

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: P333128-930

Luminaire Tested: **S125DIP-S375D590U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333128-930  
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-S375D590U930-4F0-1E-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: 2859.5 lumens  
Efficiency: N/A  
Efficacy: 111.7 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

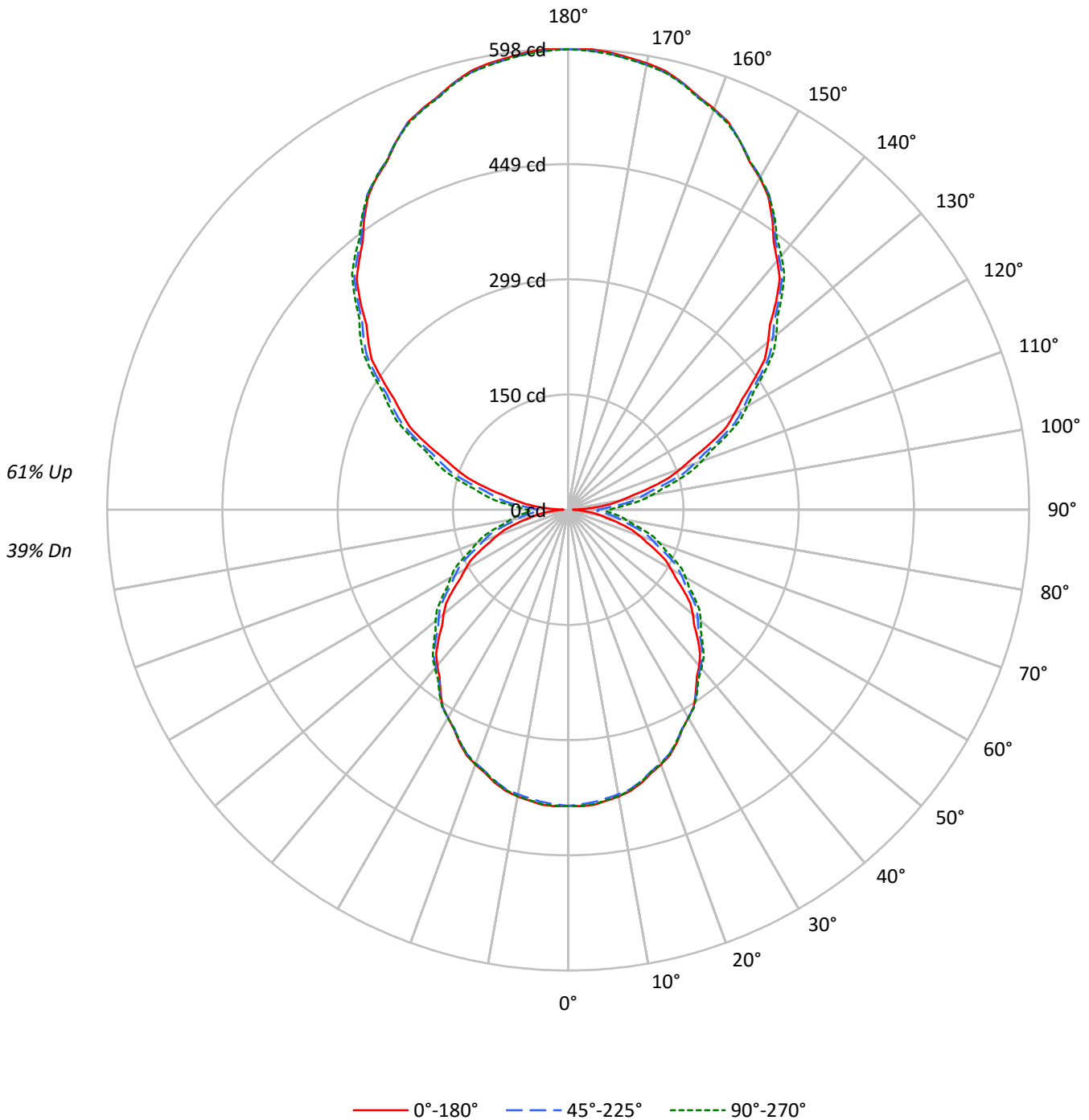
Input Watts (W): 25.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2482	2482	2482
5°	2487	2436	2444
10°	2469	2393	2389
15°	2440	2341	2319
20°	2401	2276	2249
25°	2354	2207	2164
30°	2296	2132	2086
35°	2243	2062	2014
40°	2189	1989	1942
45°	2127	1926	1878
50°	2069	1858	1821
55°	1998	1793	1756
60°	1921	1720	1687
65°	1842	1644	1612
70°	1750	1538	1534
75°	1605	1438	1437
80°	1417	1316	1333
85°	1239	1232	1299



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.3	1.3
10°-20°	103.2	3.6
20°-30°	153.4	5.4
30°-40°	181.7	6.4
40°-50°	187.9	6.6
50°-60°	173.1	6.1
60°-70°	139.9	4.9
70°-80°	93.7	3.3
80°-90°	49.9	1.7
90°-100°	67.3	2.4
100°-110°	138.3	4.8
110°-120°	213.7	7.5
120°-130°	271.2	9.5
130°-140°	298.6	10.4
140°-150°	290.0	10.1
150°-160°	243.1	8.5
160°-170°	161.6	5.7
170°-180°	56.5	2.0
0°-30°	292.9	10.2
0°-40°	474.7	16.6
0°-60°	835.7	29.2
0°-90°	1119.2	39.1
90°-120°	419.3	14.7
90°-150°	1279.1	44.7
90°-180°	1740.0	60.9
0°-180°	2859.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	384	384	381	384	384	36
15°	367	367	365	367	366	103
25°	334	334	332	334	332	153
35°	289	291	290	291	291	181
45°	238	242	244	246	247	183
55°	183	189	195	199	200	163
65°	126	134	144	149	151	125
75°	69	79	91	98	101	74
85°	21	33	46	54	58	22
90°	6	22	38	49	53	6
95°	35	46	63	74	78	36
105°	109	118	132	142	146	117
115°	203	208	218	224	226	200
125°	294	297	304	309	311	263
135°	381	384	387	391	392	294
145°	461	463	464	466	466	288
155°	527	527	528	530	527	243
165°	574	573	573	575	572	162
175°	596	594	594	597	594	57
180°	598	598	598	598	598	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	385.2	385.1	385.0	384.8	384.7	384.4	383.9	383.4	383.0	382.5	383.0
5°	384.3	384.2	384.0	383.8	383.7	383.3	382.7	382.1	381.6	380.9	381.6
7.5°	380.9	380.9	380.8	380.7	380.7	380.3	379.8	379.1	378.5	377.9	378.5
10°	377.9	377.9	377.9	377.9	377.9	377.6	376.9	376.3	375.6	374.9	375.5
12.5°	373.7	373.8	373.8	373.9	374.0	373.7	373.2	372.7	372.1	371.6	372.0
