

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: P332538-927

Luminaire Tested: **SA4XXDIP-C575D365U927-4F0-1E-UDD-D**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332538-927
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-C575D365U927-4F0-1E-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

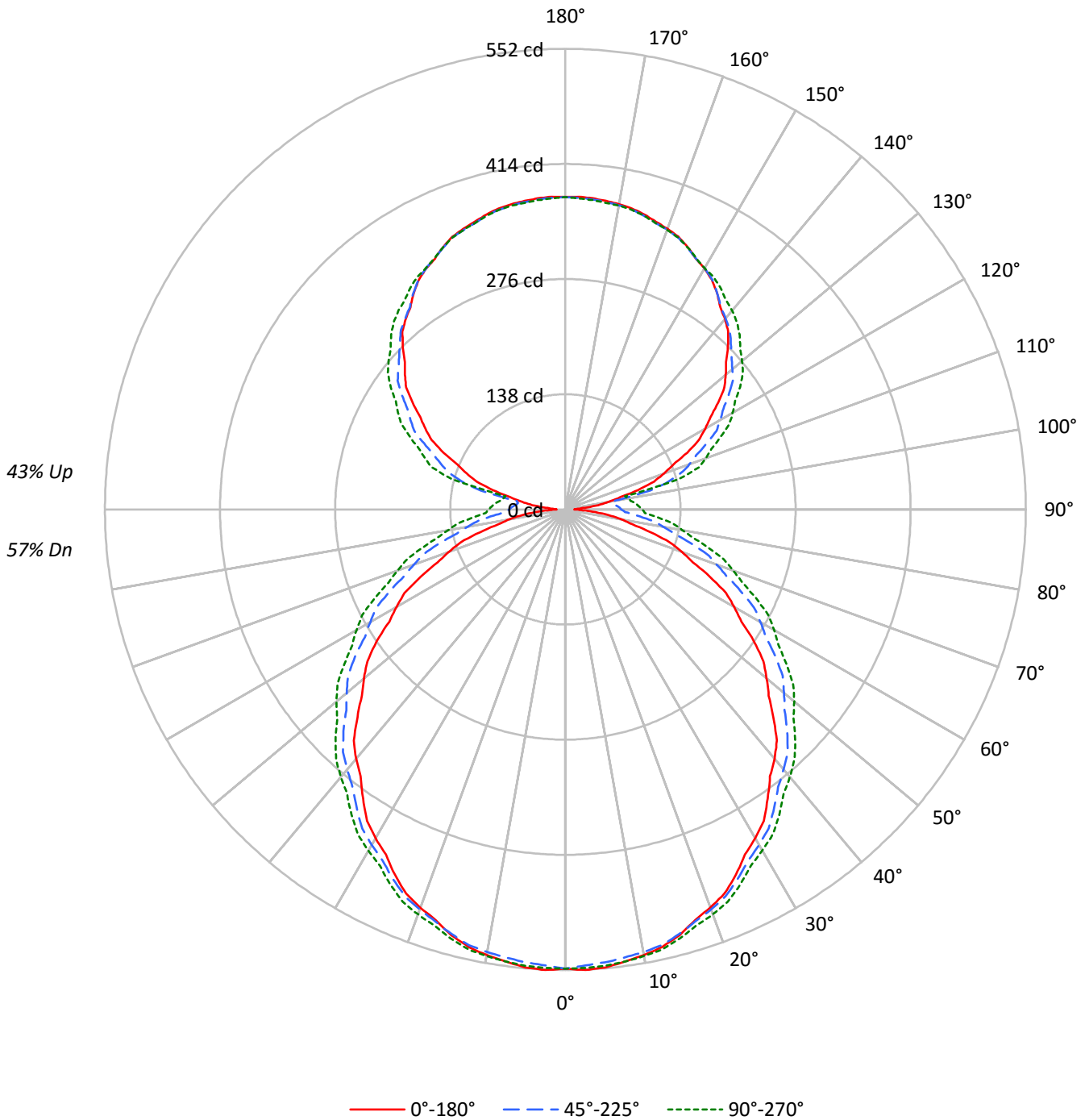
Lumens per Lamp: N/A
Luminaire Lumens: 3035.4 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: General Diffuse

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



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4444	4444	4444
5°	4458	4343	4355
10°	4431	4273	4269
15°	4391	4190	4167
20°	4331	4099	4068
25°	4264	3998	3958
30°	4191	3896	3847
35°	4108	3792	3748
40°	4041	3694	3646
45°	3943	3603	3558
50°	3860	3498	3465
55°	3775	3400	3356
60°	3640	3274	3257
65°	3494	3139	3136
70°	3315	2985	2993
75°	3068	2814	2864
80°	2794	2652	2738
85°	2439	2507	2665



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	1.7
10°-20°	149.4	4.9
20°-30°	225.8	7.4
30°-40°	273.2	9.0
40°-50°	288.9	9.5
50°-60°	271.9	9.0
60°-70°	225.6	7.4
70°-80°	158.4	5.2
80°-90°	90.7	3.0
90°-100°	66.0	2.2
100°-110°	121.0	4.0
110°-120°	182.6	6.0
120°-130°	213.1	7.0
130°-140°	218.5	7.2
140°-150°	199.6	6.6
150°-160°	159.9	5.3
160°-170°	103.2	3.4
170°-180°	35.6	1.2
0°-30°	427.3	14.1
0°-40°	700.6	23.1
0°-60°	1261.3	41.6
0°-90°	1735.9	57.2
90°-120°	369.6	12.2
90°-150°	1000.9	33.0
90°-180°	1300.0	42.8
0°-180°	3035.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	551	549	545	550	549	52
15°	528	529	527	532	532	149
25°	483	487	489	495	496	223
35°	423	430	436	445	447	265
45°	353	364	376	386	390	272
55°	276	289	308	319	324	246
65°	191	211	232	247	252	189
75°	106	129	155	171	178	113
85°	33	59	86	104	111	35
90°	11	38	67	86	92	7
95°	23	35	60	77	84	26
105°	90	104	128	145	141	94
115°	161	168	187	200	205	159
125°	224	225	239	251	256	200
135°	276	276	281	291	295	212
145°	317	317	317	321	324	198
155°	347	347	346	347	347	160
165°	366	365	364	366	364	103
175°	374	373	373	375	372	36
180°	374	374	374	374	374	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5
2.5°	552.5	552.2	551.8	551.4	551.1	550.6	549.7	548.8	547.9	547.0	547.8
5°	551.1	550.7	550.2	549.9	549.5	548.7	547.8	546.8	545.9	544.9	546.1
