

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: P333350

Luminaire Tested: **S125DIW-S375D770U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333350
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S375D770U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4591.7 lumens
Efficiency: N/A
Efficacy: 151.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

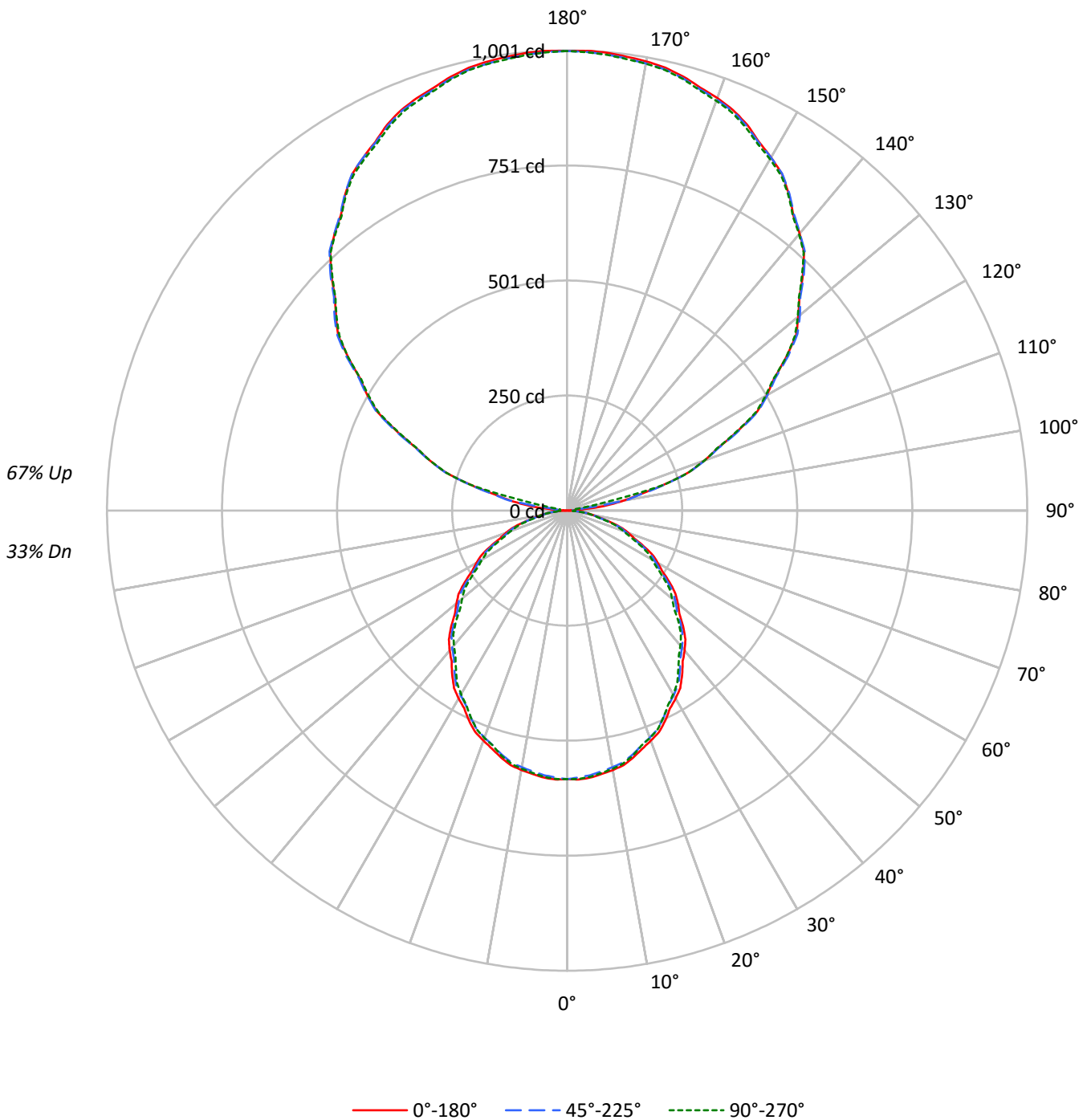
Input Watts (W): 30.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	82	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	36	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	43	36	30	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3773	3773	3773
5°	3781	3745	3769
10°	3758	3719	3740
15°	3718	3674	3689
20°	3659	3612	3618
25°	3596	3537	3534
30°	3519	3457	3439
35°	3436	3370	3323
40°	3351	3277	3230
45°	3259	3191	3128
50°	3158	3088	2995
55°	3059	2971	2888
60°	2942	2853	2753
65°	2804	2713	2621
70°	2670	2549	2460
75°	2433	2353	2271
80°	2165	2131	2079
85°	1882	1919	1815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	1.2
10°-20°	155.6	3.4
20°-30°	229.7	5.0
30°-40°	268.1	5.8
40°-50°	269.2	5.9
50°-60°	236.3	5.1
60°-70°	176.1	3.8
70°-80°	100.7	2.2
80°-90°	31.4	0.7
90°-100°	36.3	0.8
100°-110°	223.9	4.9
110°-120°	406.0	8.8
120°-130°	521.1	11.3
130°-140°	560.5	12.2
140°-150°	526.1	11.5
150°-160°	425.5	9.3
160°-170°	275.2	6.0
170°-180°	94.9	2.1
0°-30°	440.4	9.6
0°-40°	708.5	15.4
0°-60°	1214.0	26.4
0°-90°	1522.2	33.2
90°-120°	666.2	14.5
90°-150°	2273.8	49.5
90°-180°	3069.0	66.8
0°-180°	4591.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	583	582	578	582	581	55
15°	556	554	550	552	552	157
25°	505	502	496	497	496	232
35°	436	434	428	425	422	272
45°	357	355	349	344	342	275
55°	272	270	264	260	256	243
65°	184	182	178	173	172	182
75°	98	96	94	93	91	104
85°	25	26	26	25	24	28
90°	1	7	12	15	18	3
95°	42	39	12	15	16	54
105°	218	221	221	221	220	231
115°	409	413	414	410	406	405
125°	582	587	587	584	582	519
135°	725	730	728	727	722	559
145°	841	842	842	843	839	526
155°	926	922	923	925	920	427
165°	977	973	974	978	972	276
175°	1000	995	996	1001	995	95
180°	1000	1000	1000	1000	1000	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	585.6	585.4	585.2	584.9	584.7	584.1	583.3	582.5	581.7	580.8	581.7
