

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: P332567-940

Luminaire Tested: **SA4XXDIP-C575D1035U940-4F0-1E-UDD-D4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332567-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C575D1035U940-4F0-1E-UDD-D4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

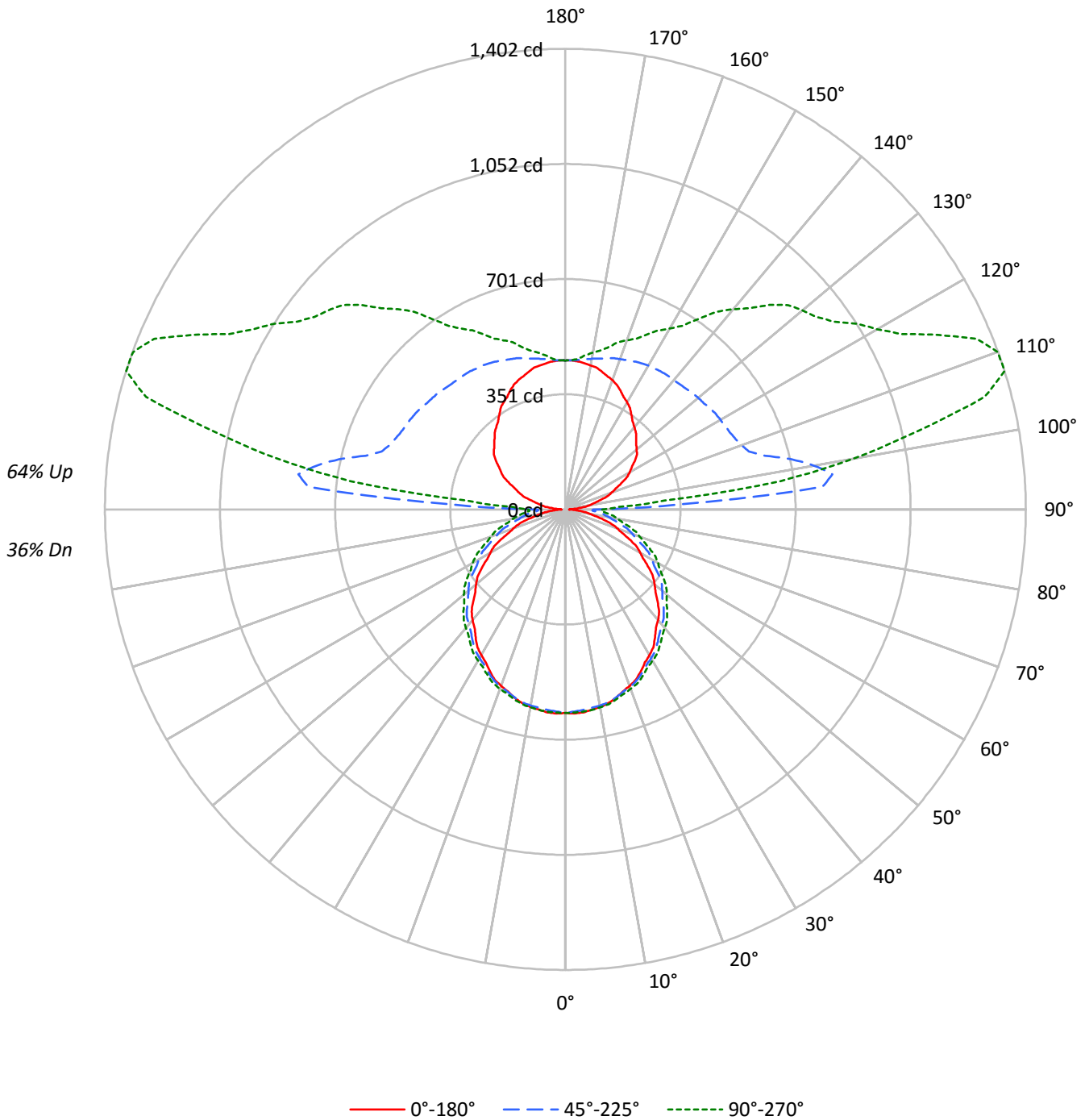
Lumens per Lamp: N/A
Luminaire Lumens: 5410.2 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36
1	94	89	85	82	85	81	77	74	65	63	60	51	49	47	37	36	35	29
2	85	78	71	66	77	70	65	60	57	53	49	44	41	39	32	31	29	24
3	77	68	60	55	70	62	55	50	50	45	41	39	35	33	28	26	24	20
4	71	60	52	46	64	54	47	42	44	39	35	34	31	28	25	23	21	17
5	65	53	45	39	58	48	41	36	39	34	30	30	27	24	23	20	18	14
6	60	47	39	34	54	43	36	31	35	30	26	27	24	21	20	18	16	12
7	55	43	35	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11
8	51	39	31	26	46	35	28	24	29	24	20	23	19	16	17	14	12	10
9	47	35	28	23	43	32	25	21	26	21	18	21	17	14	16	13	11	9
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5002	5002	5002
5°	5018	4889	4903
10°	4987	4809	4805
15°	4943	4717	4690
20°	4875	4614	4579
25°	4799	4500	4456
30°	4717	4386	4330
35°	4624	4269	4220
40°	4550	4158	4105
45°	4439	4056	4005
50°	4344	3938	3901
55°	4249	3827	3778
60°	4098	3685	3667
65°	3933	3533	3529
70°	3733	3359	3369
75°	3453	3169	3224
80°	3143	2984	3082
85°	2746	2820	2999



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	1.1
10°-20°	168.1	3.1
20°-30°	254.2	4.7
30°-40°	307.6	5.7
40°-50°	325.2	6.0
50°-60°	306.0	5.7
60°-70°	253.9	4.7
70°-80°	178.3	3.3
80°-90°	103.3	1.9
90°-100°	387.1	7.2
100°-110°	725.5	13.4
110°-120°	639.8	11.8
120°-130°	530.0	9.8
130°-140°	435.2	8.0
140°-150°	328.4	6.1
150°-160°	229.8	4.2
160°-170°	135.2	2.5
170°-180°	44.0	0.8
0°-30°	481.0	8.9
0°-40°	788.6	14.6
0°-60°	1419.8	26.2
0°-90°	1955.4	36.1
90°-120°	1752.4	32.4
90°-150°	3046.0	56.3
90°-180°	3455.0	63.9
0°-180°	5410.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	620	618	613	619	618	59
15°	595	595	593	599	599	167
25°	544	548	550	558	559	250
35°	476	484	491	501	503	298
45°	397	410	423	435	438	307
55°	311	326	346	360	364	277
65°	215	237	261	278	284	213
75°	119	145	174	193	200	127
85°	37	66	97	117	125	39
90°	12	46	85	106	113	9
95°	38	125	786	438	303	40
105°	110	172	630	1320	1321	118
115°	188	241	553	1048	1255	186
125°	258	307	538	884	996	230
