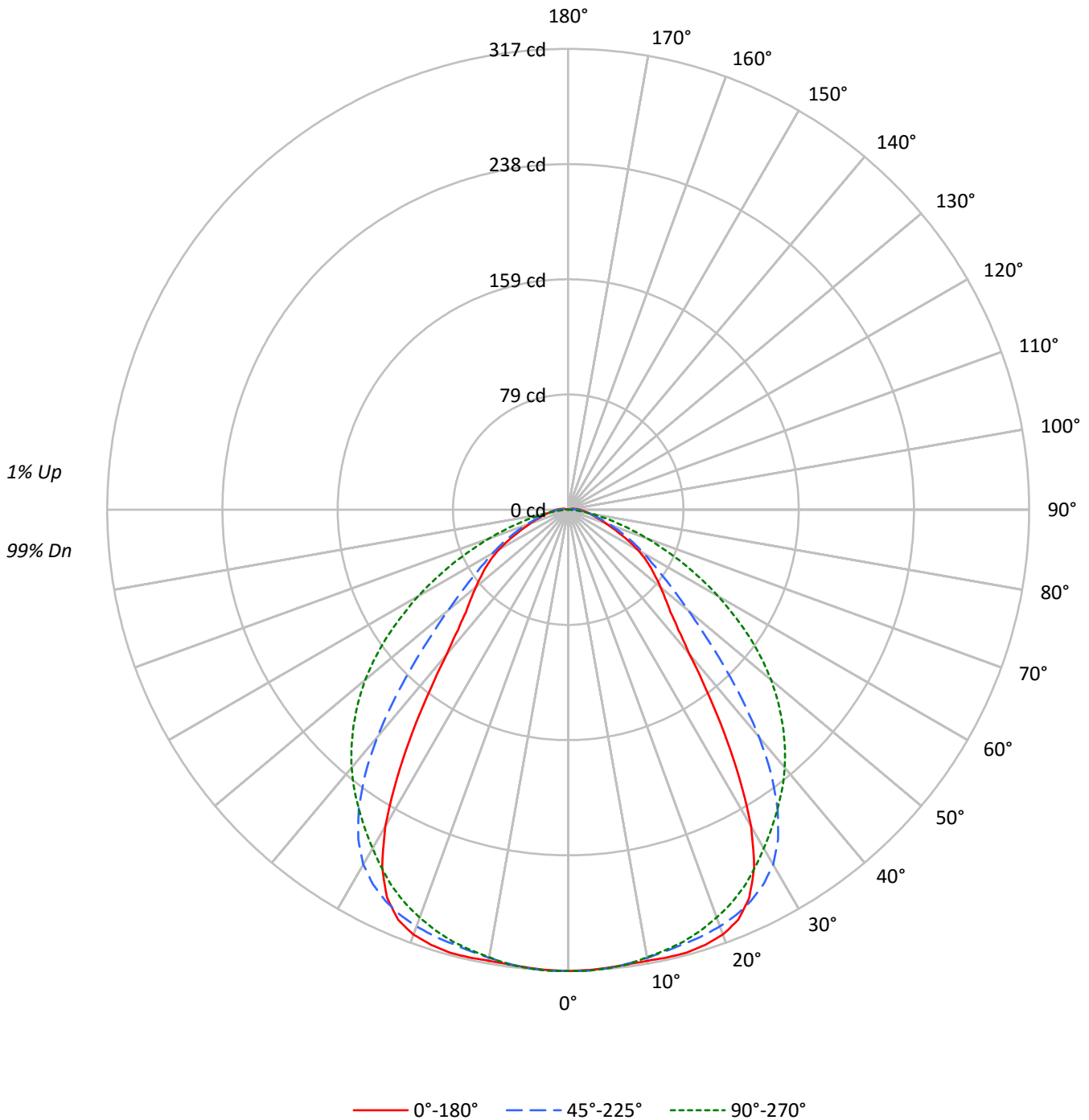
Lumens per Lamp: N/A  
Luminaire Lumens: 700.5 lumens  
Efficiency: N/A  
Efficacy: 43.8 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.26  
Luminous Opening: Rectangular w/ Sides (W: 2.92' x L: 0.16' x H: 0.03')  
CIE Type: Direct

Input Watts (W): 16  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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					99			
1	110	106	102	99	107	104	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	74					74			
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	64					64			
4	86	75	68	62	84	74	67	61	72	65	60	69	64	59	67	62	59	56					56			
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50					50			
6	74	62	54	48	72	61	53	48	59	52	47	58	51	47	56	51	46	44					44			
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40					40			
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36					36			
9	61	48	40	35	59	47	40	35	46	40	35	45	39	35	44	39	34	33					33			
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30					30			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7255	7255	7255
5°	7154	7189	7259
10°	7109	7114	7244
15°	7154	7084	7257
20°	7145	7107	7240
25°	6910	7092	7188
30°	6070	6954	7063
35°	4676	6459	6960
40°	3409	5531	6862
45°	2764	4342	6680
50°	2473	3349	6407
55°	2241	2683	5969
60°	1972	2270	5371
65°	1591	1909	4612
70°	1278	1567	3757
75°	1081	1292	2906
80°	990	1126	2055
85°	996	1060	1142



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.1	4.3
10°-20°	87.6	12.5
20°-30°	134.1	19.1
30°-40°	144.8	20.7
40°-50°	120.5	17.2
50°-60°	89.0	12.7
60°-70°	53.9	7.7
70°-80°	25.8	3.7
80°-90°	10.3	1.5
90°-100°	3.6	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°	251.8	35.9
0°-40°	396.6	56.6
0°-60°	606.1	86.5
0°-90°	696.1	99.4
90°-120°	4.4	0.6
90°-150°	4.4	0.6
90°-180°	4.0	0.6
0°-180°	700.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	317	317	317	317	317	
5°	316	317	317	317	317	30
15°	315	313	309	306	307	89
25°	295	296	297	288	286	133
35°	186	208	251	255	251	117
45°	99	108	150	207	208	79
55°	69	70	79	136	152	62
65°	40	41	44	67	87	40
75°	20	20	21	27	34	21
85°	11	11	10	8	5	10
90°	8	8	6	4	0	4
95°	6	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°	317.4	317.4	317.4	317.4	317.4	317.4	317.4	317.4	317.4	317.4	317.4
2.5°	317.0	317.0	317.0	317.0	317.0	317.0	317.1	317.2	317.3	317.4	317.4
5°	316.2	316.3	316.4	316.5	316.6	316.6	316.6	316.6	316.6	316.6	316.6
