

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: P333217-927

Luminaire Tested: **S125DIP-S850D590U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333217-927
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: S125DIP-S850D590U927-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4472.8 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

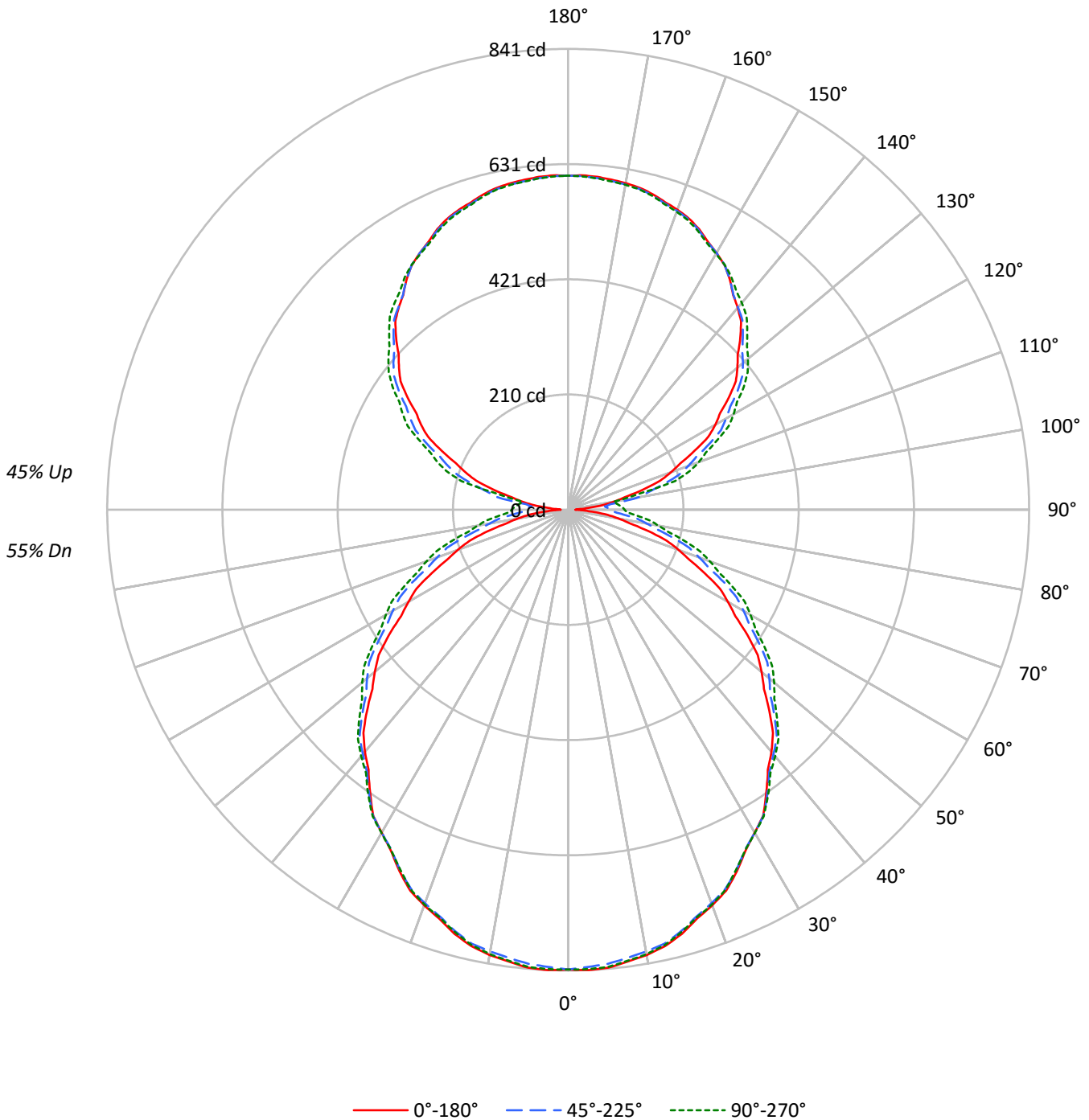
Input Watts (W): 40.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333217-927

CATALOG NUMBER: S125DIP-S850D590U927-4F0-1E-UDD-D

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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	93	89	85	91	87	83	80	74	71	69	63	61	59	52	51	49	44
2	89	81	74	69	82	75	70	65	64	60	56	55	51	48	45	43	41	36
3	81	71	63	57	75	66	59	54	57	51	47	48	44	41	40	37	34	31
4	74	63	54	48	68	58	51	45	50	44	40	43	38	35	36	32	30	26
5	68	56	47	41	63	52	44	39	45	39	34	38	34	30	32	28	26	22
6	62	50	42	36	58	47	39	34	40	34	30	34	30	26	29	25	22	20
7	58	45	37	31	53	42	35	29	37	31	26	31	27	23	26	23	20	17
8	54	41	33	27	50	38	31	26	33	27	23	29	24	20	24	21	18	15
9	50	37	30	24	46	35	28	23	31	25	21	26	22	18	22	19	16	14
10	47	34	27	22	43	32	25	21	28	23	19	24	20	17	21	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5420	5420	5420
5°	5431	5320	5337
10°	5392	5225	5217
15°	5329	5111	5064
20°	5241	4970	4912
25°	5139	4820	4724
30°	5014	4654	4554
35°	4897	4502	4398
40°	4778	4342	4241
45°	4644	4205	4102
50°	4517	4056	3979
55°	4363	3916	3833
60°	4195	3756	3686
65°	4020	3589	3520
70°	3820	3359	3349
75°	3505	3139	3139
80°	3093	2872	2910
85°	2705	2693	2839



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.4	1.8
10°-20°	225.3	5.0
20°-30°	335.0	7.5
30°-40°	396.8	8.9
40°-50°	410.3	9.2
50°-60°	377.9	8.4
60°-70°	305.5	6.8
70°-80°	204.6	4.6
80°-90°	107.4	2.4
90°-100°	81.7	1.8
100°-110°	180.5	4.0
110°-120°	277.1	6.2
120°-130°	334.5	7.5
130°-140°	349.2	7.8
140°-150°	322.4	7.2
150°-160°	259.6	5.8
160°-170°	167.9	3.8
170°-180°	57.9	1.3
0°-30°	639.6	14.3
0°-40°	1036.4	23.2
0°-60°	1824.7	40.8
0°-90°	2442.1	54.6
90°-120°	539.2	12.1
90°-150°	1545.3	34.5
90°-180°	2031.0	45.4
0°-180°	4472.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	839	837	832	838	838	80
15°	801	802	796	801	798	226
25°	728	730	726	729	725	335
35°	630	636	634	636	636	394
45°	519	528	532	538	539	400
55°	399	412	425	434	438	357
65°	275	294	314	325	329	273