135°	305	363	520	773	880	236
145°	350	401	511	642	708	220
155°	398	430	497	563	587	183
165°	434	447	476	504	512	122
175°	452	453	457	463	461	43
180°	453	453	453	453	453	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6
2.5°	621.9	621.5	621.2	620.7	620.4	619.7	618.8	617.8	616.7	615.7	616.6
5°	620.4	619.9	619.4	618.9	618.5	617.7	616.6	615.5	614.5	613.4	614.7
7.5°	615.1	614.7	614.5	614.2	613.9	613.4	612.5	611.6	610.6	609.8	611.2
10°	610.6	610.5	610.3	610.2	610.0	609.6	608.8	608.0	607.3	606.5	607.9
12.5°	604.5	604.5	604.5	604.4	604.4	604.1	603.6	603.1	602.5	602.0	603.2
15°	594.7	594.9	594.9	595.1	595.3	595.1	594.7	594.2	593.7	593.3	594.7
17.5°	581.2	581.7	582.1	582.6	583.1	583.3	583.2	583.1	583.0	582.9	584.2
20°	571.8	572.2	572.7	573.2	573.6	573.9	574.1	574.3	574.4	574.5	576.0
22.5°	561.2	561.8	562.4	562.9	563.6	564.0	564.3	564.5	564.8	565.1	566.7
25°	544.0	544.9	545.9	546.8	547.7	548.4	548.8	549.3	549.8	550.3	552.0
27.5°	524.9	526.2	527.5	529.0	530.3	531.3	532.0	532.7	533.4	534.1	535.7
30°	512.1	513.4	514.5	515.8	517.0	518.2	519.2	520.3	521.4	522.5	524.2
32.5°	498.2	499.7	501.1	502.7	504.2	505.5	506.7	507.9	509.1	510.3	512.2
35°	476.0	477.9	479.7	481.5	483.4	485.1	486.6	488.2	489.7	491.2	493.5
37.5°	453.7	455.8	457.9	460.0	462.2	464.2	466.1	468.1	469.9	471.8	474.0
40°	439.3	441.2	443.3	445.2	447.3	449.3	451.5	453.6	455.8	458.0	460.3
42.5°	422.6	424.8	427.0	429.4	431.6	434.0	436.5	439.0	441.6	444.1	446.7
45°	396.9	399.8	402.8	405.7	408.6	411.5	414.5	417.4	420.4	423.3	425.9
47.5°	372.4	375.3	378.4	381.4	384.4	387.6	391.0	394.4	397.8	401.2	403.9
50°	354.5	357.9	361.3	364.8	368.2	371.6	375.0	378.4	381.7	385.1	388.2
52.5°	336.8	340.2	343.6	347.0	350.4	354.0	357.9	361.8	365.7	369.5	372.6
55°	310.9	314.1	317.4	320.6	323.8	327.7	332.3	337.0	341.6	346.3	349.4
57.5°	281.9	285.9	289.9	293.9	297.9	302.2	306.7	311.4	316.0	320.6	324.2
60°	263.0	267.0	271.0	275.0	279.0	283.6	288.6	293.7	298.8	303.9	307.5
62.5°	244.7	249.1	253.4	257.8	262.2	266.9	272.0	277.1	282.2	287.3	290.8
65°	215.1	220.1	225.0	229.9	234.9	240.0	245.1	250.4	255.7	260.9	264.7
67.5°	186.6	191.9	197.2	202.4	207.6	213.0	218.6	224.3	229.9	235.5	239.4
70°	167.2	172.5	177.7	183.0	188.2	193.8	199.6	205.5	211.3	217.2	221.3
72.5°	148.4	153.7	159.1	164.4	169.8	175.6	181.8	188.1	194.3	200.5	204.6
75°	119.3	125.0	130.7	136.4	142.1	148.3	154.7	161.2	167.7	174.2	178.5
