

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: P273378

Luminaire Tested: **0.03-5W-830-90-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273378
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-830-90-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 90 DEGREE SYMMETRIC OPTIC.
VERY HIGH OUTPUT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 979.8 lumens
Efficiency: N/A
Efficacy: 53.5 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

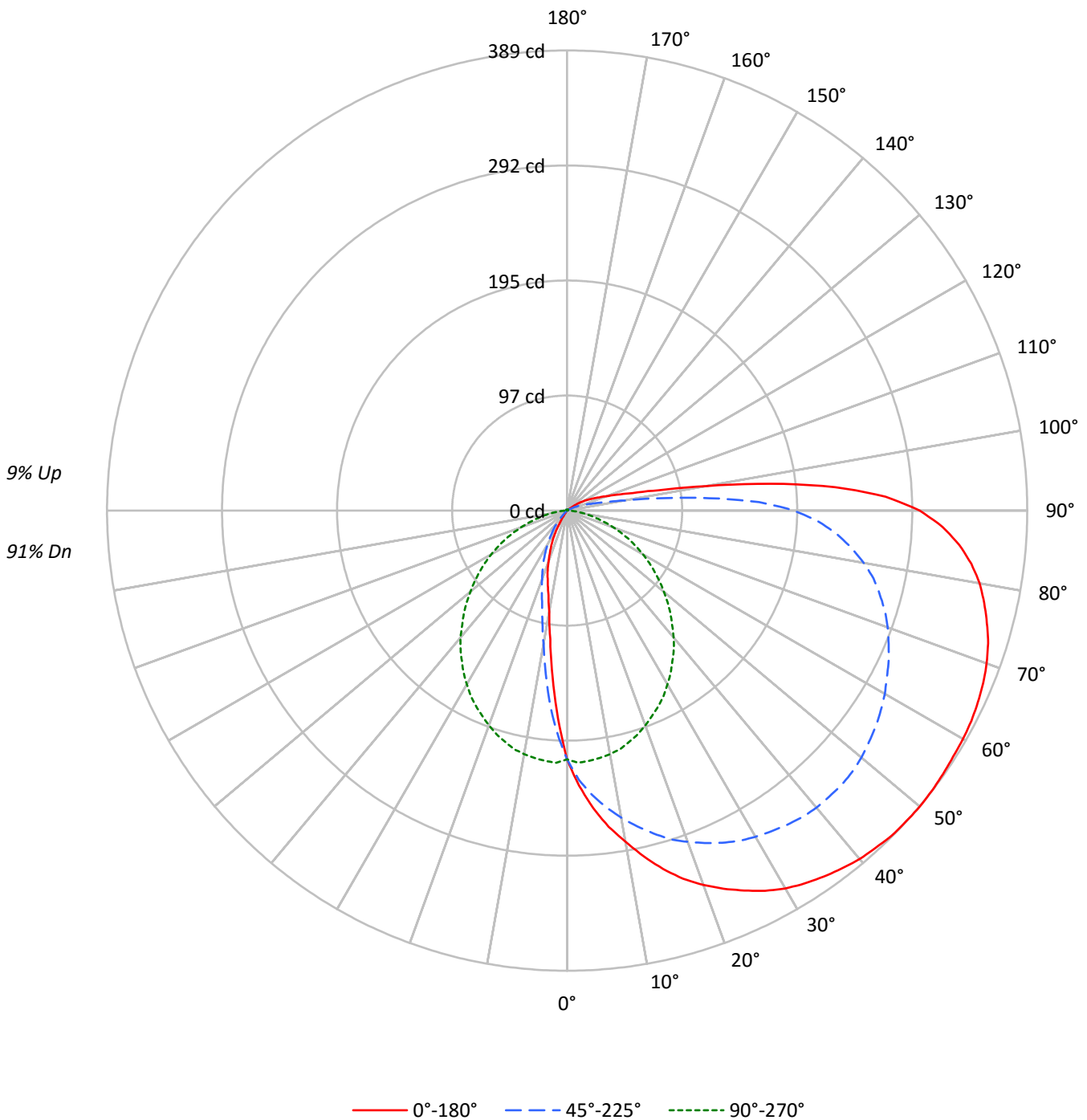
Input Watts (W): 18.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	71	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°	12412	12412	12412
5°	14961	12590	8381
10°	17040	12531	5240
15°	19171	12373	3851
20°	21164	12140	2903
25°	23090	11884	1994
30°	25146	11564	1023
35°	27233	11187	216
40°	29645	10807	15
45°	32434	10321	0
50°	35753	9811	0
55°	39943	9306	0
60°	45632	8763	0
65°	53540	8076	28
70°	65156	7147	0
75°	83820	6160	0
80°	120443	5033	68
85°	225471	3794	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.1	1.9
10°-20°	53.2	5.4
20°-30°	83.1	8.5
30°-40°	106.7	10.9
40°-50°	124.3	12.7
50°-60°	134.0	13.7
60°-70°	135.3	13.8
70°-80°	127.7	13.0
80°-90°	109.8	11.2
90°-100°	63.8	6.5
100°-110°	15.7	1.6
110°-120°	5.1	0.5
120°-130°	1.3	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°	155.4	15.9
0°-40°	262.1	26.7
0°-60°	520.4	53.1
0°-90°	893.2	91.2
90°-120°	84.6	8.6
90°-150°	86.6	8.8
90°-180°	87.0	8.9
0°-180°	979.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	210	210	210	210	210	
5°	252	241	212	165	141	25
15°	314	283	202	82	63	89
25°	354	310	182	47	31	164
35°	378	324	155	21	3	237
45°	388	328	124	4	0	300
55°	388	318	90	0	0	348
65°	383	300	58	1	0	380
75°	367	274	27	1	0	388
85°	333	229	6	1	0	276
90°	298	192	1	1	0	162
95°	228	120	1	1	0	162
105°	57	23	1	1	0	68
115°	24	7	1	1	0	25
125°	7	1	1	1	0	6
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°	210.2	210.2	210.2	210.2	210.2	210.2	210.2	210.2	210.2	210.2	210.2
2.5°	232.8	231.4	231.6	231.6	230.2	230.0	229.4	228.0	227.8	227.8	225.2
