

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: P273379

Luminaire Tested: **0.03-5W-830-91-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273379
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-246-20)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 0.03-5W-830-91-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 90 DEGREE ASYMMETRIC OPTIC.
VERY HIGH OUTPUT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 463.2 lumens
Efficiency: N/A
Efficacy: 25.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.22 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 2.92' x L: 0.04' x H: 0.04')
CIE Type: Semi-Direct

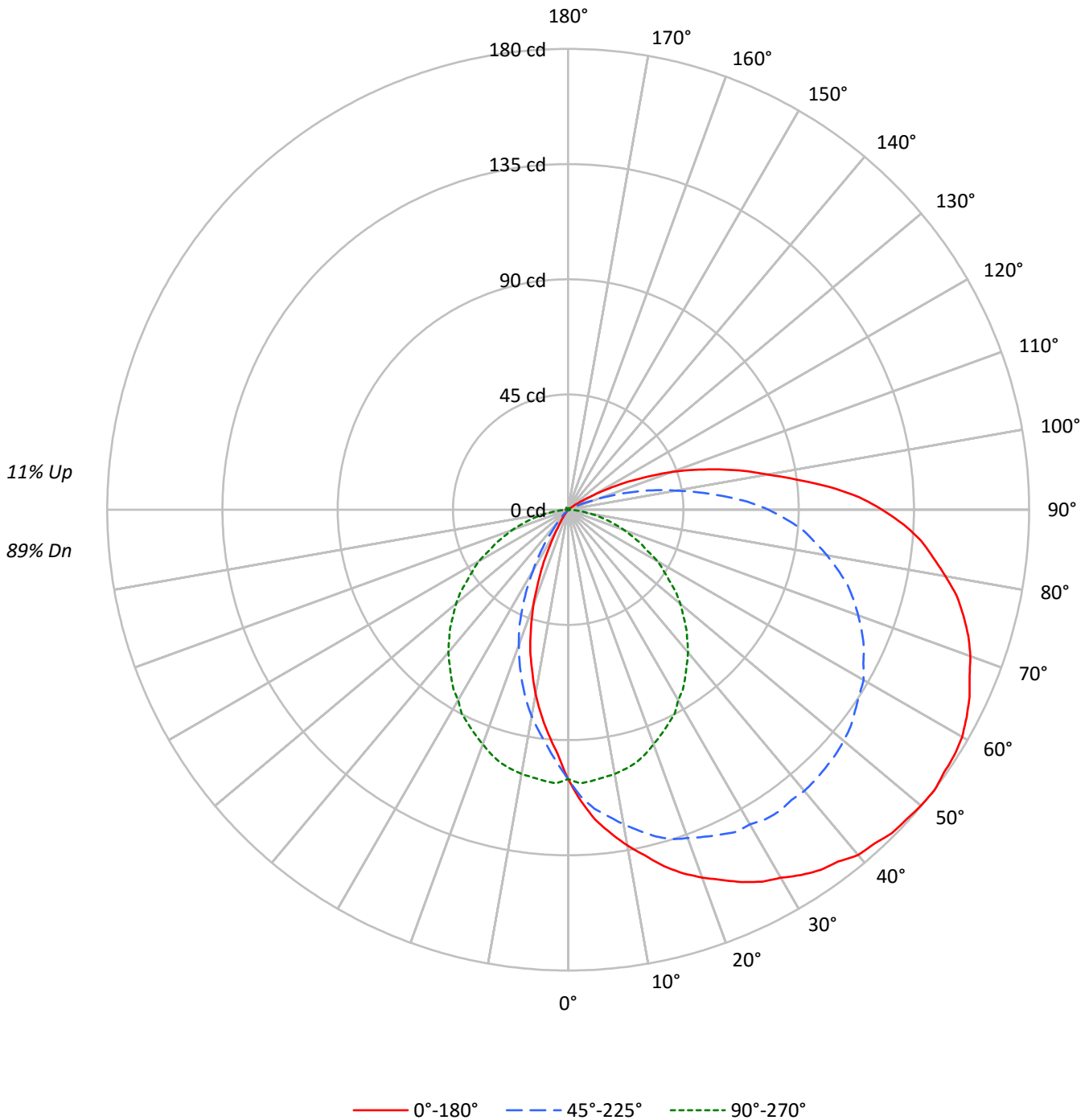
Input Watts (W): 18.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89								
1	102	95	89	84	98	92	86	82	85	81	77	79	76	73	74	71	68	65								
2	91	81	72	65	87	78	70	63	72	66	60	67	62	57	62	58	54	51								
3	82	70	60	52	78	67	58	51	62	55	49	58	52	47	54	49	44	41								
4	75	61	51	43	71	59	50	42	55	47	41	51	44	39	48	42	37	34								
5	68	54	44	37	65	52	43	36	49	41	35	45	39	33	42	36	32	29								
6	63	48	39	32	60	47	38	31	44	36	30	41	34	29	38	32	28	25								
7	58	44	34	28	56	42	33	27	40	32	26	37	30	25	35	29	24	22								
8	54	40	31	24	52	38	30	24	36	29	23	34	27	22	32	26	22	19								
9	50	36	28	22	48	35	27	21	33	26	21	31	25	20	30	24	19	17								
10	47	33	25	20	45	32	25	19	31	24	19	29	23	18	27	22	18	16								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	9318	9318	9318
5°	9942	9439	7203
10°	10184	9402	5597
15°	10421	9345	4129
20°	10566	9142	2743
25°	10697	8970	1506
30°	10763	8713	519
35°	10926	8532	114
40°	11071	8318	25
45°	11192	8039	0
50°	11304	7736	0
55°	11390	7264	0
60°	11515	6984	0
65°	11524	6365	0
70°	11547	5806	0
75°	11556	5068	0
80°	11438	4105	0
85°	11307	2883	33



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.0	2.2
10°-20°	28.4	6.1
20°-30°	42.1	9.1
30°-40°	51.1	11.0
40°-50°	57.6	12.4
50°-60°	61.2	13.2
60°-70°	60.3	13.0
70°-80°	55.3	11.9
80°-90°	45.7	9.9
90°-100°	30.6	6.6
100°-110°	15.1	3.2
110°-120°	4.6	1.0
120°-130°	0.6	0.1
130°-140°	0.3	0.1
140°-150°	0.2	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	80.4	17.4
0°-40°	131.5	28.4
0°-60°	250.3	54.0
0°-90°	411.6	88.9
90°-120°	50.3	10.9
90°-150°	51.3	11.1
90°-180°	52.0	11.2
0°-180°	463.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	105	105	105	105	105	
5°	122	117	106	93	88	12
15°	144	132	102	70	57	41
25°	160	140	92	42	23	74
35°	172	144	80	15	2	108
45°	179	142	65	2	0	138
55°	179	137	48	0	0	161
65°	173	127	31	0	0	171
75°	160	113	16	0	0	168
85°	138	92	3	1	0	115
90°	123	78	0	0	0	67
95°	102	61	0	0	1	79
105°	61	27	0	0	0	65
115°	26	3	0	0	0	26
125°	3	0	1	0	0	4
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°	22.5°	25°	30°	35°	40°	45°