77.5°	92.3	98.4	104.4	110.4	116.5	122.9	129.7	136.4	143.2	150.0	154.4
80°	75.6	81.8	88.0	94.2	100.3	106.7	113.6	120.4	127.2	133.9	138.6
82.5°	58.9	65.4	71.8	78.2	84.6	91.2	98.0	104.8	111.6	118.4	123.1
85°	36.7	43.2	49.8	56.2	62.7	69.4	76.3	83.3	90.2	97.1	101.7
87.5°	20.7	27.4	34.2	40.7	47.2	53.7	61.4	68.2	75.3	82.5	86.8
90°	11.9	20.0	28.8	35.8	42.9	49.3	61.3	67.9	76.3	84.7	88.3
92.5°	20.7	30.9	44.8	61.2	79.7	104.3	156.2	231.9	305.9	347.8	304.9
95°	38.4	46.2	60.2	76.8	103.3	146.3	230.2	382.5	601.5	785.9	810.6
97.5°	60.9	65.3	77.3	92.4	115.1	151.8	217.7	344.5	562.2	820.2	997.3
100°	75.3	79.3	89.5	104.2	125.2	158.6	217.2	323.8	511.4	768.5	1000.5
102.5°	89.5	94.4	103.5	117.0	136.7	168.4	221.9	316.3	476.7	705.2	944.2
105°	110.4	116.2	123.7	137.4	156.6	186.8	235.2	314.8	445.1	629.7	842.8
107.5°	134.8	139.1	146.2	160.1	177.9	207.3	251.9	324.6	436.4	585.9	760.4
110°	150.6	154.6	161.2	174.1	192.3	220.1	264.6	332.3	435.6	570.1	718.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	165.8	169.4	176.6	188.4	206.3	233.9	276.8	340.7	437.4	560.9	693.8
115°	187.5	191.6	199.2	209.6	227.8	255.0	295.5	353.9	441.7	553.4	669.0
117.5°	210.9	214.2	220.6	231.2	247.9	275.5	314.0	367.7	446.5	548.3	655.3
120°	226.0	228.3	235.0	245.2	260.8	288.2	326.5	377.3	450.3	545.5	647.5
122.5°	240.2	242.1	248.4	257.6	274.3	300.7	338.7	386.4	454.1	542.1	639.0
125°	258.2	261.6	266.9	276.5	293.3	320.0	356.0	400.7	460.7	537.5	625.9
127.5°	274.6	277.4	283.7	294.7	312.2	338.7	372.6	413.1	465.0	531.4	608.9
130°	283.4	286.8	293.7	306.9	323.7	350.7	383.4	420.6	468.5	527.9	598.3
132.5°	292.7	295.3	304.4	316.9	335.1	360.4	392.6	428.6	471.7	525.0	588.9
135°	305.0	308.5	317.4	332.5	351.2	375.0	405.4	438.5	476.1	519.9	574.0
137.5°	318.0	321.2	330.8	345.1	364.4	386.6	414.6	445.0	477.9	516.5	561.3
140°	327.2	329.8	339.4	354.4	372.9	394.2	421.1	449.8	480.2	514.2	554.5
142.5°	336.6	339.3	348.3	362.7	380.7	401.3	427.1	453.4	482.1	513.0	548.8
145°	350.5	353.0	361.8	374.1	390.8	410.4	433.5	457.5	483.4	511.0	540.4
147.5°	366.4	367.1	374.8	387.4	401.4	418.9	440.7	461.6	484.3	507.7	533.0
150°	376.4	377.1	384.1	394.6	407.8	424.6	444.3	463.8	484.3	505.6	527.9
152.5°	385.0	385.2	392.3	402.3	414.1	429.6	447.1	465.2	482.9	502.0	522.2
155°	397.9	398.8	404.1	413.0	422.8	436.2	451.3	466.5	480.7	496.8	513.6
157.5°	410.5	410.5	415.5	422.5	431.1	441.6	454.3	466.5	478.4	491.2	504.9
