

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: P273436

Luminaire Tested: **0.05-06W-840-90ASYM-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P273436  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-246-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: 0.05-06W-840-90ASYM-STD-UNV-AN-3F0  
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 90 DEGREE ASYMMETRIC OPTIC.  
HIGH OUTPUT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 811.1 lumens  
Efficiency: N/A  
Efficacy: 61.0 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 0.97 / 1.19  
Luminous Opening: Rectangular (W 2.92' x L: 0.21' x H: 0')  
CIE Type: Direct

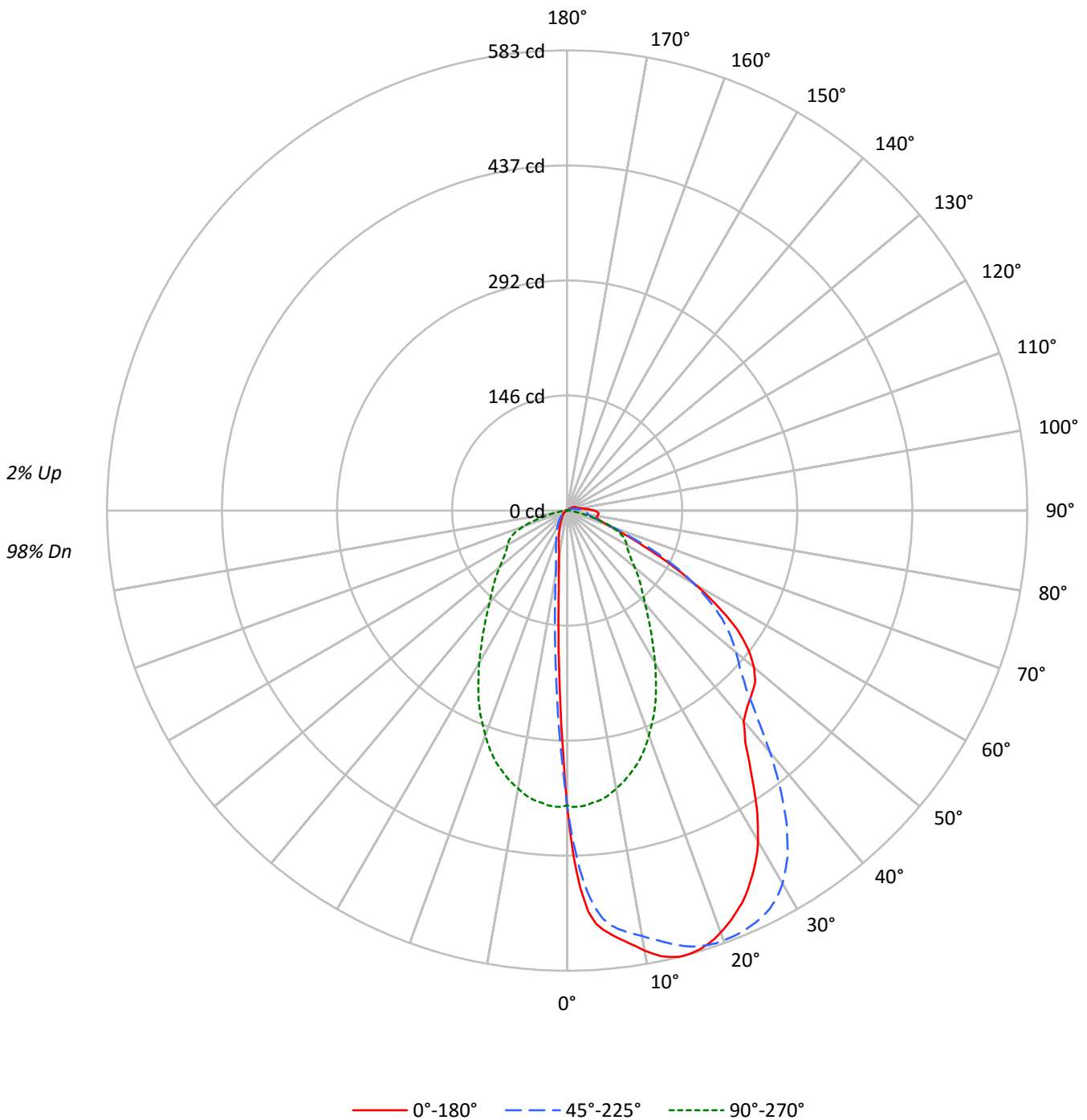
Input Watts (W): 13.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	110	110	105	105	105	100	100	100	98					98			
1	109	105	101	98	106	103	99	96	98	95	93	94	91	89	90	88	86	84					84			
2	100	93	87	82	98	91	85	80	87	82	78	84	80	76	80	77	74	72					72			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	74	66	59	83	72	65	59	70	63	58	67	61	57	65	60	56	54					54			
5	78	66	58	52	76	65	57	51	63	56	51	61	55	50	59	53	49	47					47			
6	73	60	52	45	71	59	51	45	57	50	45	55	49	44	53	48	44	42					42			
7	67	55	46	40	66	54	46	40	52	45	40	50	44	39	49	43	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	46	40	35	45	39	35	33					33			
9	59	46	38	33	57	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	27					27			