5°	252.4	251.2	251.0	250.4	248.2	247.2	246.0	244.0	242.6	241.2	237.8
7.5°	269.6	268.2	267.6	266.6	264.2	262.6	260.4	257.8	255.4	253.0	248.4
10°	284.2	283.0	282.0	280.8	278.2	276.0	273.4	270.2	267.6	263.6	258.2
12.5°	299.4	298.0	297.0	295.0	292.8	289.8	286.4	282.0	278.6	273.4	267.0
15°	313.6	312.2	310.8	308.4	305.8	302.0	297.8	293.0	289.0	282.6	274.8
17.5°	326.4	325.0	323.6	321.2	318.0	313.6	308.8	303.0	297.8	291.4	282.6
20°	336.8	335.2	333.8	331.8	327.8	323.2	318.0	311.6	305.8	298.0	288.8
22.5°	346.0	344.2	342.8	340.6	336.4	331.8	325.8	319.2	312.8	304.2	294.0
25°	354.4	352.8	351.2	349.0	344.6	339.2	333.4	326.2	319.0	309.8	298.8
27.5°	362.4	360.8	359.4	356.4	352.2	346.6	340.4	332.6	324.4	314.8	302.8
30°	368.8	367.4	365.8	363.0	358.4	352.8	346.0	337.6	328.8	318.4	306.0
32.5°	373.8	372.6	371.2	368.0	363.6	357.6	350.2	341.8	332.4	321.4	308.6
35°	377.8	377.6	375.8	372.2	368.2	361.8	354.2	345.8	335.6	324.2	310.4
37.5°	381.4	381.2	379.6	376.0	371.6	365.6	357.4	349.0	338.2	326.6	312.0
40°	384.6	384.2	382.6	378.8	374.8	368.4	360.2	351.4	340.2	327.8	312.8
42.5°	386.4	386.2	384.6	380.6	376.4	370.0	361.8	352.2	341.4	328.0	312.8
45°	388.4	388.0	386.0	382.0	377.8	371.2	363.2	353.0	341.8	328.0	312.4
47.5°	388.8	388.6	386.4	382.6	378.0	371.4	363.4	352.6	340.8	327.0	310.6
50°	389.2	388.8	386.4	382.8	377.6	371.4	362.4	352.0	339.8	324.8	307.8
52.5°	388.8	388.0	385.8	381.8	376.8	370.2	361.0	350.6	337.2	321.6	304.2
55°	388.0	387.2	384.8	380.8	376.0	368.6	359.6	348.4	334.6	318.4	299.8
57.5°	387.0	386.0	383.4	379.6	374.2	367.0	357.8	345.6	331.4	314.4	295.0
60°	386.4	385.4	382.4	378.4	372.8	365.0	355.4	342.8	328.0	310.0	289.8
62.5°	385.2	384.0	381.2	377.0	370.8	363.2	352.6	339.6	324.0	304.8	283.4
65°	383.2	382.0	379.2	375.2	368.6	360.8	349.8	336.8	320.0	300.0	276.6
67.5°	380.8	379.6	376.2	372.0	365.0	357.2	346.0	332.2	315.8	294.2	269.2
70°	377.4	376.4	373.0	368.6	361.8	353.0	342.2	328.0	310.4	288.4	261.8
72.5°	373.2	372.2	368.8	364.0	357.6	348.2	337.4	323.2	304.4	281.6	253.8
75°	367.4	366.8	363.4	358.6	351.8	342.8	331.2	316.8	298.0	273.6	244.4