75°	151	173	199	215	220	161
85°	45	72	101	119	126	48
90°	14	44	75	95	103	10
95°	36	56	67	87	93	41
105°	140	156	180	196	202	149
115°	254	263	284	297	300	252
125°	358	361	377	388	391	320
135°	444	446	451	460	462	342
145°	514	514	514	518	519	321
155°	565	562	563	564	561	260
165°	596	594	594	596	593	168
175°	610	607	607	611	607	58
180°	610	610	610	610	610	



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CATALOG NUMBER: S125DIP-S850D590U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	841.1	840.9	840.6	840.3	840.0	839.3	838.3	837.3	836.2	835.2	836.2
5°	839.2	838.8	838.4	838.0	837.7	836.9	835.6	834.3	833.1	831.8	833.2
7.5°	831.8	831.6	831.5	831.3	831.2	830.4	829.2	827.8	826.5	825.2	826.5
10°	825.2	825.2	825.2	825.2	825.2	824.5	823.0	821.6	820.1	818.6	819.9
12.5°	815.9	816.1	816.3	816.4	816.6	816.0	814.9	813.7	812.5	811.4	812.4
15°	801.4	801.5	801.7	801.8	802.1	801.5	800.3	799.0	797.6	796.4	797.5
17.5°	782.3	782.6	783.0	783.3	783.7	783.2	782.0	780.7	779.4	778.2	779.0
20°	768.4	768.8	769.1	769.5	769.9	769.4	768.2	766.9	765.6	764.3	764.9
22.5°	752.7	753.3	753.9	754.6	755.3	754.9	753.4	752.0	750.6	749.2	749.9
25°	728.1	728.6	729.2	729.8	730.3	730.0	729.0	727.9	726.7	725.6	726.4
27.5°	700.8	701.6	702.4	703.2	704.0	703.8	702.6	701.3	700.1	698.9	699.3
30°	680.4	681.5	682.6	683.7	684.8	684.8	683.7	682.6	681.5	680.4	680.8
32.5°	661.9	662.9	663.8	664.8	665.7	665.8	665.0	664.2	663.5	662.7	663.0
35°	630.2	631.5	632.8	634.1	635.3	635.7	635.2	634.6	634.1	633.5	634.1
37.5°	598.4	599.6	600.8	602.0	603.2	603.6	603.4	603.2	603.1	602.9	603.6
40°	576.7	578.2	579.6	581.1	582.6	583.2	583.0	582.9	582.7	582.5	583.2
42.5°	553.0	554.9	556.8	558.7	560.6	561.8	562.2	562.6	563.0	563.4	564.3
45°	519.1	521.2	523.2	525.1	527.2	528.6	529.6	530.4	531.4	532.3	533.6
47.5°	484.4	486.3	488.1	490.0	491.9	493.6	495.2	496.8	498.3	499.9	501.8
50°	460.7	462.7	464.8	466.8	468.7	470.8	472.8	474.8	476.8	478.8	480.9
52.5°	435.7	438.2	440.6	443.1	445.5	448.0	450.4	452.9	455.3	457.8	459.9
55°	399.0	402.0	404.9	407.8	410.7	413.7	416.6	419.5	422.4	425.3	427.4
57.5°	361.5	365.0	368.5	372.0	375.6	379.0	382.4	385.7	389.0	392.4	394.7
60°	336.5	340.2	343.8	347.5	351.1	354.8	358.5	362.1	365.8	369.4	372.2
62.5°	312.1	315.8	319.5	323.1	326.8	330.6	334.5	338.5	342.4	346.3	349.4
65°	274.8	279.0	283.2	287.4	291.6	295.9	300.3	304.7	309.1	313.5	316.2
67.5°	239.6	243.7	247.7	251.8	255.8	260.1	264.5	269.0	273.5	277.9	281.2