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

	0°	90°	180°
0°	6613	6613	6613
5°	9490	6606	2242
10°	10185	6434	1050
15°	10694	6151	735
20°	10724	5710	562
25°	10484	5182	426
30°	9896	4555	319
35°	8795	3988	251
40°	8045	3543	217
45°	8270	3292	200
50°	8521	3070	185
55°	8144	2971	151
60°	6661	3093	96
65°	4539	3269	113
70°	2906	3092	140
75°	2745	2224	151
80°	3958	1459	224
85°	8150	996	447



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.4	4.0
10°-20°	89.4	11.0
20°-30°	135.2	16.7
30°-40°	155.4	19.2
40°-50°	149.2	18.4
50°-60°	124.6	15.4
60°-70°	67.5	8.3
70°-80°	24.7	3.1
80°-90°	14.7	1.8
90°-100°	8.7	1.1
100°-110°	4.5	0.6
110°-120°	2.8	0.3
120°-130°	1.5	0.2
130°-140°	0.5	0.1
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°	257.0	31.7
0°-40°	412.3	50.8
0°-60°	686.2	84.6
0°-90°	793.1	97.8
90°-120°	16.0	2.0
90°-150°	18.0	2.2
90°-180°	18.0	2.2
0°-180°	811.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	373	373	373	373	373	
5°	534	519	372	174	126	52
15°	583	571	335	54	40	164
25°	536	573	265	32	22	245
35°	407	485	184	19	12	256
45°	330	322	131	12	8	255
55°	264	240	96	6	5	230
65°	108	121	78	3	3	112
75°	40	34	32	2	2	45
85°	40	25	5	2	2	32
90°	34	20	1	1	2	19
95°	24	16	1	1	2	18
105°	13	8	1	1	1	15
115°	11	4	1	1	1	10
125°	5	1	1	1	1	5
135°	1	1	1	1	1	1
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°	373.3	373.3	373.3	373.3	373.3	373.3	373.3	373.3	373.3	373.3	373.3
1°	435.2	433.9	435.2	428.6	429.0	431.2	431.2	427.2	429.4	420.1	418.3
2°	478.9	478.0	478.0	472.2	472.2	474.0	473.1	468.2	468.2	458.4	454.4
3°	508.3	507.0	506.5	502.1	502.1	502.9	502.1	498.0	496.3	487.8	482.9
4°	524.8	524.3	523.0	519.9	519.9	520.8	519.9	517.2	515.9	508.7	504.3
5°	533.7	533.7	531.9	529.7	529.7	530.6	529.2	527.9	526.1	522.1	519.0
6°	540.4	539.5	539.0	536.4	536.4	536.8	535.9	534.6	533.2	530.6	528.3
7°	546.6	545.7	544.8	542.2	542.6	542.2	541.3	539.5	538.6	536.4	534.1
8°	552.8	552.0	551.5	548.4	548.4	547.9	547.1	544.8	543.9	541.3	539.0
9°	559.1	558.2	557.7	554.6	554.6	554.2	552.8	551.1	548.8	545.7	543.0
10°	566.2	565.3	564.9	561.8	561.3	560.4	559.1	557.3	554.2	551.1	547.5
11°	572.0	572.0	570.2	568.0	567.1	566.7	565.3	563.5	560.0	556.0	552.4
12°	577.3	577.3	575.6	573.3	572.4	572.0	570.7	568.9	564.9	561.8	556.9
13°	580.5	580.5	579.1	576.9	576.9	576.5	575.1	573.8	569.8	566.7	561.8
14°	582.7	582.7	581.4	579.1	579.6	579.1	578.2	577.3	573.8	571.1	566.7
15°	583.1	583.6	581.8	580.0	580.9	580.5	580.0	579.1	577.3	574.7	571.1
16°	582.2	583.1	581.4	579.6	580.9	580.5	580.5	579.6	579.1	577.3	574.7
17°	580.5	581.4	580.0	578.2	580.0	579.6	579.6	579.6	580.0	578.7	576.9
18°	577.3	578.7	577.8	576.5	578.2	578.7	578.7	578.2	580.0	579.6	578.7
19°	573.8	575.1	574.7	573.8	575.6	576.5	576.5	576.9	579.1	579.6	579.6
20°	568.9	570.7	570.2	569.8	572.4	572.9	573.8	574.7	577.8	578.7	579.6
21°	563.5	565.8	565.8	565.3	568.0	569.3	570.7	572.0	575.6	577.3	579.1
22°	557.7	560.0	560.0	560.0	563.1	564.9	566.2	569.3	573.3	576.5	578.7
23°	551.1	553.3	553.3	553.7	557.3	559.5	561.3	564.9	570.2	574.7	577.3
24°	544.4	546.2	546.6	547.1	551.1	553.3	555.1	559.5	566.2	572.0	575.1
