

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: P333373

Luminaire Tested: **S125DIW-S610D470U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333373
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: S125DIW-S610D470U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4026.8 lumens
Efficiency: N/A
Efficacy: 133.3 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

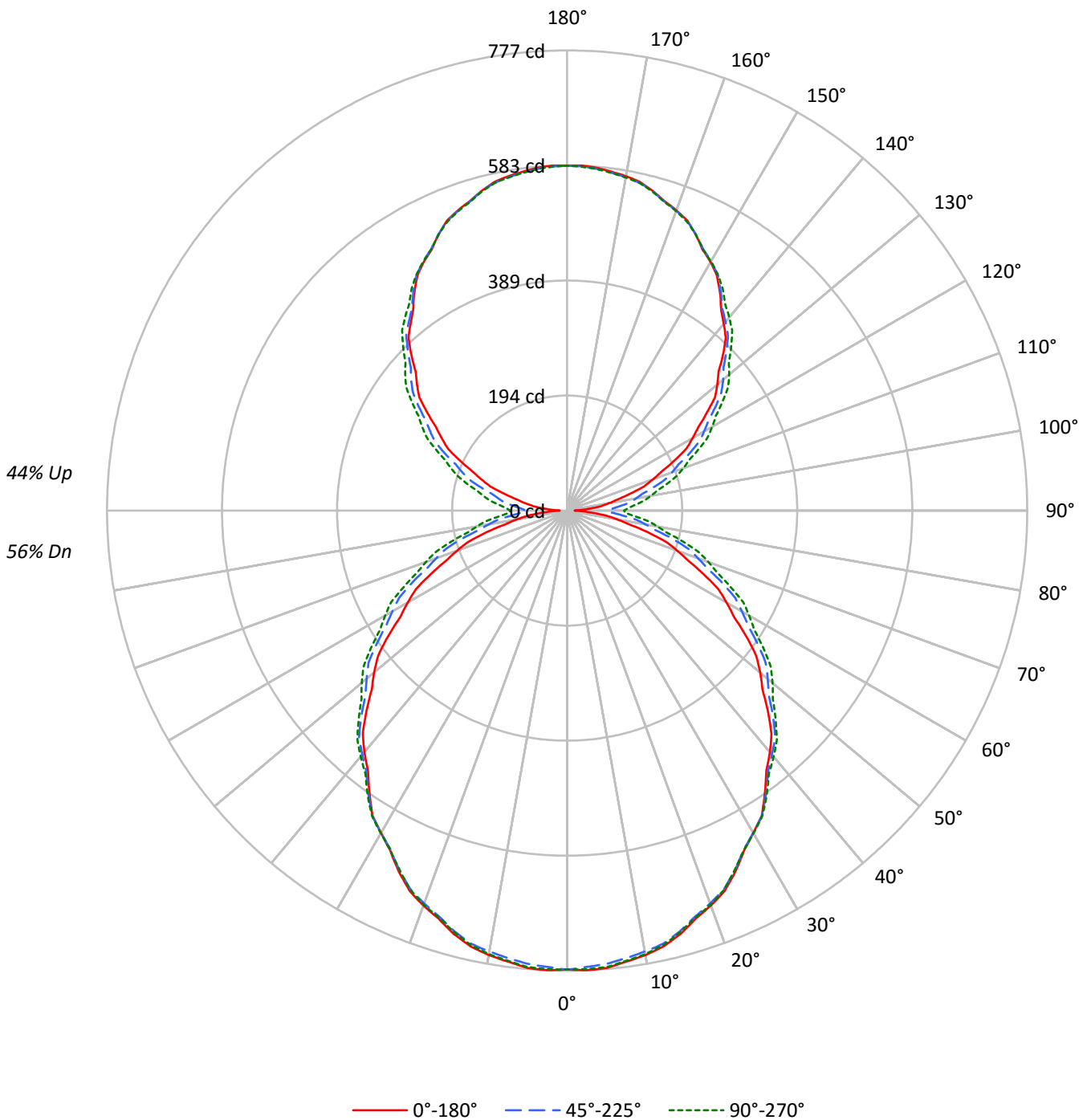
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	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	74	74	74	62	62	62	56																			
1	98	94	89	85	91	87	83	80	75	72	69	64	62	60	53	52	50	45																			
2	89	81	75	69	82	76	70	65	65	61	57	55	52	49	46	44	42	37																			
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	35	31																			
4	74	63	55	48	68	59	51	46	51	45	40	43	39	35	36	33	30	27																			
5	68	56	47	41	63	52	45	39	45	39	35	39	34	30	33	29	26	23																			
6	63	50	42	36	58	47	39	34	41	35	30	35	30	26	30	26	23	20																			
7	58	45	37	31	54	42	35	30	37	31	26	32	27	23	27	23	20	18																			
8	54	41	33	28	50	38	31	26	34	28	23	29	24	21	25	21	18	16																			
9	50	37	30	25	46	35	28	23	31	25	21	27	22	19	23	19	16	14																			
10	47	34	27	22	43	32	26	21	28	23	19	25	20	17	21	17	15	13																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5005	5005	5005
5°	5015	4912	4928
10°	4980	4825	4817
15°	4920	4720	4677
20°	4840	4590	4536
25°	4745	4451	4363
30°	4630	4298	4206
35°	4523	4158	4062
40°	4413	4010	3916
45°	4289	3884	3788
50°	4172	3746	3674
55°	4029	3616	3540
60°	3875	3468	3404
65°	3713	3314	3250
70°	3527	3103	3093
75°	3237	2899	2899
80°	2857	2653	2687
85°	2502	2488	2620



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	1.8
10°-20°	208.0	5.2
20°-30°	309.4	7.7
30°-40°	366.5	9.1
40°-50°	378.9	9.4
50°-60°	349.0	8.7
60°-70°	282.1	7.0
70°-80°	189.0	4.7
80°-90°	99.3	2.5
90°-100°	94.0	2.3
100°-110°	155.7	3.9
110°-120°	222.3	5.5
120°-130°	272.2	6.8
130°-140°	294.5	7.3
140°-150°	283.4	7.0
150°-160°	236.9	5.9
160°-170°	157.4	3.9
170°-180°	55.1	1.4
0°-30°	590.7	14.7
0°-40°	957.1	23.8
0°-60°	1685.1	41.8
0°-90°	2255.4	56.0
90°-120°	472.0	11.7
90°-150°	1322.0	32.8
90°-180°	1771.0	44.0
0°-180°	4026.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	775	773	768	774	774	73
15°	740	740	736	740	737	208
25°	672	674	670	673	669	309