7.5°	546.4	546.1	545.9	545.7	545.4	544.9	544.2	543.4	542.5	541.7	543.0
10°	542.5	542.3	542.2	542.1	541.9	541.5	540.8	540.1	539.5	538.8	540.0
12.5°	537.0	537.0	537.0	536.9	536.9	536.7	536.2	535.8	535.3	534.8	535.9
15°	528.3	528.5	528.5	528.7	528.9	528.7	528.3	527.9	527.4	527.0	528.3
17.5°	516.3	516.7	517.1	517.5	518.0	518.2	518.1	518.0	517.9	517.8	519.0
20°	507.9	508.3	508.7	509.2	509.6	509.8	510.0	510.2	510.2	510.4	511.7
22.5°	498.6	499.1	499.6	500.1	500.7	501.1	501.3	501.5	501.8	502.0	503.4
25°	483.3	484.1	485.0	485.8	486.6	487.2	487.6	488.0	488.5	488.9	490.4
27.5°	466.3	467.5	468.7	469.9	471.1	472.0	472.6	473.2	473.9	474.5	475.9
30°	455.0	456.1	457.1	458.2	459.3	460.3	461.3	462.2	463.2	464.2	465.7
32.5°	442.6	443.9	445.2	446.6	447.9	449.1	450.1	451.2	452.3	453.4	455.0
35°	422.9	424.5	426.2	427.8	429.4	430.9	432.3	433.7	435.1	436.4	438.4
37.5°	403.1	404.9	406.8	408.7	410.6	412.4	414.1	415.8	417.5	419.1	421.1
40°	390.2	392.0	393.8	395.5	397.4	399.2	401.1	403.0	405.0	406.9	408.9
42.5°	375.4	377.4	379.4	381.4	383.4	385.6	387.8	390.0	392.3	394.5	396.8
45°	352.6	355.2	357.8	360.4	363.0	365.6	368.2	370.8	373.4	376.0	378.3
47.5°	330.8	333.4	336.1	338.8	341.5	344.4	347.4	350.4	353.4	356.4	358.9
50°	315.0	318.0	321.0	324.1	327.1	330.1	333.1	336.1	339.1	342.1	344.8
52.5°	299.2	302.2	305.2	308.2	311.2	314.5	318.0	321.4	324.9	328.3	331.1
55°	276.2	279.0	281.9	284.8	287.6	291.1	295.2	299.4	303.5	307.6	310.4
57.5°	250.4	254.0	257.5	261.1	264.7	268.5	272.5	276.6	280.7	284.8	288.0
60°	233.6	237.2	240.7	244.3	247.9	251.9	256.4	260.9	265.5	270.0	273.1
62.5°	217.4	221.3	225.1	229.0	232.9	237.1	241.6	246.1	250.7	255.2	258.3
65°	191.1	195.5	199.9	204.2	208.7	213.2	217.8	222.4	227.1	231.8	235.2
67.5°	165.8	170.5	175.2	179.8	184.4	189.3	194.2	199.2	204.2	209.2	212.7
70°	148.5	153.2	157.9	162.6	167.2	172.1	177.3	182.5	187.7	193.0	196.6
72.5°	131.8	136.6	141.3	146.1	150.8	156.0	161.5	167.1	172.6	178.2	181.7
75°	106.0	111.1	116.1	121.2	126.3	131.7	137.4	143.2	149.0	154.7	158.6
77.5°	82.0	87.4	92.8	98.1	103.5	109.2	115.2	121.2	127.2	133.2	137.1
80°	67.2	72.6	78.2	83.7	89.1	94.8	100.9	106.9	113.0	119.0	123.1
82.5°	52.4	58.1	63.8	69.5	75.2	81.0	87.1	93.1	99.1	105.2	109.4
