

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: P273388

Luminaire Tested: **0.03-5W-840-90-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273388
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-246-19)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 0.03-5W-840-90-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 90 DEGREE SYMMETRIC OPTIC.
VERY HIGH OUTPUT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1038.5 lumens
Efficiency: N/A
Efficacy: 56.7 lumens/watt
Spacing Criteria (0/90/45): 1.39 / 1.2 / 1.52
Luminous Opening: Rectangular (W 2.92' x L: 0.06' x H: 0')
CIE Type: Direct

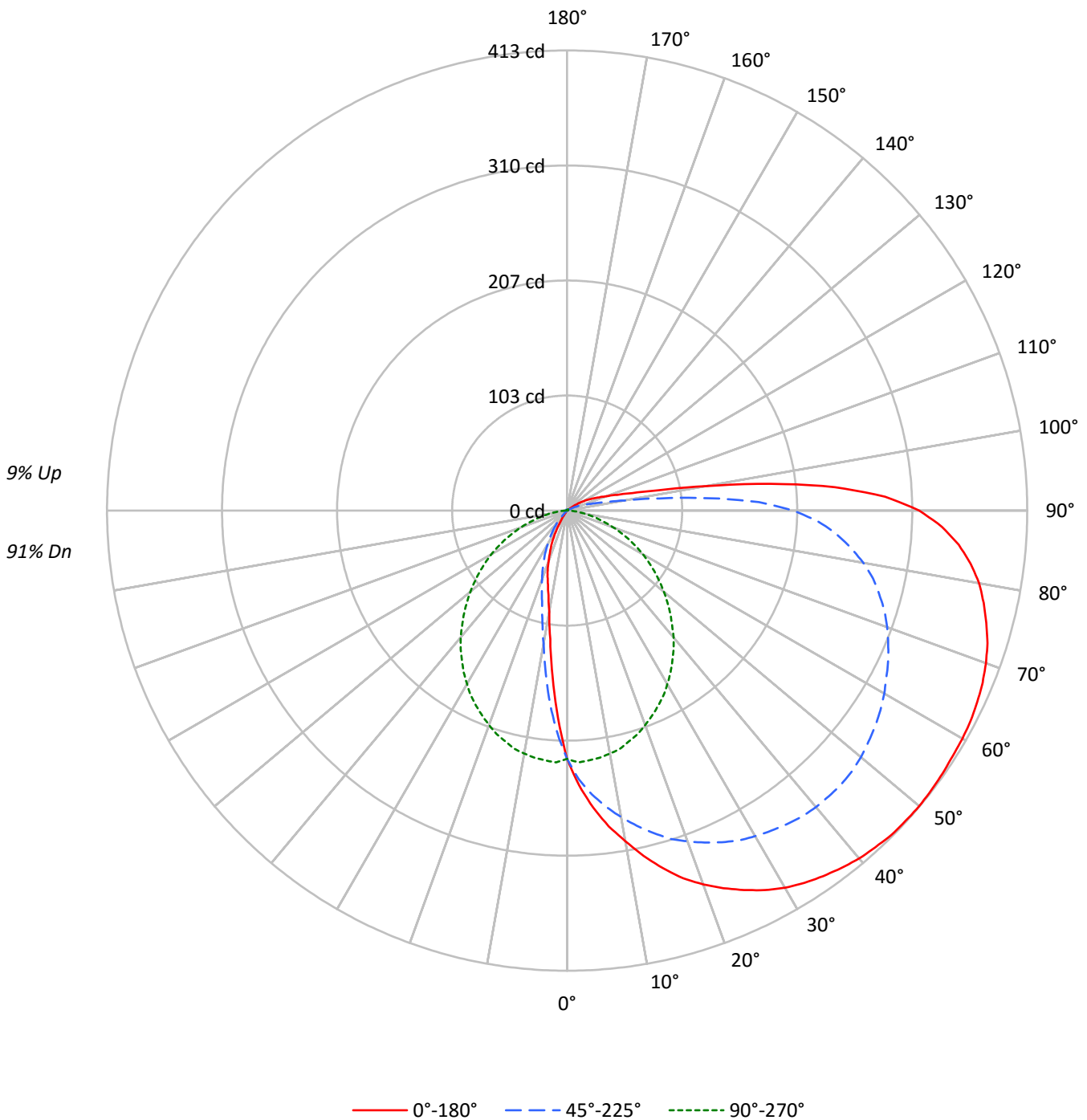
Input Watts (W): 18.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	91
1	102	95	88	83	98	91	86	81	85	81	76	80	76	72	75	72	69	66
2	90	80	71	64	87	77	69	62	72	65	59	67	61	56	63	58	54	51
3	81	68	59	51	78	66	57	50	62	54	47	58	51	45	54	48	44	41
4	74	60	49	42	71	58	48	41	54	46	39	50	43	38	47	41	36	33
5	67	53	43	35	65	51	42	34	48	40	33	45	38	32	42	36	31	28
6	62	47	37	30	59	46	36	30	43	35	29	40	33	28	38	31	27	24
7	57	42	33	26	55	41	32	26	39	31	25	36	29	24	34	28	23	21
8	53	39	29	23	51	37	29	23	35	28	22	33	26	21	31	25	21	18
9	50	35	26	20	48	34	26	20	32	25	20	31	24	19	29	23	18	16
10	46	32	24	18	45	32	24	18	30	23	18	28	22	17	27	21	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	13156	13156	13156
5°	15856	13342	8885
10°	18066	13281	5552
15°	20320	13113	4084
20°	22433	12869	3079
25°	24478	12594	2111
30°	26653	12259	1084
35°	28870	11858	231
40°	31426	11454	15
45°	34379	10939	0
50°	37902	10399	0
55°	42342	9862	0
60°	48372	9294	0
65°	56754	8565	28
70°	69058	7579	0
75°	88839	6525	0
80°	127686	5339	68
85°	239021	3997	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.2	1.9
10°-20°	56.4	5.4
20°-30°	88.1	8.5
30°-40°	113.1	10.9
40°-50°	131.7	12.7
50°-60°	142.0	13.7
60°-70°	143.4	13.8
70°-80°	135.4	13.0
80°-90°	116.4	11.2
