

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: NEO-RAY

Report Number: P332538-935

Luminaire Tested: **SA4XXDIP-C575D365U935-4F0-1E-UDD-D**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332538-935  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXDIP-C575D365U935-4F0-1E-UDD-D  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 575 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 365 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

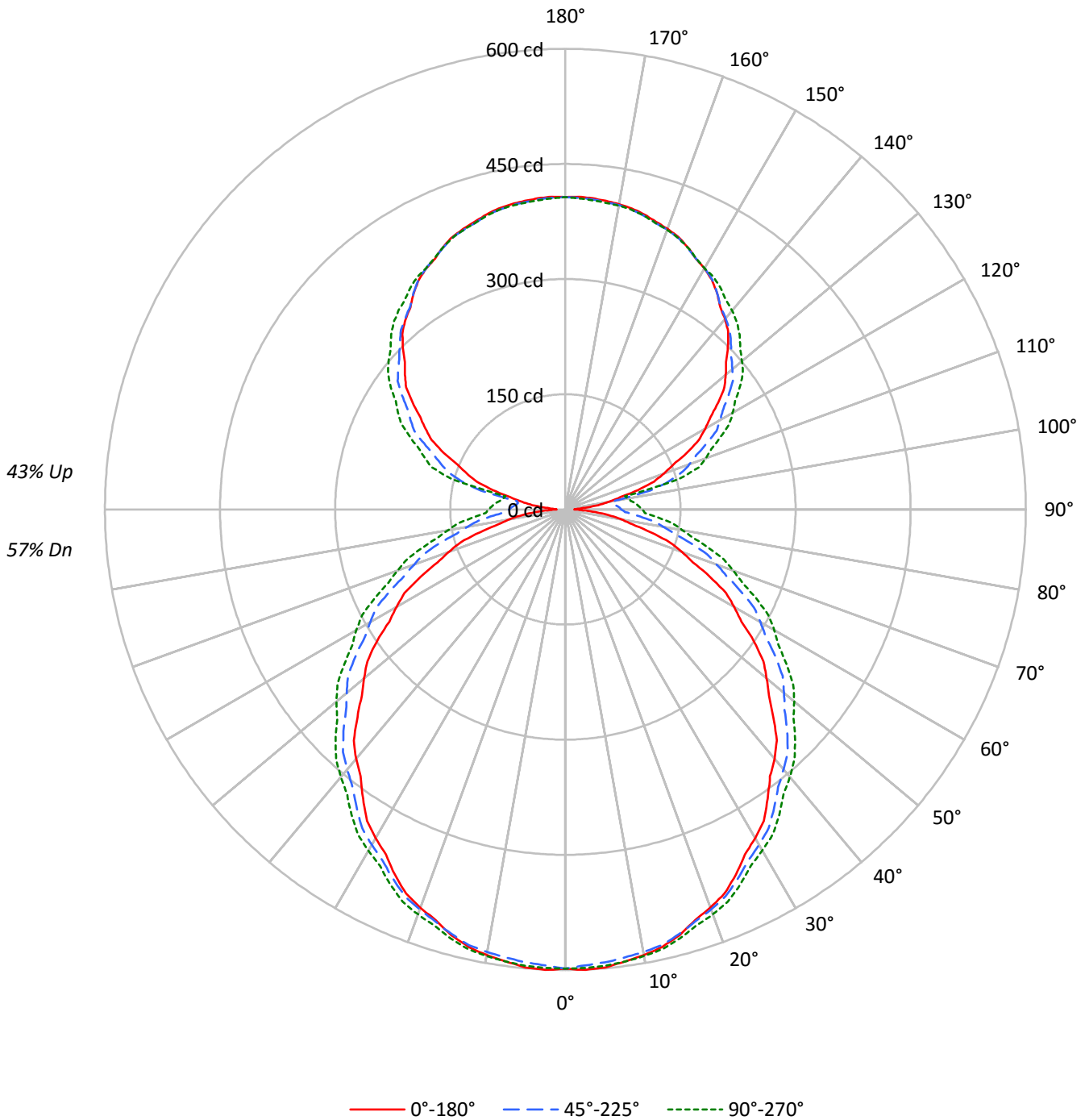
Lumens per Lamp: N/A  
Luminaire Lumens: 3299.2 lumens  
Efficiency: N/A  
Efficacy: 120.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

Input Watts (W): 27.5  
Input Voltage (V): 120  
Input Current (Ain): 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: P332538-935  
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### Luminous Intensity Polar Plot





