

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: P333209-930

Luminaire Tested: **S125DIP-S850D365U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333209-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D365U930-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3709.1 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

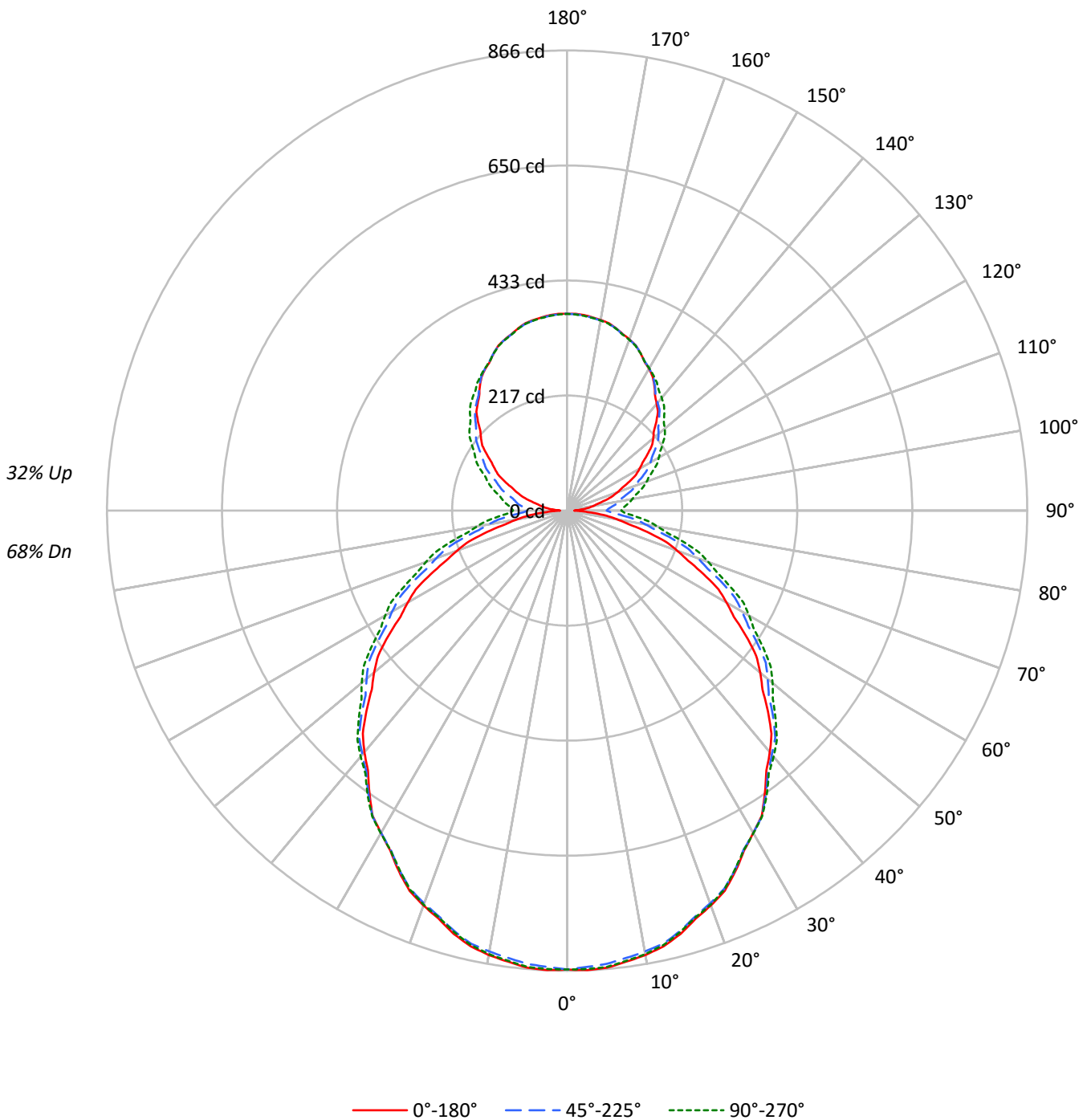
Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	68
1	101	96	91	88	95	90	87	83	80	77	75	71	69	67	62	61	59	55
2	91	83	76	71	86	79	73	67	70	65	61	62	58	55	54	52	49	45
3	83	73	65	59	78	69	62	56	61	56	51	54	50	46	48	44	41	38
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	43	39	35	32
5	70	57	49	42	65	54	46	41	49	42	37	43	38	34	38	34	31	28
6	64	51	43	37	60	49	41	35	44	37	32	39	34	30	35	30	27	24
7	59	46	38	32	56	44	36	31	40	33	29	36	30	26	32	27	24	21
8	55	42	34	28	52	40	33	27	36	30	25	33	27	23	29	25	21	19
9	51	39	31	25	48	37	30	25	33	27	23	30	25	21	27	22	19	17
10	48	35	28	23	45	34	27	22	31	25	21	28	23	19	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5577	5577	5577
5°	5589	5475	5492
10°	5549	5377	5369
15°	5484	5260	5212
20°	5394	5115	5055
25°	5288	4960	4863
30°	5160	4791	4687
35°	5040	4634	4526
40°	4918	4469	4364
45°	4780	4328	4221
50°	4649	4175	4095
55°	4491	4030	3946
60°	4317	3865	3793
65°	4137	3693	3622
70°	3931	3457	3446
75°	3607	3230	3231
80°	3183	2957	2996
85°	2789	2770	2923



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	2.2
10°-20°	231.8	6.3
20°-30°	344.8	9.3
30°-40°	408.4	11.0
40°-50°	422.2	11.4
50°-60°	389.0	10.5
60°-70°	314.4	8.5
70°-80°	210.6	5.7
80°-90°	110.0	3.0
90°-100°	86.1	2.3
100°-110°	118.4	3.2
110°-120°	154.3	4.2
120°-130°	180.4	4.9
130°-140°	190.4	5.1
140°-150°	180.8	4.9
150°-160°	150.6	4.1
160°-170°	100.1	2.7
170°-180°	35.0	0.9
0°-30°	658.3	17.7
0°-40°	1066.7	28.8
0°-60°	1877.9	50.6
0°-90°	2512.9	67.7
90°-120°	358.8	9.7
90°-150°	910.5	24.5
90°-180°	1196.0	32.2
0°-180°	3709.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	862	856	862	862	82
15°	825	825	820	824	821	232
25°	749	751	747	750	746	345
35°	649	654	652	654	654	406
45°	534	543	548	553	555	412
55°	411	424	438	447	450	367
65°	283	302	323	335	339	280
75°	156	178	205	221	226	165
85°	47	75	104	122	130	50
90°	14	43	74	94	102	10
95°	30	53	84	104	111	29
105°	73	89	115	133	141	78
115°	129	137	159	173	179	128
