

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: P273430

Luminaire Tested: **0.05-06W-835-90ASYM-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273430
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-835-90ASYM-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 90 DEGREE ASYMMETRIC OPTIC.
HIGH OUTPUT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 795.8 lumens
Efficiency: N/A
Efficacy: 59.8 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

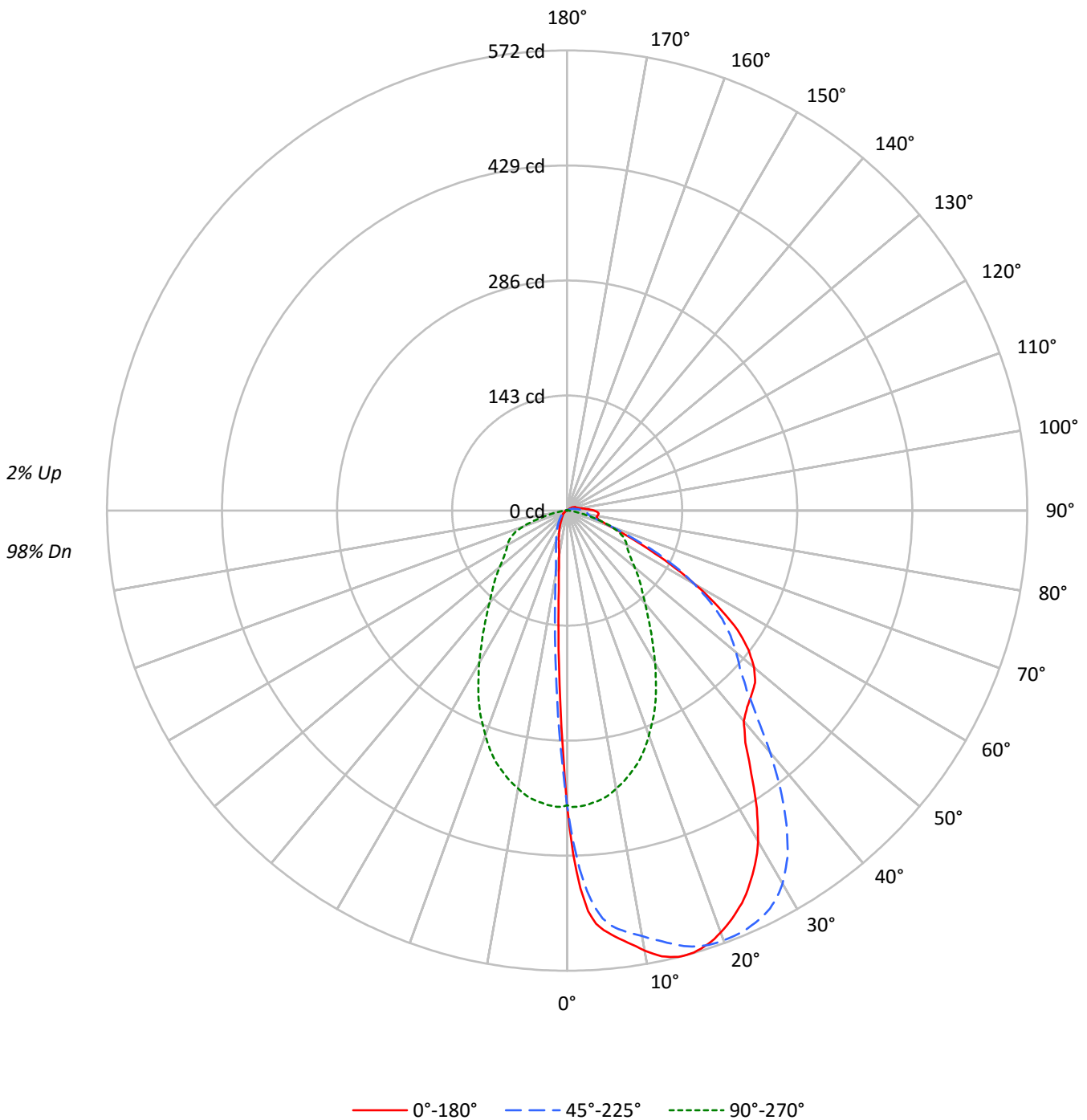
Input Watts (W): 13.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P273430