25°	536.4	538.6	538.6	539.5	543.9	546.2	548.4	553.7	561.3	568.0	572.9
26°	527.0	529.7	530.6	531.5	535.9	538.1	540.8	546.6	555.5	562.6	569.8
27°	517.6	520.3	521.7	521.7	527.5	529.7	532.8	539.0	549.3	556.9	565.8
28°	507.4	510.1	510.1	512.3	517.6	520.3	523.4	530.6	541.3	549.7	560.4
29°	496.3	498.9	498.9	501.6	507.0	510.1	513.2	521.2	531.0	541.7	553.7
30°	483.8	486.5	486.9	489.1	494.9	498.0	501.6	510.5	520.3	532.4	545.7
32.5°	447.3	450.4	450.4	455.3	459.7	465.1	467.8	477.6	490.5	503.8	519.9
35°	406.7	409.8	409.4	412.1	419.2	422.3	427.7	437.9	451.3	467.8	484.7
37.5°	370.6	372.4	371.5	373.8	378.7	383.6	387.6	395.6	409.0	426.3	443.7
40°	347.9	348.4	347.5	347.0	349.3	351.0	353.3	358.2	368.0	382.7	399.6
42.5°	337.7	336.3	335.0	333.7	332.3	332.3	331.4	332.3	335.9	344.4	356.4
45°	330.1	329.7	327.9	326.1	323.4	322.5	320.7	317.2	315.0	316.7	321.6
47.5°	323.0	321.6	319.9	318.1	315.0	313.6	310.5	305.2	301.1	298.5	297.1
50°	309.2	307.4	305.6	304.3	301.6	300.3	297.1	292.2	288.2	283.3	279.3
52.5°	289.6	287.3	286.4	285.1	282.4	280.7	278.0	274.4	270.9	267.3	261.1
55°	263.7	262.4	261.5	261.9	258.8	257.9	256.2	251.7	248.6	245.0	240.1
57.5°	227.6	226.8	227.2	229.4	229.0	229.4	229.4	227.2	224.5	220.1	214.3
60°	188.0	187.1	188.0	190.2	190.7	192.0	193.3	195.1	195.6	192.0	185.8
62.5°	147.0	145.7	146.1	147.5	147.5	149.2	151.0	154.1	157.3	157.7	155.9
65°	108.3	106.9	106.9	107.4	106.9	108.3	109.1	110.0	113.6	118.5	121.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
67.5°	77.5	76.6	76.6	76.6	76.6	77.1	76.6	77.5	79.3	82.4	86.0
70°	56.1	55.7	55.7	55.7	55.2	55.7	56.1	56.1	57.0	58.4	60.1
72.5°	45.4	45.0	45.0	44.5	43.7	43.7	43.2	42.8	42.3	42.8	43.7
75°	40.1	40.1	39.6	39.2	38.3	37.9	37.0	36.1	35.2	34.3	33.9
77.5°	38.3	38.3	37.9	37.0	36.1	35.2	34.7	33.0	31.6	30.3	29.0
80°	38.8	38.3	37.9	37.0	35.6	35.2	34.3	32.5	30.7	28.5	26.7
82.5°	39.6	39.6	39.2	37.9	36.5	35.6	34.7	33.0	30.7	28.5	25.8
85°	40.1	39.6	39.2	37.9	36.5	35.6	34.3	32.1	29.8	27.6	24.9
87.5°	37.9	37.4	37.0	35.6	33.9	33.4	32.1	29.8	28.1	25.4	23.2
90°	34.3	33.4	33.0	31.6	30.3	29.4	28.5	26.3	24.5	22.7	20.5
92.5°	29.0	28.5	28.1	26.7	25.8	24.9	24.1	22.3	20.9	19.6	18.3
95°	24.1	23.6	23.2	22.3	21.4	20.9	20.0	18.7	17.8	16.5	15.6
97.5°	20.0	19.6	19.2	18.7	17.8	17.4	16.9	16.0	15.1	14.3	13.4
100°	16.9	16.9	16.5	16.0	15.1	14.7	14.3	13.8	12.9	12.0	11.6
102.5°	14.7	14.7	14.3	13.8	13.4	12.9	12.5	12.0	11.1	10.2	9.8
105°	13.4	12.9	12.9	12.5	12.0	11.6	11.1	10.2	9.4	8.9	8.0
107.5°	12.5	12.0	12.0	11.6	10.7	10.7	10.2	9.4	8.5	7.6	7.1
110°	11.6	11.6	11.1	10.7	10.2	9.8	9.4	8.9	7.6	6.7	5.8
112.5°	11.1	11.1	10.7	10.2	9.8	9.4	8.9	8.0	7.1	6.2	4.9
115°	10.7	10.2	10.2	9.8	8.9	8.5	8.0	7.1	6.2	4.9	4.0
117.5°	9.4	9.4	9.4	8.5	8.0	7.6	7.1	6.2	5.3	4.0	3.1
120°	8.5	8.0	8.0	7.6	6.7	6.2	6.2	5.3	4.0	3.1	2.2
122.5°	7.1	6.7	6.7	6.2	5.8	5.3	4.9	4.0	3.1	2.2	1.8
125°	5.3	5.3	5.3	4.9	4.5	4.0	3.6	3.1	2.2	1.8	0.9
127.5°	4.5	4.0	4.0	3.6	3.1	3.1	2.7	2.2	1.3	0.9	0.9
130°	3.1	3.1	2.7	2.7	2.2	1.8	1.3	0.9	0.9	0.9	0.9
132.5°	1.8	1.8	1.8	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9
135°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	373.3	373.3	373.3	373.3	373.3	373.3	373.3	373.3	373.3	373.3	373.3