70°	213.9	218.1	222.3	226.6	230.8	235.2	240.0	244.7	249.5	254.2	257.7
72.5°	188.9	193.2	197.6	201.9	206.3	211.0	216.3	221.5	226.6	231.9	235.6
75°	151.4	156.1	160.9	165.6	170.4	175.7	181.6	187.4	193.2	199.1	202.7
77.5°	115.3	120.8	126.4	131.8	137.3	142.8	148.5	154.1	159.7	165.4	169.4
80°	93.0	98.5	103.9	109.4	114.9	120.7	127.0	133.2	139.4	145.6	149.6
82.5°	72.6	78.3	84.1	89.9	95.7	101.7	108.1	114.5	120.8	127.2	131.1
85°	45.2	51.3	57.4	63.4	69.4	75.6	82.0	88.4	94.8	101.2	105.2
87.5°	25.7	31.8	37.8	43.8	49.8	56.0	62.3	68.7	75.0	81.4	85.7
90°	13.6	20.3	26.9	33.6	40.2	47.1	53.9	60.8	67.8	74.7	79.4
92.5°	18.8	23.7	28.5	33.4	38.2	44.1	51.1	58.1	65.0	72.1	76.6
95°	36.4	40.9	45.4	49.8	54.3	57.7	60.1	62.5	64.9	67.3	71.9
97.5°	63.5	68.3	73.1	78.0	82.8	84.4	82.9	81.3	79.8	78.2	79.2
100°	84.5	88.6	92.8	97.0	101.1	106.3	112.6	118.8	125.0	131.3	120.2
102.5°	105.9	109.9	113.8	117.7	121.7	126.6	132.5	138.5	144.4	150.4	151.2
105°	140.3	143.6	146.9	150.3	153.6	158.0	163.5	169.0	174.4	179.9	183.6
107.5°	176.0	178.5	180.9	183.5	185.9	189.9	195.4	200.8	206.3	211.8	215.4
110°	199.2	201.4	203.6	205.8	207.9	211.8	217.1	222.4	227.7	233.0	236.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	221.7	223.6	225.6	227.6	229.6	233.1	238.2	243.4	248.4	253.5	256.5
115°	254.4	256.2	258.0	259.8	261.6	264.9	269.7	274.6	279.4	284.3	287.2
117.5°	288.4	289.2	290.0	290.9	291.7	294.5	299.4	304.3	309.2	314.0	316.6
120°	310.1	310.5	311.0	311.4	311.9	314.3	318.9	323.4	327.9	332.4	335.3
122.5°	328.6	329.2	329.9	330.5	331.1	333.6	337.8	342.0	346.2	350.4	353.2
125°	358.1	358.6	359.1	359.7	360.2	362.3	365.9	369.6	373.2	376.9	379.4
127.5°	385.6	385.9	386.2	386.5	386.8	388.5	391.4	394.3	397.3	400.2	402.7
130°	402.9	403.2	403.5	403.9	404.2	405.7	408.4	411.0	413.7	416.3	418.6
132.5°	419.6	420.2	420.7	421.3	421.8	422.9	424.7	426.4	428.2	430.0	432.5
135°	444.1	444.6	445.0	445.4	445.8	446.6	447.7	448.7	449.8	450.8	453.0
137.5°	466.7	467.0	467.4	467.8	468.2	468.6	469.0	469.4	469.9	470.3	472.5
140°	480.9	481.0	481.3	481.4	481.6	481.7	481.8	482.0	482.0	482.1	484.3
142.5°	494.2	494.2	494.2	494.1	494.1	494.2	494.3	494.6	494.7	494.9	496.6
145°	513.8	513.8	513.8	513.9	513.9	513.9	513.9	513.9	513.9	513.9	514.9
147.5°	530.1	530.1	530.0	530.0	530.0	530.0	530.1	530.3	530.4	530.5	530.9
150°	541.0	540.8	540.6	540.4	540.2	540.2	540.4	540.6	540.8	541.0	541.2