5°	583.2	583.0	582.8	582.6	582.4	581.8	580.8	579.8	578.7	577.7	578.6
7.5°	577.9	577.7	577.5	577.3	577.1	576.4	575.3	574.1	573.0	571.9	572.8
10°	573.1	572.9	572.7	572.5	572.3	571.6	570.5	569.3	568.2	567.1	567.9
12.5°	567.2	566.8	566.4	566.1	565.7	565.0	563.9	562.9	561.8	560.8	561.4
15°	556.0	555.7	555.4	555.1	554.7	554.0	552.9	551.8	550.6	549.5	550.0
17.5°	543.1	542.7	542.2	541.8	541.3	540.5	539.3	538.2	537.0	535.8	536.5
20°	532.4	532.2	532.0	531.8	531.6	530.8	529.5	528.1	526.8	525.5	526.2
22.5°	521.7	521.3	520.9	520.6	520.2	519.4	518.1	516.9	515.6	514.4	514.9
25°	504.7	504.2	503.6	503.1	502.6	501.7	500.4	499.0	497.7	496.4	496.6
27.5°	484.8	484.5	484.2	483.9	483.6	482.7	481.4	480.0	478.6	477.2	477.3
30°	471.9	471.6	471.2	470.9	470.6	469.7	468.2	466.6	465.1	463.5	463.3
32.5°	457.8	457.3	456.9	456.4	455.9	455.0	453.6	452.2	450.9	449.5	449.1
35°	435.8	435.4	435.0	434.6	434.2	433.2	431.8	430.4	428.9	427.5	427.0
37.5°	413.0	412.5	412.0	411.4	410.9	410.0	408.6	407.3	405.9	404.6	403.8
40°	397.5	396.9	396.4	395.9	395.4	394.4	393.0	391.6	390.1	388.7	387.8
42.5°	380.8	380.4	380.0	379.5	379.1	378.2	376.7	375.3	373.8	372.4	371.6
45°	356.8	356.4	356.0	355.6	355.1	354.3	353.1	351.9	350.6	349.4	348.2
47.5°	330.9	330.9	330.9	331.0	331.0	330.3	328.8	327.3	325.8	324.3	323.1
50°	314.3	314.0	313.7	313.3	313.0	312.3	311.0	309.8	308.6	307.3	306.0
52.5°	297.3	297.0	296.8	296.6	296.4	295.6	294.3	293.0	291.6	290.3	289.2
55°	271.7	271.4	271.1	270.8	270.5	269.6	268.2	266.8	265.3	263.9	263.0
57.5°	244.9	244.7	244.5	244.4	244.2	243.5	242.3	241.1	239.9	238.7	237.5
60°	227.8	227.4	227.0	226.6	226.2	225.4	224.3	223.2	222.0	220.9	219.9
62.5°	210.1	209.8	209.4	209.1	208.8	208.1	207.2	206.2	205.2	204.3	203.2
65°	183.5	183.3	183.1	182.9	182.7	182.0	180.9	179.7	178.6	177.5	176.5
67.5°	157.7	157.3	156.8	156.4	156.0	155.3	154.5	153.6	152.8	152.0	151.2
70°	141.4	140.9	140.4	139.9	139.4	138.6	137.7	136.8	135.9	135.0	134.3
72.5°	123.7	123.3	123.0	122.6	122.3	121.8	121.2	120.6	120.0	119.4	118.7
75°	97.5	97.3	97.1	96.9	96.7	96.3	95.8	95.3	94.8	94.3	94.0
77.5°	73.4	73.3	73.2	73.1	73.1	72.9	72.6	72.3	72.0	71.7	71.5
80°	58.2	58.2	58.2	58.2	58.2	58.1	57.9	57.7	57.5	57.3	57.2