85°	32.6	38.4	44.2	49.9	55.7	61.6	67.8	74.0	80.2	86.3	90.4
87.5°	18.4	24.2	29.9	35.6	41.4	47.2	53.3	59.4	65.5	71.6	75.7
90°	10.7	16.9	23.1	29.2	35.3	41.7	48.0	54.4	60.8	67.2	71.5
92.5°	12.9	17.9	22.8	27.8	32.8	38.4	44.8	51.3	57.6	64.0	68.2
95°	23.4	25.8	28.2	30.7	33.0	37.1	42.8	48.4	54.1	59.8	63.8
97.5°	40.0	45.2	50.4	55.6	60.8	62.7	61.3	60.0	58.5	57.2	60.8
100°	52.7	57.4	62.0	66.7	71.5	72.2	68.9	65.7	62.4	59.2	61.8
102.5°	67.5	71.5	75.3	79.3	83.3	87.3	91.4	95.5	99.7	103.8	95.9
105°	89.8	92.9	96.0	99.2	102.3	106.5	111.9	117.2	122.6	128.0	132.1
107.5°	111.6	114.0	116.5	118.9	121.3	125.2	130.4	135.5	140.8	146.0	149.6
110°	125.9	128.0	130.1	132.2	134.3	137.9	143.1	148.3	153.4	158.6	161.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	139.7	141.7	143.8	145.8	147.8	151.2	156.0	160.7	165.5	170.2	173.3
115°	161.1	162.5	163.9	165.3	166.8	169.6	173.9	178.2	182.5	186.9	190.0
117.5°	180.8	181.8	182.8	183.8	184.7	187.4	191.5	195.8	200.0	204.2	207.1
120°	193.8	194.4	195.0	195.7	196.4	198.7	202.6	206.5	210.4	214.3	217.1
122.5°	206.3	206.5	206.8	207.0	207.2	209.2	213.1	216.9	220.8	224.6	227.4
125°	223.6	223.8	223.9	223.9	224.1	225.8	229.1	232.4	235.7	239.0	241.8
127.5°	240.5	240.4	240.4	240.3	240.3	241.7	244.5	247.5	250.4	253.3	255.7
130°	251.0	251.0	250.9	250.8	250.7	251.8	254.3	256.7	259.0	261.4	263.9
132.5°	261.1	261.1	261.0	261.0	261.0	262.0	264.0	265.9	267.9	270.0	272.4
135°	275.6	275.5	275.4	275.4	275.4	275.9	277.1	278.4	279.6	280.7	283.0
137.5°	289.0	288.9	288.8	288.7	288.5	288.8	289.6	290.3	291.0	291.8	294.0
140°	297.7	297.7	297.7	297.7	297.7	297.8	298.0	298.3	298.6	298.8	300.8
142.5°	305.1	305.2	305.5	305.6	305.9	305.9	305.9	305.9	305.9	305.9	307.6
145°	317.0	317.0	317.1	317.1	317.2	317.2	317.2	317.2	317.2	317.2	318.1
147.5°	326.5	326.8	327.0	327.2	327.4	327.5	327.4	327.3	327.3	327.3	327.4
150°	333.5	333.6	333.7	333.8	334.0	334.0	333.9	333.8	333.7	333.7	333.7
152.5°	338.8	339.0	339.1	339.4	339.5	339.5	339.5	339.3	339.2	339.1	339.2
155°	346.9	347.0	347.0	347.1	347.1	347.1	346.9	346.7	346.5	346.3	346.6
157.5°	353.8	353.7	353.7	353.6	353.6	353.5	353.3	353.1	352.8	352.7	353.0
160°	357.8	357.6	357.4	357.3	357.0	357.0	356.9	356.8	356.7	356.6	357.0
162.5°	361.4	361.2	360.9	360.7	360.4	360.3	360.2	360.1	360.1	360.0	360.4