7.5°	315.4	315.4	315.4	315.4	315.4	315.4	315.3	315.2	315.1	315.0	315.0
10°	315.0	314.8	314.6	314.5	314.3	314.1	313.8	313.5	313.3	313.0	312.9
12.5°	315.4	315.0	314.7	314.3	314.0	313.5	312.9	312.2	311.6	311.0	310.7
15°	315.4	314.9	314.3	313.8	313.3	312.6	311.7	310.8	309.9	309.0	308.4
17.5°	313.8	313.4	312.9	312.5	312.0	311.3	310.3	309.4	308.4	307.4	306.3
20°	311.0	310.6	310.1	309.7	309.2	308.6	307.7	306.8	305.9	305.0	303.5
22.5°	305.4	305.1	304.9	304.6	304.3	303.9	303.4	302.9	302.3	301.8	300.0
25°	294.6	295.0	295.5	295.9	296.4	296.6	296.7	296.8	296.9	297.0	294.9
27.5°	277.0	278.4	279.8	281.3	282.7	284.2	285.8	287.4	289.0	290.6	288.5
30°	251.4	254.1	256.9	259.6	262.4	265.8	269.8	273.8	277.8	281.8	279.8
32.5°	219.3	223.3	227.3	231.3	235.4	240.8	247.8	254.7	261.6	268.6	267.6
35°	186.5	191.0	195.6	200.1	204.7	211.8	221.6	231.4	241.2	251.0	251.9
37.5°	155.3	159.5	163.7	167.8	172.0	180.2	192.5	204.8	217.1	229.3	233.1
40°	129.7	133.3	137.0	140.6	144.3	152.5	165.4	178.4	191.2	204.1	211.2
42.5°	112.1	114.6	117.0	119.6	122.0	129.2	141.2	153.1	165.0	176.9	187.2
45°	99.3	100.8	102.3	103.8	105.3	111.0	120.9	130.8	140.6	150.5	163.7
47.5°	90.5	91.3	92.1	92.9	93.7	97.7	105.0	112.3	119.6	126.9	142.0
50°	82.9	83.2	83.6	83.9	84.3	87.0	92.2	97.3	102.5	107.7	123.2
52.5°	75.6	75.9	76.2	76.4	76.7	78.5	81.8	85.1	88.4	91.7	106.5
55°	69.2	69.2	69.2	69.2	69.2	70.3	72.4	74.6	76.7	78.9	92.1
57.5°	62.4	62.4	62.3	62.2	62.1	62.8	64.2	65.6	67.0	68.4	79.6
60°	55.2	55.2	55.1	55.0	54.9	55.4	56.6	57.7	58.9	60.0	68.8
62.5°	47.2	47.3	47.4	47.5	47.6	48.1	49.1	50.1	51.1	52.0	58.7
65°	39.6	39.9	40.1	40.4	40.7	41.2	42.0	42.8	43.6	44.4	49.4
67.5°	32.8	33.1	33.3	33.6	33.9	34.4	35.1	35.8	36.5	37.2	40.9
70°	27.6	27.8	28.0	28.1	28.3	28.7	29.3	30.0	30.6	31.2	33.9
72.5°	23.2	23.3	23.4	23.5	23.6	23.9	24.3	24.7	25.2	25.6	27.6
75°	19.6	19.7	19.8	19.9	20.0	20.1	20.4	20.7	20.9	21.2	22.5
77.5°	16.8	16.9	17.0	17.1	17.2	17.3	17.3	17.5	17.5	17.6	18.3
80°	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.6
82.5°	12.4	12.4	12.4	12.4	12.4	12.4	12.3	12.2	12.1	12.0	11.8
85°	10.8	10.8	10.8	10.8	10.8	10.7	10.4	10.1	9.9	9.6	9.2
87.5°	9.2	9.2	9.2	9.2	9.2	9.1	8.8	8.5	8.3	8.0	7.5
90°	8.0	7.9	7.8	7.7	7.6	7.5	7.2	6.9	6.7	6.4	5.8
92.5°	6.8	6.7	6.6	6.5	6.4	6.2	5.9	5.5	5.2	4.8	4.2
95°	5.6	5.5	5.4	5.3	5.2	5.0	4.7	4.3	4.0	3.6	3.0
97.5°	4.4	4.3	4.2	4.1	4.0	3.8	3.5	3.1	2.8	2.4	2.0