1°	415.6	405.8	402.3	399.6	396.5	392.0	389.4	386.2	380.4	375.5	369.7
2°	448.6	436.1	429.9	422.8	418.3	411.2	404.5	396.0	385.8	375.5	364.0
3°	475.8	462.4	453.1	443.3	437.9	429.0	417.9	405.4	390.2	374.7	357.3
4°	497.2	483.8	473.1	461.5	455.3	445.5	430.8	414.3	393.8	373.8	351.0
5°	512.7	500.7	490.0	477.6	470.9	460.6	442.8	421.4	397.4	371.5	343.9
6°	523.4	512.7	502.9	491.4	484.7	474.0	453.9	429.4	400.9	370.2	336.3
7°	530.6	521.7	513.2	502.9	495.8	486.0	464.2	437.0	403.6	368.0	328.8
8°	535.9	527.9	520.8	511.9	505.6	495.8	473.5	444.1	406.3	365.3	321.2
9°	539.5	531.9	526.1	518.1	512.7	504.3	481.6	449.5	407.6	361.7	312.3
10°	543.9	535.5	530.1	523.4	518.5	511.4	489.1	455.3	409.4	357.7	303.4
11°	548.4	539.0	533.7	527.5	523.0	516.8	495.4	460.2	410.7	353.7	294.0
12°	552.4	542.6	537.3	531.0	527.0	520.8	500.7	465.1	412.1	349.7	285.1
13°	557.3	545.7	540.4	534.6	530.1	524.3	505.6	469.5	413.0	345.2	275.8
14°	561.3	550.6	543.5	537.3	533.2	527.5	509.6	474.0	413.4	340.3	266.4
15°	565.3	554.6	546.6	539.5	535.5	529.7	513.2	477.1	413.9	335.4	256.6
16°	569.3	558.6	549.7	541.7	538.1	532.4	516.3	480.2	413.9	330.1	246.8
17°	573.3	563.1	552.8	544.4	540.8	535.5	519.0	483.3	413.4	323.9	236.6
18°	576.9	566.7	557.3	547.5	543.9	538.1	521.7	486.0	412.5	317.2	227.2
19°	578.7	569.8	560.4	551.1	546.2	540.8	524.3	488.7	411.2	310.5	216.9
20°	579.6	572.4	563.5	553.7	547.9	542.6	526.6	490.9	409.4	302.9	206.7
21°	580.0	574.7	565.8	556.4	550.6	544.8	528.8	492.7	407.6	295.4	197.3
22°	580.5	576.0	568.9	559.5	552.8	547.1	531.0	495.4	406.7	288.2	188.0
23°	579.6	576.5	570.2	561.3	555.5	548.8	533.2	497.6	404.9	281.5	178.6
24°	578.2	576.9	572.0	563.5	558.2	551.1	535.5	499.4	402.7	273.1	169.7
25°	577.3	576.9	572.4	564.9	560.4	553.7	536.8	500.7	400.0	265.1	161.3
26°	575.6	576.5	573.3	567.1	562.2	555.5	538.6	501.6	396.5	256.6	152.8
27°	572.9	575.1	574.2	569.3	564.4	558.2	540.8	502.5	392.5	247.7	145.2
28°	569.8	573.8	574.7	571.1	566.7	560.4	543.5	504.3	388.5	238.8	137.7
29°	565.8	571.6	573.8	572.4	569.3	563.5	545.7	506.5	384.0	231.2	131.0
30°	560.0	568.4	572.9	573.3	571.1	565.8	547.9	507.4	380.0	222.7	125.2
32.5°	539.5	556.0	566.7	574.7	575.1	571.6	554.6	510.5	368.0	202.2	111.4
35°	508.3	533.2	553.7	570.2	574.7	576.9	563.1	514.1	355.5	184.4	98.5
37.5°	471.8	498.9	530.1	557.3	568.0	574.7	569.8	517.2	340.3	167.5	90.0
40°	427.2	457.5	494.5	534.1	549.7	565.8	572.4	518.1	324.3	153.2	82.4
42.5°	380.9	411.6	450.8	497.6	521.2	545.3	568.4	515.0	305.2	141.2	76.6
45°	338.1	364.4	402.7	454.4	482.5	514.1	555.1	505.2	286.0	131.4	72.2
47.5°	302.9	320.3	353.3	404.9	435.7	474.9	535.9	491.8	265.5	121.6	68.2
50°	278.0	285.6	307.8	351.9	381.8	424.1	507.0	477.6	247.2	111.4	63.3
52.5°	257.5	257.9	268.6	299.4	326.5	367.5	466.0	457.5	232.5	102.9	58.4
55°	235.2	232.1	235.7	254.4	273.1	306.5	411.2	433.0	221.4	96.2	53.0
57.5°	210.7	204.9	204.9	214.3	225.9	250.8	342.1	396.5	211.6	90.9	48.6
60°	181.8	175.1	172.8	177.7	184.4	201.4	277.5	346.6	200.5	87.3	45.0
62.5°	150.6	144.3	142.1	143.9	147.0	159.0	214.3	286.0	185.3	83.3	41.4
65°	119.8	114.5	111.4	112.3	113.6	123.0	160.4	220.1	163.9	78.0	38.3