77.5°	361.2	360.4	357.2	352.0	344.8	336.0	324.2	309.0	290.0	265.4	235.2
80°	354.2	353.2	350.0	344.6	337.0	327.6	315.8	299.8	280.0	254.6	225.0
82.5°	344.6	343.8	341.0	335.4	327.8	318.0	306.0	289.6	269.2	242.4	213.6
85°	332.8	332.2	329.4	324.0	316.2	306.4	293.8	278.0	255.6	229.0	202.0
87.5°	317.8	317.6	314.4	308.8	301.2	291.2	278.2	261.2	238.8	212.8	186.0
90°	298.2	297.6	293.4	288.2	280.4	269.6	257.0	240.0	216.4	191.6	166.6
92.5°	269.4	269.6	264.8	259.6	251.2	239.6	227.4	211.0	185.4	162.6	138.4
95°	227.6	228.4	224.4	217.2	208.6	197.8	183.6	167.4	142.6	120.4	100.4
97.5°	173.6	173.2	169.4	160.2	154.0	140.8	129.6	114.0	95.8	79.0	64.2
100°	118.8	119.2	116.0	110.2	103.0	92.6	84.2	72.4	60.4	49.2	39.4
102.5°	79.0	79.8	76.4	73.4	68.2	62.2	55.2	48.6	39.8	32.6	26.2
105°	57.2	57.4	55.6	52.0	48.4	44.8	39.6	34.4	28.6	23.2	18.4
107.5°	44.4	44.4	43.0	40.2	37.8	34.2	30.4	26.2	21.4	17.2	13.0
110°	35.6	35.6	34.4	32.6	30.0	27.2	24.0	20.4	16.4	13.0	9.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	29.2	29.0	28.2	26.2	24.2	22.0	19.0	16.0	12.6	9.6	7.0
115°	24.0	23.8	23.0	21.4	19.6	17.6	15.0	12.4	9.6	6.6	3.0
117.5°	19.6	19.6	18.6	17.6	15.8	14.0	11.6	9.4	6.2	2.2	1.0
120°	15.8	15.8	15.2	13.8	12.4	10.6	8.2	5.2	1.4	1.0	0.8
122.5°	12.2	12.2	11.6	10.2	8.2	5.8	3.0	1.0	0.8	1.0	0.8
125°	6.8	6.6	5.6	4.2	2.2	1.0	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	1.0	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	1.0	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°	210.2	210.2	210.2	210.2	210.2	210.2	210.2	210.2	210.2	210.2	210.2
2.5°	224.6	222.8	222.0	220.2	218.6	217.0	215.4	213.4	210.6	207.2	204.8
5°	235.8	232.8	230.2	227.0	223.8	220.6	216.6	212.4	207.0	201.6	196.4
7.5°	245.2	241.4	237.6	232.6	228.2	223.2	217.6	211.0	203.6	195.4	187.2
10°	253.8	248.8	243.4	237.2	231.4	225.0	217.6	209.0	199.4	188.4	177.2
12.5°	261.6	255.4	248.6	241.2	233.6	226.0	216.8	206.6	194.2	180.4	166.2
15°	267.8	260.4	252.6	243.6	234.4	225.4	214.8	202.4	188.0	171.4	153.6