152.5°	551.5	551.0	550.6	550.2	549.7	549.6	549.8	550.0	550.2	550.4	550.6
155°	565.0	564.4	563.8	563.2	562.5	562.4	562.5	562.8	562.9	563.2	563.5
157.5°	575.4	575.0	574.6	574.3	573.9	573.8	573.8	573.8	573.8	573.9	574.2
160°	582.6	582.0	581.4	580.7	580.2	580.0	580.0	580.1	580.2	580.4	580.7
162.5°	588.4	587.8	587.2	586.5	586.0	585.7	585.8	585.9	586.0	586.1	586.7
165°	596.1	595.6	594.9	594.4	593.7	593.5	593.6	593.7	593.8	593.9	594.5
167.5°	601.9	601.3	600.7	600.1	599.4	599.2	599.3	599.4	599.4	599.6	600.3
170°	605.2	604.5	603.8	603.1	602.4	602.1	602.1	602.3	602.4	602.5	603.2
172.5°	607.4	606.7	605.9	605.2	604.5	604.3	604.4	604.7	604.8	605.0	605.7
175°	609.7	609.1	608.5	607.9	607.3	607.0	607.1	607.3	607.4	607.4	608.2
177.5°	610.8	610.3	609.8	609.3	608.9	608.6	608.7	608.8	608.9	609.0	609.6
180°	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	837.3	838.3	839.3	839.8	839.6	839.5	839.3	839.2
5°	834.7	836.1	837.7	838.3	838.0	837.9	837.7	837.6
7.5°	827.8	829.0	830.3	830.8	830.7	830.5	830.3	830.1
10°	821.2	822.4	823.7	824.3	824.1	823.9	823.7	823.6
12.5°	813.3	814.4	815.3	815.6	815.1	814.6	814.1	813.7
15°	798.6	799.7	800.8	801.0	800.3	799.5	798.8	798.0
17.5°	779.8	780.7	781.5	781.7	781.3	780.9	780.4	780.0
20°	765.4	766.0	766.5	766.8	766.8	766.8	766.8	766.8
22.5°	750.6	751.2	751.9	752.1	751.6	751.2	750.8	750.4
25°	727.1	727.9	728.6	728.5	727.5	726.7	725.7	724.8
27.5°	699.8	700.4	700.8	701.0	700.6	700.3	700.0	699.7
30°	681.1	681.5	681.8	682.0	681.8	681.6	681.4	681.2
32.5°	663.4	663.7	664.1	664.2	664.0	663.8	663.6	663.5
35°	634.6	635.2	635.7	636.0	636.0	636.0	636.0	636.0
37.5°	604.4	605.1	605.8	606.2	606.1	606.0	605.9	605.9
40°	583.9	584.7	585.4	586.0	586.3	586.7	587.1	587.4
42.5°	565.1	566.0	566.9	567.4	567.4	567.5	567.6	567.7
45°	534.9	536.1	537.4	538.1	538.4	538.5	538.7	538.9
47.5°	503.6	505.5	507.3	508.5	508.9	509.3	509.7	510.1
50°	482.8	484.9	486.9	488.1	488.7	489.3	489.8	490.4
52.5°	462.1	464.2	466.4	467.7	468.1	468.5	468.9	469.3
55°	429.4	431.4	433.4	434.7	435.5	436.3	437.0	437.7
57.5°	397.0	399.3	401.6	403.1	403.6	404.2	404.7	405.3
60°	374.9	377.6	380.4	382.0	382.5	383.1	383.7	384.2
62.5°	352.4	355.5	358.5	360.4	361.1	361.8	362.4	363.1
65°	318.9	321.7	324.4	326.1	326.9	327.6	328.4	329.1
67.5°	284.6	287.9	291.2	293.3	294.3	295.2	296.2	297.1
70°	261.2	264.7	268.2	270.4	271.5	272.6	273.7	274.8
72.5°	239.4	243.1	246.9	249.2	250.0	250.8	251.6	252.4