0°	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2
2.5°	113.9	113.2	113.6	113.2	113.2	112.8	112.5	112.5	112.1	111.7	112.1
5°	121.6	120.8	121.2	120.5	119.7	119.4	119.0	118.6	117.9	117.6	117.2
7.5°	127.4	127.0	126.7	126.3	125.6	125.2	124.5	123.7	123.0	122.3	120.8
10°	133.2	132.1	132.1	131.7	131.0	130.3	129.6	129.2	127.4	126.7	124.8
12.5°	138.3	137.9	137.9	136.5	135.8	135.4	134.3	133.6	131.7	130.3	128.5
15°	144.1	143.8	143.4	142.7	141.6	140.5	139.4	137.6	136.1	133.9	132.1
17.5°	148.9	148.5	148.1	146.7	145.9	144.8	143.8	141.6	139.4	137.2	135.0
20°	152.9	152.5	151.8	150.7	148.9	148.1	146.7	144.8	142.3	139.8	136.5
22.5°	156.5	156.1	155.4	153.9	152.5	151.4	149.9	147.4	144.8	141.9	138.3
25°	160.5	160.1	159.0	157.6	155.4	154.3	153.2	150.7	147.4	144.1	140.1
27.5°	163.8	163.4	162.3	160.9	158.7	157.6	156.1	152.9	149.6	145.9	141.9
30°	166.0	166.0	164.9	163.0	160.9	159.4	158.0	154.7	150.7	146.7	141.9
32.5°	169.2	169.2	168.1	166.3	163.8	162.3	160.5	156.9	152.5	148.1	143.4
35°	171.8	171.1	170.0	168.1	165.6	164.1	162.3	158.0	153.6	148.5	143.8
37.5°	173.2	172.9	171.8	170.0	167.1	165.2	163.0	158.7	154.3	148.5	143.0
40°	176.1	175.1	174.0	172.1	169.2	167.1	164.9	160.5	155.0	149.6	143.4
42.5°	176.9	176.9	175.1	172.9	170.0	167.8	166.0	160.5	155.4	148.9	143.0
45°	178.7	178.0	176.5	174.0	170.7	168.5	166.7	161.2	155.4	149.2	142.3
47.5°	179.1	178.7	176.9	174.3	171.1	169.2	166.7	161.2	155.4	148.5	141.6
50°	179.8	179.4	177.6	174.7	171.1	169.6	167.1	161.2	154.7	148.1	140.5
52.5°	180.2	179.4	178.0	175.1	171.4	169.2	166.7	160.9	153.9	146.7	139.0
55°	179.1	178.7	176.9	174.0	170.0	167.8	165.2	159.4	152.5	144.8	136.8
57.5°	178.7	178.0	175.8	172.9	168.9	166.7	164.1	158.3	151.0	143.0	134.7
60°	177.6	176.9	175.1	171.8	167.8	165.6	162.7	156.5	149.6	141.6	133.2
62.5°	175.4	174.3	172.5	169.2	165.2	162.7	160.1	153.9	146.7	139.0	129.9
65°	172.9	172.5	170.7	167.4	163.0	160.5	158.0	151.4	144.1	136.1	127.4
67.5°	169.6	169.2	167.4	164.1	159.8	157.2	154.3	148.1	141.2	132.8	124.1
70°	167.1	166.7	164.5	161.2	156.9	153.9	151.4	145.2	137.9	129.6	120.5
72.5°	163.8	162.7	161.2	158.0	153.6	150.7	147.8	141.2	134.3	125.9	116.8
75°	159.8	158.7	156.9	153.9	149.6	146.7	143.8	137.2	129.9	121.9	112.8
77.5°	155.4	154.3	152.5	149.2	144.8	141.9	139.0	132.8	125.2	116.8	107.7
80°	149.6	148.9	147.0	144.1	139.8	137.2	134.3	127.7	120.1	111.7	102.6
82.5°	143.8	143.8	141.6	138.7	134.3	131.4	128.5	121.9	115.0	107.0	97.2
85°	138.3	137.2	135.8	132.5	128.5	125.6	122.3	116.5	109.2	100.8	92.1
87.5°	131.0	129.9	128.5	125.6	121.6	119.0	115.4	109.5	101.9	94.3	85.2
90°	122.6	122.3	120.5	117.2	113.2	110.6	108.1	102.3	95.0	87.0	78.2
92.5°	113.6	112.8	111.7	108.5	104.8	102.3	99.4	93.5	86.3	78.6	70.2
95°	102.3	101.5	100.1	97.2	93.5	91.3	88.1	82.6	75.7	68.8	60.8