165°	365.9	365.6	365.3	365.0	364.6	364.5	364.5	364.5	364.5	364.5	365.0
167.5°	369.5	369.2	368.8	368.5	368.2	368.0	368.0	368.0	367.9	367.9	368.4
170°	371.5	371.1	370.7	370.4	370.0	369.9	369.9	370.0	370.0	370.1	370.6
172.5°	372.9	372.5	372.1	371.8	371.4	371.2	371.3	371.4	371.4	371.5	371.9
175°	374.3	373.9	373.6	373.2	372.8	372.6	372.7	372.8	372.9	372.9	373.5
177.5°	375.0	374.6	374.3	373.9	373.6	373.4	373.6	373.7	373.8	373.8	374.3
180°	374.3	374.3	374.3	374.3	374.3	374.3	374.3	374.3	374.3	374.3	374.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5
2.5°	548.6	549.3	550.1	550.4	550.3	550.2	550.1	550.0
5°	547.2	548.2	549.3	549.8	549.7	549.5	549.4	549.2
7.5°	544.2	545.4	546.7	547.2	547.1	546.9	546.8	546.7
10°	541.2	542.5	543.7	544.2	544.2	544.0	543.8	543.7
12.5°	537.1	538.2	539.3	539.9	539.9	539.8	539.8	539.8
15°	529.5	530.8	532.0	532.5	532.4	532.3	532.1	532.0
17.5°	520.3	521.6	522.8	523.4	523.3	523.2	523.1	523.0
20°	513.2	514.5	515.9	516.6	516.6	516.6	516.6	516.6
22.5°	504.8	506.1	507.5	508.3	508.5	508.7	509.0	509.2
25°	491.9	493.4	494.9	495.7	495.8	496.0	496.1	496.2
27.5°	477.4	478.7	480.1	480.9	481.1	481.3	481.4	481.6
30°	467.2	468.7	470.2	471.1	471.3	471.7	471.9	472.2
32.5°	456.8	458.5	460.3	461.2	461.5	461.8	462.1	462.3
35°	440.3	442.2	444.1	445.3	445.7	446.1	446.5	446.9
37.5°	423.1	425.0	427.0	428.2	428.6	429.0	429.4	429.9
40°	411.0	413.0	415.1	416.4	416.9	417.5	418.0	418.6
42.5°	399.1	401.3	403.6	405.0	405.4	405.8	406.3	406.7
45°	380.7	383.0	385.3	386.8	387.5	388.2	388.9	389.6
47.5°	361.2	363.7	366.1	367.7	368.5	369.3	370.2	371.0
50°	347.6	350.4	353.1	354.9	355.7	356.5	357.4	358.1
52.5°	333.8	336.5	339.3	341.0	341.9	342.7	343.5	344.4
55°	313.1	315.8	318.5	320.4	321.2	322.0	322.8	323.6
57.5°	291.3	294.6	297.9	299.8	300.6	301.3	302.1	302.9
60°	276.3	279.5	282.6	284.7	285.8	286.9	288.0	289.1
62.5°	261.5	264.7	267.8	269.9	271.0	272.1	273.2	274.3
65°	238.6	242.1	245.5	247.7	248.8	249.9	251.0	252.2
67.5°	216.2	219.7	223.2	225.4	226.5	227.5	228.6	229.7
70°	200.3	204.1	207.7	210.1	211.0	212.0	212.9	213.9
72.5°	185.3	188.9	192.5	194.8	195.9	196.9	198.0	199.1
75°	162.4	166.2	170.1	172.6	173.8	175.1	176.3	177.5
77.5°	141.1	145.0	148.9	151.5	152.7	154.1	155.3	156.7