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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°	6489	6489	6489
5°	9311	6482	2200
10°	9992	6314	1031
15°	10492	6035	721
20°	10521	5603	552
25°	10285	5084	418
30°	9710	4469	313
35°	8631	3912	247
40°	7895	3478	213
45°	8114	3229	198
50°	8359	3012	182
55°	7990	2915	148
60°	6533	3036	92
65°	4451	3207	109
70°	2854	3035	135
75°	2690	2183	151
80°	3876	1428	224
85°	7988	976	447



TEST NUMBER: P273430

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.8	4.0
10°-20°	87.7	11.0
20°-30°	132.6	16.7
30°-40°	152.4	19.2
40°-50°	146.4	18.4
50°-60°	122.3	15.4
60°-70°	66.2	8.3
70°-80°	24.3	3.1
80°-90°	14.4	1.8
90°-100°	8.5	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°	252.1	31.7
0°-40°	404.6	50.8
0°-60°	673.3	84.6
0°-90°	778.1	97.8
90°-120°	15.7	2.0
90°-150°	17.7	2.2
90°-180°	18.0	2.3
0°-180°	795.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	366	366	366	366	366	
5°	524	509	364	171	124	51
15°	572	560	329	53	39	161
25°	526	562	260	31	21	241
35°	399	476	181	19	11	251
45°	324	316	129	11	8	250
55°	259	236	94	6	5	225
65°	106	119	76	3	3	110
75°	39	33	32	2	2	44
85°	39	24	5	2	2	32
90°	34	20	1	1	2	18
95°	24	15	1	1	2	18
105°	13	8	1	1	1	14
115°	10	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



