

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: P333344-935

Luminaire Tested: **S125DIW-S375D470U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333344-935
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-S375D470U935-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 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: 2923.5 lumens
Efficiency: N/A
Efficacy: 127.1 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

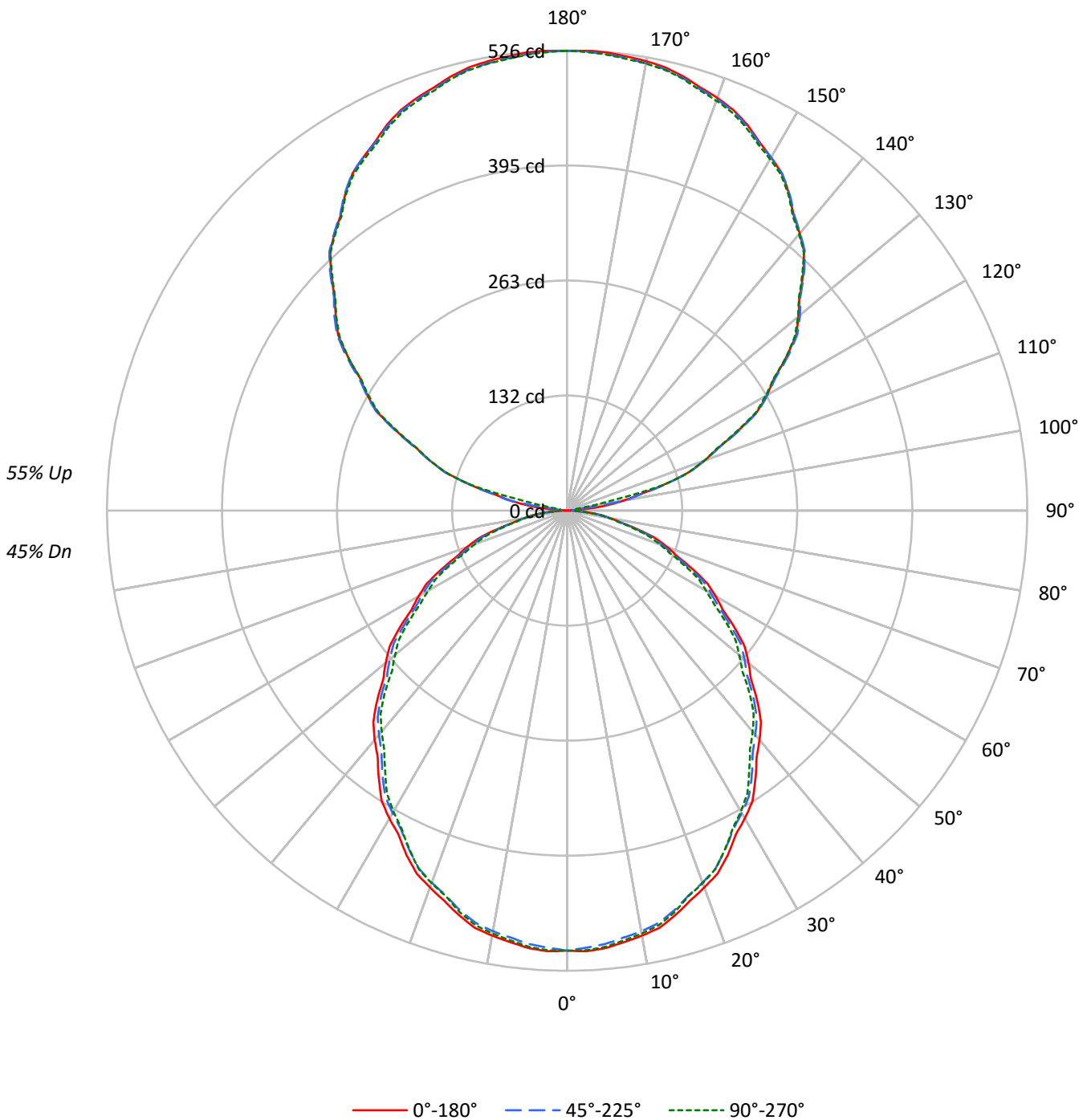
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	97	92	88	85	88	85	81	78	70	68	66	57	56	54	45	44	43	38
2	88	80	74	69	80	74	69	64	62	58	54	50	48	45	40	38	36	31
3	80	71	63	58	73	65	59	54	54	50	46	44	41	38	35	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	31	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	28	25	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15
8	53	41	33	28	49	38	31	26	32	27	23	27	22	19	22	18	16	14
9	49	37	30	25	45	35	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3249	3249	3249
5°	3255	3225	3245
10°	3236	3202	3220
15°	3201	3163	3177
20°	3151	3110	3115
25°	3096	3046	3043
30°	3030	2976	2961
35°	2958	2902	2861
40°	2885	2822	2780
45°	2806	2747	2693
50°	2719	2659	2579
55°	2634	2558	2486
60°	2533	2457	2370
65°	2415	2335	2257
70°	2298	2194	2119
75°	2094	2026	1956
80°	1863	1834	1789
85°	1623	1652	1564



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	1.6
10°-20°	134.0	4.6
20°-30°	197.8	6.8
30°-40°	230.8	7.9
40°-50°	231.8	7.9
50°-60°	203.5	7.0
60°-70°	151.6	5.2
70°-80°	86.7	3.0
80°-90°	26.3	0.9
90°-100°	19.1	0.7
100°-110°	117.7	4.0
110°-120°	213.4	7.3
120°-130°	273.9	9.4
130°-140°	294.6	10.1
140°-150°	276.5	9.5
150°-160°	223.7	7.7
160°-170°	144.7	4.9
170°-180°	49.9	1.7
0°-30°	379.2	13.0
0°-40°	610.0	20.9
0°-60°	1045.3	35.8
0°-90°	1309.9	44.8
90°-120°	350.2	12.0
90°-150°	1195.3	40.9
90°-180°	1614.0	55.2
0°-180°	2923.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	502	501	497	501	501	48
15°	479	477	473	475	475	135
25°	434	432	427	428	427	200
35°	375	373	368	366	363	235
45°	307	305	301	296	295	237
55°	234	232	227	224	221	209
65°	158	157	153	149	148	157
75°	84	83	81	80	78	89
85°	22	22	22	22	21	24
90°	0	4	6	8	9	2
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°	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0