17.5°	274.2	265.4	256.2	245.8	235.2	224.8	212.6	198.4	181.6	162.0	141.6
20°	278.8	269.2	258.8	247.2	235.0	223.4	209.8	193.2	174.2	152.4	129.2
22.5°	283.0	272.2	260.4	248.0	234.4	221.0	206.2	187.8	166.8	142.2	117.4
25°	287.0	274.4	261.8	247.8	232.6	218.2	202.2	182.4	158.8	132.0	106.0
27.5°	290.6	276.2	262.2	247.0	230.8	215.2	197.8	176.6	150.8	122.2	95.2
30°	292.8	277.4	262.2	245.4	228.0	211.0	192.6	169.6	142.2	111.8	85.2
32.5°	294.0	278.2	261.6	243.6	224.6	206.4	186.6	162.8	133.6	102.0	75.8
35°	295.2	278.4	260.8	241.2	221.2	201.4	180.0	155.2	124.8	92.6	67.8
37.5°	295.6	277.6	259.4	239.0	217.2	196.2	173.8	148.0	116.2	83.6	60.6
40°	295.8	276.6	257.0	235.8	212.8	190.6	167.0	140.2	107.6	75.4	54.0
42.5°	295.0	274.8	254.6	231.8	207.2	183.8	159.2	131.4	98.2	67.2	47.6
45°	293.6	272.8	251.0	227.2	201.6	176.4	151.2	123.6	90.6	60.0	42.4
47.5°	291.2	269.4	246.4	221.6	194.4	168.4	142.8	115.2	82.2	53.6	37.0
50°	288.4	265.6	241.4	214.6	186.4	160.4	135.0	106.8	74.6	47.8	32.2
52.5°	284.0	260.4	234.8	207.2	178.6	152.2	126.4	98.6	67.2	41.8	27.6
55°	279.2	254.4	227.8	199.0	170.6	143.4	117.4	90.4	60.2	36.2	23.2
57.5°	273.0	247.2	219.4	190.8	162.0	134.8	109.0	82.2	53.0	31.4	18.8
60°	266.2	239.4	210.8	182.6	153.2	125.8	100.0	74.2	46.6	26.6	15.0
62.5°	258.2	230.4	202.2	173.6	144.0	116.2	90.8	65.6	40.2	22.2	11.6
65°	250.0	221.2	193.2	164.4	134.2	106.6	81.4	57.8	34.2	17.6	8.2
67.5°	240.4	211.6	183.0	153.8	124.0	96.4	71.6	49.4	28.2	13.2	5.0
70°	231.8	202.0	173.0	143.4	113.4	85.8	62.2	41.4	22.2	9.2	2.4
72.5°	223.2	192.8	162.8	132.4	102.6	75.2	53.2	34.0	17.0	6.0	1.4
75°	214.4	183.6	152.8	121.4	91.0	65.4	44.2	27.0	12.0	3.2	1.0
77.5°	205.2	174.4	142.6	110.6	80.2	55.4	35.8	20.4	8.0	1.6	1.0
80°	195.6	164.6	132.4	100.2	70.4	46.4	27.8	14.8	4.8	1.2	0.8
82.5°	185.4	154.2	121.8	90.0	60.8	37.8	21.0	9.8	2.0	0.8	0.8
85°	173.6	143.2	111.4	80.4	52.2	30.2	15.4	5.6	1.2	0.8	0.8
87.5°	159.4	129.8	99.2	69.8	43.6	24.2	10.4	3.0	1.2	1.2	1.0
90°	140.2	112.4	83.6	56.8	33.8	17.2	6.4	1.0	1.0	1.0	0.8
92.5°	114.4	88.6	63.4	41.4	23.0	10.0	2.8	1.0	1.2	1.0	0.8
