

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: P333343-830

Luminaire Tested: **S125DIW-S375D470U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333343-830
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-S375D470U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 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: 2909.2 lumens
Efficiency: N/A
Efficacy: 126.5 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

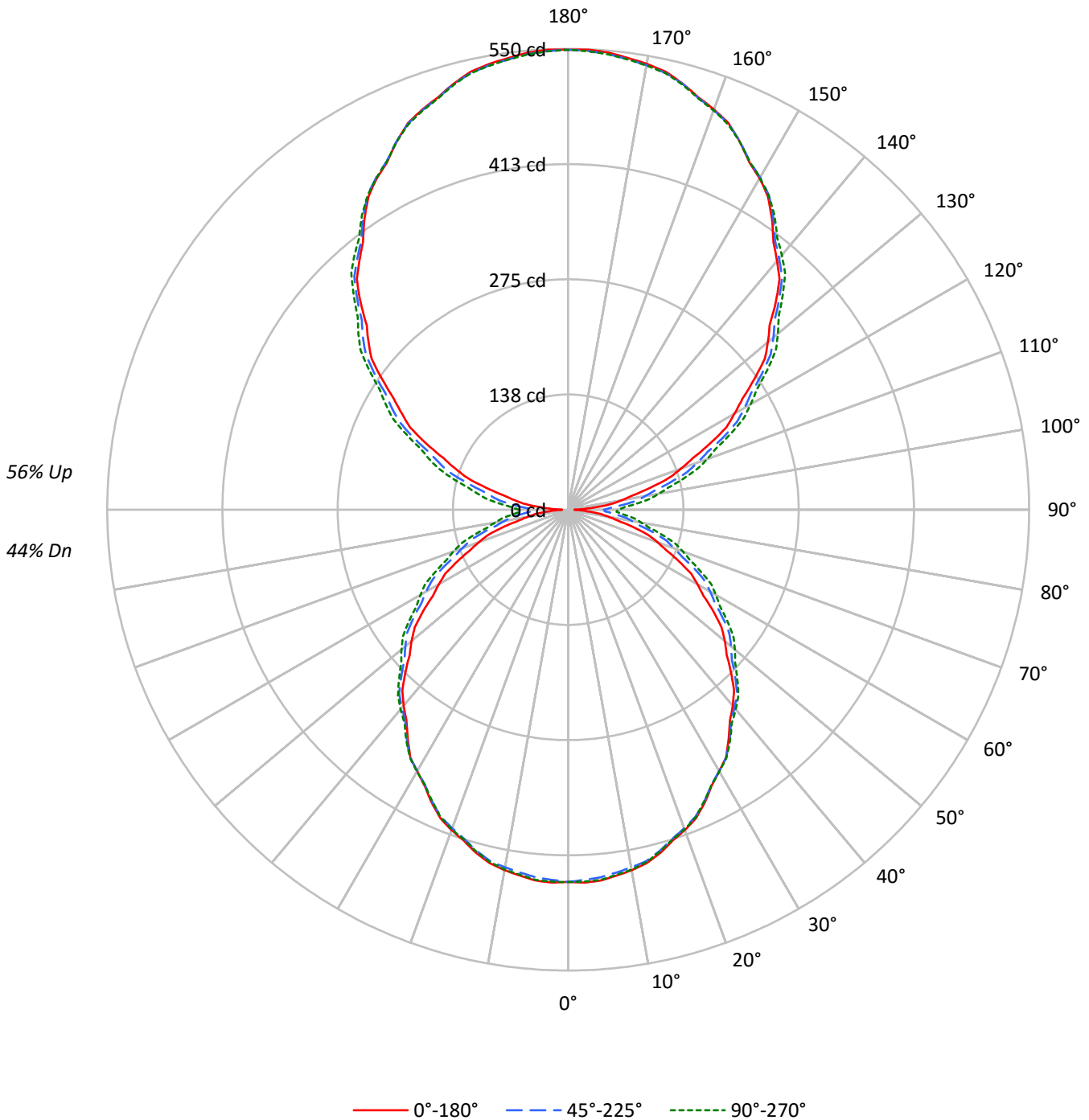
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	44
1	96	91	87	83	88	84	80	77	69	67	64	56	54	53	44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	37	34	31	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	27	25	21
5	66	55	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	24	21	19	16
7	56	44	36	30	51	41	33	28	34	28	24	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	20	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	14	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2869	2869	2869
5°	2875	2817	2826
10°	2855	2766	2762
15°	2821	2706	2681
20°	2776	2631	2601
25°	2721	2552	2502
30°	2654	2464	2411
35°	2593	2384	2329
40°	2531	2299	2245
45°	2459	2226	2171
50°	2391	2147	2106
55°	2309	2073	2030
60°	2220	1989	1951
65°	2128	1900	1864
70°	2024	1779	1773
75°	1855	1662	1662
80°	1636	1521	1540
85°	1430	1424	1502



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.0	1.4
10°-20°	119.3	4.1
20°-30°	177.4	6.1
30°-40°	210.1	7.2
40°-50°	217.2	7.5
50°-60°	200.1	6.9
60°-70°	161.8	5.6
70°-80°	108.3	3.7
80°-90°	57.4	2.0
90°-100°	68.3	2.3
100°-110°	131.8	4.5
110°-120°	199.5	6.9
120°-130°	250.9	8.6
130°-140°	275.1	9.5
140°-150°	266.6	9.2
150°-160°	223.3	7.7
160°-170°	148.4	5.1
170°-180°	51.9	1.8
0°-30°	338.7	11.6
0°-40°	548.8	18.9
0°-60°	966.1	33.2
0°-90°	1293.5	44.5
90°-120°	399.6	13.7
90°-150°	1192.1	41.0
90°-180°	1616.0	55.5
0°-180°	2909.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	444	444	42
15°	424	424	422	424	422	119
25°	386	387	384	386	384	177
35°	334	336	336	337	337	209
45°	275	280	282	285	285	212
55°	211	218	225	230	232	189
65°	146	156	166	172	174	144
75°	80	92	105	114	116	85
85°	24	38	54	63	67	26
90°	7	25	42	54	59	6
95°	34	46	65	77	81	34
105°	101	111	126	137	142	108
115°	187	192	204	211	213	185
125°	270	273	282	288	290	242
