

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: P333374-935

Luminaire Tested: **S125DIW-S610D470U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333374-935
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-S610D470U935-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3766.3 lumens
Efficiency: N/A
Efficacy: 124.7 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: General Diffuse

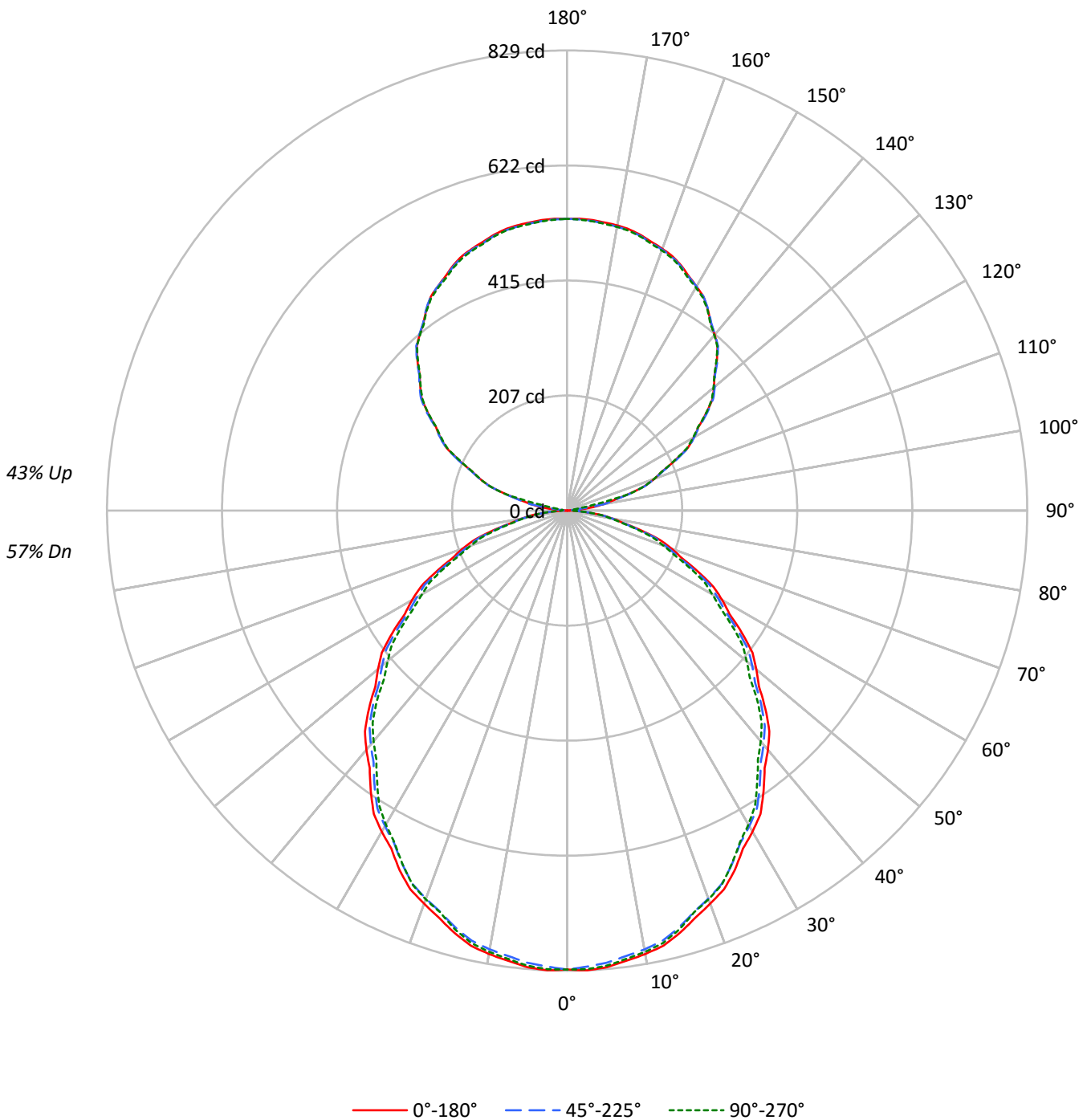
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	63	63	63	57
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	49	46	44	40
3	82	73	65	59	76	68	61	56	59	54	50	51	47	44	43	40	38	34
4	75	64	56	50	70	60	53	48	52	47	42	45	41	37	38	35	33	29
5	69	57	49	43	64	54	46	41	47	41	37	41	36	32	35	31	28	25
6	64	52	43	37	59	48	41	36	42	36	32	37	32	28	31	28	25	22
7	59	47	39	33	55	44	36	31	38	33	28	33	29	25	29	25	22	20
8	55	42	34	29	51	40	33	28	35	29	25	31	26	22	26	23	20	18
9	51	39	31	26	48	36	30	25	32	26	22	28	24	20	24	21	18	16
10	48	36	28	23	44	34	27	22	30	24	20	26	22	18	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5340	5340	5340
5°	5352	5301	5335
10°	5319	5264	5294
15°	5262	5201	5223
20°	5179	5112	5121
25°	5091	5007	5002
30°	4981	4894	4869
35°	4864	4771	4704
40°	4743	4639	4572
45°	4613	4517	4427
50°	4470	4372	4240
55°	4332	4206	4088
60°	4166	4039	3896
65°	3969	3839	3709
70°	3780	3609	3484
75°	3444	3331	3216
80°	3065	3016	2942
85°	2668	2712	2571



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	2.1
10°-20°	220.2	5.8
20°-30°	325.2	8.6
30°-40°	379.4	10.1
40°-50°	381.1	10.1
50°-60°	334.5	8.9
60°-70°	249.3	6.6
70°-80°	142.5	3.8
80°-90°	42.6	1.1
90°-100°	19.1	0.5
100°-110°	117.7	3.1
110°-120°	213.4	5.7
120°-130°	273.9	7.3
130°-140°	294.6	7.8
140°-150°	276.5	7.3
150°-160°	223.7	5.9
160°-170°	144.7	3.8
170°-180°	49.9	1.3
0°-30°	623.4	16.6
0°-40°	1002.8	26.6
0°-60°	1718.4	45.6
0°-90°	2152.8	57.2
90°-120°	350.2	9.3
90°-150°	1195.3	31.7
90°-180°	1614.0	42.9
0°-180°	3766.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	827	827	827	827	827	
5°	826	824	818	823	823	78
15°	787	785	778	781	781	222
25°	714	711	703	704	702	329
35°	617	614	605	602	597	386
45°	505	502	495	487	485	389
55°	385	382	374	368	363	343
65°	260	258	251	246	243	258
75°	138	137	134	131	129	147
85°	36	37	37	36	35	40
90°	0	4	6	8	9	3
95°	22	20	6	8	8	28