90°-100°	67.6	6.5
100°-110°	16.7	1.6
110°-120°	5.4	0.5
120°-130°	1.4	0.1
130°-140°	0.6	0.1
140°-150°	0.1	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	164.7	15.9
0°-40°	277.8	26.8
0°-60°	551.6	53.1
0°-90°	946.8	91.2
90°-120°	89.7	8.6
90°-150°	91.7	8.8
90°-180°	92.0	8.9
0°-180°	1038.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	223	223	223	223	223	
5°	268	256	225	174	150	27
15°	332	300	214	86	67	95
25°	376	328	193	50	32	174
35°	400	344	164	23	3	252
45°	412	348	131	4	0	318
55°	411	338	96	0	0	369
65°	406	318	61	1	0	403
75°	389	290	29	1	0	411
85°	353	243	6	1	0	293
90°	316	203	1	1	0	172
95°	241	128	1	1	0	172
105°	61	25	1	1	0	73
115°	25	7	1	1	0	26
125°	7	1	1	1	0	7
135°	0	1	1	1	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°	222.8	222.8	222.8	222.8	222.8	222.8	222.8	222.8	222.8	222.8	222.8
2.5°	246.8	245.3	245.5	245.5	244.0	243.8	243.2	241.7	241.5	241.5	238.7
5°	267.5	266.3	266.1	265.4	263.1	262.0	260.8	258.6	257.2	255.7	252.1
7.5°	285.8	284.3	283.7	282.6	280.1	278.4	276.0	273.3	270.7	268.2	263.3
10°	301.3	300.0	298.9	297.6	294.9	292.6	289.8	286.4	283.7	279.4	273.7
12.5°	317.4	315.9	314.8	312.7	310.4	307.2	303.6	298.9	295.3	289.8	283.0
15°	332.4	330.9	329.4	326.9	324.1	320.1	315.7	310.6	306.3	299.6	291.3
17.5°	346.0	344.5	343.0	340.5	337.1	332.4	327.3	321.2	315.7	308.9	299.6
20°	357.0	355.3	353.8	351.7	347.5	342.6	337.1	330.3	324.1	315.9	306.1
22.5°	366.8	364.9	363.4	361.0	356.6	351.7	345.3	338.4	331.6	322.5	311.6
25°	375.7	374.0	372.3	369.9	365.3	359.6	353.4	345.8	338.1	328.4	316.7
27.5°	384.1	382.4	381.0	377.8	373.3	367.4	360.8	352.6	343.9	333.7	321.0
30°	390.9	389.4	387.7	384.8	379.9	374.0	366.8	357.9	348.5	337.5	324.4
32.5°	396.2	395.0	393.5	390.1	385.4	379.1	371.2	362.3	352.3	340.7	327.1
35°	400.5	400.3	398.3	394.5	390.3	383.5	375.5	366.5	355.7	343.7	329.0
37.5°	404.3	404.1	402.4	398.6	393.9	387.5	378.8	369.9	358.5	346.2	330.7
