

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: P333128-927

Luminaire Tested: **S125DIP-S375D590U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333128-927
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: S125DIP-S375D590U927-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2778.4 lumens
Efficiency: N/A
Efficacy: 108.5 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: Semi-Indirect

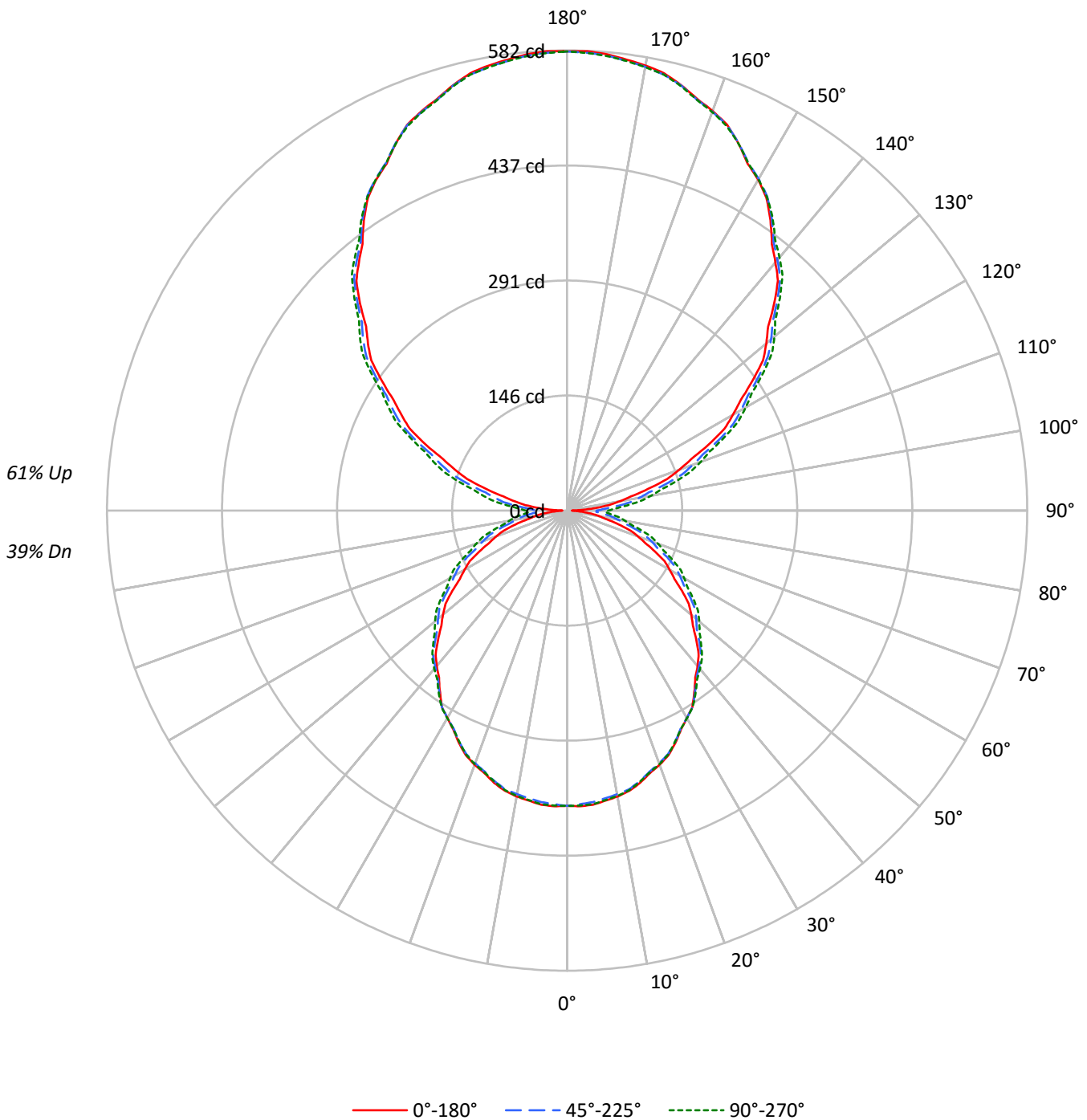
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	90	86	83	86	82	79	76	67	64	62	53	51	50	40	39	38	32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26
3	78	69	61	55	71	63	56	51	51	46	43	40	37	34	31	28	26	22
4	72	61	53	47	65	55	48	43	45	40	36	36	32	29	27	25	23	19
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	24	22	20	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	52	39	32	26	47	36	29	24	30	25	21	24	20	17	18	16	14	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	26	21	41	30	24	19	25	20	17	20	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2412	2412	2412
5°	2416	2367	2375
10°	2399	2324	2322
15°	2371	2274	2253
20°	2333	2212	2186
25°	2287	2145	2103
30°	2231	2071	2027
35°	2179	2003	1957
40°	2127	1932	1887
45°	2067	1871	1825
50°	2010	1805	1770
55°	1941	1743	1706
60°	1866	1671	1640
65°	1789	1597	1567
70°	1700	1494	1490
75°	1558	1397	1397
80°	1377	1278	1295
85°	1203	1197	1263



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.3	1.3
10°-20°	100.2	3.6
20°-30°	149.1	5.4
30°-40°	176.6	6.4
40°-50°	182.6	6.6
50°-60°	168.2	6.1
60°-70°	135.9	4.9
70°-80°	91.0	3.3
80°-90°	48.5	1.7
90°-100°	65.4	2.4
100°-110°	134.4	4.8
110°-120°	207.6	7.5
120°-130°	263.5	9.5
130°-140°	290.1	10.4
140°-150°	281.8	10.1
150°-160°	236.2	8.5
160°-170°	157.0	5.7
170°-180°	54.9	2.0
0°-30°	284.6	10.2
0°-40°	461.2	16.6
0°-60°	812.0	29.2
0°-90°	1087.5	39.1
90°-120°	407.4	14.7
90°-150°	1242.8	44.7
90°-180°	1691.0	60.9
0°-180°	2778.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	373	373	373	373	373	
5°	373	373	370	373	373	35
15°	357	357	354	356	355	100
25°	324	325	323	324	323	149
35°	280	283	282	283	283	175
45°	231	235	237	239	240	178
55°	178	183	189	193	195	159
65°	122	131	140	145	146	121
75°	67	77	89	96	98	71
85°	20	32	45	53	56	21
90°	6	22	37	48	52	6
95°	34	45	62	72	76	35
105°	106	115	128	138	142	113