95°	80.6	59.6	41.0	25.4	12.6	4.0	1.2	1.0	1.2	0.8	0.8
97.5°	49.4	35.8	23.8	13.4	5.8	1.2	0.8	1.0	1.0	0.8	0.8
100°	30.2	21.4	13.6	7.0	2.8	1.0	0.8	1.0	1.2	0.8	1.0
102.5°	19.6	13.4	8.0	3.8	0.8	0.8	0.8	1.0	1.0	0.8	1.0
105°	13.2	8.6	4.8	1.2	0.8	0.6	0.8	0.8	0.8	0.8	1.0
107.5°	9.2	5.6	1.6	1.0	0.6	0.6	0.8	0.8	0.8	0.8	0.8
110°	6.2	2.4	1.0	1.0	0.8	0.8	0.6	0.8	0.8	0.8	0.8



TEST NUMBER: P273378

CATALOG NUMBER: 0.03-5W-830-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	3.0	1.0	1.0	1.0	0.8	0.8	0.8	0.8	1.0	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°	1.0	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	1.0	1.0	0.8	1.0	0.8	1.0	1.0	1.0	1.0	1.0
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	1.0	1.0	0.8	0.8	1.0	1.0	1.0
137.5°	0.8	1.0	1.0	1.0	1.0	1.2	1.2	1.0	1.2	1.2	1.2
140°	0.8	1.0	0.8	0.8	1.0	0.8	1.0	1.0	1.0	1.0	1.0
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



TEST NUMBER: P273378

CATALOG NUMBER: 0.03-5W-830-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	210.2	210.2	210.2	210.2	210.2	210.2	210.2	210.2	210.2	210.2	210.2
2.5°	202.2	199.4	197.0	194.0	190.8	188.8	186.6	183.8	182.8	180.4	178.8
5°	191.4	185.8	180.6	175.0	169.0	164.6	160.6	156.0	152.6	149.0	147.8
7.5°	179.0	170.8	162.4	153.6	145.4	138.8	133.2	127.2	122.6	119.8	116.4
10°	165.6	154.4	142.4	132.2	122.6	114.8	109.0	103.0	98.4	94.4	92.6
12.5°	151.4	137.8	124.2	112.8	103.8	96.6	90.4	86.0	82.6	79.8	77.4
15°	136.4	120.4	107.0	95.8	87.4	81.6	76.6	73.2	70.8	68.2	66.4
17.5°	122.4	106.4	92.2	83.2	76.6	71.4	67.2	63.8	61.4	59.2	57.6
20°	109.0	93.0	81.2	73.0	67.2	62.2	58.4	55.2	52.8	50.8	49.0
22.5°	96.6	81.8	71.4	64.0	58.6	54.2	50.2	46.8	44.8	42.6	40.6
25°	85.8	72.6	62.6	56.0	51.4	46.8	43.0	39.4	37.0	34.6	32.8
27.5°	76.2	64.0	55.4	49.2	44.4	39.8	35.8	32.8	29.8	27.4	25.6
30°	67.8	56.8	49.0	42.6	37.8	32.8	29.2	25.6	23.2	20.6	18.6
32.5°	60.2	50.0	42.8	36.6	31.6	26.8	23.0	19.8	16.8	14.2	11.8
35°	53.6	44.0	36.6	30.8	26.0	21.4	17.8	14.2	10.8	8.2	6.2
37.5°	47.2	38.4	31.6	25.6	20.8	16.4	12.4	8.6	5.8	3.8	2.8
40°	41.6	33.6	26.4	21.2	16.2	11.6	7.8	4.6	2.4	1.2	0.6