TEST NUMBER: P273430

CATALOG NUMBER: 0.05-06W-835-90ASYM-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3
1°	427.0	425.7	427.0	420.5	420.9	423.1	423.1	419.2	421.3	412.2	410.4
2°	469.9	469.0	469.0	463.3	463.3	465.0	464.2	459.4	459.4	449.8	445.8
3°	498.7	497.4	497.0	492.6	492.6	493.5	492.6	488.7	486.9	478.6	473.8
4°	514.9	514.4	513.1	510.1	510.1	510.9	510.1	507.4	506.1	499.1	494.8
5°	523.6	523.6	521.9	519.7	519.7	520.6	519.2	517.9	516.2	512.3	509.2
6°	530.2	529.3	528.9	526.2	526.2	526.7	525.8	524.5	523.2	520.6	518.4
7°	536.3	535.4	534.5	531.9	532.4	531.9	531.0	529.3	528.4	526.2	524.1
8°	542.4	541.5	541.1	538.0	538.0	537.6	536.7	534.5	533.7	531.0	528.9
9°	548.5	547.7	547.2	544.2	544.2	543.7	542.4	540.7	538.5	535.4	532.8
10°	555.5	554.6	554.2	551.2	550.7	549.8	548.5	546.8	543.7	540.7	537.2
11°	561.2	561.2	559.5	557.3	556.4	556.0	554.6	552.9	549.4	545.5	542.0
12°	566.5	566.5	564.7	562.5	561.6	561.2	559.9	558.1	554.2	551.2	546.3
13°	569.5	569.5	568.2	566.0	566.0	565.6	564.3	563.0	559.0	556.0	551.2
14°	571.7	571.7	570.4	568.2	568.6	568.2	567.3	566.5	563.0	560.3	556.0
15°	572.1	572.6	570.8	569.1	569.9	569.5	569.1	568.2	566.5	563.8	560.3
16°	571.3	572.1	570.4	568.6	569.9	569.5	569.5	568.6	568.2	566.5	563.8
17°	569.5	570.4	569.1	567.3	569.1	568.6	568.6	568.6	569.1	567.8	566.0
18°	566.5	567.8	566.9	565.6	567.3	567.8	567.8	567.3	569.1	568.6	567.8
19°	563.0	564.3	563.8	563.0	564.7	565.6	565.6	566.0	568.2	568.6	568.6
20°	558.1	559.9	559.5	559.0	561.6	562.1	563.0	563.8	566.9	567.8	568.6
21°	552.9	555.1	555.1	554.6	557.3	558.6	559.9	561.2	564.7	566.5	568.2
22°	547.2	549.4	549.4	549.4	552.5	554.2	555.5	558.6	562.5	565.6	567.8
23°	540.7	542.8	542.8	543.3	546.8	549.0	550.7	554.2	559.5	563.8	566.5
24°	534.1	535.9	536.3	536.7	540.7	542.8	544.6	549.0	555.5	561.2	564.3
25°	526.2	528.4	528.4	529.3	533.7	535.9	538.0	543.3	550.7	557.3	562.1
26°	517.1	519.7	520.6	521.4	525.8	528.0	530.6	536.3	545.0	552.0	559.0
27°	507.9	510.5	511.8	511.8	517.5	519.7	522.7	528.9	538.9	546.3	555.1
28°	497.8	500.5	500.5	502.6	507.9	510.5	513.6	520.6	531.0	539.4	549.8
29°	486.9	489.5	489.5	492.1	497.4	500.5	503.5	511.4	521.0	531.5	543.3
30°	474.7	477.3	477.7	479.9	485.6	488.7	492.1	500.9	510.5	522.3	535.4
32.5°	438.8	441.9	441.9	446.7	451.1	456.3	458.9	468.5	481.2	494.3	510.1
35°	399.1	402.1	401.7	404.3	411.3	414.3	419.6	429.6	442.8	458.9	475.5
37.5°	363.6	365.4	364.5	366.7	371.5	376.3	380.3	388.1	401.2	418.3	435.3
40°	341.4	341.8	340.9	340.5	342.7	344.4	346.6	351.4	361.0	375.4	392.1
42.5°	331.3	330.0	328.7	327.4	326.1	326.1	325.2	326.1	329.6	337.9	349.7
45°	323.9	323.4	321.7	319.9	317.3	316.4	314.7	311.2	309.0	310.8	315.6
47.5°	316.9	315.6	313.8	312.1	309.0	307.7	304.6	299.4	295.5	292.8	291.5
50°	303.3	301.6	299.8	298.5	295.9	294.6	291.5	286.7	282.8	278.0	274.0
52.5°	284.1	281.9	281.0	279.7	277.1	275.4	272.7	269.2	265.7	262.2	256.1
55°	258.7	257.4	256.6	257.0	253.9	253.1	251.3	246.9	243.9	240.4	235.6
57.5°	223.3	222.5	222.9	225.1	224.7	225.1	225.1	222.9	220.3	215.9	210.2
60°	184.4	183.6	184.4	186.6	187.1	188.4	189.7	191.4	191.9	188.4	182.3
62.5°	144.2	142.9	143.4	144.7	144.7	146.4	148.2	151.2	154.3	154.7	153.0
65°	106.2	104.9	104.9	105.3	104.9	106.2	107.1	108.0	111.5	116.3	118.9