35°	582	587	585	587	587	364
45°	479	488	492	497	498	370
55°	368	381	393	401	404	329
65°	254	271	290	300	304	252
75°	140	160	184	198	203	148
85°	42	67	94	110	116	45
90°	13	41	70	89	96	10
95°	39	61	90	109	116	39
105°	110	125	150	167	175	118
115°	200	208	228	240	245	198
125°	288	291	306	317	320	258
135°	372	374	380	389	392	287
145°	450	451	452	456	458	281
155°	514	514	514	516	514	237
165°	559	558	558	560	558	158
175°	581	579	579	582	579	55
180°	582	582	582	582	582	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	776.8	776.5	776.3	776.0	775.7	775.1	774.2	773.2	772.3	771.3	772.3
5°	775.0	774.6	774.3	774.0	773.6	772.9	771.7	770.5	769.3	768.1	769.5
7.5°	768.1	768.0	767.9	767.7	767.6	766.9	765.7	764.5	763.3	762.1	763.2
10°	762.1	762.1	762.1	762.1	762.1	761.4	760.0	758.7	757.3	756.0	757.2
12.5°	753.6	753.7	753.8	754.0	754.1	753.6	752.5	751.5	750.4	749.3	750.2
15°	740.0	740.2	740.4	740.5	740.7	740.2	739.0	737.8	736.7	735.5	736.5
17.5°	722.4	722.7	723.1	723.4	723.8	723.3	722.2	721.0	719.8	718.6	719.4
20°	709.6	710.0	710.3	710.7	711.0	710.6	709.4	708.2	707.0	705.8	706.3
22.5°	695.1	695.7	696.3	696.9	697.5	697.1	695.8	694.5	693.2	691.9	692.5
25°	672.4	672.9	673.4	673.9	674.4	674.2	673.2	672.2	671.1	670.1	670.8
27.5°	647.2	647.9	648.7	649.4	650.2	650.0	648.8	647.7	646.5	645.4	645.8
30°	628.3	629.4	630.4	631.4	632.4	632.4	631.4	630.4	629.4	628.3	628.7
32.5°	611.3	612.2	613.1	614.0	614.8	614.9	614.2	613.4	612.7	611.9	612.3
35°	582.0	583.2	584.4	585.5	586.7	587.1	586.6	586.0	585.5	585.0	585.5
37.5°	552.7	553.8	554.8	555.9	557.0	557.4	557.3	557.1	556.9	556.8	557.4
40°	532.6	534.0	535.3	536.7	538.0	538.6	538.4	538.3	538.1	537.9	538.6
42.5°	510.7	512.5	514.2	516.0	517.8	518.8	519.2	519.6	519.9	520.3	521.1
45°	479.4	481.3	483.1	485.0	486.9	488.2	489.1	489.9	490.7	491.6	492.8
47.5°	447.4	449.1	450.8	452.5	454.3	455.8	457.3	458.7	460.2	461.6	463.4
50°	425.5	427.3	429.2	431.1	432.9	434.8	436.6	438.5	440.3	442.2	444.1
52.5°	402.4	404.6	406.9	409.2	411.4	413.7	416.0	418.2	420.5	422.7	424.7
55°	368.5	371.2	373.9	376.6	379.3	382.0	384.7	387.4	390.1	392.8	394.7
57.5°	333.9	337.1	340.3	343.6	346.8	350.0	353.1	356.2	359.3	362.4	364.5
60°	310.8	314.1	317.5	320.9	324.3	327.6	331.0	334.4	337.8	341.1	343.7
62.5°	288.3	291.6	295.0	298.4	301.8	305.3	308.9	312.6	316.2	319.9	322.7
65°	253.8	257.7	261.5	265.4	269.3	273.3	277.3	281.4	285.4	289.5	292.0