82.5°	44.9	44.8	44.6	44.4	44.3	44.2	44.1	44.1	44.0	44.0	43.8
85°	25.4	25.5	25.6	25.7	25.8	25.9	25.9	25.9	25.9	25.9	25.8
87.5°	10.1	10.4	10.7	10.9	11.2	11.4	11.5	11.7	11.8	12.0	12.1
90°	0.7	2.1	3.4	4.7	6.0	7.2	8.4	9.6	10.7	11.9	12.7
92.5°	11.4	10.5	9.6	8.6	7.7	7.8	8.8	9.8	10.8	11.9	12.7
95°	42.2	41.7	41.2	40.8	40.3	36.9	30.6	24.4	18.1	11.9	12.7
97.5°	88.2	89.1	90.0	90.8	91.7	86.0	73.6	61.2	48.8	36.5	31.8
100°	123.7	124.2	124.7	125.2	125.7	126.3	127.0	127.6	128.3	128.9	104.4
102.5°	159.9	160.5	161.2	161.8	162.4	162.9	163.3	163.7	164.1	164.5	159.9
105°	217.8	218.5	219.2	219.8	220.5	220.8	220.8	220.8	220.8	220.8	220.8
107.5°	278.0	278.0	278.0	278.0	278.0	278.2	278.5	278.8	279.2	279.5	279.5
110°	317.1	317.1	317.1	317.1	317.1	317.3	317.6	318.0	318.3	318.6	318.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	353.9	354.3	354.7	355.1	355.5	355.8	356.0	356.2	356.4	356.6	355.9
115°	409.0	409.8	410.7	411.5	412.3	412.8	413.0	413.1	413.3	413.5	412.8
117.5°	466.1	466.0	466.0	466.0	465.9	466.2	466.9	467.5	468.1	468.7	467.9
120°	501.6	501.5	501.3	501.1	501.0	501.1	501.6	502.1	502.6	503.1	502.8
122.5°	533.0	533.7	534.3	534.9	535.6	536.0	536.2	536.4	536.7	536.9	536.6
125°	581.7	582.8	584.0	585.1	586.3	586.8	586.8	586.8	586.8	586.8	586.2
127.5°	628.0	628.9	629.7	630.5	631.3	631.7	631.6	631.5	631.4	631.3	630.9
130°	656.5	657.3	658.1	659.0	659.8	660.3	660.4	660.6	660.8	660.9	660.4
132.5°	684.9	685.9	686.9	687.8	688.8	689.1	688.7	688.3	688.0	687.6	687.5
135°	725.4	726.4	727.4	728.4	729.4	729.7	729.4	729.0	728.7	728.4	728.0
137.5°	762.6	763.5	764.3	765.2	766.0	766.3	766.0	765.7	765.4	765.1	765.2
140°	786.9	787.2	787.6	787.9	788.2	788.3	788.1	788.0	787.8	787.6	788.0
142.5°	808.8	809.0	809.2	809.4	809.6	809.8	810.1	810.3	810.5	810.8	810.8
145°	841.0	841.3	841.7	842.0	842.3	842.5	842.5	842.5	842.5	842.5	842.6
147.5°	869.2	869.1	869.0	869.0	868.9	869.0	869.2	869.3	869.5	869.7	869.9
150°	886.9	886.6	886.3	885.9	885.6	885.6	885.9	886.3	886.6	886.9	887.3
152.5°	904.1	903.4	902.7	902.0	901.2	901.0	901.4	901.7	902.0	902.3	902.7
155°	926.2	925.2	924.2	923.2	922.3	921.9	922.3	922.6	922.9	923.2	923.7
157.5°	943.2	942.7	942.1	941.5	940.9	940.6	940.6	940.7	940.7	940.7	941.3
160°	955.1	954.1	953.1	952.1	951.2	950.7	950.9	951.1	951.2	951.4	952.1
