

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: P333373-927

Luminaire Tested: **S125DIW-S610D470U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333373-927
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-S610D470U927-4F0-1E-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: 3190.0 lumens
Efficiency: N/A
Efficacy: 105.6 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: General Diffuse

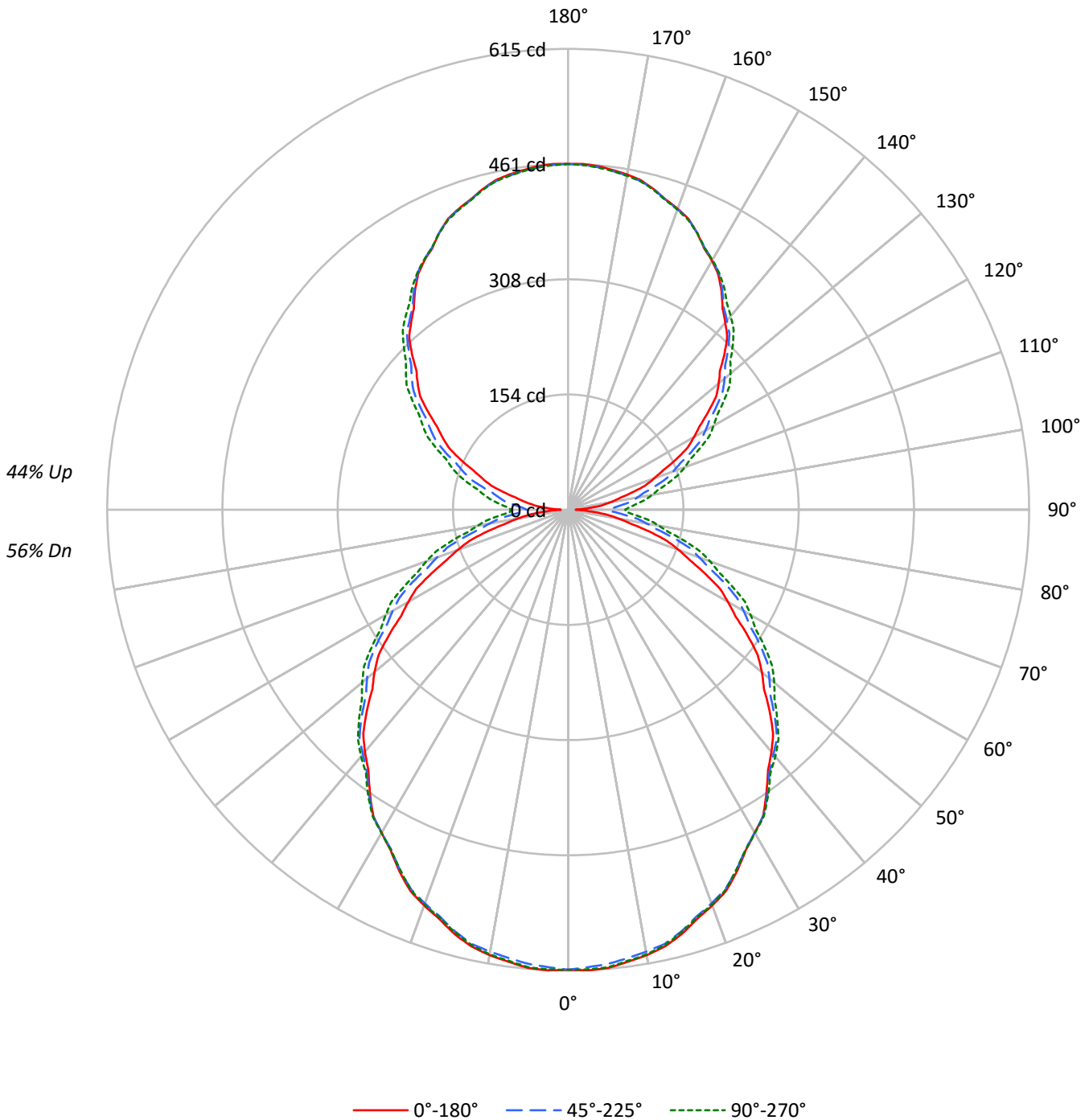
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3965	3965	3965
5°	3973	3892	3904
10°	3945	3822	3817
15°	3898	3740	3705
20°	3834	3636	3593
25°	3759	3526	3457
30°	3667	3405	3332
35°	3583	3293	3217
40°	3496	3176	3103
45°	3398	3076	3001
50°	3305	2967	2910
55°	3192	2865	2804
60°	3069	2747	2697
65°	2942	2625	2574
70°	2795	2458	2451
75°	2563	2297	2296
80°	2262	2101	2129
85°	1981	1972	2077



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.8
10°-20°	164.8	5.2
20°-30°	245.1	7.7
30°-40°	290.3	9.1
40°-50°	300.2	9.4
50°-60°	276.5	8.7
60°-70°	223.5	7.0
70°-80°	149.7	4.7
80°-90°	78.6	2.5
90°-100°	74.4	2.3
100°-110°	123.4	3.9
110°-120°	176.1	5.5
120°-130°	215.6	6.8
130°-140°	233.3	7.3
140°-150°	224.5	7.0
150°-160°	187.6	5.9
160°-170°	124.7	3.9
170°-180°	43.6	1.4
0°-30°	467.9	14.7
0°-40°	758.2	23.8
0°-60°	1334.9	41.8
0°-90°	1786.7	56.0
90°-120°	373.9	11.7
90°-150°	1047.3	32.8
90°-180°	1403.0	44.0
0°-180°	3190.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	614	613	608	613	613	58
15°	586	587	583	586	584	165
25°	533	534	531	533	530	245
35°	461	465	463	465	465	288
45°	380	386	389	393	394	293
55°	292	302	311	318	320	261
65°	201	215	229	238	241	199
75°	111	127	146	157	161	117
85°	33	53	74	87	92	35
90°	10	32	55	70	76	8
95°	31	48	72	87	92	31
105°	87	99	119	133	138	93
115°	158	165	180	190	194	157
125°	228	230	242	251	254	204
135°	295	297	301	308	310	227
145°	356	357	358	361	363	223
155°	407	407	408	409	407	187
165°	443	442	442	444	442	125
175°	460	459	459	461	458	44
180°	461	461	461	461	461	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	615.4	615.1	615.0	614.7	614.5	614.0	613.3	612.5	611.8	611.0	611.8
5°	613.9	613.6	613.4	613.1	612.8	612.3	611.3	610.4	609.4	608.5	609.6
7.5°	608.5	608.4	608.3	608.2	608.1	607.5	606.6	605.6	604.7	603.7	604.6