97.5°	89.9	89.5	87.7	85.5	81.9	79.7	77.2	72.1	65.9	59.3	51.7
100°	79.0	78.6	77.5	75.3	72.1	69.9	67.3	63.0	57.1	50.6	42.9
102.5°	70.2	69.9	68.4	66.2	63.3	61.1	59.0	54.2	48.8	41.9	35.3
105°	60.8	60.4	59.0	57.1	54.2	52.0	50.2	45.5	39.7	33.5	27.3
107.5°	51.7	51.0	49.9	48.0	45.1	43.7	41.1	36.8	31.7	25.8	19.3
110°	43.3	42.2	41.1	39.3	36.4	34.9	32.8	28.4	23.7	18.2	12.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	33.8	33.8	32.4	30.6	28.0	26.2	24.4	20.0	15.6	10.9	6.2
115°	25.8	25.1	24.0	22.2	20.0	18.6	16.4	13.1	8.7	5.5	2.9
117.5°	17.8	17.1	16.4	14.9	12.7	11.3	9.8	6.9	4.7	2.5	0.4
120°	11.3	10.2	9.8	8.4	6.9	6.2	5.5	3.6	2.2	0.4	0.4
122.5°	6.6	6.2	5.8	5.1	4.0	3.3	2.2	1.1	0.4	0.4	0.4
125°	2.9	2.5	2.2	1.1	0.7	0.4	0.4	0.4	0.4	0.4	0.0
127.5°	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.4	0.0	0.0	0.0
130°	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.7	0.0	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4
135°	0.0	0.0	0.0	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4
137.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.4	0.4	0.7
140°	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.4	0.0	0.4
142.5°	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
145°	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4
147.5°	0.0	0.4	0.4	0.4	0.4	0.4	0.7	0.4	0.4	0.4	0.7
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
152.5°	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.4
155°	0.4	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.4	0.4
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.4	0.0
160°	0.0	0.0	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
162.5°	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.4	0.4	0.4
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
167.5°	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
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	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.0
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2
2.5°	110.6	110.6	109.9	109.9	109.5	109.2	108.8	108.5	107.7	107.0	105.5
5°	115.4	114.3	113.6	112.8	112.5	112.1	110.3	108.8	108.1	106.3	104.1
7.5°	119.4	117.9	116.5	115.0	114.3	113.2	111.4	109.9	107.7	105.5	102.6
10°	123.0	121.2	119.4	117.2	116.1	115.4	112.8	110.3	107.7	104.8	101.5
12.5°	126.3	124.1	121.6	119.0	117.9	116.5	113.6	110.3	107.0	103.7	99.4
15°	129.2	126.3	123.4	120.5	118.6	117.2	113.6	110.3	106.3	102.3	97.2
17.5°	131.4	127.7	124.8	121.6	119.4	117.6	113.6	109.5	105.2	100.1	94.6
20°	133.2	128.8	125.2	121.6	119.4	117.2	112.8	108.5	103.4	97.5	92.1
22.5°	134.7	130.3	125.6	121.6	119.0	116.8	111.7	107.0	101.2	95.0	88.4
25°	136.1	131.0	125.6	121.6	118.6	116.1	110.6	105.2	99.4	92.4	85.2
27.5°	137.2	131.7	126.3	120.8	117.9	115.0	109.2	103.7	97.2	89.9	81.9