42.5°	36.4	28.2	21.8	16.4	11.6	7.0	4.0	1.6	0.6	0.4	0.2
45°	31.6	24.0	17.8	12.4	7.6	3.6	1.4	1.0	0.6	0.4	0.2
47.5°	26.8	19.8	13.8	8.2	4.0	1.4	0.8	0.6	0.4	0.4	0.2
50°	22.6	15.8	10.0	4.8	1.8	0.8	0.6	0.6	0.4	0.4	0.2
52.5°	18.4	12.0	5.8	2.0	0.8	0.6	0.4	0.4	0.2	0.4	0.2
55°	14.8	8.2	3.2	1.0	0.6	0.4	0.4	0.4	0.4	0.2	0.2
57.5°	11.6	5.0	1.4	0.8	0.6	0.6	0.4	0.4	0.4	0.2	0.2
60°	8.2	2.8	1.2	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.2
62.5°	5.0	1.4	0.8	0.6	0.4	0.4	0.4	0.4	0.2	0.2	0.2
65°	2.8	1.2	0.8	0.8	0.8	0.6	0.6	0.6	0.4	0.4	0.4
67.5°	1.2	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°	1.0	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	1.0	1.0	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°	1.0	1.0	1.0	0.8	0.8	0.6	0.6	0.6	0.4	0.4	0.4
87.5°	1.0	1.2	1.2	1.0	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°	1.0	0.8	0.8	0.8	0.8	0.6	0.6	0.4	0.4	0.4	0.4
95°	1.0	0.8	0.8	0.8	0.8	0.6	0.6	0.6	0.6	0.4	0.4
97.5°	1.0	1.0	0.8	0.8	0.8	0.6	0.6	0.4	0.4	0.4	0.4
100°	0.8	1.0	1.0	1.0	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: P273378

CATALOG NUMBER: 0.03-5W-830-90-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	1.0	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°	1.0	1.0	1.0	0.8	0.8	0.6	0.6	0.6	0.6	0.6	0.4
137.5°	1.0	1.0	1.0	1.0	0.8	1.0	0.8	0.8	0.8	0.6	0.6
140°	1.0	1.0	0.8	1.0	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: P273378

CATALOG NUMBER: 0.03-5W-830-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	210.2	210.2	210.2	210.2
2.5°	177.8	178.6	177.6	176.0
5°	144.8	145.0	143.4	141.4
7.5°	113.4	113.0	111.4	109.6
10°	90.6	89.8	88.6	87.4
12.5°	75.4	74.6	74.4	73.2
15°	64.6	63.8	63.6	63.0
17.5°	56.4	55.6	55.2	55.0
20°	47.8	47.2	46.6	46.2
22.5°	39.6	38.8	38.2	37.6
25°	31.6	30.8	30.0	30.6
27.5°	24.4	23.4	22.2	22.6
30°	16.8	16.0	15.0	15.0
32.5°	10.0	8.8	8.0	7.8
35°	4.6	3.8	3.2	3.0
37.5°	1.6	1.0	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: P273378

CATALOG NUMBER: 0.03-5W-830-90-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)