2.5°	504.2	504.0	503.9	503.6	503.4	502.9	502.2	501.5	500.8	500.1	500.8
5°	502.1	502.0	501.8	501.6	501.4	500.9	500.1	499.2	498.3	497.4	498.2
7.5°	497.6	497.4	497.2	497.1	496.9	496.3	495.3	494.3	493.4	492.4	493.2
10°	493.4	493.3	493.1	492.9	492.8	492.1	491.2	490.2	489.2	488.3	489.0
12.5°	488.4	488.0	487.7	487.4	487.1	486.5	485.5	484.7	483.7	482.8	483.4
15°	478.7	478.5	478.2	477.9	477.6	477.0	476.0	475.1	474.1	473.1	473.6
17.5°	467.6	467.3	466.8	466.5	466.1	465.4	464.3	463.4	462.4	461.3	461.9
20°	458.4	458.2	458.1	457.9	457.7	457.0	455.9	454.7	453.6	452.5	453.1
22.5°	449.2	448.8	448.5	448.2	447.9	447.2	446.1	445.1	443.9	442.9	443.3
25°	434.5	434.1	433.6	433.2	432.7	432.0	430.8	429.6	428.5	427.4	427.6
27.5°	417.4	417.2	416.9	416.6	416.4	415.6	414.5	413.3	412.1	410.9	411.0
30°	406.3	406.0	405.7	405.4	405.2	404.4	403.1	401.7	400.5	399.1	398.9
32.5°	394.2	393.7	393.4	393.0	392.5	391.8	390.5	389.3	388.2	387.0	386.7
35°	375.2	374.9	374.5	374.2	373.8	373.0	371.8	370.6	369.3	368.1	367.6
37.5°	355.6	355.2	354.7	354.2	353.8	353.0	351.8	350.7	349.5	348.4	347.7
40°	342.2	341.7	341.3	340.9	340.4	339.6	338.4	337.2	335.9	334.7	333.9
42.5°	327.9	327.5	327.2	326.7	326.4	325.6	324.3	323.1	321.8	320.6	319.9
45°	307.2	306.9	306.5	306.2	305.7	305.1	304.0	303.0	301.9	300.8	299.8
47.5°	284.9	284.9	284.9	285.0	285.0	284.4	283.1	281.8	280.5	279.2	278.2
50°	270.6	270.4	270.1	269.8	269.5	268.9	267.8	266.7	265.7	264.6	263.5
52.5°	256.0	255.7	255.5	255.4	255.2	254.5	253.4	252.3	251.1	249.9	249.0
55°	233.9	233.7	233.4	233.2	232.9	232.1	230.9	229.7	228.4	227.2	226.4
57.5°	210.9	210.7	210.5	210.4	210.3	209.7	208.6	207.6	206.6	205.5	204.5
60°	196.1	195.8	195.4	195.1	194.8	194.1	193.1	192.2	191.1	190.2	189.3
62.5°	180.9	180.6	180.3	180.0	179.8	179.2	178.4	177.5	176.7	175.9	175.0
65°	158.0	157.8	157.6	157.5	157.3	156.7	155.8	154.7	153.8	152.8	152.0
67.5°	135.8	135.4	135.0	134.7	134.3	133.7	133.0	132.2	131.6	130.9	130.2
70°	121.7	121.3	120.9	120.5	120.0	119.3	118.6	117.8	117.0	116.2	115.6
72.5°	106.5	106.2	105.9	105.6	105.3	104.9	104.4	103.8	103.3	102.8	102.2
75°	83.9	83.8	83.6	83.4	83.3	82.9	82.5	82.1	81.6	81.2	80.9
77.5°	63.2	63.1	63.0	62.9	62.9	62.8	62.5	62.3	62.0	61.7	61.6