67.5°	221.3	225.0	228.7	232.5	236.2	240.2	244.3	248.4	252.5	256.7	259.7
70°	197.5	201.4	205.3	209.2	213.1	217.2	221.6	226.0	230.4	234.8	238.0
72.5°	174.4	178.5	182.5	186.5	190.5	194.9	199.7	204.5	209.3	214.1	217.6
75°	139.8	144.2	148.6	153.0	157.4	162.3	167.7	173.1	178.5	183.9	187.2
77.5°	106.5	111.6	116.7	121.7	126.8	131.9	137.1	142.3	147.5	152.7	156.4
80°	85.9	90.9	96.0	101.1	106.1	111.5	117.3	123.0	128.7	134.5	138.2
82.5°	67.0	72.3	77.7	83.0	88.4	94.0	99.8	105.7	111.6	117.5	121.0
85°	41.8	47.4	52.9	58.5	64.1	69.8	75.7	81.6	87.5	93.5	97.2
87.5°	23.8	29.4	34.9	40.5	46.1	51.8	57.7	63.5	69.4	75.3	79.3
90°	12.6	18.8	25.0	31.2	37.4	43.8	50.2	56.7	63.1	69.6	73.9
92.5°	21.9	27.5	33.0	38.6	44.2	50.3	57.1	63.8	70.5	77.3	81.7
95°	39.3	43.9	48.5	53.1	57.7	63.4	70.1	76.9	83.6	90.4	94.8
97.5°	57.9	61.9	66.0	70.0	74.0	79.5	86.4	93.4	100.3	107.2	111.4
100°	71.8	75.4	78.9	82.4	86.0	91.1	97.8	104.5	111.3	118.0	122.4
102.5°	86.8	90.5	94.2	97.8	101.5	106.3	112.2	118.2	124.1	130.0	134.4
105°	110.2	113.4	116.6	119.8	123.0	127.4	133.1	138.8	144.4	150.1	154.1
107.5°	136.1	138.9	141.7	144.5	147.3	151.4	156.7	162.0	167.3	172.7	176.3
110°	154.0	156.5	159.0	161.6	164.1	167.9	172.9	177.9	183.0	188.0	191.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	172.8	174.7	176.6	178.5	180.4	183.8	188.8	193.7	198.7	203.7	206.9
115°	199.9	201.5	203.1	204.7	206.2	209.3	213.9	218.5	223.1	227.7	230.6
117.5°	227.1	228.0	229.0	229.9	230.9	233.5	237.9	242.2	246.5	250.9	253.8
120°	244.5	245.5	246.5	247.5	248.5	251.0	255.0	259.0	263.0	266.9	269.8
122.5°	262.7	263.1	263.6	264.0	264.4	266.6	270.6	274.6	278.6	282.6	285.3
125°	288.1	288.6	289.0	289.4	289.9	291.8	295.3	298.8	302.3	305.7	308.2
127.5°	314.6	314.7	314.9	315.1	315.3	316.8	319.7	322.6	325.5	328.3	330.7
130°	330.9	331.2	331.5	331.9	332.2	333.7	336.2	338.8	341.4	343.9	346.2
132.5°	346.6	347.4	348.2	349.0	349.8	351.0	352.8	354.6	356.4	358.2	360.4
135°	372.3	372.7	373.1	373.6	374.0	374.9	376.2	377.4	378.7	380.0	382.2
137.5°	396.4	396.9	397.3	397.8	398.2	398.8	399.6	400.4	401.2	402.0	404.1
140°	411.4	411.9	412.4	412.9	413.4	413.9	414.4	414.8	415.3	415.8	417.8
142.5°	427.0	427.3	427.6	427.8	428.1	428.5	428.9	429.3	429.7	430.2	431.9
145°	449.9	450.2	450.4	450.6	450.9	451.1	451.4	451.7	452.0	452.3	453.2
147.5°	470.4	470.6	470.8	471.0	471.3	471.5	471.7	472.0	472.2	472.5	473.0
150°	484.5	484.4	484.3	484.2	484.1	484.3	484.7	485.1	485.5	485.9	485.9