30°	137.2	131.4	125.6	119.7	116.5	113.6	107.0	100.8	93.5	85.9	77.9
32.5°	137.9	131.7	125.9	119.4	116.1	112.8	105.9	99.0	91.7	83.3	75.0
35°	137.6	131.4	125.2	117.9	114.3	110.6	103.7	96.4	88.8	79.7	71.0
37.5°	136.8	130.3	123.4	116.5	112.5	108.5	100.8	92.8	84.8	76.1	66.6
40°	137.2	129.9	122.6	115.4	111.4	107.0	99.4	91.0	82.3	72.8	63.3
42.5°	136.1	128.5	120.5	112.8	108.8	104.5	96.1	87.7	78.6	68.8	58.6
45°	135.4	127.4	119.4	111.4	107.0	102.6	93.9	84.8	75.3	65.1	55.0
47.5°	133.9	125.9	117.6	108.8	104.1	99.4	90.3	81.2	71.3	60.8	50.2
50°	132.5	124.1	115.4	105.9	101.5	96.8	87.0	77.5	67.7	57.1	45.9
52.5°	131.0	122.3	113.2	103.7	99.0	94.3	84.1	73.9	64.1	53.1	42.2
55°	128.5	119.4	109.9	100.4	95.7	90.3	79.7	69.9	59.3	48.0	37.1
57.5°	126.3	117.2	107.0	97.2	92.1	86.6	76.1	65.9	55.0	44.0	32.8
60°	124.1	114.6	104.5	94.6	88.8	83.7	72.8	62.2	51.3	40.4	29.5
62.5°	120.8	110.6	101.2	90.3	84.4	79.3	68.1	57.1	46.6	34.9	24.4
65°	117.9	108.1	97.5	86.6	80.8	75.7	64.4	53.5	42.2	31.3	20.7
67.5°	114.3	104.1	93.9	83.0	76.8	71.3	59.7	48.8	37.9	26.9	16.4
70°	111.0	100.4	89.9	78.6	72.8	67.0	55.7	44.4	33.5	23.3	13.1
72.5°	107.0	96.8	85.9	75.0	68.4	63.0	51.3	40.0	29.5	19.3	9.8
75°	103.0	92.4	81.5	70.6	64.4	58.6	46.9	35.7	25.5	15.6	7.3
77.5°	98.3	88.1	77.2	65.9	59.7	53.9	42.6	31.7	21.1	12.0	4.0
80°	92.8	82.6	71.7	61.1	55.3	49.1	38.2	26.9	17.1	8.7	2.2
82.5°	87.3	77.5	67.0	56.0	50.2	44.8	33.8	22.9	13.1	5.5	0.7
85°	82.3	72.1	61.5	51.0	45.1	40.0	29.5	19.3	9.8	3.3	0.7
87.5°	75.7	65.5	55.3	44.8	39.7	34.2	24.4	14.6	6.2	1.1	0.4
90°	68.1	58.6	48.8	38.6	33.1	28.8	18.9	10.6	3.6	0.4	0.4
92.5°	60.4	51.3	41.5	32.0	27.3	22.6	13.8	6.2	1.1	0.7	1.1
95°	51.7	42.9	33.5	24.7	20.7	16.4	8.4	2.5	1.1	0.4	0.7
97.5°	43.3	34.9	26.2	17.8	13.8	9.8	3.3	0.7	0.4	0.4	0.4
100°	34.6	27.3	19.3	11.3	7.6	4.7	0.4	0.0	0.0	0.0	0.4
102.5°	27.3	20.0	12.7	5.8	3.3	1.5	0.4	0.4	0.4	0.4	0.7
105°	19.7	13.1	6.2	2.2	0.7	0.0	0.0	0.0	0.4	0.4	0.4
107.5°	13.1	6.6	2.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
110°	6.6	2.9	0.7	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P273379

CATALOG NUMBER: 0.03-5W-830-91-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	2.9	0.7	0.0	0.0	0.4	0.4	0.0	0.0	0.4	0.4	0.4
115°	0.7	0.0	0.4	0.0	0.0	0.4	0.4	0.0	0.0	0.4	0.4
117.5°	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4
120°	0.4	0.4	0.0	0.4	0.0	0.4	0.4	0.4	0.4	0.0	0.4
122.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
125°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7
127.5°	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.4	0.4	0.4	0.0
130°	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.4
132.5°	0.4	0.4	0.7	0.4	0.4	0.0	0.4	0.7	0.4	0.4	0.4
135°	0.0	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.7	0.4	0.4