TEST NUMBER: P273430

CATALOG NUMBER: 0.05-06W-835-90ASYM-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
67.5°	76.1	75.2	75.2	75.2	75.2	75.6	75.2	76.1	77.8	80.9	84.4
70°	55.1	54.6	54.6	54.6	54.2	54.6	55.1	55.1	55.9	57.3	59.0
72.5°	44.6	44.1	44.1	43.7	42.8	42.8	42.4	42.0	41.5	42.0	42.8
75°	39.3	39.3	38.9	38.5	37.6	37.2	36.3	35.4	34.5	33.7	33.2
77.5°	37.6	37.6	37.2	36.3	35.4	34.5	34.1	32.3	31.0	29.7	28.4
80°	38.0	37.6	37.2	36.3	35.0	34.5	33.7	31.9	30.2	28.0	26.2
82.5°	38.9	38.9	38.5	37.2	35.8	35.0	34.1	32.3	30.2	28.0	25.4
85°	39.3	38.9	38.5	37.2	35.8	35.0	33.7	31.5	29.3	27.1	24.5
87.5°	37.2	36.7	36.3	35.0	33.2	32.8	31.5	29.3	27.5	24.9	22.7
90°	33.7	32.8	32.3	31.0	29.7	28.8	28.0	25.8	24.0	22.3	20.1
92.5°	28.4	28.0	27.5	26.2	25.4	24.5	23.6	21.9	20.5	19.2	17.9
95°	23.6	23.2	22.7	21.9	21.0	20.5	19.7	18.4	17.5	16.2	15.3
97.5°	19.7	19.2	18.8	18.4	17.5	17.0	16.6	15.7	14.9	14.0	13.1
100°	16.6	16.6	16.2	15.7	14.9	14.4	14.0	13.5	12.7	11.8	11.4
102.5°	14.4	14.4	14.0	13.5	13.1	12.7	12.2	11.8	10.9	10.1	9.6
105°	13.1	12.7	12.7	12.2	11.8	11.4	10.9	10.1	9.2	8.7	7.9
107.5°	12.2	11.8	11.8	11.4	10.5	10.5	10.1	9.2	8.3	7.4	7.0
110°	11.4	11.4	10.9	10.5	10.1	9.6	9.2	8.7	7.4	6.6	5.7
112.5°	10.9	10.9	10.5	10.1	9.6	9.2	8.7	7.9	7.0	6.1	4.8
115°	10.5	10.1	10.1	9.6	8.7	8.3	7.9	7.0	6.1	4.8	3.9
117.5°	9.2	9.2	9.2	8.3	7.9	7.4	7.0	6.1	5.2	3.9	3.1
120°	8.3	7.9	7.9	7.4	6.6	6.1	6.1	5.2	3.9	3.1	2.2
122.5°	7.0	6.6	6.6	6.1	5.7	5.2	4.8	3.9	3.1	2.2	1.7
125°	5.2	5.2	5.2	4.8	4.4	3.9	3.5	3.1	2.2	1.7	0.9
127.5°	4.4	3.9	3.9	3.5	3.1	3.1	2.6	2.2	1.3	0.9	0.9
130°	3.1	3.1	2.6	2.6	2.2	1.7	1.3	0.9	0.9	0.9	0.9
132.5°	1.7	1.7	1.7	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



