

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: P273435

Luminaire Tested: **0.05-06W-840-60-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273435
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ITL89169-GONIOPHOTOMETRY)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 0.05-06W-840-60-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 60 DEGREE OPTIC.
HIGH OUTPUT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1193.0 lumens
Efficiency: N/A
Efficacy: 51.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 2.92' x L: 0.16' x H: 0.03')
CIE Type: Direct

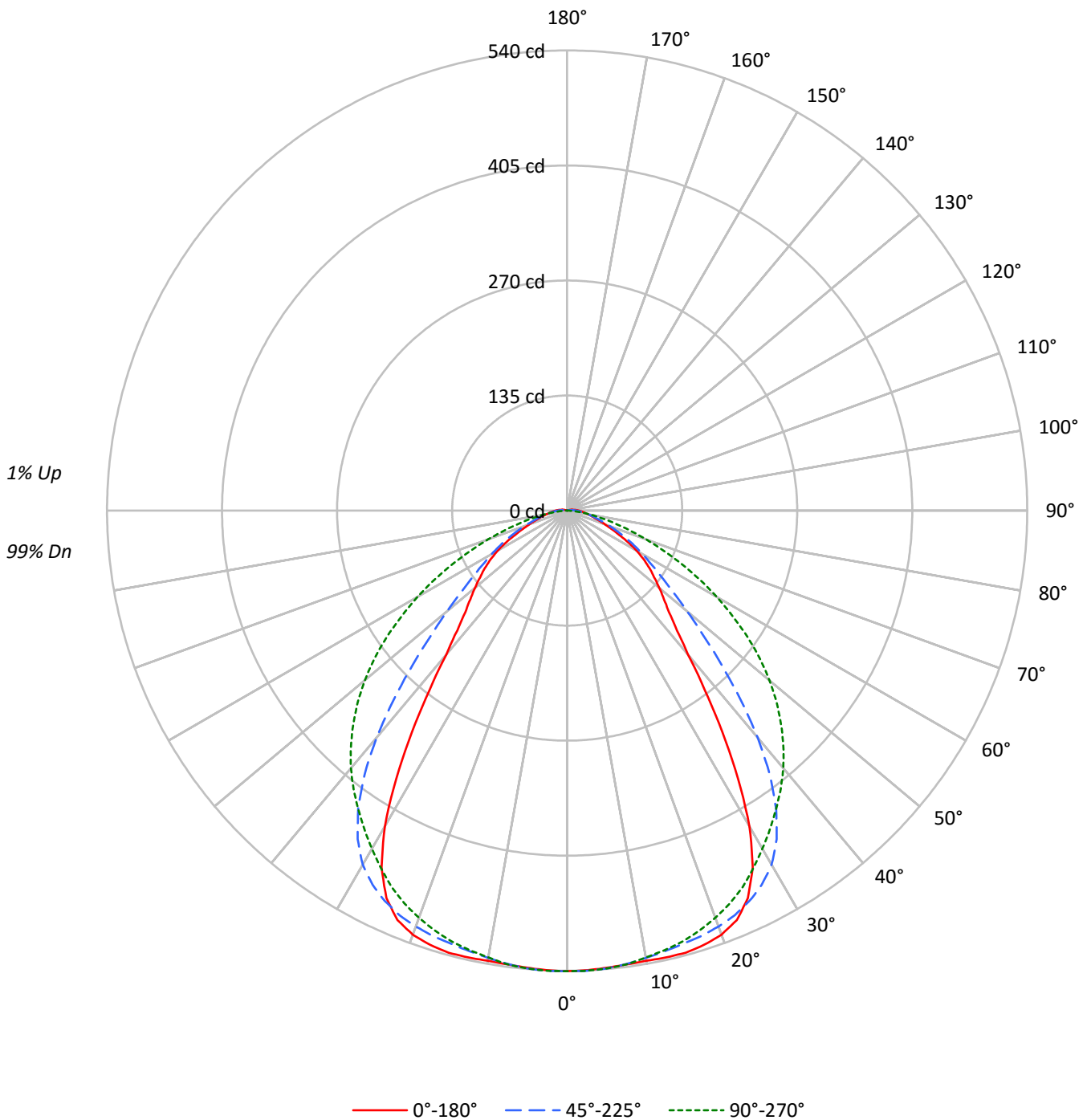
Input Watts (W): 23.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	110	106	102	99	107	104	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	74
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	64
4	86	75	68	62	84	74	67	61	72	65	60	69	64	59	67	62	59	56
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	48	59	52	47	58	51	47	56	51	46	44
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	47	40	35	46	40	35	45	39	35	44	39	34	33
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12354	12354	12354
5°	12184	12243	12362
10°	12108	12114	12338
15°	12183	12063	12358
20°	12168	12104	12329
25°	11768	12078	12241
30°	10336	11843	12029
35°	7963	10999	11852
40°	5805	9420	11689
45°	4704	7395	11377
50°	4208	5703	10911
55°	3819	4567	10164
60°	3362	3866	9143
65°	2712	3254	7849
70°	2177	2672	6406
75°	1841	2200	4948
80°	1684	1917	3495
85°	1697	1810	1951



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.3	4.3
10°-20°	149.2	12.5
20°-30°	228.4	19.1
30°-40°	246.6	20.7
40°-50°	205.2	17.2
50°-60°	151.5	12.7
60°-70°	91.8	7.7
70°-80°	43.9	3.7
80°-90°	17.6	1.5
90°-100°	6.1	0.5
100°-110°	1.4	0.1
110°-120°	0.1	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
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°	428.9	35.9
0°-40°	675.5	56.6
0°-60°	1032.1	86.5
0°-90°	1185.4	99.4
90°-120°	7.6	0.6
90°-150°	7.6	0.6
90°-180°	8.0	0.7
0°-180°	1193.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	540	540	540	540	540	
5°	538	539	539	539	539	51
15°	537	533	526	522	524	152
25°	502	505	506	491	487	227
35°	318	355	427	434	427	198
45°	169	184	256	352	355	134
55°	118	119	134	231	258	105
65°	68	70	76	114	148	68
75°	33	34	36	46	58	36
85°	18	18	16	13	8	16
90°	14	13	11	6	0	7
95°	10	9	6	2	0	7
105°	3	3	1	0	0	4
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
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°	25°	30°	35°	40°	45°	50°
0°	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5
2.5°	539.9	539.9	539.9	539.9	539.9	539.9	540.1	540.3	540.4	540.5	540.5
5°	538.5	538.6	538.8	539.0	539.1	539.2	539.2	539.2	539.2	539.2	539.2