TEST NUMBER: P273436

CATALOG NUMBER: 0.05-06W-840-90ASYM-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
67.5°	89.1	88.2	86.4	86.9	88.7	92.2	118.1	159.5	134.5	70.8	34.3
70°	63.3	65.5	66.4	66.8	67.3	69.5	84.6	110.9	100.2	59.7	29.8
72.5°	45.0	47.2	49.9	51.2	51.7	52.6	61.0	75.7	70.8	46.3	23.6
75°	34.3	35.2	37.0	39.6	39.6	40.5	44.5	51.2	48.1	32.5	17.8
77.5°	28.1	28.1	29.0	30.7	31.2	31.6	33.4	35.6	31.6	21.8	12.0
80°	25.4	24.5	24.1	24.5	24.9	24.9	25.4	24.5	20.9	14.3	7.6
82.5°	23.6	22.3	20.9	20.5	20.0	19.6	19.2	16.9	13.8	8.5	4.0
85°	22.7	20.5	18.7	17.4	16.9	16.0	14.7	12.0	8.9	4.9	2.2
87.5°	20.9	18.7	16.9	15.1	14.3	13.4	11.1	8.5	5.3	2.7	0.9
90°	18.7	16.9	15.1	12.9	12.0	11.1	8.9	5.8	3.1	0.9	0.9
92.5°	16.5	15.1	13.4	11.6	10.2	9.4	6.7	4.0	1.8	0.9	0.9
95°	14.3	13.4	11.6	9.8	8.9	7.6	5.3	2.7	0.9	0.9	0.9
97.5°	12.5	11.6	9.8	8.0	7.1	6.2	3.6	1.3	0.9	0.9	0.9
100°	10.7	9.8	8.5	6.7	5.8	4.5	2.2	0.9	0.9	0.9	0.9
102.5°	8.9	8.0	6.7	4.9	4.0	3.1	1.3	0.9	0.9	0.9	0.9
105°	7.1	6.2	5.3	3.6	2.7	1.8	0.9	0.9	0.9	0.9	0.9
107.5°	6.2	4.9	4.0	2.7	1.8	1.3	0.9	0.9	0.9	0.9	0.9
110°	4.9	4.0	2.7	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
112.5°	4.0	2.7	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
115°	3.1	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
117.5°	2.2	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
120°	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
122.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
125°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
127.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
130°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
132.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
135°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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



TEST NUMBER: P273436

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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
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: P273436

CATALOG NUMBER: 0.05-06W-840-90ASYM-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	373.3	373.3	373.3	373.3	373.3	373.3	373.3	373.3	373.3	373.3	373.3
1°	362.2	355.0	348.8	346.1	342.6	338.6	337.2	327.9	323.9	320.7	317.2
2°	351.0	339.0	327.9	325.2	316.7	307.8	302.5	289.1	281.1	275.3	268.6
3°	339.9	322.1	306.9	301.6	290.9	277.5	268.2	252.1	241.0	233.0	224.1
4°	327.4	305.2	285.6	277.5	265.5	248.6	236.1	218.3	204.9	195.6	185.8