105°	114	116	116	116	116	121
115°	215	217	217	216	213	213
125°	306	308	308	307	306	273
135°	381	384	383	382	380	294
145°	442	443	443	443	441	276
155°	487	485	485	486	483	224
165°	514	512	512	514	511	145
175°	526	523	524	526	523	50
180°	526	526	526	526	526	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	829.0	828.6	828.3	827.9	827.6	826.8	825.7	824.5	823.4	822.2	823.4
5°	825.6	825.3	825.0	824.7	824.4	823.5	822.1	820.6	819.2	817.7	819.1
7.5°	817.9	817.7	817.4	817.1	816.8	815.9	814.2	812.7	811.1	809.5	810.7
10°	811.1	810.9	810.6	810.3	810.0	809.1	807.4	805.9	804.3	802.7	803.8
12.5°	802.8	802.3	801.8	801.2	800.7	799.7	798.2	796.8	795.2	793.8	794.7
15°	787.0	786.5	786.1	785.7	785.2	784.2	782.6	781.0	779.4	777.8	778.5
17.5°	768.8	768.2	767.5	766.9	766.2	765.1	763.4	761.7	760.1	758.5	759.3
20°	753.6	753.3	753.0	752.8	752.4	751.4	749.5	747.6	745.7	743.8	744.9
22.5°	738.4	737.9	737.4	736.8	736.3	735.2	733.4	731.7	729.9	728.1	728.8
25°	714.4	713.6	712.9	712.2	711.4	710.2	708.3	706.4	704.5	702.6	702.9
27.5°	686.2	685.8	685.4	684.9	684.5	683.3	681.3	679.4	677.4	675.5	675.5
30°	667.9	667.4	667.0	666.6	666.2	664.9	662.7	660.5	658.3	656.2	655.8
32.5°	648.0	647.4	646.7	646.0	645.3	644.0	642.1	640.2	638.2	636.3	635.8
35°	616.9	616.3	615.7	615.2	614.6	613.3	611.2	609.2	607.2	605.1	604.4
37.5°	584.5	583.8	583.2	582.4	581.7	580.3	578.4	576.5	574.5	572.7	571.6
40°	562.6	561.9	561.1	560.4	559.6	558.3	556.3	554.2	552.2	550.2	548.9
42.5°	539.1	538.5	537.8	537.2	536.6	535.3	533.2	531.2	529.2	527.1	526.0
45°	505.1	504.5	503.9	503.3	502.7	501.5	499.8	498.1	496.3	494.6	492.8
47.5°	468.4	468.4	468.5	468.5	468.5	467.4	465.4	463.3	461.2	459.1	457.4
50°	444.9	444.4	443.9	443.5	443.1	442.0	440.2	438.5	436.8	435.1	433.2
52.5°	420.8	420.4	420.2	419.8	419.5	418.4	416.6	414.7	412.8	411.0	409.3
55°	384.7	384.2	383.7	383.3	382.9	381.7	379.6	377.6	375.6	373.5	372.2
57.5°	346.6	346.4	346.1	345.9	345.7	344.7	342.9	341.2	339.5	337.9	336.1
60°	322.5	321.9	321.3	320.7	320.2	319.1	317.5	315.9	314.3	312.7	311.3
62.5°	297.4	297.0	296.4	296.0	295.5	294.6	293.3	291.9	290.5	289.1	287.6
65°	259.7	259.4	259.2	258.8	258.6	257.6	256.0	254.4	252.8	251.2	249.9
67.5°	223.2	222.6	222.0	221.4	220.8	219.9	218.7	217.5	216.3	215.1	214.0
70°	200.2	199.5	198.7	198.0	197.3	196.2	194.9	193.6	192.3	191.1	190.1