125°	185	186	203	215	220	165
135°	237	239	244	255	259	183
145°	286	287	288	292	294	179
155°	327	327	327	328	327	150
165°	355	355	355	356	354	100
175°	369	368	368	370	368	35
180°	370	370	370	370	370	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	865.7	865.4	865.1	864.8	864.5	863.8	862.7	861.7	860.6	859.6	860.6
5°	863.6	863.3	862.9	862.5	862.2	861.3	860.0	858.7	857.4	856.1	857.5
7.5°	856.1	855.9	855.7	855.6	855.4	854.7	853.4	852.0	850.6	849.3	850.6
10°	849.3	849.3	849.3	849.3	849.3	848.6	847.0	845.5	844.0	842.5	843.8
12.5°	839.8	839.9	840.1	840.2	840.4	839.8	838.7	837.5	836.3	835.0	836.1
15°	824.8	824.9	825.1	825.2	825.5	824.9	823.6	822.3	820.9	819.6	820.8
17.5°	805.1	805.4	805.8	806.2	806.6	806.1	804.8	803.5	802.2	800.9	801.7
20°	790.8	791.2	791.6	792.0	792.4	791.9	790.6	789.3	787.9	786.6	787.2
22.5°	774.6	775.3	775.9	776.7	777.3	776.9	775.4	774.0	772.5	771.0	771.8
25°	749.3	749.9	750.5	751.1	751.6	751.3	750.2	749.1	748.0	746.8	747.5
27.5°	721.2	722.1	722.9	723.7	724.6	724.3	723.1	721.8	720.5	719.3	719.7
30°	700.3	701.4	702.5	703.6	704.7	704.7	703.6	702.5	701.4	700.3	700.7
32.5°	681.3	682.2	683.2	684.2	685.2	685.3	684.4	683.6	682.8	682.0	682.3
35°	648.6	650.0	651.3	652.6	653.9	654.3	653.7	653.1	652.6	652.0	652.6
37.5°	615.9	617.1	618.3	619.5	620.8	621.3	621.0	620.9	620.7	620.5	621.3
40°	593.5	595.1	596.6	598.1	599.6	600.2	600.1	599.9	599.7	599.5	600.2
42.5°	569.2	571.1	573.1	575.0	577.0	578.2	578.6	579.0	579.4	579.8	580.7
45°	534.3	536.4	538.4	540.5	542.6	544.0	545.0	545.9	546.9	547.8	549.2
47.5°	498.6	500.5	502.4	504.3	506.2	508.0	509.6	511.3	512.8	514.5	516.4
50°	474.2	476.2	478.3	480.4	482.4	484.5	486.6	488.7	490.7	492.8	494.9
52.5°	448.4	450.9	453.5	456.0	458.5	461.1	463.6	466.1	468.6	471.2	473.4
55°	410.7	413.7	416.7	419.7	422.7	425.7	428.8	431.8	434.7	437.7	439.9
57.5°	372.0	375.7	379.3	382.9	386.5	390.0	393.5	397.0	400.4	403.9	406.3
60°	346.3	350.1	353.8	357.6	361.3	365.2	368.9	372.7	376.4	380.2	383.0
62.5°	321.2	325.0	328.8	332.6	336.3	340.2	344.3	348.4	352.4	356.4	359.6
65°	282.8	287.1	291.5	295.8	300.1	304.5	309.1	313.6	318.1	322.6	325.5
67.5°	246.5	250.8	254.9	259.1	263.3	267.7	272.2	276.9	281.4	286.0	289.4
70°	220.1	224.5	228.8	233.2	237.5	242.1	247.0	251.8	256.7	261.6	265.2
72.5°	194.4	198.9	203.3	207.8	212.3	217.2	222.6	228.0	233.3	238.6	242.5