162.5°	964.6	963.6	962.6	961.6	960.6	960.2	960.4	960.6	960.7	960.9	961.8
165°	977.3	976.3	975.4	974.4	973.4	973.0	973.1	973.3	973.5	973.6	974.6
167.5°	986.8	985.8	984.8	983.8	982.7	982.3	982.5	982.6	982.8	983.0	984.1
170°	992.2	991.0	989.8	988.7	987.5	987.0	987.2	987.4	987.5	987.7	989.0
172.5°	995.7	994.6	993.4	992.2	991.1	990.7	991.0	991.3	991.6	991.9	993.0
175°	999.6	998.6	997.6	996.6	995.6	995.2	995.4	995.5	995.7	995.9	997.2
177.5°	1001.3	1000.5	999.8	999.0	998.2	997.8	998.0	998.1	998.2	998.4	999.3
180°	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	582.5	583.3	584.1	584.5	584.4	584.3	584.3	584.2
5°	579.5	580.5	581.4	581.8	581.7	581.6	581.5	581.4
7.5°	573.7	574.6	575.5	575.9	575.8	575.7	575.6	575.5
10°	568.7	569.5	570.4	570.7	570.6	570.5	570.4	570.3
12.5°	562.1	562.8	563.4	563.7	563.7	563.7	563.7	563.6
15°	550.5	551.0	551.6	551.8	551.8	551.8	551.8	551.8
17.5°	537.1	537.7	538.4	538.4	537.9	537.4	536.9	536.4
20°	526.9	527.6	528.3	528.5	527.9	527.4	526.9	526.4
22.5°	515.3	515.8	516.3	516.3	516.0	515.6	515.3	514.9
25°	496.8	497.0	497.2	497.1	496.8	496.5	496.2	495.9
27.5°	477.3	477.3	477.4	477.3	476.9	476.6	476.3	476.0
30°	463.1	462.9	462.7	462.5	462.2	461.9	461.5	461.2
32.5°	448.8	448.4	448.0	447.6	447.0	446.4	445.9	445.3
35°	426.5	426.0	425.4	424.8	424.0	423.1	422.3	421.5
37.5°	403.1	402.3	401.5	400.9	400.4	400.0	399.5	399.0
40°	386.8	385.9	385.0	384.4	384.1	383.7	383.4	383.1
42.5°	370.7	369.9	369.0	368.4	367.9	367.4	367.0	366.5
45°	346.9	345.7	344.5	343.7	343.4	343.1	342.8	342.5
47.5°	321.8	320.6	319.3	318.3	317.6	316.9	316.2	315.5
50°	304.7	303.3	302.0	301.0	300.2	299.5	298.8	298.1
52.5°	288.0	286.8	285.6	284.7	283.9	283.1	282.3	281.5
55°	262.0	261.1	260.2	259.4	258.7	257.9	257.2	256.5
57.5°	236.3	235.1	233.9	233.1	232.7	232.3	231.9	231.5
60°	218.9	217.8	216.8	215.9	215.2	214.5	213.8	213.1
62.5°	202.1	200.9	199.8	199.0	198.5	197.9	197.3	196.8
65°	175.6	174.7	173.8	173.1	172.7	172.3	171.9	171.5
67.5°	150.4	149.6	148.8	148.3	148.1	147.8	147.6	147.3
70°	133.7	133.1	132.5	132.0	131.6	131.2	130.7	130.3
72.5°	118.0	117.3	116.6	116.1	115.7	115.3	114.8	114.4
75°	93.7	93.4	93.0	92.7	92.3	91.9	91.5	91.0
77.5°	71.4	71.2	71.0	70.8	70.5	70.2	69.9	69.6
80°	57.1	57.0	56.9	56.7	56.5	56.3	56.1	55.9