115°	197	202	212	218	220	195
125°	286	288	296	301	302	256
135°	370	373	376	380	381	285
145°	448	450	451	453	453	280
155°	512	512	513	514	512	236
165°	557	556	557	558	556	157
175°	579	578	578	580	577	55
180°	581	581	581	581	581	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	374.3	374.1	374.1	373.9	373.8	373.5	373.0	372.6	372.2	371.7	372.2
5°	373.4	373.3	373.1	373.0	372.8	372.4	371.9	371.3	370.7	370.1	370.8
7.5°	370.1	370.1	370.0	369.9	369.9	369.6	369.0	368.4	367.8	367.2	367.8
10°	367.2	367.2	367.2	367.2	367.2	366.9	366.2	365.6	365.0	364.2	364.9
12.5°	363.1	363.2	363.2	363.3	363.4	363.1	362.7	362.1	361.6	361.1	361.5
15°	356.6	356.6	356.7	356.9	357.0	356.6	356.1	355.5	355.0	354.4	354.9
17.5°	348.1	348.2	348.4	348.6	348.7	348.6	348.0	347.4	346.8	346.3	346.7
20°	342.0	342.1	342.3	342.5	342.6	342.4	341.8	341.3	340.7	340.1	340.4
22.5°	334.9	335.3	335.5	335.8	336.1	335.9	335.3	334.6	334.0	333.4	333.7
25°	324.0	324.2	324.5	324.7	325.0	324.9	324.4	323.9	323.4	322.9	323.2
27.5°	311.9	312.2	312.6	312.9	313.3	313.2	312.7	312.1	311.6	311.0	311.2
30°	302.8	303.2	303.7	304.3	304.8	304.8	304.3	303.7	303.2	302.8	302.9
32.5°	294.6	295.0	295.4	295.9	296.3	296.3	296.0	295.6	295.2	294.9	295.0
35°	280.4	281.0	281.6	282.2	282.7	282.9	282.7	282.4	282.2	281.9	282.2
37.5°	266.3	266.8	267.4	267.8	268.4	268.6	268.5	268.5	268.4	268.3	268.6
40°	256.7	257.3	257.9	258.6	259.3	259.5	259.4	259.4	259.3	259.2	259.5
42.5°	246.1	246.9	247.8	248.7	249.5	250.0	250.2	250.3	250.6	250.7	251.1
45°	231.0	232.0	232.8	233.7	234.6	235.3	235.7	236.1	236.5	236.9	237.4
47.5°	215.6	216.4	217.2	218.1	218.9	219.7	220.4	221.0	221.7	222.4	223.3
50°	205.0	205.9	206.8	207.7	208.6	209.5	210.4	211.3	212.1	213.1	214.0
52.5°	193.9	195.0	196.1	197.2	198.3	199.3	200.4	201.5	202.6	203.7	204.7
55°	177.5	178.9	180.1	181.5	182.8	184.1	185.4	186.6	188.0	189.3	190.2
57.5°	160.9	162.4	164.0	165.6	167.2	168.7	170.2	171.7	173.2	174.6	175.6
60°	149.7	151.4	153.0	154.6	156.2	157.9	159.5	161.1	162.8	164.4	165.6
62.5°	138.9	140.5	142.2	143.8	145.4	147.1	148.9	150.6	152.4	154.2	155.5
65°	122.3	124.1	126.0	127.9	129.8	131.7	133.6	135.6	137.5	139.5	140.7
67.5°	106.6	108.4	110.2	112.0	113.8	115.7	117.7	119.7	121.7	123.7	125.2
70°	95.2	97.0	98.9	100.8	102.7	104.6	106.8	108.9	111.0	113.1	114.7
72.5°	84.1	86.0	87.9	89.8	91.8	94.0	96.3	98.5	100.8	103.1	104.9