15°	367.0	367.0	367.1	367.3	367.4	367.0	366.5	365.9	365.3	364.8	365.3
17.5°	358.2	358.4	358.6	358.7	358.9	358.7	358.2	357.5	356.9	356.4	356.8
20°	352.0	352.1	352.3	352.5	352.6	352.4	351.8	351.2	350.7	350.0	350.3
22.5°	344.7	345.0	345.3	345.6	345.9	345.7	345.0	344.4	343.7	343.1	343.4
25°	333.5	333.7	333.9	334.2	334.4	334.4	333.9	333.4	332.8	332.3	332.6
27.5°	321.0	321.3	321.7	322.0	322.5	322.4	321.8	321.2	320.7	320.1	320.2
30°	311.6	312.1	312.6	313.2	313.6	313.6	313.2	312.6	312.1	311.6	311.8
32.5°	303.2	303.6	304.0	304.5	304.9	304.9	304.6	304.2	303.9	303.5	303.6
35°	288.6	289.2	289.8	290.4	291.0	291.1	290.9	290.7	290.4	290.2	290.4
37.5°	274.1	274.6	275.2	275.7	276.2	276.5	276.4	276.3	276.2	276.1	276.5
40°	264.2	264.8	265.5	266.1	266.8	267.1	267.0	266.9	266.8	266.8	267.1
42.5°	253.3	254.1	255.0	255.9	256.7	257.3	257.5	257.6	257.9	258.0	258.4
45°	237.7	238.7	239.6	240.5	241.4	242.1	242.6	243.0	243.4	243.8	244.3
47.5°	221.8	222.7	223.6	224.5	225.3	226.1	226.8	227.5	228.2	228.9	229.8
50°	211.0	211.9	212.9	213.8	214.7	215.6	216.5	217.4	218.3	219.3	220.2
52.5°	199.6	200.6	201.8	202.9	204.1	205.1	206.3	207.4	208.6	209.6	210.7
55°	182.7	184.1	185.4	186.8	188.1	189.5	190.8	192.1	193.5	194.8	195.8
57.5°	165.6	167.1	168.8	170.4	172.0	173.6	175.1	176.7	178.2	179.7	180.8
60°	154.1	155.8	157.4	159.1	160.8	162.5	164.1	165.8	167.5	169.2	170.4
62.5°	142.9	144.6	146.3	148.0	149.7	151.4	153.2	155.0	156.9	158.7	160.0
65°	125.9	127.8	129.7	131.6	133.5	135.5	137.5	139.6	141.5	143.6	144.8
67.5°	109.7	111.6	113.4	115.3	117.2	119.1	121.2	123.2	125.2	127.3	128.8
70°	98.0	99.9	101.8	103.7	105.7	107.7	109.9	112.1	114.2	116.4	118.1
72.5°	86.5	88.5	90.5	92.5	94.5	96.7	99.1	101.4	103.8	106.2	107.9
75°	69.3	71.5	73.7	75.8	78.0	80.5	83.2	85.9	88.5	91.2	92.9
77.5°	52.8	55.4	57.9	60.3	62.9	65.4	68.0	70.6	73.1	75.7	77.6
80°	42.6	45.1	47.6	50.1	52.6	55.3	58.1	61.0	63.8	66.7	68.6
82.5°	33.3	35.9	38.6	41.2	43.8	46.6	49.5	52.4	55.4	58.2	60.0
85°	20.7	23.5	26.3	29.0	31.8	34.7	37.6	40.5	43.5	46.3	48.2
87.5°	11.8	14.7	17.5	20.4	23.2	26.2	29.1	32.1	35.1	38.1	40.1
90°	6.5	10.0	13.5	17.0	20.5	24.1	27.6	31.2	34.7	38.3	40.8
92.5°	16.7	19.7	22.8	25.8	28.9	32.4	36.1	39.9	43.8	47.5	50.1
95°	35.1	37.5	39.9	42.3	44.7	47.8	51.7	55.5	59.4	63.3	65.9
97.5°	54.7	56.7	58.8	60.8	62.9	66.0	70.1	74.3	78.4	82.7	85.1
100°	69.2	71.0	72.8	74.5	76.3	79.2	83.2	87.2	91.2	95.3	98.0