40°	407.7	407.3	405.6	401.5	397.3	390.5	381.8	372.5	360.6	347.5	331.6
42.5°	409.6	409.4	407.7	403.4	399.0	392.2	383.5	373.3	361.9	347.7	331.6
45°	411.7	411.3	409.2	404.9	400.5	393.5	385.0	374.2	362.3	347.7	331.1
47.5°	412.1	411.9	409.6	405.6	400.7	393.7	385.2	373.8	361.2	346.6	329.2
50°	412.6	412.1	409.6	405.8	400.3	393.7	384.1	373.1	360.2	344.3	326.3
52.5°	412.1	411.3	408.9	404.7	399.4	392.4	382.7	371.6	357.4	340.9	322.5
55°	411.3	410.4	407.9	403.6	398.6	390.7	381.2	369.3	354.7	337.5	317.8
57.5°	410.2	409.2	406.4	402.4	396.7	389.0	379.3	366.3	351.3	333.3	312.7
60°	409.6	408.5	405.3	401.1	395.2	386.9	376.7	363.4	347.7	328.6	307.2
62.5°	408.3	407.0	404.1	399.6	393.0	385.0	373.8	360.0	343.4	323.1	300.4
65°	406.2	404.9	402.0	397.7	390.7	382.4	370.8	357.0	339.2	318.0	293.2
67.5°	403.6	402.4	398.8	394.3	386.9	378.6	366.8	352.1	334.7	311.9	285.4
70°	400.0	399.0	395.4	390.7	383.5	374.2	362.7	347.7	329.0	305.7	277.5
72.5°	395.6	394.5	390.9	385.8	379.1	369.1	357.6	342.6	322.7	298.5	269.0
75°	389.4	388.8	385.2	380.1	372.9	363.4	351.1	335.8	315.9	290.0	259.1
77.5°	382.9	382.0	378.6	373.1	365.5	356.2	343.7	327.5	307.4	281.3	249.3
80°	375.5	374.4	371.0	365.3	357.2	347.3	334.7	317.8	296.8	269.9	238.5
82.5°	365.3	364.4	361.5	355.5	347.5	337.1	324.4	307.0	285.4	256.9	226.4
85°	352.8	352.1	349.2	343.4	335.2	324.8	311.4	294.7	270.9	242.7	214.1
87.5°	336.9	336.7	333.3	327.3	319.3	308.7	294.9	276.9	253.1	225.6	197.2
90°	316.1	315.5	311.0	305.5	297.2	285.8	272.4	254.4	229.4	203.1	176.6
92.5°	285.6	285.8	280.7	275.2	266.3	254.0	241.0	223.7	196.5	172.4	146.7
95°	241.3	242.1	237.9	230.2	221.1	209.7	194.6	177.4	151.2	127.6	106.4
97.5°	184.0	183.6	179.6	169.8	163.2	149.2	137.4	120.8	101.5	83.7	68.1
100°	125.9	126.4	123.0	116.8	109.2	98.2	89.3	76.7	64.0	52.2	41.8
102.5°	83.7	84.6	81.0	77.8	72.3	65.9	58.5	51.5	42.2	34.6	27.8
105°	60.6	60.8	58.9	55.1	51.3	47.5	42.0	36.5	30.3	24.6	19.5
107.5°	47.1	47.1	45.6	42.6	40.1	36.3	32.2	27.8	22.7	18.2	13.8