75°	206.4	210.1	213.7	216.0	216.9	217.9	218.7	219.7
77.5°	173.4	177.4	181.5	183.9	184.6	185.3	186.0	186.8
80°	153.7	157.7	161.7	164.1	164.9	165.6	166.3	167.0
82.5°	134.9	138.8	142.7	145.3	146.6	147.9	149.2	150.6
85°	109.2	113.3	117.3	120.0	121.5	122.9	124.5	125.9
87.5°	90.0	94.3	98.6	101.5	102.8	104.2	105.5	106.8
90°	84.1	88.8	93.6	96.6	98.2	99.8	101.4	103.0
92.5°	81.2	85.7	90.3	93.3	94.7	96.2	97.6	98.9
95°	76.4	80.9	85.4	88.3	89.6	90.9	92.1	93.4
97.5°	80.2	81.2	82.2	83.3	84.6	85.8	87.1	88.3
100°	109.1	97.9	86.8	81.6	82.3	82.9	83.7	84.4
102.5°	152.1	153.0	153.8	151.4	145.6	139.9	134.2	128.4
105°	187.3	190.9	194.6	197.0	198.1	199.3	200.5	201.7
107.5°	219.0	222.7	226.3	228.5	229.4	230.2	231.1	231.9
110°	239.4	242.6	245.7	248.0	249.4	250.7	252.2	253.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	259.4	262.4	265.3	267.4	268.5	269.7	270.8	271.9
115°	290.1	292.9	295.9	297.5	298.0	298.5	299.0	299.5
117.5°	319.2	321.8	324.4	326.1	327.2	328.1	329.2	330.1
120°	338.2	341.1	344.0	345.8	346.3	347.0	347.5	348.2
122.5°	355.9	358.6	361.4	363.1	363.5	364.1	364.6	365.1
125°	381.9	384.4	387.0	388.6	389.1	389.8	390.4	391.0
127.5°	405.2	407.7	410.2	411.5	411.9	412.2	412.5	412.8
130°	420.8	423.1	425.3	426.7	427.1	427.5	427.9	428.3
132.5°	435.0	437.4	440.0	441.3	441.6	441.9	442.1	442.4
135°	455.2	457.4	459.5	460.8	461.1	461.4	461.8	462.1
137.5°	474.8	476.9	479.1	480.3	480.5	480.8	480.9	481.2
140°	486.5	488.7	490.9	492.1	492.3	492.3	492.5	492.7
142.5°	498.4	500.2	501.9	502.9	503.0	503.1	503.3	503.4
145°	515.9	516.9	517.9	518.5	518.6	518.8	518.9	519.0
147.5°	531.3	531.8	532.2	532.2	531.8	531.4	531.0	530.6
150°	541.4	541.6	541.8	541.6	541.0	540.3	539.7	539.1
152.5°	550.8	551.0	551.2	551.0	550.2	549.6	548.9	548.2
155°	563.8	564.0	564.4	564.1	563.3	562.5	561.7	560.9
157.5°	574.5	574.8	575.1	574.9	574.1	573.2	572.4	571.6
160°	581.1	581.5	581.9	581.7	580.9	580.1	579.3	578.5
162.5°	587.2	587.8	588.4	588.2	587.3	586.5	585.6	584.6
165°	595.1	595.7	596.3	596.2	595.4	594.6	593.8	592.9
167.5°	601.0	601.7	602.5	602.4	601.5	600.6	599.7	598.7
170°	604.1	604.9	605.7	605.6	604.8	603.8	602.9	602.1
172.5°	606.4	607.2	607.9	607.8	606.9	606.0	605.1	604.2
175°	609.0	609.8	610.7	610.6	609.7	608.8	607.9	607.0
177.5°	610.1	610.7	611.2	611.2	610.5	609.9	609.3	608.6
180°	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7

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