TEST NUMBER: P332538-935

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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	0	
RCR																						
0	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57				57
1	98	93	89	85	91	87	83	80	75	72	69	64	62	60	54	52	51	46				46
2	89	81	74	68	82	75	69	64	65	60	56	55	52	49	46	44	42	37				37
3	81	71	63	56	75	66	59	53	57	51	47	49	44	41	41	38	35	31				31
4	74	62	54	47	68	58	51	45	50	44	40	43	38	35	36	33	30	26				26
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	32	29	26	23				23
6	62	50	41	35	58	46	39	33	40	34	30	35	30	26	29	26	23	20				20
7	58	45	36	31	53	42	34	29	37	30	26	31	27	23	27	23	20	17				17
8	53	41	32	27	49	38	31	26	33	27	23	29	24	20	25	21	18	15				15
9	50	37	29	24	46	35	28	23	30	25	21	26	22	18	23	19	16	14				14
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14	13				13

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

	0°	45°	90°
0°	4830	4830	4830
5°	4845	4721	4734
10°	4816	4644	4639
15°	4772	4554	4529
20°	4707	4455	4422
25°	4634	4345	4302
30°	4555	4235	4181
35°	4464	4122	4074
40°	4393	4015	3964
45°	4286	3916	3867
50°	4195	3803	3767
55°	4102	3695	3648
60°	3957	3557	3541
65°	3798	3411	3409
70°	3603	3243	3253
75°	3334	3060	3114
80°	3035	2882	2977
85°	2656	2725	2896



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.7	1.7
10°-20°	162.3	4.9
20°-30°	245.5	7.4
30°-40°	297.0	9.0
40°-50°	314.0	9.5
50°-60°	295.5	9.0
60°-70°	245.2	7.4
70°-80°	172.2	5.2
80°-90°	98.5	3.0
90°-100°	71.7	2.2
100°-110°	131.5	4.0
110°-120°	198.4	6.0
120°-130°	231.6	7.0
130°-140°	237.5	7.2
140°-150°	217.0	6.6
150°-160°	173.8	5.3
160°-170°	112.1	3.4
170°-180°	38.6	1.2
0°-30°	464.5	14.1
0°-40°	761.4	23.1
0°-60°	1370.9	41.6
0°-90°	1886.8	57.2
90°-120°	401.7	12.2
90°-150°	1087.8	33.0
90°-180°	1412.0	42.8
0°-180°	3299.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	599	597	592	597	597	57
15°	574	575	573	578	578	162
25°	525	529	531	538	539	242
35°	460	468	474	483	486	288
45°	383	396	409	420	423	296
55°	300	314	334	347	352	267
65°	208	229	252	268	274	206
75°	115	140	168	186	193	123
85°	36	64	94	113	121	38
90°	12	42	73	94	100	8
95°	26	38	65	84	91	28
105°	98	114	139	157	153	103
115°	175	183	203	218	223	172
125°	243	244	260	273	278	217
135°	300	300	305	316	321	231
145°	344	345	345	349	352	215
155°	377	377	376	378	377	174
165°	398	396	396	398	396	112
175°	407	405	405	408	404	39
180°	407	407	407	407	407	