110°	37.7	37.7	36.5	34.6	31.8	28.8	25.4	21.6	17.4	13.8	10.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	31.0	30.7	29.9	27.8	25.7	23.3	20.1	17.0	13.4	10.2	7.4
115°	25.4	25.2	24.4	22.7	20.8	18.7	15.9	13.1	10.2	7.0	3.2
117.5°	20.8	20.8	19.7	18.7	16.7	14.8	12.3	10.0	6.6	2.3	1.1
120°	16.7	16.7	16.1	14.6	13.1	11.2	8.7	5.5	1.5	1.1	0.8
122.5°	12.9	12.9	12.3	10.8	8.7	6.1	3.2	1.1	0.8	1.1	0.8
125°	7.2	7.0	5.9	4.5	2.3	1.1	0.8	0.8	0.6	0.8	0.8
127.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.6	0.8	0.8	0.8
130°	0.8	0.8	0.8	0.8	0.6	0.8	0.8	0.8	0.8	1.1	0.8
132.5°	0.4	0.4	0.6	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6
135°	0.4	0.4	0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.6	0.8
137.5°	0.6	0.6	0.8	0.6	0.6	0.8	0.8	0.8	1.1	0.8	0.8
140°	0.6	0.4	0.6	0.4	0.4	0.6	0.6	0.6	0.6	0.8	0.8
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°	95°	100°	105°
0°	222.8	222.8	222.8	222.8	222.8	222.8	222.8	222.8	222.8	222.8	222.8
2.5°	238.1	236.2	235.3	233.4	231.7	230.0	228.3	226.2	223.2	219.6	217.1
5°	249.9	246.8	244.0	240.6	237.2	233.8	229.6	225.1	219.4	213.7	208.2
7.5°	259.9	255.9	251.9	246.6	241.9	236.6	230.7	223.7	215.8	207.1	198.4
10°	269.0	263.7	258.0	251.4	245.3	238.5	230.7	221.5	211.4	199.7	187.8
12.5°	277.3	270.7	263.5	255.7	247.6	239.6	229.8	219.0	205.9	191.2	176.2
15°	283.9	276.0	267.8	258.2	248.5	238.9	227.7	214.5	199.3	181.7	162.8
17.5°	290.7	281.3	271.6	260.5	249.3	238.3	225.4	210.3	192.5	171.7	150.1
20°	295.5	285.4	274.3	262.0	249.1	236.8	222.4	204.8	184.7	161.5	137.0
22.5°	300.0	288.5	276.0	262.9	248.5	234.3	218.6	199.1	176.8	150.7	124.4
25°	304.2	290.9	277.5	262.7	246.6	231.3	214.3	193.3	168.3	139.9	112.4
27.5°	308.0	292.8	277.9	261.8	244.6	228.1	209.7	187.2	159.8	129.5	100.9
30°	310.4	294.0	277.9	260.1	241.7	223.7	204.2	179.8	150.7	118.5	90.3
32.5°	311.6	294.9	277.3	258.2	238.1	218.8	197.8	172.6	141.6	108.1	80.3