152.5°	496.1	496.3	496.4	496.5	496.7	496.8	497.0	497.2	497.3	497.5	497.7
155°	514.0	514.0	514.0	514.0	514.0	514.0	514.1	514.2	514.3	514.4	514.8
157.5°	529.9	529.7	529.5	529.3	529.0	529.0	529.1	529.2	529.3	529.4	529.8
160°	539.4	539.1	538.7	538.4	538.1	538.0	538.1	538.2	538.3	538.4	538.9
162.5°	547.7	547.5	547.3	547.0	546.8	546.7	546.7	546.7	546.8	546.8	547.3
165°	558.8	558.6	558.4	558.2	558.0	558.0	558.1	558.2	558.3	558.4	558.8
167.5°	568.3	567.9	567.5	567.1	566.7	566.5	566.5	566.5	566.5	566.5	567.1
170°	573.3	572.9	572.5	572.1	571.7	571.5	571.5	571.5	571.5	571.5	572.1
172.5°	577.0	576.6	576.2	575.8	575.4	575.2	575.2	575.2	575.2	575.2	575.8
175°	581.1	580.6	580.2	579.8	579.4	579.2	579.2	579.2	579.2	579.2	579.8
177.5°	583.1	582.8	582.5	582.2	581.8	581.6	581.6	581.5	581.4	581.3	581.8
180°	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	773.2	774.2	775.1	775.5	775.4	775.3	775.1	775.0
5°	770.8	772.2	773.5	774.1	774.0	773.8	773.6	773.5
7.5°	764.4	765.6	766.8	767.3	767.1	767.0	766.8	766.6
10°	758.4	759.5	760.7	761.2	761.1	760.9	760.7	760.5
12.5°	751.1	752.0	753.0	753.2	752.7	752.3	751.9	751.4
15°	737.5	738.5	739.5	739.7	739.0	738.3	737.7	737.0
17.5°	720.2	720.9	721.7	721.9	721.5	721.1	720.7	720.3
20°	706.9	707.4	707.9	708.1	708.1	708.1	708.1	708.1
22.5°	693.1	693.8	694.4	694.5	694.1	693.7	693.3	692.9
25°	671.5	672.2	672.8	672.8	671.9	671.1	670.2	669.4
27.5°	646.3	646.8	647.3	647.3	647.0	646.7	646.4	646.1
30°	629.0	629.4	629.7	629.8	629.6	629.4	629.3	629.1
32.5°	612.6	612.9	613.3	613.4	613.2	613.0	612.9	612.7
35°	586.0	586.6	587.1	587.3	587.3	587.3	587.3	587.3
37.5°	558.1	558.8	559.5	559.8	559.7	559.6	559.6	559.5
40°	539.3	540.0	540.6	541.1	541.5	541.8	542.2	542.5
42.5°	521.9	522.7	523.5	524.0	524.1	524.1	524.2	524.3
45°	493.9	495.1	496.3	497.0	497.2	497.3	497.5	497.7
47.5°	465.1	466.8	468.5	469.6	470.0	470.3	470.7	471.1
50°	445.9	447.8	449.6	450.8	451.3	451.8	452.3	452.8
52.5°	426.7	428.7	430.7	431.9	432.3	432.6	433.0	433.4
55°	396.5	398.4	400.2	401.5	402.2	402.9	403.5	404.2
57.5°	366.7	368.8	370.9	372.2	372.8	373.3	373.8	374.3
60°	346.2	348.7	351.3	352.8	353.3	353.8	354.3	354.8
62.5°	325.5	328.3	331.1	332.8	333.4	334.1	334.7	335.4
65°	294.5	297.1	299.6	301.2	301.9	302.6	303.2	303.9
67.5°	262.8	265.9	268.9	270.9	271.8	272.7	273.6	274.4
70°	241.2	244.4	247.6	249.7	250.7	251.7	252.8	253.8
72.5°	221.1	224.5	228.0	230.1	230.9	231.6	232.4	233.1