135°	350	352	356	361	362	270
145°	424	425	426	428	429	265
155°	484	484	485	486	484	223
165°	527	526	526	528	526	149
175°	548	546	546	548	546	52
180°	549	549	549	549	549	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	445.4	445.2	445.1	444.9	444.8	444.4	443.8	443.3	442.8	442.2	442.8
5°	444.3	444.1	443.9	443.7	443.6	443.1	442.4	441.8	441.1	440.4	441.2
7.5°	440.4	440.4	440.3	440.2	440.1	439.7	439.0	438.3	437.6	436.9	437.6
10°	436.9	436.9	436.9	436.9	436.9	436.5	435.7	435.0	434.2	433.4	434.1
12.5°	432.1	432.2	432.2	432.3	432.3	432.1	431.5	430.8	430.2	429.6	430.1
15°	424.2	424.3	424.4	424.6	424.7	424.3	423.7	423.0	422.4	421.7	422.3
17.5°	414.2	414.3	414.5	414.7	414.9	414.7	414.1	413.3	412.6	412.0	412.5
20°	406.9	407.1	407.3	407.5	407.6	407.4	406.7	406.0	405.4	404.6	405.0
22.5°	398.5	398.9	399.2	399.5	399.9	399.6	398.9	398.1	397.4	396.6	397.0
25°	385.5	385.8	386.1	386.3	386.6	386.5	386.0	385.4	384.7	384.2	384.6
27.5°	371.1	371.5	371.9	372.3	372.8	372.7	372.0	371.4	370.7	370.0	370.2
30°	360.2	360.8	361.4	362.0	362.6	362.6	362.0	361.4	360.8	360.2	360.4
32.5°	350.5	351.0	351.5	352.0	352.5	352.5	352.1	351.7	351.3	350.8	351.0
35°	333.7	334.3	335.1	335.7	336.4	336.6	336.3	336.0	335.7	335.5	335.7
37.5°	316.9	317.4	318.1	318.7	319.3	319.6	319.5	319.4	319.3	319.2	319.6
40°	305.4	306.1	306.9	307.6	308.5	308.8	308.7	308.6	308.5	308.4	308.8
42.5°	292.8	293.8	294.8	295.9	296.8	297.5	297.7	297.8	298.1	298.3	298.8
45°	274.8	276.0	277.0	278.1	279.1	279.9	280.4	280.9	281.3	281.8	282.5
47.5°	256.5	257.5	258.4	259.5	260.4	261.4	262.2	263.0	263.8	264.7	265.7
50°	243.9	245.0	246.1	247.1	248.2	249.3	250.3	251.4	252.4	253.5	254.6
52.5°	230.7	232.0	233.3	234.6	235.9	237.1	238.5	239.8	241.1	242.3	243.6
55°	211.2	212.8	214.3	215.9	217.4	219.0	220.6	222.1	223.7	225.2	226.3
57.5°	191.4	193.2	195.1	197.0	198.9	200.7	202.5	204.2	206.0	207.7	209.0
60°	178.1	180.1	182.0	184.0	185.9	187.8	189.7	191.7	193.7	195.6	197.0
62.5°	165.2	167.2	169.2	171.1	173.1	175.0	177.1	179.2	181.3	183.4	185.0
65°	145.5	147.7	150.0	152.1	154.4	156.7	159.0	161.4	163.6	166.0	167.4
67.5°	126.9	129.0	131.1	133.3	135.4	137.7	140.1	142.4	144.8	147.1	148.9
70°	113.3	115.5	117.7	119.9	122.2	124.5	127.1	129.6	132.1	134.6	136.5
72.5°	100.0	102.4	104.6	106.9	109.2	111.8	114.5	117.3	120.0	122.7	124.8