75°	67.3	69.5	71.6	73.7	75.8	78.2	80.8	83.4	86.0	88.6	90.2
77.5°	51.3	53.8	56.2	58.6	61.1	63.5	66.1	68.6	71.1	73.6	75.4
80°	41.4	43.8	46.3	48.7	51.1	53.7	56.5	59.3	62.0	64.8	66.6
82.5°	32.3	34.9	37.5	40.0	42.5	45.3	48.1	50.9	53.8	56.6	58.3
85°	20.1	22.8	25.5	28.2	30.9	33.7	36.5	39.4	42.2	45.0	46.8
87.5°	11.5	14.3	17.0	19.8	22.6	25.4	28.3	31.2	34.1	37.0	39.0
90°	6.3	9.7	13.2	16.6	20.0	23.4	26.9	30.3	33.7	37.2	39.6
92.5°	16.2	19.2	22.2	25.1	28.1	31.4	35.1	38.8	42.5	46.2	48.6
95°	34.1	36.4	38.7	41.1	43.4	46.4	50.2	53.9	57.8	61.6	64.0
97.5°	53.2	55.1	57.1	59.1	61.1	64.1	68.1	72.2	76.2	80.3	82.7
100°	67.3	69.0	70.7	72.4	74.1	76.9	80.9	84.8	88.6	92.6	95.2
102.5°	82.5	84.5	86.5	88.5	90.5	93.1	96.3	99.5	102.7	105.8	108.5
105°	106.3	108.1	110.0	111.8	113.5	116.0	119.0	122.1	125.1	128.2	130.4
107.5°	132.6	134.3	135.9	137.4	139.1	141.3	144.1	146.9	149.7	152.5	154.4
110°	150.8	152.3	153.8	155.2	156.7	158.8	161.3	163.9	166.4	169.1	170.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	169.6	170.6	171.7	172.7	173.7	175.5	178.2	180.8	183.4	185.9	187.6
115°	196.9	198.0	198.9	199.9	200.9	202.5	204.8	207.2	209.5	211.8	213.1
117.5°	224.4	225.0	225.5	226.1	226.6	228.1	230.2	232.4	234.6	236.8	238.2
120°	241.8	242.6	243.3	244.1	244.8	246.1	248.1	250.1	252.1	254.1	255.4
122.5°	260.3	260.6	260.9	261.2	261.5	262.7	264.7	266.8	268.9	270.9	272.2
125°	285.7	286.2	286.8	287.2	287.8	288.9	290.7	292.4	294.1	295.9	296.9
127.5°	312.4	312.8	313.0	313.2	313.5	314.3	315.8	317.3	318.7	320.2	321.3
130°	328.8	329.2	329.5	330.0	330.4	331.3	332.6	334.0	335.3	336.7	337.7
132.5°	344.7	345.5	346.3	347.1	347.9	348.8	349.6	350.5	351.3	352.1	353.2
135°	370.4	370.9	371.5	371.9	372.5	373.1	373.8	374.4	375.1	375.7	376.8
137.5°	394.6	395.1	395.6	396.1	396.6	397.1	397.6	398.2	398.6	399.1	400.2
140°	409.8	410.3	410.8	411.3	411.8	412.3	412.6	413.0	413.4	413.8	414.9
142.5°	425.3	425.7	426.0	426.4	426.7	427.1	427.5	427.9	428.3	428.7	429.6
145°	448.2	448.5	448.9	449.2	449.5	449.8	450.1	450.4	450.8	451.0	451.4
147.5°	469.0	469.2	469.4	469.7	469.9	470.1	470.3	470.6	470.9	471.1	471.4
150°	483.1	483.0	482.9	482.8	482.7	482.8	483.2	483.6	484.0	484.4	484.4
152.5°	494.6	494.8	495.0	495.1	495.2	495.4	495.5	495.7	495.8	496.1	496.3
155°	512.5	512.5	512.5	512.5	512.5	512.5	512.6	512.7	512.9	512.9	513.3