72.5°	175.0	174.5	174.1	173.6	173.1	172.4	171.6	170.7	169.9	169.0	168.1
75°	138.0	137.8	137.4	137.2	136.9	136.4	135.6	134.9	134.1	133.5	133.0
77.5°	103.9	103.8	103.7	103.5	103.4	103.1	102.7	102.4	101.9	101.5	101.3
80°	82.4	82.4	82.4	82.4	82.4	82.3	82.0	81.7	81.5	81.1	80.9
82.5°	63.6	63.4	63.1	62.9	62.7	62.5	62.4	62.4	62.3	62.3	62.0
85°	36.0	36.2	36.2	36.4	36.6	36.6	36.6	36.6	36.6	36.6	36.5
87.5°	14.2	14.4	14.5	14.6	14.7	14.8	14.8	14.8	14.8	14.9	15.0
90°	0.4	1.1	1.8	2.5	3.2	3.8	4.4	5.0	5.6	6.2	6.6
92.5°	6.0	5.5	5.0	4.6	4.0	4.0	4.6	5.2	5.7	6.2	6.6
95°	22.2	22.0	21.7	21.4	21.2	19.4	16.1	12.8	9.6	6.2	6.6
97.5°	46.3	46.8	47.3	47.8	48.2	45.2	38.7	32.2	25.7	19.2	16.7
100°	65.0	65.3	65.6	65.9	66.1	66.4	66.7	67.1	67.4	67.8	54.8
102.5°	84.0	84.4	84.7	85.1	85.4	85.7	85.8	86.0	86.3	86.4	84.0
105°	114.5	114.9	115.2	115.5	115.9	116.1	116.1	116.1	116.1	116.1	116.1
107.5°	146.1	146.1	146.1	146.1	146.1	146.2	146.4	146.5	146.7	146.9	147.0
110°	166.7	166.7	166.7	166.7	166.7	166.8	166.9	167.1	167.3	167.5	167.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	186.1	186.2	186.4	186.7	186.8	187.0	187.1	187.3	187.4	187.4	187.1
115°	215.0	215.4	215.9	216.3	216.7	217.0	217.1	217.1	217.2	217.3	217.0
117.5°	245.0	245.0	245.0	245.0	245.0	245.1	245.4	245.7	246.1	246.4	246.0
120°	263.7	263.6	263.6	263.5	263.4	263.5	263.7	264.0	264.2	264.5	264.3
122.5°	280.3	280.5	280.9	281.2	281.5	281.7	281.9	282.0	282.1	282.2	282.1
125°	305.7	306.3	306.9	307.5	308.2	308.5	308.5	308.5	308.5	308.5	308.2
127.5°	330.1	330.6	331.1	331.5	331.9	332.1	332.0	332.0	331.9	331.8	331.7
130°	345.1	345.5	345.9	346.4	346.8	347.1	347.2	347.2	347.3	347.4	347.2
132.5°	360.1	360.6	361.1	361.5	362.1	362.2	362.1	361.9	361.6	361.4	361.4
135°	381.3	381.9	382.4	382.9	383.4	383.6	383.4	383.2	383.1	382.9	382.7
137.5°	400.9	401.3	401.7	402.3	402.7	402.9	402.7	402.5	402.3	402.2	402.3
140°	413.6	413.8	414.0	414.1	414.3	414.4	414.3	414.2	414.1	414.1	414.2
142.5°	425.2	425.3	425.4	425.5	425.6	425.7	425.9	425.9	426.1	426.2	426.2
145°	442.1	442.3	442.5	442.6	442.8	442.9	442.9	442.9	442.9	442.9	443.0
147.5°	456.9	456.8	456.8	456.8	456.8	456.8	456.9	457.0	457.1	457.2	457.3
150°	466.2	466.1	465.9	465.7	465.5	465.5	465.7	465.9	466.1	466.2	466.4
152.5°	475.3	474.9	474.5	474.2	473.7	473.6	473.8	474.0	474.2	474.3	474.5