7.5°	537.1	537.1	537.1	537.1	537.1	537.1	536.9	536.7	536.6	536.5	536.5
10°	536.5	536.2	535.8	535.6	535.2	534.9	534.4	533.9	533.5	533.0	532.9
12.5°	537.1	536.5	535.9	535.3	534.7	533.9	532.8	531.7	530.7	529.6	529.2
15°	537.1	536.2	535.3	534.4	533.5	532.3	530.8	529.2	527.7	526.2	525.1
17.5°	534.4	533.7	532.9	532.2	531.4	530.2	528.5	526.8	525.1	523.5	521.7
20°	529.6	528.9	528.1	527.4	526.6	525.5	524.0	522.4	520.9	519.4	516.8
22.5°	520.1	519.6	519.2	518.7	518.3	517.6	516.7	515.8	514.8	514.0	511.0
25°	501.7	502.4	503.2	503.9	504.7	505.2	505.3	505.5	505.6	505.8	502.3
27.5°	471.7	474.2	476.5	479.0	481.4	484.0	486.7	489.4	492.1	494.9	491.3
30°	428.1	432.8	437.5	442.2	446.9	452.6	459.4	466.2	473.1	479.9	476.5
32.5°	373.5	380.4	387.2	394.0	400.8	410.1	421.9	433.7	445.6	457.4	455.7
35°	317.6	325.3	333.1	340.8	348.5	360.7	377.4	394.1	410.8	427.4	429.0
37.5°	264.5	271.6	278.7	285.8	293.0	306.9	327.9	348.8	369.7	390.6	396.9
40°	220.9	227.1	233.3	239.5	245.7	259.8	281.7	303.7	325.7	347.6	359.6
42.5°	190.9	195.1	199.3	203.6	207.8	220.1	240.4	260.7	281.0	301.3	318.9
45°	169.0	171.6	174.2	176.7	179.3	189.0	205.9	222.7	239.5	256.3	278.9
47.5°	154.1	155.4	156.8	158.1	159.5	166.4	178.8	191.3	203.7	216.1	241.8
50°	141.1	141.7	142.3	142.9	143.6	148.2	157.0	165.8	174.6	183.4	209.9
52.5°	128.8	129.3	129.7	130.2	130.7	133.7	139.3	144.9	150.5	156.1	181.4
55°	117.9	117.9	117.9	117.9	117.9	119.8	123.4	127.0	130.7	134.3	156.8
57.5°	106.3	106.2	106.1	105.9	105.7	106.9	109.3	111.7	114.1	116.6	135.5
60°	94.1	93.9	93.8	93.6	93.5	94.3	96.3	98.3	100.3	102.2	117.1
62.5°	80.4	80.6	80.7	80.9	81.0	81.9	83.6	85.3	87.0	88.6	100.0
65°	67.5	68.0	68.4	68.8	69.3	70.2	71.6	72.9	74.3	75.7	84.1
67.5°	55.9	56.4	56.8	57.3	57.7	58.6	59.8	60.9	62.2	63.4	69.7
70°	47.0	47.3	47.6	47.9	48.3	48.9	50.0	51.1	52.1	53.2	57.7
72.5°	39.5	39.7	39.8	40.0	40.1	40.6	41.4	42.1	42.9	43.6	47.0
75°	33.4	33.5	33.7	33.9	34.0	34.3	34.8	35.2	35.6	36.1	38.2
77.5°	28.6	28.8	28.9	29.1	29.2	29.4	29.5	29.7	29.9	30.0	31.1
80°	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.8
82.5°	21.1	21.1	21.1	21.1	21.1	21.1	20.9	20.7	20.6	20.4	20.2
85°	18.4	18.4	18.4	18.4	18.4	18.2	17.7	17.2	16.8	16.4	15.7
87.5°	15.7	15.7	15.7	15.7	15.7	15.5	15.0	14.5	14.1	13.6	12.7
90°	13.6	13.5	13.4	13.2	13.0	12.7	12.3	11.8	11.4	10.9	9.8
92.5°	11.6	11.5	11.3	11.1	11.0	10.6	10.0	9.4	8.8	8.2	7.1
95°	9.5	9.4	9.3	9.1	8.9	8.6	8.0	7.4	6.7	6.1	5.0
97.5°	7.5	7.4	7.2	7.0	6.9	6.5	5.9	5.3	4.7	4.1	3.3
100°	6.1	6.0	5.9	5.7	5.5	5.2	4.6	4.0	3.3	2.7	2.1
102.5°	4.8	4.6	4.5	4.3	4.2	3.8	3.2	2.6	2.0	1.4	1.1
105°	3.4	3.3	3.1	2.9	2.8	2.5	2.0	1.6	1.2	0.7	0.5
107.5°	2.0	1.9	1.8	1.6	1.4	1.2	0.9	0.6	0.3	0.0	0.0