80°	50.1	50.1	50.1	50.1	50.1	50.0	49.9	49.7	49.5	49.3	49.2
82.5°	38.7	38.6	38.4	38.2	38.1	38.1	38.0	38.0	37.9	37.9	37.7
85°	21.9	22.0	22.0	22.1	22.2	22.3	22.3	22.3	22.3	22.3	22.2
87.5°	8.7	8.8	9.0	9.1	9.2	9.3	9.4	9.4	9.5	9.6	9.6
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°	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0
2.5°	501.5	502.2	502.9	503.3	503.2	503.1	503.1	503.0
5°	498.9	499.8	500.6	500.9	500.8	500.8	500.7	500.6
7.5°	494.0	494.7	495.5	495.8	495.8	495.7	495.6	495.5
10°	489.7	490.3	491.1	491.4	491.3	491.2	491.1	491.0
12.5°	484.0	484.6	485.1	485.3	485.3	485.3	485.3	485.3
15°	474.0	474.4	474.9	475.1	475.1	475.1	475.1	475.1
17.5°	462.4	463.0	463.6	463.6	463.1	462.7	462.3	461.8
20°	453.7	454.3	454.9	455.0	454.5	454.1	453.7	453.2
22.5°	443.7	444.1	444.5	444.5	444.3	443.9	443.7	443.3
25°	427.7	427.9	428.1	428.0	427.7	427.5	427.2	427.0
27.5°	411.0	411.0	411.0	411.0	410.6	410.4	410.1	409.8
30°	398.7	398.6	398.4	398.2	398.0	397.7	397.4	397.1
32.5°	386.4	386.1	385.7	385.4	384.9	384.4	383.9	383.4
35°	367.2	366.8	366.3	365.8	365.1	364.3	363.6	362.9
37.5°	347.1	346.4	345.7	345.2	344.7	344.4	344.0	343.5
40°	333.0	332.3	331.5	331.0	330.7	330.4	330.1	329.8
42.5°	319.2	318.5	317.7	317.2	316.8	316.3	316.0	315.6
45°	298.7	297.6	296.6	295.9	295.7	295.4	295.2	294.9
47.5°	277.1	276.0	274.9	274.1	273.5	272.9	272.2	271.6
50°	262.3	261.1	260.0	259.2	258.5	257.9	257.3	256.7
52.5°	248.0	246.9	245.9	245.1	244.4	243.7	243.1	242.4
55°	225.6	224.8	224.0	223.3	222.7	222.1	221.4	220.8
57.5°	203.5	202.4	201.4	200.7	200.4	200.0	199.7	199.3
60°	188.5	187.5	186.7	185.9	185.3	184.7	184.1	183.5
62.5°	174.0	173.0	172.0	171.3	170.9	170.4	169.9	169.4
65°	151.2	150.4	149.6	149.0	148.7	148.4	148.0	147.7
67.5°	129.5	128.8	128.1	127.7	127.5	127.3	127.1	126.8
70°	115.1	114.6	114.1	113.7	113.3	113.0	112.5	112.2
72.5°	101.6	101.0	100.4	100.0	99.6	99.3	98.8	98.5
75°	80.7	80.4	80.1	79.8	79.5	79.1	78.8	78.4
77.5°	61.5	61.3	61.1	61.0	60.7	60.4	60.2	59.9
80°	49.2	49.1	49.0	48.8	48.6	48.5	48.3	48.1
82.5°	37.5	37.4	37.3	37.1	37.1	37.1	37.0	37.0
85°	22.1	22.0	22.0	21.8	21.6	21.4	21.3	21.1
87.5°	9.7	9.8	9.9	9.9	9.8	9.7	9.6	9.5
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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