75°	80.1	82.7	85.2	87.7	90.2	93.0	96.1	99.2	102.4	105.4	107.4
77.5°	61.1	64.0	66.9	69.7	72.7	75.6	78.6	81.6	84.5	87.6	89.7
80°	49.2	52.1	55.0	58.0	60.8	63.9	67.2	70.5	73.8	77.1	79.3
82.5°	38.5	41.5	44.6	47.6	50.6	53.9	57.2	60.6	64.0	67.3	69.4
85°	23.9	27.1	30.3	33.6	36.8	40.1	43.5	46.8	50.2	53.5	55.7
87.5°	13.7	17.0	20.2	23.5	26.7	30.0	33.5	36.9	40.2	43.7	46.0
90°	7.4	11.2	15.1	18.9	22.8	26.8	30.7	34.7	38.6	42.5	45.2
92.5°	16.6	20.0	23.4	26.8	30.2	34.0	38.2	42.3	46.6	50.7	53.5
95°	33.5	36.1	38.8	41.6	44.3	47.7	51.9	56.2	60.4	64.7	67.5
97.5°	51.3	53.6	56.0	58.3	60.6	64.1	68.5	73.0	77.5	82.0	84.6
100°	64.6	66.6	68.7	70.7	72.8	75.9	80.2	84.5	88.9	93.2	96.1
102.5°	79.0	81.2	83.4	85.7	87.9	91.0	94.5	98.2	101.9	105.5	108.4
105°	101.3	103.3	105.4	107.4	109.4	112.2	115.6	119.1	122.6	126.0	128.6
107.5°	126.1	127.9	129.7	131.5	133.3	135.7	139.0	142.2	145.4	148.6	150.9
110°	143.2	144.8	146.5	148.1	149.7	152.0	155.0	158.1	161.0	164.0	166.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	161.0	162.1	163.2	164.5	165.6	167.8	170.7	173.7	176.7	179.7	181.6
115°	186.7	187.8	188.9	189.9	191.0	192.8	195.6	198.2	201.0	203.7	205.3
117.5°	212.6	213.2	213.9	214.4	215.1	216.7	219.2	221.8	224.3	226.9	228.6
120°	229.0	229.8	230.5	231.3	232.1	233.7	235.9	238.3	240.6	242.9	244.6
122.5°	246.5	246.8	247.0	247.3	247.7	249.0	251.4	253.8	256.2	258.6	260.0
125°	270.4	270.9	271.4	271.8	272.3	273.6	275.6	277.7	279.7	281.7	283.0
127.5°	295.7	295.9	296.1	296.3	296.5	297.5	299.3	301.0	302.7	304.3	305.7
130°	311.0	311.4	311.8	312.2	312.5	313.5	315.0	316.6	318.1	319.7	320.9
132.5°	326.0	326.8	327.5	328.3	329.1	330.0	331.0	332.0	333.0	334.0	335.3
135°	350.3	350.8	351.3	351.8	352.2	352.8	353.6	354.4	355.2	355.9	357.2
137.5°	373.2	373.6	374.1	374.6	375.0	375.5	376.1	376.6	377.1	377.7	378.9
140°	387.5	388.0	388.4	388.9	389.4	389.8	390.2	390.6	391.0	391.3	392.6
142.5°	402.2	402.5	402.8	403.1	403.5	403.8	404.2	404.5	404.9	405.3	406.3
145°	423.8	424.0	424.3	424.6	424.9	425.2	425.5	425.7	426.0	426.3	426.8
147.5°	443.4	443.6	443.7	443.9	444.2	444.4	444.6	444.9	445.1	445.4	445.7
150°	456.7	456.6	456.5	456.4	456.3	456.5	456.9	457.2	457.6	458.0	458.0
152.5°	467.6	467.8	467.9	468.0	468.2	468.3	468.4	468.6	468.7	468.9	469.1
155°	484.5	484.5	484.5	484.5	484.5	484.5	484.6	484.7	484.7	484.8	485.2