35°	312.9	295.1	276.4	255.7	234.5	213.5	190.8	164.5	132.3	98.2	71.9
37.5°	313.3	294.3	275.0	253.3	230.2	208.0	184.2	156.9	123.2	88.6	64.2
40°	313.5	293.2	272.4	249.9	225.6	202.0	177.0	148.6	114.1	79.9	57.2
42.5°	312.7	291.3	269.9	245.7	219.6	194.8	168.8	139.3	104.1	71.2	50.5
45°	311.2	289.2	266.1	240.8	213.7	187.0	160.3	131.0	96.0	63.6	44.9
47.5°	308.7	285.6	261.2	234.9	206.1	178.5	151.4	122.1	87.1	56.8	39.2
50°	305.7	281.5	255.9	227.5	197.6	170.0	143.1	113.2	79.1	50.7	34.1
52.5°	301.0	276.0	248.9	219.6	189.3	161.3	134.0	104.5	71.2	44.3	29.3
55°	296.0	269.7	241.5	210.9	180.8	152.0	124.4	95.8	63.8	38.4	24.6
57.5°	289.4	262.0	232.6	202.2	171.7	142.9	115.5	87.1	56.2	33.3	19.9
60°	282.2	253.8	223.4	193.6	162.4	133.3	106.0	78.7	49.4	28.2	15.9
62.5°	273.7	244.2	214.3	184.0	152.6	123.2	96.2	69.5	42.6	23.5	12.3
65°	265.0	234.5	204.8	174.3	142.3	113.0	86.3	61.3	36.3	18.7	8.7
67.5°	254.8	224.3	194.0	163.0	131.4	102.2	75.9	52.4	29.9	14.0	5.3
70°	245.7	214.1	183.4	152.0	120.2	90.9	65.9	43.9	23.5	9.8	2.5
72.5°	236.6	204.4	172.6	140.3	108.8	79.7	56.4	36.0	18.0	6.4	1.5
75°	227.3	194.6	162.0	128.7	96.5	69.3	46.9	28.6	12.7	3.4	1.1
77.5°	217.5	184.9	151.2	117.2	85.0	58.7	37.9	21.6	8.5	1.7	1.1
80°	207.3	174.5	140.3	106.2	74.6	49.2	29.5	15.7	5.1	1.3	0.8
82.5°	196.5	163.5	129.1	95.4	64.4	40.1	22.3	10.4	2.1	0.8	0.8
85°	184.0	151.8	118.1	85.2	55.3	32.0	16.3	5.9	1.3	0.8	0.8
87.5°	169.0	137.6	105.2	74.0	46.2	25.7	11.0	3.2	1.3	1.3	1.1
90°	148.6	119.1	88.6	60.2	35.8	18.2	6.8	1.1	1.1	1.1	0.8
92.5°	121.3	93.9	67.2	43.9	24.4	10.6	3.0	1.1	1.3	1.1	0.8
95°	85.4	63.2	43.5	26.9	13.4	4.2	1.3	1.1	1.3	0.8	0.8
97.5°	52.4	37.9	25.2	14.2	6.1	1.3	0.8	1.1	1.1	0.8	0.8
100°	32.0	22.7	14.4	7.4	3.0	1.1	0.8	1.1	1.3	0.8	1.1
102.5°	20.8	14.2	8.5	4.0	0.8	0.8	0.8	1.1	1.1	0.8	1.1
105°	14.0	9.1	5.1	1.3	0.8	0.6	0.8	0.8	0.8	0.8	1.1
107.5°	9.8	5.9	1.7	1.1	0.6	0.6	0.8	0.8	0.8	0.8	0.8
110°	6.6	2.5	1.1	1.1	0.8	0.8	0.6	0.8	0.8	0.8	0.8