157.5°	528.4	528.1	527.9	527.8	527.5	527.4	527.5	527.7	527.8	527.8	528.2
160°	537.8	537.5	537.2	536.9	536.5	536.5	536.5	536.7	536.8	536.9	537.3
162.5°	546.1	545.9	545.7	545.4	545.2	545.1	545.1	545.2	545.2	545.2	545.7
165°	557.2	557.0	556.8	556.6	556.4	556.3	556.4	556.6	556.7	556.7	557.1
167.5°	566.6	566.3	565.8	565.4	565.0	564.8	564.8	564.8	564.8	564.8	565.4
170°	571.6	571.2	570.8	570.5	570.1	569.9	569.9	569.9	569.9	569.9	570.5
172.5°	575.3	574.9	574.5	574.1	573.7	573.5	573.5	573.5	573.5	573.5	574.1
175°	579.3	578.9	578.5	578.1	577.7	577.6	577.6	577.6	577.6	577.6	578.1
177.5°	581.5	581.1	580.8	580.5	580.1	580.0	579.9	579.8	579.7	579.6	580.1
180°	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	372.6	373.0	373.5	373.7	373.6	373.6	373.5	373.4
5°	371.5	372.1	372.7	373.0	373.0	372.9	372.8	372.7
7.5°	368.4	368.9	369.5	369.7	369.6	369.6	369.5	369.4
10°	365.4	366.0	366.5	366.8	366.7	366.6	366.5	366.5
12.5°	361.9	362.3	362.8	362.9	362.7	362.5	362.3	362.1
15°	355.4	355.8	356.3	356.4	356.1	355.8	355.5	355.1
17.5°	347.1	347.4	347.8	347.8	347.7	347.5	347.3	347.1
20°	340.6	340.9	341.1	341.2	341.2	341.2	341.2	341.2
22.5°	334.0	334.3	334.6	334.7	334.5	334.3	334.1	333.9
25°	323.5	323.9	324.2	324.2	323.8	323.4	323.0	322.6
27.5°	311.4	311.6	311.9	312.0	311.8	311.6	311.5	311.3
30°	303.1	303.2	303.4	303.5	303.4	303.3	303.2	303.2
32.5°	295.2	295.3	295.5	295.6	295.5	295.4	295.3	295.2
35°	282.4	282.7	282.9	283.0	283.0	283.0	283.0	283.0
37.5°	268.9	269.3	269.6	269.7	269.7	269.7	269.7	269.6
40°	259.8	260.2	260.5	260.8	260.9	261.1	261.3	261.4
42.5°	251.5	251.9	252.3	252.5	252.5	252.5	252.5	252.6
45°	238.1	238.6	239.2	239.5	239.6	239.6	239.7	239.8
47.5°	224.1	225.0	225.8	226.2	226.5	226.6	226.8	227.0
50°	214.8	215.8	216.7	217.2	217.5	217.7	217.9	218.2
52.5°	205.7	206.6	207.6	208.1	208.3	208.5	208.7	208.8
55°	191.1	191.9	192.9	193.5	193.8	194.1	194.5	194.8
57.5°	176.7	177.7	178.7	179.4	179.6	179.8	180.1	180.4
60°	166.8	168.0	169.3	170.0	170.2	170.5	170.7	171.0
62.5°	156.9	158.2	159.5	160.3	160.7	161.0	161.3	161.6
65°	142.0	143.1	144.3	145.1	145.4	145.8	146.2	146.5
67.5°	126.7	128.1	129.6	130.6	130.9	131.4	131.8	132.2
70°	116.2	117.8	119.3	120.3	120.8	121.3	121.8	122.3
72.5°	106.5	108.2	109.9	110.9	111.2	111.6	111.9	112.3
75°	91.9	93.5	95.1	96.1	96.6	97.0	97.4	97.8