137.5°	0.4	0.7	0.7	0.7	0.4	0.4	0.4	0.7	0.7	1.1	0.4
140°	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
142.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
145°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
147.5°	0.4	0.4	0.4	0.7	0.4	0.4	0.7	0.7	0.7	0.7	0.4
150°	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.4	0.4	0.0
152.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
155°	0.4	0.0	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4
157.5°	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
160°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.4	0.7
162.5°	0.0	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
165°	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.4
167.5°	0.4	0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.4	0.0	0.4
170°	0.4	0.0	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4
172.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
175°	0.4	0.0	0.0	0.0	0.4	0.0	0.4	0.0	0.4	0.4	0.0
177.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.4	0.4
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P273379

CATALOG NUMBER: 0.03-5W-830-91-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2
2.5°	104.8	103.7	103.4	103.0	102.3	101.2	100.8	99.7	99.0	98.6	97.5
5°	102.6	101.2	100.1	99.0	98.3	96.8	95.4	94.6	92.8	92.4	91.3
7.5°	100.4	98.3	96.4	95.4	94.3	92.1	90.3	88.8	87.3	85.9	84.8
10°	98.3	95.4	93.2	91.7	90.3	87.7	85.5	83.3	81.9	79.7	77.9
12.5°	95.7	92.1	89.5	87.7	86.3	83.0	80.4	78.2	76.1	73.5	71.3
15°	92.8	89.2	85.5	83.7	81.5	78.2	75.7	72.4	69.5	66.6	64.4
17.5°	89.5	85.2	81.5	79.0	77.5	73.2	69.5	65.9	63.0	60.4	57.1
20°	86.3	81.5	76.8	74.6	72.4	68.1	63.7	59.3	56.4	52.8	49.9
22.5°	82.6	77.5	72.1	69.5	67.3	61.9	57.9	53.1	49.9	45.5	41.9
25°	78.6	73.2	67.7	64.8	61.9	56.4	51.3	46.2	42.2	37.9	34.2
27.5°	75.3	68.8	62.6	59.7	56.8	50.6	45.5	40.4	34.9	30.9	26.6
30°	70.6	64.1	57.5	53.9	51.0	44.0	38.6	32.8	27.3	22.9	18.9
32.5°	67.3	60.1	53.1	49.5	46.2	38.9	33.1	26.9	21.5	16.4	12.7
35°	62.6	55.3	47.3	43.7	40.0	32.8	26.2	20.7	15.3	10.6	8.0
37.5°	57.9	49.9	41.9	38.2	34.2	26.9	20.0	14.2	9.5	6.2	4.7
40°	54.2	45.5	37.1	33.5	29.5	21.5	14.9	9.1	5.8	4.0	2.5
42.5°	49.5	40.4	32.0	27.7	23.7	16.0	9.5	5.8	3.6	1.8	0.7
45°	44.8	36.0	27.3	22.9	18.6	10.9	6.2	3.6	1.8	0.7	0.4
47.5°	40.4	30.9	22.2	17.8	13.8	6.9	4.0	1.8	0.4	0.4	0.0
50°	35.7	26.6	17.8	13.5	9.5	4.7	2.5	1.1	0.4	0.0	0.4
52.5°	32.0	22.9	13.5	9.5	6.6	3.3	1.5	1.1	0.7	0.4	0.7
55°	27.3	17.8	8.7	5.5	4.0	1.5	0.4	0.0	0.4	0.4	0.0
57.5°	23.3	13.8	5.8	4.0	2.5	0.7	0.4	0.0	0.0	0.4	0.0
60°	19.3	10.2	4.0	2.5	1.8	1.1	0.7	0.7	0.4	0.7	0.7
62.5°	14.6	6.6	1.8	1.1	0.4	0.4	0.0	0.4	0.4	0.0	0.0
65°	11.3	4.0	1.1	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4
67.5°	7.6	2.2	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.0