TEST NUMBER: P273388

CATALOG NUMBER: 0.03-5W-840-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	3.2	1.1	1.1	1.1	0.8	0.8	0.8	0.8	1.1	0.8	0.8
115°	0.8	0.8	0.8	0.8	0.6	0.8	0.8	0.8	0.8	0.8	0.8
117.5°	0.8	0.8	0.8	0.8	0.8	0.6	0.8	0.8	0.8	0.6	0.6
120°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
122.5°	1.1	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
125°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.6
127.5°	0.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
130°	0.8	1.1	1.1	0.8	1.1	0.8	1.1	1.1	1.1	1.1	1.1
132.5°	0.6	0.6	0.8	0.8	0.6	0.8	0.8	0.6	0.8	0.8	0.8
135°	0.8	0.8	0.8	0.8	1.1	1.1	0.8	0.8	1.1	1.1	1.1
137.5°	0.8	1.1	1.1	1.1	1.1	1.3	1.3	1.1	1.3	1.3	1.3
140°	0.8	1.1	0.8	0.8	1.1	0.8	1.1	1.1	1.1	1.1	1.1
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



TEST NUMBER: P273388

CATALOG NUMBER: 0.03-5W-840-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	222.8	222.8	222.8	222.8	222.8	222.8	222.8	222.8	222.8	222.8	222.8
2.5°	214.3	211.4	208.8	205.6	202.2	200.1	197.8	194.8	193.8	191.2	189.5
5°	202.9	196.9	191.4	185.5	179.1	174.5	170.2	165.4	161.8	157.9	156.7
7.5°	189.7	181.0	172.1	162.8	154.1	147.1	141.2	134.8	130.0	127.0	123.4
10°	175.5	163.7	150.9	140.1	130.0	121.7	115.5	109.2	104.3	100.1	98.2
12.5°	160.5	146.1	131.7	119.6	110.0	102.4	95.8	91.2	87.6	84.6	82.0
15°	144.6	127.6	113.4	101.5	92.6	86.5	81.2	77.6	75.0	72.3	70.4
17.5°	129.7	112.8	97.7	88.2	81.2	75.7	71.2	67.6	65.1	62.8	61.1
20°	115.5	98.6	86.1	77.4	71.2	65.9	61.9	58.5	56.0	53.8	51.9
22.5°	102.4	86.7	75.7	67.8	62.1	57.5	53.2	49.6	47.5	45.2	43.0
25°	90.9	77.0	66.4	59.4	54.5	49.6	45.6	41.8	39.2	36.7	34.8
27.5°	80.8	67.8	58.7	52.2	47.1	42.2	37.9	34.8	31.6	29.0	27.1
30°	71.9	60.2	51.9	45.2	40.1	34.8	31.0	27.1	24.6	21.8	19.7
32.5°	63.8	53.0	45.4	38.8	33.5	28.4	24.4	21.0	17.8	15.1	12.5
35°	56.8	46.6	38.8	32.6	27.6	22.7	18.9	15.1	11.4	8.7	6.6
37.5°	50.0	40.7	33.5	27.1	22.0	17.4	13.1	9.1	6.1	4.0	3.0
40°	44.1	35.6	28.0	22.5	17.2	12.3	8.3	4.9	2.5	1.3	0.6
42.5°	38.6	29.9	23.1	17.4	12.3	7.4	4.2	1.7	0.6	0.4	0.2
45°	33.5	25.4	18.9	13.1	8.1	3.8	1.5	1.1	0.6	0.4	0.2
47.5°	28.4	21.0	14.6	8.7	4.2	1.5	0.8	0.6	0.4	0.4	0.2
50°	24.0	16.7	10.6	5.1	1.9	0.8	0.6	0.6	0.4	0.4	0.2
52.5°	19.5	12.7	6.1	2.1	0.8	0.6	0.4	0.4	0.2	0.4	0.2
55°	15.7	8.7	3.4	1.1	0.6	0.4	0.4	0.4	0.4	0.2	0.2
57.5°	12.3	5.3	1.5	0.8	0.6	0.6	0.4	0.4	0.4	0.2	0.2
60°	8.7	3.0	1.3	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.2
62.5°	5.3	1.5	0.8	0.6	0.4	0.4	0.4	0.4	0.2	0.2	0.2
65°	3.0	1.3	0.8	0.8	0.8	0.6	0.6	0.6	0.4	0.4	0.4
67.5°	1.3	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.2	0.2	0.2
70°	0.8	0.8	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.2	0.4
72.5°	1.1	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.4
75°	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.4
77.5°	0.8	0.8	0.8	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.2
80°	0.8	1.1	1.1	0.8	0.6	0.6	0.4	0.4	0.6	0.4	0.4
82.5°	0.8	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4
85°	1.1	1.1	1.1	0.8	0.8	0.6	0.6	0.6	0.4	0.4	0.4
87.5°	1.1	1.3	1.3	1.1	0.8	0.8	0.6	0.6	0.4	0.6	0.4
90°	0.8	0.8	0.8	0.8	0.6	0.6	0.4	0.6	0.4	0.4	0.2
92.5°	1.1	0.8	0.8	0.8	0.8	0.6	0.6	0.4	0.4	0.4	0.4
95°	1.1	0.8	0.8	0.8	0.8	0.6	0.6	0.6	0.6	0.4	0.4
97.5°	1.1	1.1	0.8	0.8	0.8	0.6	0.6	0.4	0.4	0.4	0.4
100°	0.8	1.1	1.1	1.1	0.8	0.8	0.8	0.6	0.6	0.6	0.6
102.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.6	0.6	0.6	0.6	0.4
105°	0.8	0.8	0.8	0.8	0.6	0.6	0.6	0.4	0.4	0.4	0.4
107.5°	0.6	0.8	0.8	0.6	0.6	0.6	0.4	0.4	0.6	0.4	0.4
110°	0.6	0.6	0.8	0.8	0.8	0.6	0.6	0.6	0.4	0.4	0.4