160°	418.4	418.4	422.0	428.2	435.3	445.1	455.8	466.5	476.3	487.0	498.6
162.5°	425.5	424.8	427.7	433.2	439.6	447.3	457.2	466.5	474.1	482.7	492.8
165°	433.5	433.5	435.3	439.8	444.3	449.5	457.5	464.7	470.0	476.3	483.4
167.5°	441.6	440.7	441.6	445.0	447.5	451.5	457.4	462.5	465.7	469.8	474.8
170°	445.1	444.3	445.1	447.8	449.5	452.2	456.6	461.1	462.9	465.6	469.1
172.5°	448.6	447.8	447.9	449.9	450.9	452.9	455.9	459.7	460.0	461.3	464.1
175°	452.2	451.3	451.3	452.2	453.1	453.1	454.9	457.5	456.6	456.6	458.4
177.5°	453.8	453.1	452.4	453.1	453.1	453.1	453.8	455.2	453.8	453.8	454.5
180°	453.1	453.1	453.1	453.1	453.1	453.1	453.1	453.1	453.1	453.1	453.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6
2.5°	617.5	618.3	619.2	619.6	619.5	619.3	619.2	619.1
5°	615.9	617.1	618.3	618.8	618.8	618.6	618.4	618.2
7.5°	612.6	613.9	615.4	616.0	615.8	615.6	615.5	615.4
10°	609.2	610.6	612.0	612.6	612.5	612.3	612.2	612.0
12.5°	604.6	605.8	607.1	607.7	607.7	607.6	607.6	607.6
15°	596.0	597.4	598.8	599.4	599.3	599.1	599.0	598.8
17.5°	585.7	587.1	588.5	589.2	589.1	589.0	588.8	588.7
20°	577.7	579.2	580.7	581.5	581.5	581.5	581.5	581.5
22.5°	568.2	569.7	571.2	572.2	572.4	572.7	572.9	573.2
25°	553.7	555.4	557.1	557.9	558.1	558.3	558.4	558.6
27.5°	537.3	538.9	540.5	541.4	541.5	541.7	541.9	542.1
30°	525.9	527.6	529.3	530.3	530.6	530.9	531.2	531.5
32.5°	514.2	516.1	518.1	519.2	519.5	519.8	520.1	520.4
35°	495.6	497.8	499.9	501.2	501.7	502.1	502.6	503.1
37.5°	476.3	478.4	480.6	482.0	482.4	483.0	483.4	483.9
40°	462.6	464.9	467.3	468.7	469.3	469.9	470.6	471.2
42.5°	449.2	451.7	454.3	455.8	456.4	456.8	457.4	457.8
45°	428.6	431.1	433.7	435.4	436.2	437.0	437.7	438.5
47.5°	406.6	409.4	412.1	413.8	414.8	415.7	416.7	417.6
50°	391.3	394.4	397.4	399.5	400.4	401.3	402.3	403.1
52.5°	375.8	378.8	381.9	383.9	384.9	385.8	386.6	387.6
55°	352.4	355.5	358.6	360.6	361.5	362.5	363.4	364.3
57.5°	327.9	331.6	335.3	337.5	338.4	339.2	340.1	341.0
60°	311.0	314.6	318.1	320.5	321.7	323.0	324.2	325.5
62.5°	294.4	297.9	301.5	303.8	305.1	306.3	307.6	308.8
65°	268.6	272.5	276.3	278.8	280.1	281.3	282.6	283.8
67.5°	243.3	247.3	251.2	253.7	254.9	256.1	257.3	258.5
70°	225.5	229.7	233.8	236.5	237.6	238.6	239.7	240.8
72.5°	208.6	212.7	216.7	219.3	220.5	221.7	222.9	224.1
75°	182.8	187.1	191.5	194.3	195.6	197.1	198.5	199.8
77.5°	158.8	163.2	167.6	170.5	171.9	173.4	174.9	176.4