110°	1.4	1.2	1.1	0.9	0.7	0.6	0.5	0.3	0.1	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.7	0.5	0.4	0.2	0.1	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	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	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	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
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°
0°	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5
2.5°	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5
5°	539.2	539.2	539.2	539.2	539.2	539.2	539.2	539.2
7.5°	536.5	536.5	536.5	536.5	536.7	536.9	537.0	537.1
10°	532.8	532.6	532.4	532.4	532.4	532.4	532.4	532.4
12.5°	528.7	528.3	527.8	527.7	527.8	528.0	528.1	528.3
15°	524.1	523.0	522.0	521.7	522.1	522.6	523.0	523.5
17.5°	519.9	518.0	516.2	515.5	515.8	516.1	516.4	516.7
20°	514.2	511.7	509.1	507.9	508.0	508.2	508.4	508.5
22.5°	507.9	504.9	501.8	500.2	499.8	499.6	499.2	499.0
25°	498.8	495.3	491.9	489.8	489.2	488.6	488.0	487.4
27.5°	487.6	484.0	480.4	477.9	476.7	475.5	474.3	473.1
30°	473.2	469.9	466.5	464.1	462.6	461.1	459.6	458.1
32.5°	454.0	452.4	450.7	449.1	447.6	446.1	444.6	443.1
35°	430.7	432.4	434.1	434.1	432.4	430.7	429.0	427.4
37.5°	403.3	409.7	416.0	418.4	416.7	415.1	413.3	411.7
40°	371.6	383.6	395.5	400.7	399.2	397.7	396.2	394.7
42.5°	336.5	354.0	371.6	379.8	378.8	377.7	376.7	375.6
45°	301.4	324.0	346.5	357.6	357.0	356.4	355.7	355.1
47.5°	267.6	293.3	319.1	332.1	332.4	332.7	333.1	333.3
50°	236.4	262.9	289.4	303.5	305.2	306.8	308.5	310.1
52.5°	206.7	232.0	257.3	271.6	274.9	278.2	281.6	284.9
55°	179.4	202.0	224.5	238.4	243.3	248.3	253.4	258.3
57.5°	154.5	173.3	192.3	204.9	211.1	217.3	223.5	229.7
60°	132.0	146.8	161.6	172.9	180.4	188.0	195.6	203.1
62.5°	111.3	122.7	134.1	143.7	151.5	159.4	167.3	175.2
65°	92.6	101.1	109.6	117.7	125.2	132.8	140.4	147.9
67.5°	76.1	82.5	88.8	95.4	102.0	108.7	115.3	122.0
70°	62.2	66.8	71.4	76.3	81.8	87.3	92.7	98.2
72.5°	50.3	53.6	57.0	60.6	64.6	68.4	72.4	76.3
75°	40.4	42.5	44.6	47.0	49.8	52.5	55.2	57.9
77.5°	32.1	33.2	34.2	35.5	37.0	38.6	40.1	41.6
80°	25.2	25.4	25.8	26.1	26.6	27.1	27.5	27.9
82.5°	19.8	19.6	19.2	18.9	18.4	17.9	17.5	17.0
85°	15.1	14.5	13.9	13.0	11.8	10.6	9.4	8.2
87.5°	11.8	10.9	10.0	8.8	7.3	5.7	4.2	2.7
90°	8.8	7.7	6.7	5.5	4.1	2.7	1.4	0.0
92.5°	6.1	5.0	4.0	3.0	2.2	1.5	0.7	0.0
95°	4.0	2.9	1.9	1.2	0.9	0.6	0.3	0.0
97.5°	2.6	1.8	1.1	0.6	0.5	0.3	0.1	0.0
100°	1.5	0.9	0.3	0.0	0.0	0.0	0.0	0.0
102.5°	0.7	0.5	0.1	0.0	0.0	0.0	0.0	0.0
105°	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	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°
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	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)