157.5°	499.5	499.3	499.1	498.9	498.6	498.6	498.7	498.8	498.9	499.0	499.4
160°	508.4	508.1	507.7	507.5	507.2	507.1	507.2	507.3	507.4	507.5	507.9
162.5°	516.2	516.0	515.9	515.6	515.4	515.3	515.3	515.3	515.4	515.4	515.9
165°	526.7	526.5	526.3	526.1	525.9	525.9	526.0	526.1	526.2	526.3	526.7
167.5°	535.6	535.3	534.9	534.5	534.1	534.0	534.0	534.0	534.0	534.0	534.5
170°	540.4	540.0	539.6	539.2	538.9	538.7	538.7	538.7	538.7	538.7	539.2
172.5°	543.8	543.5	543.1	542.7	542.3	542.2	542.2	542.2	542.2	542.2	542.7
175°	547.7	547.2	546.9	546.5	546.1	545.9	545.9	545.9	545.9	545.9	546.5
177.5°	549.6	549.3	549.0	548.7	548.4	548.2	548.2	548.1	548.0	547.9	548.4
180°	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	443.3	443.8	444.4	444.6	444.5	444.5	444.4	444.3
5°	442.0	442.7	443.5	443.8	443.7	443.7	443.6	443.5
7.5°	438.3	438.9	439.6	439.9	439.8	439.7	439.6	439.5
10°	434.8	435.5	436.1	436.4	436.3	436.2	436.1	436.0
12.5°	430.6	431.1	431.7	431.8	431.6	431.3	431.0	430.8
15°	422.8	423.4	424.0	424.0	423.7	423.3	422.9	422.5
17.5°	412.9	413.3	413.8	413.9	413.7	413.4	413.2	412.9
20°	405.3	405.6	405.9	406.0	406.0	406.0	406.0	406.0
22.5°	397.4	397.8	398.1	398.2	397.9	397.8	397.5	397.3
25°	384.9	385.4	385.8	385.7	385.2	384.7	384.3	383.8
27.5°	370.5	370.8	371.1	371.2	371.0	370.8	370.6	370.4
30°	360.6	360.8	361.0	361.1	361.0	360.9	360.8	360.7
32.5°	351.2	351.4	351.6	351.7	351.6	351.5	351.4	351.3
35°	336.0	336.3	336.6	336.7	336.7	336.7	336.7	336.7
37.5°	320.0	320.4	320.7	320.9	320.9	320.8	320.8	320.7
40°	309.2	309.5	310.0	310.3	310.5	310.7	310.9	311.0
42.5°	299.3	299.7	300.2	300.4	300.5	300.5	300.5	300.6
45°	283.2	283.9	284.6	284.9	285.0	285.1	285.2	285.3
47.5°	266.6	267.7	268.6	269.2	269.5	269.7	269.8	270.0
50°	255.6	256.7	257.8	258.4	258.7	259.0	259.3	259.6
52.5°	244.7	245.8	246.9	247.6	247.8	248.1	248.3	248.5
55°	227.3	228.4	229.5	230.2	230.5	230.9	231.4	231.8
57.5°	210.2	211.4	212.6	213.4	213.7	214.0	214.3	214.6
60°	198.5	199.9	201.4	202.3	202.6	202.8	203.1	203.4
62.5°	186.6	188.2	189.8	190.8	191.1	191.5	191.9	192.3
65°	168.9	170.3	171.7	172.7	173.1	173.4	173.9	174.3
67.5°	150.7	152.4	154.2	155.3	155.8	156.4	156.8	157.3
70°	138.3	140.2	141.9	143.2	143.7	144.3	144.9	145.5
72.5°	126.8	128.8	130.7	132.0	132.3	132.8	133.2	133.7
75°	109.3	111.2	113.2	114.3	114.9	115.4	115.8	116.3