TEST NUMBER: P273430

CATALOG NUMBER: 0.05-06W-835-90ASYM-STD-UNV-AN-3F0

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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CATALOG NUMBER: 0.05-06W-835-90ASYM-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3
1°	407.8	398.2	394.7	392.1	389.0	384.6	382.0	378.9	373.3	368.5	362.8
2°	440.1	427.9	421.8	414.8	410.4	403.4	396.9	388.6	378.5	368.5	357.1
3°	466.8	453.7	444.5	434.9	429.6	420.9	410.0	397.7	382.9	367.6	350.5
4°	487.8	474.7	464.2	452.8	446.7	437.1	422.7	406.5	386.4	366.7	344.4
5°	503.1	491.3	480.8	468.5	462.0	451.9	434.5	413.5	389.9	364.5	337.4
6°	513.6	503.1	493.5	482.1	475.5	465.0	445.4	421.3	393.4	363.2	330.0
7°	520.6	511.8	503.5	493.5	486.5	476.9	455.4	428.8	396.0	361.0	322.6
8°	525.8	517.9	510.9	502.2	496.1	486.5	464.6	435.8	398.6	358.4	315.1
9°	529.3	521.9	516.2	508.3	503.1	494.8	472.5	441.0	399.9	354.9	306.4
10°	533.7	525.4	520.1	513.6	508.8	501.8	479.9	446.7	401.7	351.0	297.6
11°	538.0	528.9	523.6	517.5	513.1	507.0	486.0	451.5	403.0	347.0	288.5
12°	542.0	532.4	527.1	521.0	517.1	510.9	491.3	456.3	404.3	343.1	279.7
13°	546.8	535.4	530.2	524.5	520.1	514.4	496.1	460.7	405.2	338.7	270.6
14°	550.7	540.2	533.2	527.1	523.2	517.5	500.0	465.0	405.6	333.9	261.4
15°	554.6	544.2	536.3	529.3	525.4	519.7	503.5	468.1	406.0	329.1	251.8
16°	558.6	548.1	539.4	531.5	528.0	522.3	506.6	471.2	406.0	323.9	242.1
17°	562.5	552.5	542.4	534.1	530.6	525.4	509.2	474.2	405.6	317.8	232.1
18°	566.0	556.0	546.8	537.2	533.7	528.0	511.8	476.9	404.7	311.2	222.9
19°	567.8	559.0	549.8	540.7	535.9	530.6	514.4	479.5	403.4	304.6	212.9
20°	568.6	561.6	552.9	543.3	537.6	532.4	516.6	481.7	401.7	297.2	202.8
21°	569.1	563.8	555.1	545.9	540.2	534.5	518.8	483.4	399.9	289.8	193.6
22°	569.5	565.1	558.1	549.0	542.4	536.7	521.0	486.0	399.1	282.8	184.4
23°	568.6	565.6	559.5	550.7	545.0	538.5	523.2	488.2	397.3	276.2	175.3
24°	567.3	566.0	561.2	552.9	547.7	540.7	525.4	490.0	395.1	267.9	166.5
25°	566.5	566.0	561.6	554.2	549.8	543.3	526.7	491.3	392.5	260.1	158.2
26°	564.7	565.6	562.5	556.4	551.6	545.0	528.4	492.1	389.0	251.8	149.9
27°	562.1	564.3	563.4	558.6	553.8	547.7	530.6	493.0	385.1	243.0	142.5
28°	559.0	563.0	563.8	560.3	556.0	549.8	533.2	494.8	381.1	234.3	135.1
29°	555.1	560.8	563.0	561.6	558.6	552.9	535.4	497.0	376.8	226.8	128.5
30°	549.4	557.7	562.1	562.5	560.3	555.1	537.6	497.8	372.8	218.5	122.8
32.5°	529.3	545.5	556.0	563.8	564.3	560.8	544.2	500.9	361.0	198.4	109.3
35°	498.7	523.2	543.3	559.5	563.8	566.0	552.5	504.4	348.8	180.9	96.6
37.5°	462.9	489.5	520.1	546.8	557.3	563.8	559.0	507.4	333.9	164.3	88.3
40°	419.2	448.9	485.2	524.1	539.4	555.1	561.6	508.3	318.2	150.4	80.9
42.5°	373.7	403.9	442.3	488.2	511.4	535.0	557.7	505.3	299.4	138.6	75.2
45°	331.7	357.5	395.1	445.8	473.4	504.4	544.6	495.6	280.6	128.9	70.8
47.5°	297.2	314.3	346.6	397.3	427.5	465.9	525.8	482.5	260.5	119.3	66.9
50°	272.7	280.2	302.0	345.3	374.6	416.1	497.4	468.5	242.6	109.3	62.1
52.5°	252.6	253.1	263.6	293.7	320.4	360.6	457.2	448.9	228.2	101.0	57.3
55°	230.8	227.7	231.2	249.6	267.9	300.7	403.4	424.8	217.2	94.4	52.0
57.5°	206.7	201.1	201.1	210.2	221.6	246.1	335.7	389.0	207.6	89.2	47.6
60°	178.3	171.8	169.6	174.4	180.9	197.6	272.3	340.0	196.7	85.7	44.1
62.5°	147.7	141.6	139.4	141.2	144.2	156.0	210.2	280.6	181.8	81.7	40.6
65°	117.6	112.3	109.3	110.1	111.5	120.6	157.3	215.9	160.8	76.5	37.6



TEST NUMBER: P273430

CATALOG NUMBER: 0.05-06W-835-90ASYM-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
67.5°	87.4	86.5	84.8	85.2	87.0	90.5	115.8	156.5	132.0	69.5	33.7
70°	62.1	64.3	65.1	65.6	66.0	68.2	83.0	108.8	98.3	58.6	29.3
72.5°	44.1	46.3	49.0	50.3	50.7	51.6	59.9	74.3	69.5	45.5	23.2
75°	33.7	34.5	36.3	38.9	38.9	39.8	43.7	50.3	47.2	31.9	17.5
77.5°	27.5	27.5	28.4	30.2	30.6	31.0	32.8	35.0	31.0	21.4	11.8
80°	24.9	24.0	23.6	24.0	24.5	24.5	24.9	24.0	20.5	14.0	7.4
82.5°	23.2	21.9	20.5	20.1	19.7	19.2	18.8	16.6	13.5	8.3	3.9
85°	22.3	20.1	18.4	17.0	16.6	15.7	14.4	11.8	8.7	4.8	2.2
87.5°	20.5	18.4	16.6	14.9	14.0	13.1	10.9	8.3	5.2	2.6	0.9
90°	18.4	16.6	14.9	12.7	11.8	10.9	8.7	5.7	3.1	0.9	0.9
92.5°	16.2	14.9	13.1	11.4	10.1	9.2	6.6	3.9	1.7	0.9	0.9
95°	14.0	13.1	11.4	9.6	8.7	7.4	5.2	2.6	0.9	0.9	0.9
97.5°	12.2	11.4	9.6	7.9	7.0	6.1	3.5	1.3	0.9	0.9	0.9
100°	10.5	9.6	8.3	6.6	5.7	4.4	2.2	0.9	0.9	0.9	0.9
102.5°	8.7	7.9	6.6	4.8	3.9	3.1	1.3	0.9	0.9	0.9	0.9
105°	7.0	6.1	5.2	3.5	2.6	1.7	0.9	0.9	0.9	0.9	0.9
107.5°	6.1	4.8	3.9	2.6	1.7	1.3	0.9	0.9	0.9	0.9	0.9
110°	4.8	3.9	2.6	1.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
112.5°	3.9	2.6	1.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
115°	3.1	1.7	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: P273430