77.5°	77.2	79.0	80.7	81.8	82.1	82.5	82.8	83.1
80°	68.4	70.2	71.9	73.0	73.4	73.7	74.0	74.3
82.5°	60.0	61.8	63.5	64.6	65.3	65.8	66.4	67.0
85°	48.6	50.4	52.2	53.4	54.0	54.7	55.4	56.0
87.5°	41.0	42.9	44.9	46.2	46.8	47.5	48.1	48.7
90°	42.0	44.4	46.7	48.4	49.3	50.1	51.0	51.9
92.5°	51.2	53.6	56.1	57.7	58.5	59.3	60.0	60.8
95°	66.5	69.0	71.5	73.1	73.9	74.7	75.4	76.2
97.5°	85.1	87.4	89.8	91.3	92.0	92.7	93.3	94.0
100°	97.8	100.4	103.1	104.6	105.4	106.1	106.7	107.4
102.5°	111.1	113.8	116.4	118.0	118.8	119.6	120.4	121.1
105°	132.6	134.8	137.0	138.6	139.5	140.4	141.2	142.1
107.5°	156.3	158.3	160.2	161.4	161.8	162.3	162.8	163.3
110°	172.8	174.6	176.4	177.6	178.1	178.6	179.0	179.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	189.2	190.8	192.4	193.5	193.8	194.2	194.6	195.0
115°	214.5	215.9	217.2	218.1	218.5	218.9	219.3	219.7
117.5°	239.7	241.1	242.6	243.4	243.6	243.8	243.9	244.0
120°	256.8	258.2	259.6	260.3	260.4	260.5	260.5	260.6
122.5°	273.4	274.6	275.9	276.6	276.8	276.9	277.1	277.3
125°	298.0	299.1	300.2	301.0	301.3	301.6	301.9	302.1
127.5°	322.4	323.5	324.6	325.3	325.6	325.8	326.1	326.4
130°	338.7	339.8	340.8	341.4	341.7	341.8	342.1	342.3
132.5°	354.2	355.2	356.2	356.8	356.9	357.0	357.0	357.0
135°	377.9	378.9	380.0	380.5	380.6	380.6	380.6	380.6
137.5°	401.2	402.3	403.5	403.9	403.7	403.5	403.4	403.2
140°	416.0	417.1	418.2	418.6	418.4	418.3	418.1	418.0
142.5°	430.6	431.4	432.3	432.6	432.5	432.3	432.1	431.9
145°	451.9	452.3	452.7	452.9	452.9	452.9	452.9	453.0
147.5°	471.8	472.2	472.5	472.5	472.0	471.4	470.9	470.3
150°	484.4	484.4	484.4	484.4	484.3	484.2	484.0	483.9
152.5°	496.5	496.8	497.0	496.9	496.6	496.2	495.9	495.6
155°	513.7	514.1	514.5	514.5	514.0	513.5	512.9	512.5
157.5°	528.6	529.0	529.4	529.3	528.6	528.0	527.4	526.6
160°	537.7	538.1	538.4	538.4	538.0	537.4	536.9	536.5
162.5°	546.1	546.6	547.2	547.1	546.5	545.9	545.3	544.7
165°	557.5	557.9	558.4	558.3	557.7	557.1	556.4	555.9
167.5°	566.0	566.6	567.2	567.2	566.6	565.9	565.3	564.7
170°	571.1	571.6	572.3	572.2	571.6	570.8	570.1	569.4
172.5°	574.7	575.3	575.9	575.9	575.3	574.6	574.0	573.4
175°	578.8	579.3	580.0	579.9	579.2	578.5	577.8	577.1
177.5°	580.6	581.1	581.5	581.5	581.0	580.4	579.8	579.2
180°	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7

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