TEST NUMBER: P332538-935

CATALOG NUMBER: SA4XXDIP-C575D365U935-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	598.3	598.3	598.3	598.3	598.3	598.3	598.3	598.3	598.3	598.3	598.3
2.5°	600.5	600.1	599.8	599.3	599.0	598.4	597.4	596.5	595.5	594.5	595.4
5°	599.0	598.6	598.1	597.6	597.2	596.4	595.4	594.3	593.3	592.3	593.5
7.5°	593.9	593.6	593.3	593.1	592.8	592.3	591.4	590.6	589.6	588.8	590.1
10°	589.6	589.4	589.3	589.2	589.0	588.6	587.8	587.0	586.3	585.6	586.9
12.5°	583.7	583.7	583.7	583.6	583.6	583.3	582.8	582.3	581.8	581.3	582.5
15°	574.2	574.4	574.5	574.6	574.8	574.6	574.2	573.8	573.3	572.8	574.2
17.5°	561.2	561.6	562.1	562.5	563.0	563.2	563.1	563.0	562.9	562.8	564.1
20°	552.1	552.5	552.9	553.5	553.9	554.1	554.3	554.5	554.6	554.7	556.2
22.5°	541.9	542.4	543.0	543.5	544.2	544.6	544.8	545.1	545.4	545.6	547.2
25°	525.3	526.2	527.1	528.0	528.8	529.5	529.9	530.4	530.9	531.3	533.0
27.5°	506.8	508.1	509.4	510.7	512.0	513.0	513.7	514.4	515.1	515.7	517.3
30°	494.5	495.7	496.8	498.0	499.2	500.3	501.4	502.4	503.4	504.5	506.2
32.5°	481.0	482.5	483.9	485.3	486.8	488.1	489.2	490.4	491.5	492.8	494.6
35°	459.6	461.4	463.2	464.9	466.7	468.4	469.8	471.4	472.9	474.3	476.5
37.5°	438.1	440.1	442.1	444.2	446.3	448.2	450.0	451.9	453.7	455.6	457.7
40°	424.1	426.0	428.0	429.9	431.9	433.9	435.9	438.0	440.1	442.2	444.4
42.5°	408.0	410.2	412.3	414.6	416.7	419.0	421.5	423.9	426.4	428.8	431.3
45°	383.2	386.1	388.9	391.8	394.5	397.4	400.2	403.0	405.9	408.7	411.2
47.5°	359.6	362.4	365.3	368.2	371.2	374.3	377.5	380.8	384.1	387.4	390.0
50°	342.3	345.6	348.9	352.2	355.5	358.8	362.1	365.3	368.6	371.9	374.8
52.5°	325.2	328.5	331.7	335.0	338.3	341.8	345.6	349.3	353.1	356.8	359.8
55°	300.1	303.2	306.4	309.5	312.6	316.4	320.9	325.4	329.8	334.3	337.3
57.5°	272.2	276.0	279.9	283.8	287.7	291.8	296.2	300.7	305.1	309.5	313.1
60°	253.9	257.8	261.7	265.5	269.4	273.8	278.7	283.6	288.5	293.4	296.9
62.5°	236.3	240.5	244.7	248.9	253.1	257.7	262.6	267.5	272.5	277.4	280.8
65°	207.7	212.5	217.2	222.0	226.8	231.7	236.7	241.8	246.8	251.9	255.6
67.5°	180.2	185.3	190.4	195.4	200.4	205.7	211.1	216.5	222.0	227.4	231.2
70°	161.4	166.5	171.6	176.7	181.8	187.1	192.7	198.4	204.1	209.7	213.7
72.5°	143.3	148.4	153.6	158.8	163.9	169.5	175.6	181.6	187.6	193.6	197.5
75°	115.2	120.7	126.2	131.7	137.2	143.2	149.4	155.7	162.0	168.2	172.4
77.5°	89.1	95.0	100.8	106.6	112.4	118.6	125.2	131.7	138.3	144.8	149.0
80°	73.0	79.0	85.0	90.9	96.9	103.1	109.7	116.2	122.8	129.3	133.8
82.5°	56.9	63.1	69.3	75.5	81.7	88.1	94.6	101.2	107.7	114.3	118.9
85°	35.5	41.8	48.0	54.2	60.5	67.0	73.7	80.4	87.1	93.8	98.2
87.5°	20.0	26.3	32.5	38.7	44.9	51.3	57.9	64.6	71.2	77.8	82.2
90°	11.6	18.3	25.1	31.8	38.4	45.3	52.2	59.2	66.0	73.0	77.7
92.5°	14.0	19.5	24.8	30.2	35.6	41.8	48.7	55.7	62.6	69.6	74.1
95°	25.5	28.1	30.7	33.3	35.9	40.3	46.5	52.6	58.8	65.0	69.4
97.5°	43.5	49.1	54.8	60.4	66.1	68.2	66.6	65.2	63.6	62.2	66.1
100°	57.3	62.3	67.4	72.5	77.7	78.4	74.9	71.4	67.8	64.3	67.2
102.5°	73.4	77.7	81.9	86.2	90.5	94.9	99.4	103.8	108.3	112.8	104.3
105°	97.6	101.0	104.4	107.8	111.2	115.8	121.7	127.4	133.3	139.1	143.5
107.5°	121.3	123.9	126.6	129.2	131.8	136.0	141.7	147.3	153.0	158.7	162.6
110°	136.8	139.1	141.4	143.7	145.9	149.9	155.5	161.2	166.8	172.4	175.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	151.9	154.0	156.3	158.5	160.7	164.4	169.5	174.7	179.9	185.0	188.3
115°	175.0	176.6	178.1	179.7	181.2	184.3	189.0	193.7	198.4	203.1	206.6
117.5°	196.5	197.6	198.6	199.8	200.8	203.6	208.2	212.8	217.4	222.0	225.1
120°	210.6	211.3	212.0	212.8	213.4	215.9	220.2	224.5	228.7	232.9	236.0
122.5°	224.2	224.5	224.7	225.0	225.2	227.4	231.6	235.7	240.0	244.1	247.2
125°	243.1	243.2	243.3	243.4	243.6	245.4	249.0	252.6	256.1	259.8	262.8
127.5°	261.4	261.3	261.3	261.2	261.1	262.7	265.8	269.0	272.2	275.3	277.9
130°	272.9	272.8	272.7	272.6	272.5	273.7	276.4	279.0	281.5	284.1	286.8