80°	127.2	131.3	135.4	138.0	139.1	140.2	141.3	142.4
82.5°	113.6	117.8	122.1	124.8	126.0	127.1	128.3	129.6
85°	94.5	98.6	102.7	105.5	106.9	108.2	109.6	111.0
87.5°	79.7	83.7	87.9	90.5	91.7	92.9	94.1	95.4
90°	75.9	80.2	84.6	87.4	88.6	89.8	91.0	92.2
92.5°	72.5	76.7	81.0	83.7	84.8	85.9	87.0	88.1
95°	68.0	72.0	76.0	78.7	80.1	81.4	82.6	84.0
97.5°	64.5	68.0	71.7	74.1	75.4	76.6	77.9	79.1
100°	64.5	67.1	69.7	71.5	72.6	73.6	74.6	75.7
102.5°	88.1	80.2	72.5	69.1	70.2	71.2	72.3	73.4
105°	136.0	140.0	143.9	145.4	144.3	143.1	142.0	140.9
107.5°	153.3	156.9	160.6	163.0	164.2	165.5	166.7	167.9
110°	165.2	168.4	171.7	174.0	175.2	176.6	177.8	179.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	176.3	179.3	182.3	184.5	185.8	187.1	188.5	189.8
115°	193.1	196.3	199.4	201.5	202.4	203.4	204.4	205.3
117.5°	209.8	212.7	215.6	217.5	218.6	219.6	220.7	221.7
120°	220.1	222.9	225.8	227.7	228.6	229.7	230.6	231.6
122.5°	230.2	233.1	235.8	237.7	238.5	239.4	240.3	241.1
125°	244.5	247.4	250.2	252.0	252.9	253.7	254.6	255.6
127.5°	258.2	260.6	263.0	264.7	265.5	266.5	267.4	268.2
130°	266.4	268.9	271.5	273.1	274.0	274.8	275.6	276.5
132.5°	274.8	277.2	279.6	281.2	282.0	282.7	283.5	284.3
135°	285.4	287.7	290.0	291.7	292.6	293.6	294.5	295.4
137.5°	296.1	298.3	300.3	301.7	302.4	303.0	303.7	304.4
140°	302.8	304.8	306.7	308.1	308.8	309.6	310.3	311.1
142.5°	309.3	311.0	312.7	313.9	314.4	315.1	315.6	316.2
145°	318.9	319.9	320.8	321.5	322.2	322.9	323.5	324.2
147.5°	327.6	327.7	327.9	328.2	328.7	329.2	329.7	330.2
150°	333.7	333.7	333.7	333.7	333.8	333.9	333.9	334.0
152.5°	339.3	339.4	339.5	339.5	339.5	339.5	339.5	339.4
155°	346.8	347.1	347.3	347.4	347.1	347.0	346.8	346.6
157.5°	353.3	353.6	353.9	353.9	353.6	353.3	353.0	352.7
160°	357.4	357.8	358.1	358.1	357.8	357.4	357.0	356.6
162.5°	360.8	361.2	361.6	361.5	361.1	360.7	360.2	359.8
165°	365.5	366.0	366.5	366.5	365.9	365.4	364.8	364.2
167.5°	369.0	369.6	370.0	370.0	369.4	368.8	368.1	367.6
170°	371.1	371.6	372.1	372.0	371.5	370.8	370.2	369.6
172.5°	372.5	373.0	373.4	373.4	372.7	372.0	371.4	370.7
175°	374.1	374.6	375.2	375.1	374.3	373.6	372.8	372.1
177.5°	374.7	375.1	375.5	375.3	374.8	374.1	373.6	373.0
180°	374.3	374.3	374.3	374.3	374.3	374.3	374.3	374.3

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