5°	315.4	288.7	264.6	254.8	241.0	221.4	206.7	188.4	174.2	164.4	154.1
6°	302.9	271.7	244.1	232.5	218.3	196.5	180.9	162.2	147.9	138.1	128.7
7°	290.0	254.8	225.0	212.0	197.3	174.6	157.7	140.3	126.5	117.6	107.8
8°	277.5	238.8	206.7	193.3	178.2	155.0	138.5	122.1	108.3	99.8	92.7
9°	264.6	223.2	188.9	175.1	160.4	137.2	121.6	105.6	94.4	87.3	80.6
10°	251.7	208.0	172.8	159.0	144.8	122.5	106.9	93.6	83.3	77.1	71.7
11°	239.2	193.8	158.1	143.9	130.5	108.7	95.3	83.3	74.4	69.0	64.6
12°	226.8	180.0	144.8	131.0	117.6	98.0	85.5	75.3	67.7	63.3	59.2
13°	214.7	167.1	132.3	119.4	106.5	88.7	77.5	68.6	62.4	58.4	54.8
14°	202.7	154.1	121.6	107.8	97.1	81.1	71.3	63.3	57.9	54.3	51.2
15°	191.6	143.0	110.5	98.9	89.1	74.4	65.9	58.8	54.3	50.8	48.1
16°	180.4	132.3	101.6	91.3	82.0	69.0	61.0	55.2	51.2	47.7	45.4
17°	169.3	123.0	94.0	84.2	75.7	64.1	57.5	52.1	48.1	45.0	42.8
18°	159.5	114.0	86.9	78.0	70.4	60.1	53.9	49.0	45.4	42.8	40.1
19°	149.7	105.6	80.6	72.6	65.9	57.0	51.2	46.8	43.2	40.1	37.9
20°	140.3	98.5	75.3	68.2	61.9	53.9	48.6	44.1	40.5	37.9	35.6
21°	131.9	91.8	70.8	64.1	58.4	51.2	46.3	41.9	38.3	35.6	33.9
22°	123.8	86.0	66.8	60.6	55.7	49.0	44.1	39.6	36.5	33.9	32.1
23°	115.8	81.1	63.3	57.5	53.0	46.3	41.9	37.4	34.7	32.5	30.7
24°	108.3	76.6	60.1	54.8	50.8	44.5	39.6	35.6	33.0	30.7	29.0
25°	102.0	72.6	57.0	52.6	48.1	42.3	37.9	34.3	31.6	29.4	27.6
26°	96.7	68.6	54.3	50.3	46.3	40.1	36.1	32.5	30.3	28.1	26.3
27°	91.3	65.5	52.1	48.1	44.1	38.3	34.3	31.2	29.0	26.7	24.9
28°	86.9	62.4	49.9	45.9	42.3	37.0	33.0	29.8	27.6	25.4	23.6
29°	82.4	59.7	48.1	44.1	40.5	35.2	31.6	28.5	26.3	24.1	22.3
30°	78.4	57.0	45.9	42.3	38.8	33.9	30.3	27.2	24.9	22.7	20.5
32.5°	70.4	51.7	41.9	38.3	35.2	30.7	27.6	24.5	21.8	19.6	18.3
35°	63.7	47.2	37.9	34.7	32.1	28.1	24.5	21.8	19.2	17.4	16.0
37.5°	58.4	43.2	34.7	31.6	29.4	25.4	22.3	19.2	16.9	15.1	13.8
40°	53.5	40.1	32.1	29.4	26.7	23.2	19.6	16.9	14.7	13.4	12.0
42.5°	50.3	37.4	29.4	27.2	24.9	20.9	17.8	15.1	12.9	11.6	10.2
45°	47.7	35.2	27.6	24.9	22.7	19.2	16.0	13.4	11.6	10.2	8.9
47.5°	45.0	33.0	25.8	23.2	20.9	17.4	14.3	12.0	10.2	8.9	8.0
50°	42.3	30.7	24.1	21.4	19.2	15.6	12.9	10.7	8.9	7.6	6.7
52.5°	39.2	28.5	21.8	19.6	17.4	14.3	11.6	9.4	7.6	6.7	6.2
55°	36.1	26.3	20.0	17.8	16.0	12.9	10.2	8.0	6.2	5.8	5.3
57.5°	32.1	23.6	17.8	16.0	14.3	11.6	8.5	6.7	5.3	4.9	4.9
60°	29.0	20.9	15.6	14.3	12.9	9.8	7.1	5.3	4.5	4.0	4.0
62.5°	25.8	18.3	13.8	12.5	11.1	8.5	5.8	4.5	4.0	3.6	3.1
65°	22.7	15.6	12.0	10.7	9.4	6.7	4.5	3.6	3.1	2.7	2.7