132.5°	283.8	283.8	283.7	283.7	283.7	284.7	286.9	289.0	291.2	293.4	296.0
135°	299.5	299.5	299.4	299.4	299.3	299.9	301.2	302.6	303.8	305.1	307.6
137.5°	314.1	314.0	313.8	313.7	313.6	313.9	314.8	315.6	316.3	317.2	319.5
140°	323.6	323.6	323.6	323.6	323.6	323.6	323.9	324.3	324.5	324.8	326.9
142.5°	331.6	331.7	332.0	332.2	332.4	332.5	332.5	332.5	332.5	332.5	334.3
145°	344.5	344.6	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	345.7
147.5°	354.9	355.2	355.4	355.6	355.9	355.9	355.9	355.8	355.7	355.7	355.9
150°	362.5	362.6	362.7	362.8	363.0	363.0	362.9	362.8	362.7	362.7	362.7
152.5°	368.2	368.4	368.6	368.9	369.0	369.0	368.9	368.8	368.7	368.6	368.7
155°	377.0	377.1	377.1	377.2	377.3	377.2	377.0	376.8	376.6	376.4	376.7
157.5°	384.5	384.4	384.4	384.4	384.4	384.2	384.0	383.7	383.5	383.3	383.7
160°	388.9	388.7	388.5	388.3	388.1	388.0	387.9	387.8	387.7	387.6	388.1
162.5°	392.8	392.5	392.3	392.0	391.8	391.6	391.5	391.4	391.4	391.3	391.8
165°	397.7	397.4	397.0	396.7	396.3	396.1	396.1	396.1	396.1	396.1	396.7
167.5°	401.6	401.2	400.9	400.5	400.2	400.0	399.9	399.9	399.8	399.8	400.5
170°	403.8	403.4	402.9	402.6	402.2	402.0	402.1	402.2	402.2	402.3	402.8
172.5°	405.3	404.8	404.4	404.1	403.6	403.5	403.6	403.6	403.6	403.7	404.2
175°	406.8	406.4	406.0	405.6	405.2	405.0	405.1	405.2	405.3	405.3	406.0
177.5°	407.6	407.2	406.8	406.4	406.0	405.9	406.0	406.1	406.2	406.3	406.8
180°	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	598.3	598.3	598.3	598.3	598.3	598.3	598.3	598.3
2.5°	596.2	597.0	597.9	598.2	598.1	598.0	597.9	597.8
5°	594.7	595.8	597.0	597.5	597.4	597.3	597.1	596.9
7.5°	591.5	592.8	594.2	594.8	594.6	594.4	594.3	594.2
10°	588.2	589.6	590.9	591.5	591.4	591.2	591.1	590.9
12.5°	583.8	585.0	586.2	586.8	586.8	586.7	586.7	586.7
15°	575.5	576.9	578.2	578.8	578.7	578.5	578.3	578.2
17.5°	565.5	566.9	568.3	568.9	568.8	568.7	568.5	568.4
20°	557.8	559.2	560.7	561.5	561.5	561.5	561.5	561.5
22.5°	548.6	550.1	551.6	552.5	552.7	552.9	553.2	553.5
25°	534.6	536.2	537.9	538.7	538.9	539.1	539.2	539.3
27.5°	518.8	520.3	521.9	522.7	522.9	523.1	523.2	523.4
30°	507.8	509.5	511.1	512.0	512.3	512.6	512.9	513.2
32.5°	496.5	498.3	500.2	501.3	501.6	501.9	502.2	502.5
35°	478.5	480.6	482.7	484.0	484.4	484.8	485.3	485.8
37.5°	459.9	461.9	464.1	465.4	465.8	466.3	466.7	467.3
40°	446.7	448.9	451.2	452.5	453.1	453.7	454.3	455.0
42.5°	433.8	436.2	438.7	440.1	440.7	441.1	441.6	442.0
45°	413.8	416.3	418.8	420.4	421.2	422.0	422.7	423.4
47.5°	392.6	395.3	397.9	399.6	400.5	401.4	402.3	403.2
50°	377.8	380.8	383.7	385.7	386.6	387.4	388.4	389.3
52.5°	362.8	365.8	368.8	370.7	371.6	372.5	373.3	374.3
55°	340.3	343.3	346.2	348.2	349.0	350.0	350.9	351.7
57.5°	316.6	320.2	323.7	325.9	326.7	327.5	328.4	329.2
60°	300.3	303.8	307.1	309.4	310.6	311.9	313.1	314.3
62.5°	284.2	287.7	291.1	293.3	294.5	295.8	297.0	298.2
65°	259.3	263.1	266.8	269.2	270.4	271.6	272.9	274.1
67.5°	235.0	238.8	242.5	245.0	246.2	247.3	248.5	249.6
70°	217.7	221.8	225.8	228.3	229.4	230.4	231.4	232.5
72.5°	201.4	205.3	209.2	211.7	212.9	214.0	215.2	216.4
75°	176.5	180.6	184.9	187.6	188.9	190.3	191.7	193.0
77.5°	153.3	157.6	161.8	164.6	166.0	167.5	168.8	170.3
80°	138.3	142.7	147.1	150.0	151.2	152.4	153.6	154.8
82.5°	123.5	128.0	132.7	135.6	136.9	138.2	139.5	140.9
85°	102.7	107.2	111.7	114.7	116.1	117.6	119.1	120.6
87.5°	86.6	91.0	95.5	98.3	99.6	101.0	102.3	103.7
90°	82.5	87.2	92.0	95.0	96.3	97.6	98.9	100.2
92.5°	78.8	83.3	88.0	90.9	92.1	93.3	94.5	95.7
95°	73.9	78.3	82.7	85.6	87.0	88.4	89.8	91.3
97.5°	70.1	74.0	77.9	80.6	82.0	83.3	84.6	86.0
100°	70.1	72.9	75.8	77.7	78.9	80.0	81.1	82.2
102.5°	95.7	87.2	78.8	75.1	76.3	77.4	78.6	79.8
105°	147.8	152.1	156.4	158.0	156.8	155.5	154.3	153.1
107.5°	166.6	170.6	174.5	177.2	178.5	179.9	181.2	182.5
110°	179.5	183.0	186.6	189.1	190.5	191.9	193.3	194.7