CATALOG NUMBER: 0.05-06W-835-90ASYM-STD-UNV-AN-3F0

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: P273430

CATALOG NUMBER: 0.05-06W-835-90ASYM-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3
1°	355.3	348.3	342.2	339.6	336.1	332.2	330.9	321.7	317.8	314.7	311.2
2°	344.4	332.6	321.7	319.1	310.8	302.0	296.8	283.7	275.8	270.1	263.6
3°	333.5	316.0	301.1	295.9	285.4	272.3	263.1	247.4	236.5	228.6	219.8
4°	321.3	299.4	280.2	272.3	260.5	243.9	231.7	214.2	201.1	191.9	182.3
5°	309.5	283.2	259.6	250.0	236.5	217.2	202.8	184.9	170.9	161.3	151.2
6°	297.2	266.6	239.5	228.2	214.2	192.8	177.5	159.1	145.1	135.5	126.3
7°	284.5	250.0	220.7	208.0	193.6	171.3	154.7	137.7	124.1	115.4	105.8
8°	272.3	234.3	202.8	189.7	174.8	152.1	135.9	119.8	106.2	97.9	90.9
9°	259.6	219.0	185.3	171.8	157.3	134.6	119.3	103.6	92.7	85.7	79.1
10°	246.9	204.1	169.6	156.0	142.0	120.2	104.9	91.8	81.7	75.6	70.4
11°	234.7	190.1	155.2	141.2	128.1	106.6	93.5	81.7	73.0	67.7	63.4
12°	222.5	176.6	142.0	128.5	115.4	96.2	83.9	73.9	66.4	62.1	58.1
13°	210.7	163.9	129.8	117.1	104.5	87.0	76.1	67.3	61.2	57.3	53.8
14°	198.9	151.2	119.3	105.8	95.3	79.5	69.9	62.1	56.8	53.3	50.3
15°	187.9	140.3	108.4	97.0	87.4	73.0	64.7	57.7	53.3	49.8	47.2
16°	177.0	129.8	99.7	89.6	80.4	67.7	59.9	54.2	50.3	46.8	44.6
17°	166.1	120.6	92.2	82.6	74.3	62.9	56.4	51.1	47.2	44.1	42.0
18°	156.5	111.9	85.2	76.5	69.1	59.0	52.9	48.1	44.6	42.0	39.3
19°	146.9	103.6	79.1	71.2	64.7	55.9	50.3	45.9	42.4	39.3	37.2
20°	137.7	96.6	73.9	66.9	60.8	52.9	47.6	43.3	39.8	37.2	35.0
21°	129.4	90.0	69.5	62.9	57.3	50.3	45.5	41.1	37.6	35.0	33.2
22°	121.5	84.4	65.6	59.4	54.6	48.1	43.3	38.9	35.8	33.2	31.5
23°	113.6	79.5	62.1	56.4	52.0	45.5	41.1	36.7	34.1	31.9	30.2
24°	106.2	75.2	59.0	53.8	49.8	43.7	38.9	35.0	32.3	30.2	28.4
25°	100.1	71.2	55.9	51.6	47.2	41.5	37.2	33.7	31.0	28.8	27.1
26°	94.8	67.3	53.3	49.4	45.5	39.3	35.4	31.9	29.7	27.5	25.8
27°	89.6	64.3	51.1	47.2	43.3	37.6	33.7	30.6	28.4	26.2	24.5
28°	85.2	61.2	49.0	45.0	41.5	36.3	32.3	29.3	27.1	24.9	23.2
29°	80.9	58.6	47.2	43.3	39.8	34.5	31.0	28.0	25.8	23.6	21.9
30°	76.9	55.9	45.0	41.5	38.0	33.2	29.7	26.7	24.5	22.3	20.1
32.5°	69.1	50.7	41.1	37.6	34.5	30.2	27.1	24.0	21.4	19.2	17.9
35°	62.5	46.3	37.2	34.1	31.5	27.5	24.0	21.4	18.8	17.0	15.7
37.5°	57.3	42.4	34.1	31.0	28.8	24.9	21.9	18.8	16.6	14.9	13.5
40°	52.4	39.3	31.5	28.8	26.2	22.7	19.2	16.6	14.4	13.1	11.8
42.5°	49.4	36.7	28.8	26.7	24.5	20.5	17.5	14.9	12.7	11.4	10.1
45°	46.8	34.5	27.1	24.5	22.3	18.8	15.7	13.1	11.4	10.1	8.7
47.5°	44.1	32.3	25.4	22.7	20.5	17.0	14.0	11.8	10.1	8.7	7.9
50°	41.5	30.2	23.6	21.0	18.8	15.3	12.7	10.5	8.7	7.4	6.6
52.5°	38.5	28.0	21.4	19.2	17.0	14.0	11.4	9.2	7.4	6.6	6.1
55°	35.4	25.8	19.7	17.5	15.7	12.7	10.1	7.9	6.1	5.7	5.2
57.5°	31.5	23.2	17.5	15.7	14.0	11.4	8.3	6.6	5.2	4.8	4.8
60°	28.4	20.5	15.3	14.0	12.7	9.6	7.0	5.2	4.4	3.9	3.9
62.5°	25.4	17.9	13.5	12.2	10.9	8.3	5.7	4.4	3.9	3.5	3.1
65°	22.3	15.3	11.8	10.5	9.2	6.6	4.4	3.5	3.1	2.6	2.6