10°	603.7	603.7	603.7	603.7	603.7	603.2	602.1	601.0	599.9	598.9	599.8
12.5°	597.0	597.1	597.1	597.3	597.4	597.0	596.1	595.3	594.5	593.6	594.3
15°	586.2	586.4	586.5	586.6	586.8	586.4	585.4	584.5	583.6	582.7	583.4
17.5°	572.3	572.5	572.8	573.1	573.4	573.0	572.1	571.2	570.2	569.3	569.9
20°	562.1	562.4	562.7	563.0	563.2	562.9	562.0	561.0	560.1	559.1	559.5
22.5°	550.6	551.1	551.6	552.1	552.5	552.2	551.2	550.2	549.1	548.1	548.6
25°	532.7	533.1	533.5	533.9	534.2	534.1	533.3	532.5	531.6	530.8	531.4
27.5°	512.7	513.3	513.9	514.4	515.1	514.9	514.0	513.1	512.1	511.3	511.6
30°	497.7	498.6	499.4	500.2	501.0	501.0	500.2	499.4	498.6	497.7	498.0
32.5°	484.3	485.0	485.7	486.4	487.0	487.1	486.6	485.9	485.4	484.7	485.1
35°	461.1	462.0	463.0	463.8	464.8	465.1	464.7	464.2	463.8	463.4	463.8
37.5°	437.8	438.7	439.5	440.4	441.2	441.6	441.5	441.3	441.2	441.1	441.6
40°	421.9	423.0	424.1	425.2	426.2	426.7	426.5	426.4	426.3	426.1	426.7
42.5°	404.6	406.0	407.3	408.8	410.2	411.0	411.3	411.6	411.9	412.2	412.8
45°	379.8	381.3	382.7	384.2	385.7	386.7	387.5	388.1	388.7	389.4	390.4
47.5°	354.4	355.8	357.1	358.5	359.9	361.1	362.3	363.4	364.6	365.7	367.1
50°	337.1	338.5	340.0	341.5	342.9	344.4	345.9	347.4	348.8	350.3	351.8
52.5°	318.8	320.5	322.3	324.2	325.9	327.7	329.5	331.3	333.1	334.9	336.4
55°	291.9	294.1	296.2	298.3	300.5	302.6	304.8	306.9	309.0	311.2	312.7
57.5°	264.5	267.0	269.6	272.2	274.7	277.3	279.7	282.2	284.6	287.1	288.8
60°	246.2	248.8	251.5	254.2	256.9	259.5	262.2	264.9	267.6	270.2	272.3
62.5°	228.4	231.0	233.7	236.4	239.1	241.9	244.7	247.6	250.5	253.4	255.6
65°	201.1	204.1	207.2	210.2	213.3	216.5	219.7	222.9	226.1	229.3	231.3
67.5°	175.3	178.2	181.2	184.2	187.1	190.3	193.5	196.8	200.0	203.4	205.7
70°	156.5	159.5	162.6	165.7	168.8	172.1	175.5	179.0	182.5	186.0	188.5
72.5°	138.2	141.4	144.6	147.7	150.9	154.4	158.2	162.0	165.8	169.6	172.4
75°	110.7	114.2	117.7	121.2	124.7	128.6	132.8	137.1	141.4	145.7	148.3
77.5°	84.4	88.4	92.4	96.4	100.4	104.5	108.6	112.7	116.8	121.0	123.9
80°	68.0	72.0	76.0	80.1	84.1	88.3	92.9	97.4	102.0	106.5	109.5
82.5°	53.1	57.3	61.6	65.8	70.0	74.5	79.1	83.7	88.4	93.1	95.9
85°	33.1	37.5	41.9	46.3	50.8	55.3	60.0	64.6	69.3	74.1	77.0