75°	155.8	160.7	165.6	170.5	175.4	180.8	186.9	192.9	198.9	204.9	208.6
77.5°	118.7	124.3	130.0	135.7	141.3	147.0	152.8	158.6	164.4	170.2	174.3
80°	95.7	101.3	107.0	112.6	118.3	124.3	130.7	137.1	143.5	149.9	154.0
82.5°	74.7	80.6	86.6	92.5	98.5	104.7	111.3	117.8	124.3	130.9	134.9
85°	46.6	52.7	59.0	65.2	71.4	77.8	84.4	91.0	97.6	104.1	108.3
87.5°	26.5	32.6	38.7	44.8	51.0	57.3	63.8	70.3	76.7	83.2	87.6
90°	13.9	20.4	26.9	33.4	39.9	46.6	53.5	60.3	67.2	74.0	78.7
92.5°	19.2	25.1	31.1	36.9	42.9	49.4	56.5	63.6	70.7	77.8	82.4
95°	29.8	34.7	39.8	44.8	49.8	55.8	62.9	70.0	77.0	84.0	88.6
97.5°	41.1	45.6	50.1	54.5	58.9	64.7	71.7	78.8	85.9	92.9	97.3
100°	49.7	53.6	57.6	61.5	65.5	70.8	77.7	84.5	91.4	98.2	102.8
102.5°	58.9	62.8	66.7	70.6	74.5	79.7	85.9	92.2	98.5	104.8	109.3
105°	73.3	76.6	80.0	83.3	86.7	91.3	97.3	103.4	109.4	115.4	119.6
107.5°	89.4	92.2	95.1	98.0	100.9	105.2	110.9	116.6	122.3	128.0	131.9
110°	100.4	103.1	105.6	108.2	110.7	114.8	120.3	125.7	131.2	136.6	140.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	112.4	114.4	116.3	118.4	120.3	124.0	129.4	134.7	140.1	145.4	149.0
115°	129.3	130.9	132.4	134.0	135.6	138.8	143.9	148.9	153.9	159.0	162.2
117.5°	146.2	147.2	148.1	149.1	150.1	153.0	157.7	162.5	167.2	171.9	175.2
120°	157.3	158.2	159.0	159.9	160.8	163.4	167.8	172.2	176.6	181.0	184.2
122.5°	168.5	168.9	169.3	169.7	170.1	172.4	176.8	181.2	185.5	189.8	192.8
125°	184.7	184.8	185.1	185.2	185.4	187.4	191.3	195.1	198.9	202.8	205.6
127.5°	201.1	201.1	201.1	201.1	201.2	202.8	205.9	209.1	212.3	215.5	218.2
130°	211.5	211.6	211.7	211.8	212.0	213.4	216.2	219.0	221.7	224.5	227.1
132.5°	221.2	221.7	222.1	222.6	223.1	224.4	226.3	228.4	230.4	232.4	235.0
135°	237.4	237.6	237.8	238.0	238.2	239.0	240.4	241.7	243.1	244.5	247.0
137.5°	252.7	252.9	253.2	253.3	253.6	254.0	254.9	255.6	256.4	257.2	259.5
140°	262.0	262.2	262.5	262.9	263.2	263.6	263.9	264.3	264.7	265.1	267.3
142.5°	271.8	272.0	272.1	272.2	272.3	272.5	272.8	273.0	273.4	273.6	275.5
145°	286.4	286.5	286.6	286.6	286.7	286.8	287.0	287.2	287.4	287.6	288.5
147.5°	299.1	299.2	299.3	299.5	299.6	299.8	299.9	300.1	300.2	300.4	300.8
150°	308.0	308.0	307.9	307.9	307.8	307.9	308.1	308.4	308.7	308.9	308.9
152.5°	315.4	315.5	315.6	315.7	315.8	315.8	316.0	316.1	316.2	316.3	316.4
155°	326.8	326.8	326.8	326.8	326.8	326.8	326.9	326.9	327.0	327.1	327.3