TEST NUMBER: P273436

CATALOG NUMBER: 0.05-06W-840-90ASYM-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
67.5°	19.6	12.9	9.8	8.5	7.6	4.9	3.6	2.7	2.2	2.2	2.2
70°	16.0	10.7	7.6	6.7	5.3	3.6	2.7	2.2	2.2	2.2	2.2
72.5°	12.5	8.0	5.8	4.9	3.6	2.7	2.2	2.2	2.2	2.2	2.2
75°	8.9	5.8	3.6	3.1	2.2	1.8	1.8	1.8	2.2	2.2	2.2
77.5°	6.2	4.0	2.2	1.8	1.8	1.8	1.8	1.8	2.2	2.2	2.2
80°	4.0	2.2	1.3	1.8	1.8	1.8	1.8	1.8	1.8	2.2	2.2
82.5°	2.2	1.3	1.3	1.3	1.3	1.8	1.8	1.8	1.8	1.8	1.8
85°	0.9	1.3	1.3	1.3	1.3	1.3	1.8	1.8	1.8	1.8	1.8
87.5°	0.9	0.9	1.3	1.3	1.3	1.3	1.3	1.3	1.8	1.8	1.8
90°	0.9	0.9	0.9	1.3	1.3	1.3	1.3	1.3	1.3	1.8	1.8
92.5°	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.3	1.3	1.3
95°	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.3	1.3
97.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.3
100°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3
102.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
105°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
107.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
110°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
112.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
115°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
117.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
120°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
122.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
125°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
127.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
130°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
132.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
135°	0.9	0.9	0.9	1.3	0.9	1.3	1.3	1.3	0.9	0.9	0.9
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



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**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
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: P273436