70°	5.1	1.1	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.0	0.0
72.5°	2.9	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
75°	1.5	0.7	0.4	0.4	0.7	0.0	0.4	0.4	0.4	0.0	0.4
77.5°	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.4	0.0	0.4	0.0
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.0	0.0
82.5°	0.4	0.4	0.4	0.4	0.4	0.7	0.4	0.4	0.0	0.4	0.0
85°	0.7	0.7	0.7	0.7	0.4	0.7	0.4	0.7	0.7	0.4	0.7
87.5°	0.4	0.7	0.7	0.4	0.4	0.7	0.4	0.4	0.4	0.4	0.4
90°	0.4	0.7	0.7	0.4	0.4	0.4	0.4	0.7	0.4	0.4	0.4
92.5°	0.7	1.1	1.1	0.7	0.7	0.7	0.7	0.7	1.1	0.7	0.4
95°	1.1	0.7	1.1	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4
97.5°	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4
100°	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0
102.5°	0.4	0.4	0.7	0.4	0.4	0.7	0.7	0.4	0.4	0.4	0.4
105°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
107.5°	0.0	0.4	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.0	0.4
110°	0.4	0.4	0.4	0.0	0.0	0.4	0.0	0.4	0.4	0.4	0.0



TEST NUMBER: P273379

CATALOG NUMBER: 0.03-5W-830-91-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
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°	0.4	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.4
120°	0.0	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.0	0.4	0.0
122.5°	0.4	0.4	0.4	0.4	0.7	0.4	0.0	0.4	0.4	0.7	0.4
125°	0.4	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
127.5°	0.0	0.4	0.4	0.4	0.4	0.0	0.4	0.0	0.0	0.0	0.0
130°	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.0
132.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.4	0.4	0.4	0.4
135°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
137.5°	0.4	0.7	0.7	0.7	0.7	0.7	0.4	0.7	0.4	0.7	0.4
140°	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.0	0.4	0.0	0.0
142.5°	0.4	0.4	0.0	0.0	0.0	0.4	0.0	0.4	0.4	0.0	0.0
145°	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
147.5°	0.4	0.4	0.7	0.7	0.4	0.4	0.7	0.4	0.4	0.4	0.4
150°	0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.4	0.4	0.7	0.4	0.7	0.4	0.4	0.4	0.4	0.4	0.4
155°	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.0
157.5°	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.0	0.0
160°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
162.5°	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0
165°	0.4	0.0	0.4	0.4	0.4	0.0	0.4	0.4	0.0	0.4	0.0
167.5°	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.0	0.4	0.0
170°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
172.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
175°	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
177.5°	0.4	0.4	0.4	0.7	0.0	0.4	0.4	0.4	0.0	0.4	0.0
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P273379