157.5°	336.9	336.8	336.6	336.5	336.4	336.3	336.4	336.5	336.5	336.6	336.8
160°	342.9	342.8	342.5	342.3	342.2	342.1	342.2	342.2	342.3	342.3	342.6
162.5°	348.2	348.1	348.0	347.8	347.6	347.6	347.6	347.6	347.6	347.6	348.0
165°	355.3	355.1	355.1	354.9	354.8	354.7	354.8	354.9	355.0	355.0	355.3
167.5°	361.3	361.0	360.8	360.5	360.3	360.1	360.1	360.1	360.1	360.1	360.5
170°	364.5	364.3	364.0	363.8	363.5	363.4	363.4	363.4	363.4	363.4	363.8
172.5°	366.8	366.6	366.3	366.1	365.8	365.7	365.7	365.7	365.7	365.7	366.1
175°	369.4	369.2	368.9	368.7	368.4	368.3	368.3	368.3	368.3	368.3	368.7
177.5°	370.7	370.6	370.3	370.1	369.9	369.8	369.7	369.7	369.7	369.6	369.9
180°	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	861.7	862.7	863.8	864.3	864.1	864.0	863.8	863.6
5°	859.1	860.5	862.1	862.7	862.5	862.3	862.2	862.0
7.5°	851.9	853.2	854.5	855.1	854.9	854.8	854.5	854.4
10°	845.1	846.4	847.7	848.3	848.2	848.0	847.7	847.6
12.5°	837.1	838.1	839.1	839.4	838.9	838.4	837.9	837.4
15°	821.9	823.0	824.2	824.3	823.6	822.8	822.1	821.3
17.5°	802.6	803.5	804.3	804.5	804.0	803.6	803.2	802.7
20°	787.7	788.3	788.9	789.1	789.1	789.1	789.1	789.1
22.5°	772.5	773.1	773.9	774.0	773.6	773.1	772.7	772.3
25°	748.4	749.1	749.8	749.7	748.8	747.9	746.9	746.0
27.5°	720.2	720.8	721.3	721.5	721.1	720.7	720.4	720.1
30°	701.0	701.4	701.7	701.9	701.6	701.5	701.3	701.1
32.5°	682.7	683.1	683.5	683.5	683.4	683.2	683.0	682.8
35°	653.1	653.7	654.3	654.5	654.5	654.5	654.5	654.5
37.5°	622.0	622.7	623.5	623.9	623.8	623.7	623.6	623.5
40°	601.0	601.8	602.5	603.1	603.4	603.8	604.2	604.5
42.5°	581.6	582.5	583.4	583.9	584.0	584.1	584.2	584.2
45°	550.5	551.8	553.1	553.8	554.1	554.2	554.4	554.6
47.5°	518.3	520.2	522.1	523.3	523.7	524.2	524.6	525.0
50°	496.9	499.0	501.1	502.4	503.0	503.5	504.1	504.7
52.5°	475.6	477.8	480.0	481.4	481.8	482.2	482.6	483.0
55°	441.9	444.0	446.1	447.4	448.2	449.0	449.7	450.5
57.5°	408.6	411.0	413.4	414.8	415.4	416.0	416.5	417.1
60°	385.8	388.7	391.5	393.1	393.7	394.3	394.8	395.4
62.5°	362.7	365.8	369.0	370.9	371.6	372.3	373.0	373.7
65°	328.2	331.1	333.9	335.7	336.5	337.2	337.9	338.7
67.5°	292.9	296.3	299.7	301.9	302.9	303.9	304.8	305.8
70°	268.8	272.4	276.0	278.3	279.4	280.5	281.7	282.8
72.5°	246.4	250.2	254.1	256.5	257.3	258.1	258.9	259.8
75°	212.5	216.2	220.0	222.3	223.2	224.2	225.1	226.1
77.5°	178.5	182.6	186.8	189.2	190.0	190.7	191.4	192.2