75°	190.6	194.0	197.4	199.5	200.3	201.2	202.0	202.9
77.5°	160.1	163.9	167.6	169.8	170.4	171.1	171.8	172.5
80°	141.9	145.6	149.3	151.5	152.2	152.9	153.6	154.2
82.5°	124.6	128.2	131.8	134.2	135.4	136.6	137.8	139.0
85°	100.9	104.6	108.3	110.8	112.2	113.5	114.9	116.2
87.5°	83.3	87.3	91.2	93.9	95.1	96.3	97.6	98.8
90°	78.3	82.7	87.1	90.0	91.5	93.0	94.5	96.0
92.5°	86.1	90.5	94.9	97.8	99.2	100.6	102.0	103.4
95°	99.2	103.6	108.0	110.9	112.3	113.7	115.1	116.5
97.5°	115.7	119.9	124.1	126.8	128.1	129.4	130.6	131.9
100°	126.9	131.3	135.8	138.6	139.8	141.0	142.3	143.5
102.5°	138.8	143.2	147.6	150.5	151.8	153.1	154.4	155.7
105°	158.1	162.1	166.0	168.8	170.3	171.7	173.2	174.7
107.5°	180.0	183.6	187.2	189.6	190.6	191.6	192.7	193.7
110°	195.0	198.5	202.0	204.3	205.4	206.5	207.6	208.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	210.1	213.3	216.6	218.7	219.7	220.7	221.7	222.7
115°	233.6	236.5	239.5	241.4	242.3	243.2	244.1	245.0
117.5°	256.8	259.7	262.7	264.5	265.3	266.0	266.8	267.5
120°	272.7	275.6	278.4	280.2	280.8	281.4	282.0	282.6
122.5°	288.0	290.6	293.3	294.9	295.6	296.3	297.0	297.7
125°	310.7	313.2	315.7	317.4	318.1	318.8	319.6	320.3
127.5°	333.1	335.5	337.9	339.5	340.3	341.1	341.9	342.6
130°	348.5	350.7	353.0	354.4	355.1	355.7	356.4	357.0
132.5°	362.7	365.0	367.2	368.6	369.0	369.4	369.9	370.3
135°	384.4	386.6	388.8	390.1	390.5	391.0	391.4	391.9
137.5°	406.2	408.4	410.5	411.6	411.8	412.0	412.1	412.3
140°	419.9	422.0	424.0	425.1	425.3	425.5	425.6	425.8
142.5°	433.6	435.3	437.0	437.9	438.1	438.3	438.4	438.6
145°	454.0	454.9	455.7	456.3	456.7	457.1	457.4	457.8
147.5°	473.5	474.0	474.5	474.6	474.2	473.8	473.4	473.0
150°	485.9	485.9	485.9	485.9	485.8	485.8	485.8	485.7
152.5°	498.0	498.2	498.4	498.4	498.1	497.7	497.4	497.1
155°	515.2	515.6	516.0	516.0	515.5	515.0	514.5	514.0
157.5°	530.2	530.6	531.0	530.9	530.2	529.5	528.9	528.2
160°	539.3	539.7	540.1	540.0	539.5	539.0	538.5	538.0
162.5°	547.8	548.2	548.7	548.7	548.1	547.5	546.9	546.3
165°	559.2	559.6	560.0	559.9	559.3	558.7	558.1	557.5
167.5°	567.7	568.3	568.9	568.9	568.2	567.6	567.0	566.4
170°	572.7	573.3	574.0	573.9	573.2	572.5	571.8	571.1
172.5°	576.4	577.0	577.6	577.6	576.9	576.3	575.7	575.1
175°	580.4	581.1	581.7	581.6	580.9	580.2	579.5	578.8
177.5°	582.3	582.8	583.3	583.2	582.7	582.1	581.5	581.0
180°	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4

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