82.5°	43.6	43.4	43.3	43.1	43.1	43.1	43.0	43.0
85°	25.7	25.6	25.5	25.3	25.1	24.9	24.7	24.5
87.5°	12.3	12.5	12.6	12.7	12.6	12.6	12.5	12.4
90°	13.5	14.3	15.1	15.8	16.3	16.8	17.3	17.8
92.5°	13.5	14.3	15.1	15.7	15.9	16.1	16.4	16.6
95°	13.5	14.3	15.1	15.6	15.6	15.6	15.6	15.6
97.5°	27.2	22.5	17.9	15.6	15.6	15.6	15.6	15.6
100°	79.9	55.3	30.8	18.2	17.5	16.9	16.2	15.6
102.5°	155.2	150.6	145.9	138.0	126.8	115.6	104.4	93.2
105°	220.8	220.8	220.8	220.7	220.6	220.4	220.2	220.1
107.5°	279.6	279.6	279.6	279.4	278.9	278.4	277.9	277.4
110°	317.6	317.1	316.6	316.5	316.6	316.8	317.0	317.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	355.3	354.7	354.0	353.6	353.4	353.2	352.9	352.7
115°	412.1	411.5	410.8	410.0	409.0	408.0	407.0	406.0
117.5°	467.0	466.2	465.3	464.7	464.2	463.8	463.4	463.0
120°	502.5	502.1	501.8	501.2	500.4	499.6	498.8	497.9
122.5°	536.2	535.9	535.6	534.9	534.0	533.0	532.1	531.1
125°	585.5	584.9	584.2	583.6	583.1	582.6	582.2	581.7
127.5°	630.6	630.2	629.9	629.1	627.8	626.6	625.4	624.2
130°	660.0	659.5	659.0	658.3	657.5	656.7	655.8	655.0
132.5°	687.4	687.3	687.2	686.8	685.9	685.1	684.3	683.5
135°	727.7	727.4	727.1	726.4	725.4	724.4	723.4	722.4
137.5°	765.3	765.3	765.4	765.0	764.1	763.3	762.4	761.6
140°	788.3	788.6	789.0	788.6	787.6	786.7	785.7	784.7
142.5°	810.9	811.0	811.0	810.6	809.6	808.6	807.6	806.6
145°	842.8	843.0	843.1	842.7	841.7	840.7	839.8	838.8
147.5°	870.1	870.3	870.5	870.0	868.9	867.7	866.5	865.3
150°	887.6	887.9	888.3	887.8	886.4	885.1	883.8	882.5
152.5°	903.0	903.3	903.7	903.2	902.0	900.9	899.7	898.5
155°	924.2	924.7	925.2	924.8	923.5	922.2	920.9	919.5
157.5°	941.8	942.3	942.8	942.4	941.1	939.8	938.5	937.2
160°	952.7	953.4	954.0	953.7	952.4	951.1	949.8	948.4
162.5°	962.7	963.6	964.6	964.3	962.9	961.4	960.0	958.5
165°	975.6	976.6	977.6	977.4	976.1	974.8	973.5	972.1
167.5°	985.3	986.5	987.7	987.6	986.1	984.6	983.1	981.6
170°	990.3	991.7	993.0	992.9	991.4	989.9	988.4	987.0
172.5°	994.2	995.4	996.6	996.4	995.0	993.5	992.0	990.5
175°	998.5	999.8	1001.1	1001.0	999.6	998.1	996.6	995.1
177.5°	1000.2	1001.1	1002.1	1002.0	1000.9	999.9	998.8	997.8
180°	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6

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