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	191.6	194.8	198.1	200.5	202.0	203.4	204.8	206.3
115°	209.9	213.4	216.7	219.0	220.0	221.1	222.1	223.2
117.5°	228.1	231.2	234.3	236.3	237.5	238.7	239.9	241.0
120°	239.2	242.3	245.4	247.5	248.5	249.6	250.6	251.7
122.5°	250.2	253.3	256.3	258.4	259.2	260.2	261.1	262.1
125°	265.8	268.9	271.9	273.9	274.8	275.8	276.7	277.8
127.5°	280.6	283.3	285.9	287.7	288.6	289.6	290.6	291.5
130°	289.6	292.3	295.1	296.9	297.8	298.7	299.5	300.5
132.5°	298.7	301.3	303.9	305.7	306.5	307.3	308.2	309.0
135°	310.2	312.7	315.2	317.0	318.1	319.1	320.0	321.1
137.5°	321.8	324.2	326.4	328.0	328.6	329.3	330.1	330.8
140°	329.1	331.2	333.4	334.8	335.6	336.5	337.3	338.1
142.5°	336.2	338.0	339.8	341.1	341.7	342.4	343.0	343.7
145°	346.6	347.7	348.6	349.5	350.2	350.9	351.6	352.4
147.5°	356.0	356.2	356.4	356.7	357.2	357.8	358.3	358.9
150°	362.7	362.7	362.7	362.7	362.8	362.9	362.9	363.0
152.5°	368.8	368.9	369.0	369.0	368.9	368.9	368.9	368.9
155°	376.9	377.2	377.5	377.5	377.3	377.1	376.9	376.7
157.5°	384.0	384.4	384.7	384.7	384.4	384.0	383.7	383.3
160°	388.5	388.9	389.3	389.3	388.9	388.5	388.1	387.6
162.5°	392.1	392.5	393.0	392.9	392.4	392.0	391.5	391.1
165°	397.3	397.8	398.4	398.3	397.7	397.1	396.5	395.9
167.5°	401.1	401.7	402.2	402.2	401.5	400.8	400.1	399.5
170°	403.4	403.9	404.4	404.3	403.7	403.0	402.3	401.7
172.5°	404.8	405.4	405.9	405.8	405.1	404.3	403.6	402.9
175°	406.6	407.2	407.8	407.7	406.8	406.0	405.2	404.4
177.5°	407.3	407.7	408.1	407.9	407.3	406.7	406.0	405.4
180°	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8

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