100°	3.6	3.5	3.4	3.3	3.2	3.0	2.7	2.3	2.0	1.6	1.2
102.5°	2.8	2.7	2.6	2.5	2.4	2.2	1.9	1.5	1.2	0.8	0.6
105°	2.0	1.9	1.8	1.7	1.6	1.5	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	0.4	0.2	0.0	0.0
110°	0.8	0.7	0.6	0.5	0.4	0.4	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°	317.4	317.4	317.4	317.4	317.4	317.4	317.4	317.4
2.5°	317.4	317.4	317.4	317.4	317.4	317.4	317.4	317.4
5°	316.6	316.6	316.6	316.6	316.6	316.6	316.6	316.6
7.5°	315.0	315.0	315.0	315.0	315.1	315.2	315.3	315.4
10°	312.8	312.7	312.6	312.6	312.6	312.6	312.6	312.6
12.5°	310.5	310.2	309.9	309.8	309.9	310.0	310.1	310.2
15°	307.8	307.1	306.5	306.3	306.6	306.9	307.1	307.4
17.5°	305.3	304.2	303.1	302.7	302.9	303.0	303.2	303.4
20°	302.0	300.5	299.0	298.2	298.3	298.4	298.5	298.6
22.5°	298.2	296.5	294.7	293.7	293.5	293.3	293.1	293.0
25°	292.9	290.9	288.8	287.6	287.3	286.9	286.5	286.2
27.5°	286.3	284.2	282.1	280.6	279.9	279.2	278.5	277.8
30°	277.9	275.9	273.9	272.5	271.7	270.7	269.9	269.0
32.5°	266.6	265.7	264.7	263.7	262.8	261.9	261.0	260.2
35°	252.9	253.9	254.9	254.9	253.9	252.9	251.9	251.0
37.5°	236.8	240.6	244.3	245.7	244.7	243.7	242.7	241.8
40°	218.2	225.2	232.2	235.3	234.4	233.5	232.6	231.7
42.5°	197.6	207.9	218.2	223.0	222.4	221.8	221.2	220.5
45°	177.0	190.2	203.5	210.0	209.6	209.3	208.9	208.5
47.5°	157.1	172.2	187.4	195.0	195.2	195.4	195.6	195.7
50°	138.8	154.4	169.9	178.2	179.2	180.2	181.2	182.1
52.5°	121.4	136.2	151.1	159.5	161.4	163.4	165.3	167.3
55°	105.3	118.6	131.8	140.0	142.9	145.8	148.8	151.7
57.5°	90.7	101.8	112.9	120.3	124.0	127.6	131.2	134.9
60°	77.5	86.2	94.9	101.5	105.9	110.4	114.8	119.3
62.5°	65.4	72.0	78.7	84.4	89.0	93.6	98.2	102.9
65°	54.4	59.4	64.4	69.1	73.5	78.0	82.4	86.9
67.5°	44.7	48.4	52.2	56.0	59.9	63.8	67.7	71.6
70°	36.5	39.2	41.9	44.8	48.0	51.2	54.4	57.6
72.5°	29.5	31.5	33.5	35.6	37.9	40.2	42.5	44.8
75°	23.7	24.9	26.2	27.6	29.2	30.8	32.4	34.0
77.5°	18.9	19.5	20.1	20.9	21.7	22.7	23.5	24.4
80°	14.8	14.9	15.1	15.3	15.6	15.9	16.1	16.4
82.5°	11.6	11.5	11.3	11.1	10.8	10.5	10.3	10.0
85°	8.9	8.5	8.2	7.6	6.9	6.2	5.5	4.8
87.5°	6.9	6.4	5.9	5.2	4.3	3.4	2.5	1.6
90°	5.2	4.5	3.9	3.2	2.4	1.6	0.8	0.0
92.5°	3.6	2.9	2.3	1.8	1.3	0.9	0.4	0.0
95°	2.4	1.7	1.1	0.7	0.5	0.4	0.2	0.0
97.5°	1.5	1.1	0.6	0.4	0.3	0.2	0.1	0.0
100°	0.9	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





TEST NUMBER: P273405

CATALOG NUMBER: 0.05-03W-835-60-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)