80°	143.2	147.8	152.4	155.3	156.6	157.8	159.1	160.3
82.5°	127.9	132.6	137.4	140.4	141.8	143.1	144.5	145.9
85°	106.4	111.0	115.7	118.8	120.3	121.8	123.3	124.9
87.5°	91.4	96.0	100.7	103.6	105.1	106.6	107.9	109.2
90°	93.6	99.0	104.4	107.3	109.3	111.5	111.8	113.1
92.5°	248.9	210.0	187.4	172.5	163.2	159.6	157.8	159.0
95°	728.3	594.5	479.4	395.8	353.6	327.3	312.7	302.6
97.5°	1038.8	991.5	908.5	818.2	755.6	703.4	678.0	660.8
100°	1134.6	1156.6	1117.1	1053.9	977.5	924.3	898.7	892.6
102.5°	1126.7	1219.0	1235.6	1210.9	1164.6	1126.4	1099.5	1094.9
105°	1050.5	1208.4	1300.4	1339.4	1342.5	1336.6	1325.3	1321.2
107.5°	944.8	1112.5	1240.4	1322.2	1367.3	1388.8	1398.7	1402.2
110°	880.7	1038.3	1170.9	1271.2	1335.7	1374.3	1391.6	1400.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	832.9	972.5	1097.9	1198.1	1271.1	1317.6	1341.2	1355.5
115°	783.6	896.5	1004.1	1091.7	1163.1	1217.6	1247.2	1255.4
117.5°	757.0	850.9	935.9	1010.6	1071.8	1117.9	1148.0	1154.8
120°	744.0	829.9	904.2	969.6	1021.5	1061.9	1086.3	1097.3
122.5°	732.7	815.7	883.6	941.0	985.1	1019.7	1040.4	1051.2
125°	714.3	793.8	858.2	909.0	945.6	972.3	990.2	996.4
127.5°	692.1	767.9	832.0	880.4	917.2	941.2	956.5	963.0
130°	675.0	748.1	811.5	860.4	897.9	921.0	936.2	942.4
132.5°	657.5	726.3	788.1	837.0	873.7	899.7	914.2	920.5
135°	632.6	692.9	749.7	795.9	832.4	858.3	873.4	879.7
137.5°	610.2	661.5	709.4	751.2	785.2	810.6	823.1	830.3
140°	597.4	641.2	683.3	722.1	754.0	774.4	787.6	795.5
142.5°	585.8	624.5	660.6	694.1	722.4	741.2	752.9	758.5
145°	569.8	601.0	628.7	654.3	677.2	692.9	702.5	707.6
147.5°	556.6	580.8	602.3	622.1	639.0	652.6	659.8	661.9
150°	549.3	569.7	587.5	603.6	617.8	629.4	634.7	635.6
152.5°	541.4	559.0	575.4	588.6	600.7	610.1	613.3	614.2
155°	529.7	543.9	557.2	567.9	576.8	584.0	586.7	586.7
157.5°	517.0	529.0	540.2	548.8	555.4	560.8	562.4	562.4
160°	509.2	519.0	528.8	535.9	541.3	546.6	547.5	547.5
162.5°	501.3	509.7	517.4	523.8	527.7	533.1	534.0	533.2
165°	490.5	495.9	502.0	506.5	510.1	513.6	512.7	511.8
167.5°	480.0	484.1	489.1	491.8	493.6	495.9	495.7	495.0
170°	473.6	476.3	479.8	482.5	484.3	485.2	484.3	484.3
172.5°	467.9	469.8	472.0	473.9	475.0	475.9	475.0	473.6
175°	460.2	461.1	462.9	462.9	462.9	464.7	462.9	461.1
177.5°	455.2	455.9	455.9	456.6	455.9	456.6	455.2	453.8
180°	453.1	453.1	453.1	453.1	453.1	453.1	453.1	453.1

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