155°	486.9	486.4	485.9	485.3	484.8	484.7	484.8	485.0	485.2	485.3	485.6
157.5°	495.8	495.5	495.2	494.9	494.6	494.5	494.5	494.5	494.5	494.6	494.8
160°	502.0	501.5	501.0	500.5	500.0	499.8	499.9	500.0	500.1	500.2	500.5
162.5°	507.0	506.5	506.0	505.5	505.0	504.8	504.9	505.0	505.1	505.1	505.6
165°	513.8	513.2	512.7	512.2	511.7	511.4	511.5	511.6	511.7	511.8	512.3
167.5°	518.8	518.2	517.7	517.1	516.6	516.3	516.4	516.5	516.6	516.7	517.4
170°	521.6	521.0	520.3	519.7	519.1	518.8	518.9	519.0	519.1	519.2	519.9
172.5°	523.4	522.8	522.2	521.6	521.0	520.8	520.9	521.1	521.2	521.4	522.0
175°	525.5	525.0	524.4	523.9	523.4	523.1	523.2	523.3	523.4	523.5	524.2
177.5°	526.4	526.0	525.6	525.1	524.7	524.5	524.6	524.7	524.8	524.9	525.3
180°	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	824.5	825.7	826.8	827.3	827.2	827.1	827.0	826.9
5°	820.4	821.7	822.9	823.5	823.4	823.3	823.1	822.9
7.5°	812.0	813.3	814.6	815.2	815.0	814.9	814.8	814.6
10°	805.0	806.2	807.4	807.9	807.7	807.5	807.4	807.3
12.5°	795.7	796.6	797.5	798.0	797.9	797.9	797.9	797.8
15°	779.3	780.0	780.8	781.1	781.1	781.1	781.1	781.1
17.5°	760.3	761.1	762.1	762.2	761.4	760.7	760.0	759.2
20°	745.8	746.8	747.9	748.0	747.3	746.6	745.8	745.1
22.5°	729.4	730.1	730.8	730.9	730.4	729.9	729.4	728.9
25°	703.2	703.4	703.8	703.7	703.3	702.8	702.4	702.0
27.5°	675.6	675.7	675.7	675.5	675.1	674.7	674.2	673.8
30°	655.6	655.3	655.0	654.6	654.2	653.8	653.3	652.9
32.5°	635.2	634.6	634.1	633.5	632.7	632.0	631.1	630.3
35°	603.6	603.0	602.2	601.2	600.1	598.9	597.8	596.6
37.5°	570.5	569.5	568.3	567.5	566.8	566.2	565.5	564.8
40°	547.5	546.2	544.9	544.1	543.6	543.2	542.8	542.3
42.5°	524.8	523.6	522.4	521.4	520.7	520.1	519.4	518.8
45°	491.0	489.3	487.6	486.5	486.0	485.6	485.2	484.7
47.5°	455.6	453.7	452.0	450.6	449.6	448.6	447.5	446.5
50°	431.3	429.4	427.5	426.0	425.0	424.0	422.9	422.0
52.5°	407.6	406.0	404.3	402.9	401.8	400.6	399.5	398.4
55°	370.9	369.6	368.3	367.1	366.1	365.1	364.1	363.1
57.5°	334.4	332.8	331.1	329.9	329.4	328.8	328.3	327.8
60°	309.8	308.3	306.9	305.7	304.6	303.6	302.6	301.6
62.5°	286.0	284.5	282.8	281.7	280.9	280.1	279.3	278.5
65°	248.6	247.3	246.0	245.0	244.4	243.8	243.3	242.7
67.5°	212.9	211.8	210.7	209.9	209.6	209.2	208.9	208.5
70°	189.2	188.4	187.5	186.8	186.2	185.6	185.0	184.5
72.5°	167.0	166.1	165.1	164.3	163.7	163.2	162.6	162.0