TEST NUMBER: P273430

CATALOG NUMBER: 0.05-06W-835-90ASYM-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
67.5°	19.2	12.7	9.6	8.3	7.4	4.8	3.5	2.6	2.2	2.2	2.2
70°	15.7	10.5	7.4	6.6	5.2	3.5	2.6	2.2	2.2	2.2	2.2
72.5°	12.2	7.9	5.7	4.8	3.5	2.6	2.2	2.2	2.2	2.2	2.2
75°	8.7	5.7	3.5	3.1	2.2	1.7	1.7	1.7	2.2	2.2	2.2
77.5°	6.1	3.9	2.2	1.7	1.7	1.7	1.7	1.7	2.2	2.2	2.2
80°	3.9	2.2	1.3	1.7	1.7	1.7	1.7	1.7	1.7	2.2	2.2
82.5°	2.2	1.3	1.3	1.3	1.3	1.7	1.7	1.7	1.7	1.7	1.7
85°	0.9	1.3	1.3	1.3	1.3	1.3	1.7	1.7	1.7	1.7	1.7
87.5°	0.9	0.9	1.3	1.3	1.3	1.3	1.3	1.3	1.7	1.7	1.7
90°	0.9	0.9	0.9	1.3	1.3	1.3	1.3	1.3	1.3	1.7	1.7
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