87.5°	18.9	23.3	27.6	32.1	36.5	41.0	45.7	50.3	55.0	59.7	62.8
90°	10.0	14.9	19.8	24.7	29.6	34.7	39.8	44.9	50.0	55.1	58.5
92.5°	17.3	21.8	26.1	30.6	35.0	39.8	45.2	50.5	55.8	61.2	64.7
95°	31.1	34.8	38.4	42.1	45.7	50.2	55.5	60.9	66.2	71.6	75.1
97.5°	45.9	49.0	52.3	55.5	58.6	63.0	68.4	74.0	79.5	84.9	88.2
100°	56.9	59.7	62.5	65.3	68.1	72.2	77.5	82.8	88.2	93.5	97.0
102.5°	68.8	71.7	74.6	77.5	80.4	84.2	88.9	93.6	98.3	103.0	106.5
105°	87.3	89.8	92.4	94.9	97.4	100.9	105.4	110.0	114.4	118.9	122.1
107.5°	107.8	110.0	112.3	114.5	116.7	119.9	124.1	128.3	132.5	136.8	139.7
110°	122.0	124.0	126.0	128.0	130.0	133.0	137.0	140.9	145.0	148.9	151.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	136.9	138.4	139.9	141.4	142.9	145.6	149.6	153.4	157.4	161.4	163.9
115°	158.4	159.6	160.9	162.2	163.3	165.8	169.4	173.1	176.7	180.4	182.7
117.5°	179.9	180.6	181.4	182.1	182.9	185.0	188.5	191.9	195.3	198.8	201.1
120°	193.7	194.5	195.3	196.1	196.9	198.8	202.0	205.2	208.3	211.4	213.7
122.5°	208.1	208.4	208.8	209.1	209.5	211.2	214.4	217.5	220.7	223.9	226.0
125°	228.2	228.6	228.9	229.3	229.7	231.2	233.9	236.7	239.5	242.2	244.2
127.5°	249.2	249.3	249.5	249.6	249.8	251.0	253.3	255.6	257.9	260.1	262.0
130°	262.1	262.4	262.6	262.9	263.2	264.4	266.3	268.4	270.5	272.4	274.3
132.5°	274.6	275.2	275.8	276.5	277.1	278.1	279.5	280.9	282.3	283.8	285.5
135°	294.9	295.2	295.6	296.0	296.3	297.0	298.0	299.0	300.0	301.0	302.8
137.5°	314.0	314.4	314.7	315.1	315.4	315.9	316.6	317.2	317.8	318.5	320.1
140°	325.9	326.3	326.7	327.1	327.5	327.9	328.3	328.6	329.0	329.4	331.0
142.5°	338.3	338.5	338.7	338.9	339.1	339.5	339.8	340.1	340.4	340.8	342.1
145°	356.4	356.6	356.8	357.0	357.2	357.4	357.6	357.8	358.1	358.3	359.0
147.5°	372.6	372.8	373.0	373.1	373.4	373.5	373.7	373.9	374.1	374.3	374.7
150°	383.8	383.7	383.7	383.6	383.5	383.7	384.0	384.3	384.6	384.9	384.9
152.5°	393.0	393.2	393.2	393.3	393.5	393.6	393.7	393.9	394.0	394.1	394.3
155°	407.2	407.2	407.2	407.2	407.2	407.2	407.3	407.3	407.4	407.5	407.8
157.5°	419.8	419.6	419.5	419.3	419.1	419.1	419.1	419.2	419.3	419.4	419.7
160°	427.3	427.1	426.7	426.5	426.3	426.2	426.3	426.4	426.4	426.5	426.9
162.5°	433.9	433.7	433.6	433.3	433.2	433.1	433.1	433.1	433.2	433.2	433.6
165°	442.7	442.5	442.4	442.2	442.0	442.0	442.1	442.2	442.3	442.4	442.7