CATALOG NUMBER: 0.03-5W-830-91-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2
2.5°	97.2	96.4	96.1	95.7	95.4	95.4	95.7	95.4
5°	90.6	89.5	89.2	88.8	88.4	88.1	88.4	88.1
7.5°	83.3	82.6	82.3	81.5	80.8	80.8	80.8	80.8
10°	76.8	75.7	75.0	74.2	73.5	73.2	73.2	73.2
12.5°	69.9	68.1	67.3	67.0	65.5	65.5	65.1	64.8
15°	62.6	60.8	60.1	59.0	58.2	57.1	57.5	57.1
17.5°	55.3	53.1	52.0	51.0	50.2	49.1	49.1	48.4
20°	47.3	45.1	44.0	42.9	41.5	40.4	40.4	39.7
22.5°	39.3	36.4	35.7	34.2	33.1	31.7	31.3	30.6
25°	30.9	28.4	26.9	25.8	24.4	22.9	22.2	22.6
27.5°	23.3	20.4	19.3	18.2	16.4	14.9	14.2	14.2
30°	15.3	12.4	11.3	10.6	9.1	8.4	7.6	8.0
32.5°	9.8	8.4	7.6	6.6	5.8	5.1	5.1	4.7
35°	5.8	4.7	4.0	3.6	2.5	2.2	1.8	1.8
37.5°	2.9	1.8	1.1	0.7	0.4	0.4	0.4	0.0
40°	1.5	0.7	0.4	0.4	0.0	0.4	0.4	0.4
42.5°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.4	0.0	0.0	0.0	0.0	0.4	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.4	0.4	0.0	0.0	0.4	0.0	0.0	0.0
52.5°	0.4	0.7	0.4	0.7	0.4	0.4	0.4	0.0
55°	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.4	0.4	0.7	0.0	0.4	0.7	0.4	0.0
62.5°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.4	0.4	0.4	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.4	0.4	0.4	0.4	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0
80°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.4	0.0	0.0	0.4	0.0	0.4	0.0
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
87.5°	0.4	0.4	0.4	0.0	0.4	0.4	0.0	0.4
90°	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.4
92.5°	0.7	0.4	0.4	0.7	0.4	0.4	0.4	1.1
95°	0.4	0.4	0.4	0.7	0.7	0.4	0.4	0.7
97.5°	0.0	0.4	0.0	0.0	0.4	0.4	0.4	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.4	0.4	0.0	0.4	0.7	0.4	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
107.5°	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.4
110°	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.0



TEST NUMBER: P273379

CATALOG NUMBER: 0.03-5W-830-91-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
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	0.4	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.4	0.4	0.4	0.0	0.0	0.0	0.4
125°	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4
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°	0.4	0.0	0.0	0.0	0.4	0.4	0.0	0.0
135°	0.0	0.4	0.4	0.4	0.0	0.0	0.0	0.0
137.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	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	0.4	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.4	0.4	0.4	0.4	0.0	0.0	0.4	0.0
155°	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
160°	0.4	0.0	0.4	0.4	0.4	0.4	0.0	0.0
162.5°	0.0	0.0	0.4	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	0.4	0.0	0.0	0.0	0.0	0.4	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

(END OF REPORT)