75°	132.6	132.2	131.7	131.2	130.6	130.0	129.5	128.9
77.5°	101.0	100.7	100.5	100.1	99.7	99.4	98.9	98.5
80°	80.8	80.7	80.5	80.3	80.0	79.7	79.5	79.1
82.5°	61.7	61.5	61.2	61.0	61.0	61.0	60.9	60.9
85°	36.3	36.2	36.1	35.8	35.6	35.2	35.0	34.7
87.5°	15.1	15.2	15.2	15.2	15.0	14.8	14.6	14.5
90°	7.1	7.5	7.9	8.4	8.6	8.9	9.1	9.4
92.5°	7.1	7.5	7.9	8.3	8.4	8.5	8.6	8.7
95°	7.1	7.5	7.9	8.2	8.2	8.2	8.2	8.2
97.5°	14.3	11.9	9.4	8.2	8.2	8.2	8.2	8.2
100°	42.0	29.1	16.2	9.6	9.2	8.9	8.5	8.2
102.5°	81.6	79.1	76.7	72.6	66.6	60.8	54.8	49.0
105°	116.1	116.1	116.1	116.1	116.0	115.9	115.8	115.7
107.5°	147.0	147.0	147.0	146.9	146.6	146.4	146.1	145.9
110°	166.9	166.7	166.4	166.3	166.4	166.5	166.6	166.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	186.8	186.4	186.1	185.9	185.8	185.6	185.5	185.4
115°	216.6	216.3	215.9	215.5	215.0	214.5	214.0	213.4
117.5°	245.5	245.0	244.6	244.3	244.0	243.8	243.6	243.4
120°	264.2	264.0	263.8	263.5	263.0	262.6	262.2	261.7
122.5°	281.9	281.7	281.5	281.2	280.7	280.2	279.7	279.2
125°	307.8	307.5	307.1	306.8	306.5	306.3	306.0	305.7
127.5°	331.5	331.3	331.1	330.7	330.0	329.4	328.7	328.1
130°	346.9	346.6	346.4	346.0	345.6	345.2	344.7	344.3
132.5°	361.4	361.3	361.3	361.0	360.6	360.2	359.7	359.3
135°	382.5	382.4	382.2	381.9	381.3	380.8	380.3	379.8
137.5°	402.3	402.3	402.3	402.2	401.7	401.2	400.8	400.4
140°	414.4	414.6	414.7	414.6	414.1	413.5	413.0	412.5
142.5°	426.3	426.3	426.4	426.1	425.6	425.1	424.6	424.0
145°	443.1	443.2	443.2	443.0	442.5	442.0	441.4	440.9
147.5°	457.4	457.5	457.6	457.4	456.8	456.2	455.5	454.9
150°	466.6	466.7	466.9	466.7	466.0	465.3	464.6	463.9
152.5°	474.7	474.8	475.0	474.8	474.2	473.6	472.9	472.3
155°	485.9	486.1	486.4	486.1	485.4	484.7	484.1	483.4
157.5°	495.1	495.3	495.6	495.4	494.7	494.0	493.4	492.7
160°	500.8	501.2	501.5	501.4	500.7	500.0	499.3	498.6
162.5°	506.1	506.6	507.0	507.0	506.2	505.4	504.6	503.9
165°	512.9	513.4	513.9	513.8	513.2	512.4	511.7	511.0
167.5°	518.0	518.6	519.2	519.2	518.3	517.5	516.8	516.0
170°	520.6	521.3	522.0	521.9	521.2	520.4	519.6	518.8
172.5°	522.6	523.2	523.9	523.8	523.1	522.3	521.5	520.7
175°	524.9	525.6	526.2	526.2	525.5	524.7	523.9	523.1
177.5°	525.8	526.2	526.8	526.8	526.2	525.6	525.0	524.5
180°	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5

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