80°	158.2	162.3	166.4	168.8	169.7	170.4	171.1	171.9
82.5°	138.8	142.8	146.8	149.5	150.9	152.2	153.6	155.0
85°	112.4	116.6	120.7	123.5	125.1	126.5	128.1	129.6
87.5°	92.0	96.4	100.8	103.7	105.0	106.4	107.7	109.1
90°	83.3	88.0	92.6	95.7	97.2	98.7	100.3	101.7
92.5°	87.0	91.6	96.2	99.2	100.7	102.2	103.6	105.0
95°	93.2	97.8	102.3	105.3	106.8	108.3	109.7	111.1
97.5°	101.7	106.0	110.4	113.2	114.6	116.0	117.3	118.7
100°	107.4	111.9	116.4	119.3	120.5	121.8	123.0	124.3
102.5°	113.7	118.1	122.5	125.4	126.7	128.0	129.3	130.6
105°	123.8	127.9	132.0	134.9	136.4	137.9	139.4	140.9
107.5°	135.8	139.8	143.7	146.3	147.4	148.5	149.7	150.8
110°	144.1	147.9	151.7	154.2	155.5	156.7	157.9	159.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	152.5	156.0	159.5	161.8	163.1	164.3	165.4	166.6
115°	165.6	168.9	172.3	174.5	175.5	176.6	177.7	178.7
117.5°	178.5	181.7	184.9	187.1	188.1	189.1	190.1	191.2
120°	187.4	190.6	193.8	195.8	196.7	197.5	198.4	199.3
122.5°	195.8	198.8	201.8	203.7	204.6	205.6	206.5	207.5
125°	208.5	211.4	214.3	216.1	217.0	217.9	218.7	219.6
127.5°	220.9	223.6	226.3	228.2	229.1	230.1	231.1	232.0
130°	229.6	232.2	234.7	236.4	237.3	238.1	238.9	239.7
132.5°	237.5	240.1	242.6	244.3	244.8	245.5	246.1	246.7
135°	249.4	251.8	254.3	255.8	256.6	257.2	257.9	258.6
137.5°	261.8	264.1	266.4	267.7	268.2	268.6	269.0	269.5
140°	269.5	271.7	273.9	275.2	275.6	276.1	276.5	276.9
142.5°	277.3	279.2	281.0	282.2	282.6	283.0	283.5	283.9
145°	289.4	290.4	291.4	292.1	292.7	293.2	293.8	294.3
147.5°	301.3	301.7	302.2	302.4	302.3	302.1	302.1	302.0
150°	308.9	308.9	308.9	308.9	309.0	309.1	309.1	309.2
152.5°	316.6	316.7	316.9	316.9	316.7	316.5	316.3	316.1
155°	327.6	327.8	328.1	328.1	327.8	327.4	327.1	326.8
157.5°	337.0	337.4	337.6	337.5	337.1	336.6	336.2	335.8
160°	342.8	343.1	343.3	343.3	343.0	342.7	342.3	342.0
162.5°	348.2	348.5	348.9	348.9	348.5	348.1	347.7	347.3
165°	355.6	355.8	356.0	356.0	355.6	355.2	354.8	354.4
167.5°	360.9	361.3	361.7	361.7	361.3	360.9	360.4	360.1
170°	364.1	364.5	364.9	364.8	364.4	363.9	363.5	363.1
172.5°	366.5	366.8	367.2	367.2	366.8	366.4	366.0	365.6
175°	369.0	369.4	369.8	369.7	369.3	368.8	368.4	367.9
177.5°	370.2	370.6	370.8	370.8	370.5	370.1	369.7	369.3
180°	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3

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