77.5°	91.8	94.0	96.0	97.4	97.7	98.1	98.5	98.9
80°	81.3	83.5	85.6	86.9	87.3	87.7	88.0	88.4
82.5°	71.4	73.5	75.6	76.9	77.7	78.3	79.0	79.7
85°	57.9	59.9	62.1	63.5	64.3	65.1	65.9	66.6
87.5°	48.4	50.7	53.0	54.5	55.2	56.0	56.7	57.5
90°	48.0	50.6	53.3	55.2	56.2	57.1	58.1	59.0
92.5°	56.3	59.1	61.8	63.6	64.6	65.4	66.4	67.2
95°	70.3	73.0	75.9	77.7	78.6	79.5	80.3	81.2
97.5°	87.3	90.0	92.7	94.3	95.1	95.9	96.7	97.5
100°	99.1	101.9	104.8	106.6	107.4	108.2	109.0	109.7
102.5°	111.3	114.1	117.1	118.9	119.8	120.6	121.5	122.3
105°	131.1	133.6	136.1	137.8	138.7	139.8	140.7	141.7
107.5°	153.1	155.2	157.5	158.8	159.5	160.0	160.6	161.2
110°	168.2	170.4	172.5	173.9	174.5	175.0	175.6	176.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	183.5	185.4	187.3	188.5	189.0	189.5	190.0	190.5
115°	207.0	208.6	210.3	211.3	211.8	212.3	212.8	213.3
117.5°	230.4	232.1	233.8	234.8	235.1	235.4	235.6	235.9
120°	246.2	247.9	249.5	250.4	250.6	250.8	251.0	251.2
122.5°	261.6	263.1	264.6	265.4	265.7	266.0	266.3	266.6
125°	284.5	285.8	287.2	288.0	288.4	288.8	289.2	289.5
127.5°	307.0	308.3	309.6	310.6	310.9	311.2	311.6	312.0
130°	322.2	323.5	324.7	325.5	325.8	326.1	326.4	326.7
132.5°	336.5	337.8	339.0	339.8	339.9	340.1	340.2	340.4
135°	358.4	359.7	361.0	361.7	361.7	361.8	361.9	362.0
137.5°	380.2	381.4	382.7	383.3	383.2	383.1	383.0	383.0
140°	393.8	395.1	396.3	396.9	396.8	396.7	396.6	396.6
142.5°	407.4	408.4	409.4	409.9	409.8	409.7	409.6	409.5
145°	427.3	427.8	428.3	428.6	428.7	428.8	428.9	429.0
147.5°	446.1	446.5	446.9	446.8	446.3	445.8	445.4	444.9
150°	458.0	458.0	458.0	457.9	457.8	457.7	457.6	457.5
152.5°	469.4	469.6	469.8	469.8	469.4	469.1	468.8	468.4
155°	485.6	486.0	486.4	486.4	485.9	485.4	484.9	484.5
157.5°	499.7	500.1	500.5	500.4	499.7	499.1	498.5	497.9
160°	508.3	508.7	509.1	509.0	508.5	508.0	507.6	507.1
162.5°	516.3	516.7	517.2	517.2	516.6	516.0	515.5	514.9
165°	527.1	527.4	527.8	527.7	527.2	526.6	526.0	525.5
167.5°	535.1	535.6	536.2	536.2	535.6	535.0	534.4	533.9
170°	539.8	540.4	541.0	540.9	540.3	539.6	538.9	538.3
172.5°	543.3	543.8	544.4	544.4	543.8	543.2	542.6	542.1
175°	547.1	547.7	548.3	548.2	547.5	546.9	546.2	545.5
177.5°	548.8	549.3	549.8	549.7	549.2	548.7	548.1	547.6
180°	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9

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