CATALOG NUMBER: 0.05-06W-840-90ASYM-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	373.3	373.3	373.3	373.3	373.3	373.3	373.3	373.3
1°	321.6	315.0	313.2	303.4	303.8	301.1	302.5	302.5
2°	270.0	261.9	258.8	249.5	248.6	245.0	245.5	245.0
3°	223.2	214.7	211.2	202.2	200.5	196.9	196.9	196.5
4°	183.1	174.6	170.6	163.5	161.3	157.7	157.3	155.9
5°	150.6	142.6	138.5	133.2	130.5	127.4	127.0	126.1
6°	124.3	117.6	113.6	108.7	106.0	103.4	103.4	102.5
7°	103.8	98.0	94.9	91.3	89.1	86.9	86.4	86.0
8°	88.7	82.4	81.1	78.4	76.6	74.8	74.4	73.5
9°	77.5	72.2	71.3	69.0	67.3	65.9	65.5	65.0
10°	68.6	64.6	63.7	61.9	60.6	59.2	59.2	58.4
11°	61.5	58.8	57.9	56.6	55.2	54.3	54.3	53.9
12°	56.6	54.3	53.5	52.6	51.2	50.3	50.3	49.9
13°	52.6	50.3	49.9	49.0	47.7	46.8	46.8	46.3
14°	49.0	47.2	46.3	45.9	44.5	44.1	43.7	43.2
15°	46.3	44.1	43.7	42.8	41.4	41.0	40.5	40.1
16°	43.2	41.4	40.5	39.6	38.8	38.3	37.9	37.9
17°	40.5	38.8	38.3	37.9	36.5	36.1	35.6	35.6
18°	38.3	36.5	36.1	35.6	34.3	33.9	33.9	33.4
19°	36.1	34.7	33.9	33.4	32.5	32.1	31.6	31.6
20°	34.3	33.0	32.1	31.6	30.7	30.3	30.3	29.8
21°	32.5	31.2	30.3	29.8	29.0	28.5	28.5	28.1
22°	30.7	29.4	29.0	28.5	27.6	27.2	26.7	26.7
23°	29.4	28.1	27.2	26.7	25.8	25.4	24.9	24.9
24°	27.6	26.3	25.8	25.4	24.5	23.6	23.6	23.2
25°	26.3	24.9	24.1	23.6	22.7	22.3	21.8	21.8
26°	24.9	23.2	22.7	22.3	21.4	20.9	20.5	20.5
27°	23.2	21.8	21.4	20.9	20.0	19.6	19.2	19.2
28°	21.8	20.5	20.0	19.6	18.7	18.3	18.3	17.8
29°	20.5	19.2	18.7	18.3	17.8	17.4	16.9	16.9
30°	19.2	18.3	17.8	17.4	16.9	16.0	16.0	15.6
32.5°	16.9	15.6	15.1	15.1	14.3	13.8	13.8	13.4
35°	14.7	13.4	12.9	12.9	12.5	12.0	12.0	11.6
37.5°	12.5	11.6	11.6	11.1	10.7	10.7	10.2	10.7
40°	11.1	10.2	9.8	9.8	9.4	9.4	9.4	9.4
42.5°	9.4	8.9	8.9	8.5	8.5	8.5	8.5	8.5
45°	8.5	8.0	8.0	8.0	8.0	8.0	8.0	8.0
47.5°	7.6	7.1	7.1	7.1	7.1	7.1	7.1	7.1
50°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
52.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
55°	5.3	5.3	4.9	4.9	4.9	4.9	4.9	4.9
57.5°	4.5	4.5	4.0	4.0	4.0	4.0	3.6	3.6
60°	3.6	3.1	3.1	3.1	2.7	2.7	2.7	2.7
62.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
65°	2.2	2.2	2.7	2.7	2.7	2.7	2.7	2.7



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**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
67.5°	2.2	2.2	2.2	2.2	2.7	2.7	2.7	2.7
70°	2.2	2.2	2.7	2.7	2.7	2.7	2.7	2.7
72.5°	2.2	2.2	2.2	2.2	2.7	2.7	2.7	2.7
75°	2.2	2.2	2.2	2.2	2.2	2.7	2.2	2.2
77.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
80°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
82.5°	1.8	2.2	2.2	2.2	2.2	2.2	2.2	2.2
85°	1.8	1.8	1.8	2.2	2.2	2.2	2.2	2.2
87.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
90°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
92.5°	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.8
95°	1.3	1.3	1.3	1.3	1.3	1.8	1.8	1.8
97.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
100°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
102.5°	0.9	1.3	1.3	1.3	1.3	1.3	1.3	1.3
105°	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.3
107.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
110°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
112.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
115°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
117.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
120°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
122.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
125°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
127.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
130°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
132.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
135°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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





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**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)