167.5°	450.2	449.9	449.6	449.2	448.9	448.8	448.8	448.8	448.8	448.8	449.2
170°	454.2	453.8	453.5	453.2	452.9	452.7	452.7	452.7	452.7	452.7	453.2
172.5°	457.1	456.8	456.5	456.1	455.8	455.7	455.7	455.7	455.7	455.7	456.1
175°	460.3	459.9	459.6	459.3	459.0	458.8	458.8	458.8	458.8	458.8	459.3
177.5°	461.9	461.7	461.4	461.2	460.9	460.7	460.7	460.7	460.6	460.5	460.9
180°	461.4	461.4	461.4	461.4	461.4	461.4	461.4	461.4	461.4	461.4	461.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	612.5	613.3	614.0	614.3	614.3	614.2	614.0	613.9
5°	610.6	611.7	612.8	613.2	613.1	613.0	612.8	612.8
7.5°	605.5	606.5	607.4	607.8	607.7	607.6	607.4	607.3
10°	600.8	601.7	602.6	603.0	602.9	602.8	602.6	602.5
12.5°	595.0	595.7	596.5	596.7	596.3	596.0	595.6	595.2
15°	584.2	585.0	585.8	586.0	585.4	584.9	584.4	583.8
17.5°	570.5	571.1	571.7	571.9	571.6	571.2	570.9	570.6
20°	560.0	560.4	560.8	560.9	560.9	560.9	560.9	560.9
22.5°	549.1	549.6	550.1	550.2	549.9	549.5	549.2	548.9
25°	532.0	532.5	533.0	533.0	532.3	531.6	530.9	530.3
27.5°	512.0	512.4	512.8	512.8	512.5	512.3	512.1	511.8
30°	498.3	498.6	498.8	498.9	498.8	498.6	498.5	498.4
32.5°	485.3	485.5	485.8	485.9	485.8	485.6	485.5	485.4
35°	464.2	464.7	465.1	465.2	465.2	465.2	465.2	465.2
37.5°	442.1	442.7	443.2	443.5	443.4	443.3	443.3	443.2
40°	427.2	427.8	428.3	428.6	429.0	429.2	429.5	429.8
42.5°	413.4	414.1	414.7	415.1	415.2	415.2	415.3	415.3
45°	391.3	392.2	393.2	393.7	393.9	394.0	394.1	394.3
47.5°	368.4	369.8	371.1	372.0	372.3	372.6	372.9	373.2
50°	353.2	354.7	356.2	357.1	357.5	357.9	358.3	358.7
52.5°	338.0	339.6	341.2	342.1	342.5	342.7	343.0	343.3
55°	314.1	315.6	317.0	318.1	318.6	319.2	319.6	320.2
57.5°	290.5	292.2	293.8	294.9	295.3	295.7	296.1	296.5
60°	274.3	276.2	278.3	279.5	279.9	280.3	280.7	281.1
62.5°	257.9	260.1	262.3	263.6	264.1	264.7	265.1	265.7
65°	233.3	235.4	237.3	238.6	239.2	239.7	240.2	240.7
67.5°	208.2	210.6	213.0	214.6	215.3	216.0	216.7	217.4
70°	191.1	193.6	196.1	197.8	198.6	199.4	200.3	201.1
72.5°	175.2	177.8	180.6	182.3	182.9	183.5	184.1	184.7
75°	151.0	153.7	156.4	158.0	158.7	159.4	160.0	160.7
77.5°	126.8	129.8	132.8	134.5	135.0	135.5	136.1	136.7
80°	112.4	115.3	118.3	120.0	120.6	121.1	121.7	122.2