TEST NUMBER: P273388

CATALOG NUMBER: 0.03-5W-840-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	0.6	0.6	0.8	0.8	0.6	0.6	0.6	0.6	0.4	0.4	0.4
115°	0.8	0.8	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.2
117.5°	0.8	0.8	0.6	0.6	0.4	0.6	0.6	0.4	0.4	0.4	0.2
120°	0.8	0.8	0.8	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.2
122.5°	0.8	0.8	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.4	0.2
125°	0.8	0.8	0.8	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.2
127.5°	0.8	0.8	0.6	0.8	0.6	0.6	0.4	0.6	0.4	0.4	0.4
130°	0.8	0.8	0.8	1.1	0.8	0.6	0.6	0.6	0.4	0.6	0.4
132.5°	0.6	0.6	0.8	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.4
135°	1.1	1.1	1.1	0.8	0.8	0.6	0.6	0.6	0.6	0.6	0.4
137.5°	1.1	1.1	1.1	1.1	0.8	1.1	0.8	0.8	0.8	0.6	0.6
140°	1.1	1.1	0.8	1.1	0.8	0.8	0.8	0.6	0.6	0.4	0.4
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



TEST NUMBER: P273388

CATALOG NUMBER: 0.03-5W-840-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	222.8	222.8	222.8	222.8
2.5°	188.5	189.3	188.3	186.6
5°	153.5	153.7	152.0	149.9
7.5°	120.2	119.8	118.1	116.2
10°	96.0	95.2	93.9	92.6
12.5°	79.9	79.1	78.9	77.6
15°	68.5	67.6	67.4	66.8
17.5°	59.8	58.9	58.5	58.3
20°	50.7	50.0	49.4	49.0
22.5°	42.0	41.1	40.5	39.9
25°	33.5	32.6	31.8	32.4
27.5°	25.9	24.8	23.5	24.0
30°	17.8	17.0	15.9	15.9
32.5°	10.6	9.3	8.5	8.3
35°	4.9	4.0	3.4	3.2
37.5°	1.7	1.1	0.6	0.8
40°	0.6	0.4	0.2	0.2
42.5°	0.2	0.2	0.0	0.0
45°	0.4	0.2	0.2	0.0
47.5°	0.2	0.2	0.0	0.0
50°	0.2	0.2	0.0	0.0
52.5°	0.0	0.0	0.0	0.0
55°	0.2	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0
60°	0.2	0.0	0.0	0.0
62.5°	0.2	0.0	0.0	0.0
65°	0.2	0.2	0.0	0.2
67.5°	0.2	0.2	0.0	0.0
70°	0.2	0.0	0.0	0.0
72.5°	0.2	0.2	0.0	0.0
75°	0.2	0.2	0.0	0.0
77.5°	0.2	0.2	0.2	0.0
80°	0.4	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.0
85°	0.4	0.2	0.2	0.0
87.5°	0.6	0.4	0.4	0.4
90°	0.2	0.2	0.2	0.0
92.5°	0.4	0.2	0.2	0.2
95°	0.4	0.2	0.4	0.4
97.5°	0.4	0.2	0.2	0.2
100°	0.4	0.2	0.4	0.4
102.5°	0.4	0.4	0.2	0.4
105°	0.4	0.2	0.2	0.2
107.5°	0.2	0.2	0.2	0.2
110°	0.2	0.2	0.2	0.2



TEST NUMBER: P273388

CATALOG NUMBER: 0.03-5W-840-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
112.5°	0.2	0.2	0.2	0.0
115°	0.2	0.2	0.0	0.2
117.5°	0.2	0.2	0.0	0.0
120°	0.2	0.2	0.2	0.0
122.5°	0.2	0.2	0.2	0.0
125°	0.2	0.2	0.0	0.2
127.5°	0.2	0.2	0.2	0.2
130°	0.2	0.4	0.2	0.2
132.5°	0.2	0.2	0.2	0.0
135°	0.2	0.2	0.2	0.2
137.5°	0.6	0.6	0.4	0.4
140°	0.4	0.4	0.4	0.2
142.5°	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0

(END OF REPORT)