TEST NUMBER: P273430

CATALOG NUMBER: 0.05-06W-835-90ASYM-STD-UNV-AN-3F0

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: P273430

CATALOG NUMBER: 0.05-06W-835-90ASYM-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	366.3	366.3	366.3	366.3	366.3	366.3	366.3	366.3
1°	315.6	309.0	307.3	297.6	298.1	295.5	296.8	296.8
2°	264.9	257.0	253.9	244.8	243.9	240.4	240.8	240.4
3°	219.0	210.7	207.2	198.4	196.7	193.2	193.2	192.8
4°	179.6	171.3	167.4	160.4	158.2	154.7	154.3	153.0
5°	147.7	139.9	135.9	130.7	128.1	125.0	124.6	123.7
6°	121.9	115.4	111.5	106.6	104.0	101.4	101.4	100.5
7°	101.8	96.2	93.1	89.6	87.4	85.2	84.8	84.4
8°	87.0	80.9	79.5	76.9	75.2	73.4	73.0	72.1
9°	76.1	70.8	69.9	67.7	66.0	64.7	64.3	63.8
10°	67.3	63.4	62.5	60.8	59.4	58.1	58.1	57.3
11°	60.3	57.7	56.8	55.5	54.2	53.3	53.3	52.9
12°	55.5	53.3	52.4	51.6	50.3	49.4	49.4	49.0
13°	51.6	49.4	49.0	48.1	46.8	45.9	45.9	45.5
14°	48.1	46.3	45.5	45.0	43.7	43.3	42.8	42.4
15°	45.5	43.3	42.8	42.0	40.6	40.2	39.8	39.3
16°	42.4	40.6	39.8	38.9	38.0	37.6	37.2	37.2
17°	39.8	38.0	37.6	37.2	35.8	35.4	35.0	35.0
18°	37.6	35.8	35.4	35.0	33.7	33.2	33.2	32.8
19°	35.4	34.1	33.2	32.8	31.9	31.5	31.0	31.0
20°	33.7	32.3	31.5	31.0	30.2	29.7	29.7	29.3
21°	31.9	30.6	29.7	29.3	28.4	28.0	28.0	27.5
22°	30.2	28.8	28.4	28.0	27.1	26.7	26.2	26.2
23°	28.8	27.5	26.7	26.2	25.4	24.9	24.5	24.5
24°	27.1	25.8	25.4	24.9	24.0	23.2	23.2	22.7
25°	25.8	24.5	23.6	23.2	22.3	21.9	21.4	21.4
26°	24.5	22.7	22.3	21.9	21.0	20.5	20.1	20.1
27°	22.7	21.4	21.0	20.5	19.7	19.2	18.8	18.8
28°	21.4	20.1	19.7	19.2	18.4	17.9	17.9	17.5
29°	20.1	18.8	18.4	17.9	17.5	17.0	16.6	16.6
30°	18.8	17.9	17.5	17.0	16.6	15.7	15.7	15.3
32.5°	16.6	15.3	14.9	14.9	14.0	13.5	13.5	13.1
35°	14.4	13.1	12.7	12.7	12.2	11.8	11.8	11.4
37.5°	12.2	11.4	11.4	10.9	10.5	10.5	10.1	10.5
40°	10.9	10.1	9.6	9.6	9.2	9.2	9.2	9.2
42.5°	9.2	8.7	8.7	8.3	8.3	8.3	8.3	8.3
45°	8.3	7.9	7.9	7.9	7.9	7.9	7.9	7.9
47.5°	7.4	7.0	7.0	7.0	7.0	7.0	7.0	7.0
50°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
52.5°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
55°	5.2	5.2	4.8	4.8	4.8	4.8	4.8	4.8
57.5°	4.4	4.4	3.9	3.9	3.9	3.9	3.5	3.5
60°	3.5	3.1	3.1	3.1	2.6	2.6	2.6	2.6
62.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
65°	2.2	2.2	2.6	2.6	2.6	2.6	2.6	2.6



TEST NUMBER: P273430

CATALOG NUMBER: 0.05-06W-835-90ASYM-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
67.5°	2.2	2.2	2.2	2.2	2.6	2.6	2.6	2.6
70°	2.2	2.2	2.6	2.6	2.6	2.6	2.6	2.6
72.5°	2.2	2.2	2.2	2.2	2.6	2.6	2.6	2.6
75°	2.2	2.2	2.2	2.2	2.2	2.6	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°	1.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2
85°	1.7	1.7	1.7	2.2	2.2	2.2	2.2	2.2
87.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
90°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
92.5°	1.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7
95°	1.3	1.3	1.3	1.3	1.3	1.7	1.7	1.7
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



TEST NUMBER: P273430

CATALOG NUMBER: 0.05-06W-835-90ASYM-STD-UNV-AN-3F0

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)