82.5°	98.7	101.6	104.4	106.3	107.3	108.2	109.2	110.1
85°	79.9	82.9	85.8	87.8	88.9	89.9	91.0	92.1
87.5°	66.0	69.2	72.2	74.4	75.3	76.3	77.3	78.3
90°	62.0	65.5	69.0	71.3	72.5	73.7	74.9	76.0
92.5°	68.2	71.7	75.2	77.5	78.6	79.7	80.8	81.9
95°	78.6	82.1	85.6	87.9	89.0	90.1	91.2	92.3
97.5°	91.7	95.0	98.3	100.4	101.5	102.5	103.5	104.5
100°	100.5	104.0	107.6	109.8	110.7	111.7	112.7	113.7
102.5°	110.0	113.4	116.9	119.2	120.3	121.3	122.3	123.3
105°	125.2	128.4	131.5	133.7	134.9	136.0	137.2	138.4
107.5°	142.6	145.4	148.3	150.2	151.0	151.8	152.7	153.4
110°	154.5	157.2	160.0	161.8	162.7	163.6	164.5	165.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	166.4	169.0	171.6	173.3	174.0	174.8	175.6	176.4
115°	185.1	187.4	189.7	191.2	191.9	192.7	193.4	194.1
117.5°	203.4	205.7	208.1	209.5	210.2	210.7	211.4	211.9
120°	216.0	218.3	220.5	222.0	222.4	222.9	223.4	223.9
122.5°	228.1	230.2	232.3	233.6	234.2	234.7	235.3	235.8
125°	246.1	248.1	250.1	251.4	252.0	252.5	253.2	253.7
127.5°	263.9	265.8	267.7	268.9	269.6	270.2	270.8	271.4
130°	276.1	277.8	279.6	280.7	281.3	281.8	282.3	282.8
132.5°	287.3	289.1	290.9	292.0	292.3	292.6	293.0	293.3
135°	304.5	306.3	308.0	309.0	309.3	309.7	310.1	310.5
137.5°	321.8	323.5	325.2	326.1	326.2	326.4	326.5	326.6
140°	332.6	334.3	335.9	336.8	336.9	337.1	337.2	337.3
142.5°	343.5	344.8	346.2	346.9	347.1	347.2	347.3	347.5
145°	359.7	360.4	361.0	361.5	361.8	362.1	362.3	362.7
147.5°	375.1	375.5	375.9	376.0	375.7	375.3	375.0	374.7
150°	384.9	384.9	384.9	384.9	384.8	384.8	384.8	384.8
152.5°	394.5	394.7	394.8	394.8	394.6	394.3	394.0	393.8
155°	408.1	408.4	408.8	408.8	408.4	408.0	407.6	407.2
157.5°	420.0	420.3	420.6	420.6	420.0	419.5	419.0	418.4
160°	427.2	427.5	427.9	427.8	427.4	427.0	426.6	426.2
162.5°	434.0	434.3	434.7	434.7	434.2	433.7	433.2	432.8
165°	443.0	443.3	443.6	443.5	443.1	442.6	442.1	441.6
167.5°	449.7	450.2	450.7	450.7	450.1	449.6	449.2	448.7
170°	453.7	454.2	454.7	454.6	454.1	453.5	453.0	452.4
172.5°	456.6	457.1	457.6	457.6	457.0	456.5	456.1	455.6
175°	459.8	460.3	460.8	460.7	460.2	459.6	459.1	458.5
177.5°	461.3	461.7	462.1	462.0	461.6	461.1	460.7	460.3
180°	461.4	461.4	461.4	461.4	461.4	461.4	461.4	461.4

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