102.5°	85.0	87.0	89.0	91.1	93.1	95.8	99.1	102.4	105.7	108.9	111.7
105°	109.4	111.3	113.2	115.0	116.8	119.4	122.5	125.6	128.7	131.9	134.2
107.5°	136.5	138.2	139.8	141.5	143.2	145.4	148.3	151.2	154.1	156.9	158.9
110°	155.2	156.7	158.2	159.7	161.3	163.4	166.0	168.7	171.3	174.0	175.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	174.6	175.6	176.7	177.7	178.8	180.7	183.4	186.1	188.7	191.4	193.1
115°	202.7	203.7	204.7	205.7	206.8	208.4	210.8	213.2	215.6	217.9	219.3
117.5°	231.0	231.5	232.1	232.7	233.3	234.7	236.9	239.2	241.4	243.7	245.2
120°	248.8	249.6	250.4	251.2	251.9	253.3	255.4	257.4	259.4	261.5	262.9
122.5°	267.9	268.2	268.5	268.8	269.1	270.4	272.5	274.6	276.7	278.8	280.1
125°	294.1	294.6	295.1	295.6	296.2	297.3	299.1	300.9	302.7	304.5	305.6
127.5°	321.6	321.9	322.1	322.4	322.7	323.5	325.1	326.5	328.0	329.5	330.7
130°	338.3	338.8	339.2	339.7	340.1	341.0	342.3	343.7	345.1	346.5	347.6
132.5°	354.7	355.6	356.4	357.3	358.1	359.0	359.8	360.7	361.5	362.4	363.5
135°	381.2	381.7	382.3	382.8	383.4	384.0	384.7	385.3	386.0	386.7	387.8
137.5°	406.1	406.6	407.2	407.6	408.2	408.7	409.2	409.8	410.3	410.7	411.9
140°	421.8	422.2	422.8	423.3	423.8	424.3	424.7	425.1	425.5	425.8	427.0
142.5°	437.7	438.1	438.5	438.9	439.2	439.6	440.0	440.4	440.8	441.2	442.1
145°	461.3	461.6	461.9	462.3	462.6	462.9	463.3	463.6	463.9	464.1	464.6
147.5°	482.7	482.9	483.1	483.4	483.6	483.8	484.0	484.4	484.6	484.9	485.2
150°	497.2	497.1	497.0	496.9	496.8	496.9	497.3	497.7	498.1	498.6	498.6
152.5°	509.1	509.2	509.4	509.6	509.6	509.8	510.0	510.1	510.3	510.5	510.8
155°	527.4	527.4	527.4	527.4	527.4	527.5	527.6	527.7	527.8	527.9	528.3
157.5°	543.8	543.6	543.3	543.2	542.9	542.8	542.9	543.1	543.2	543.2	543.6
160°	553.5	553.2	552.9	552.5	552.2	552.1	552.2	552.4	552.4	552.5	552.9
162.5°	562.1	561.8	561.6	561.3	561.1	561.0	561.0	561.1	561.1	561.1	561.6
165°	573.5	573.2	573.1	572.8	572.7	572.6	572.7	572.8	572.9	573.0	573.4
167.5°	583.2	582.8	582.3	581.9	581.5	581.3	581.3	581.3	581.3	581.3	581.9
170°	588.3	587.9	587.5	587.1	586.7	586.5	586.5	586.5	586.5	586.5	587.1
172.5°	592.1	591.7	591.3	590.8	590.4	590.2	590.2	590.2	590.2	590.2	590.8
175°	596.2	595.8	595.4	595.0	594.6	594.4	594.4	594.4	594.4	594.4	595.0
177.5°	598.4	598.1	597.8	597.5	597.0	596.9	596.8	596.7	596.6	596.6	597.0
180°	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	383.4	383.9	384.4	384.6	384.5	384.5	384.4	384.3
5°	382.3	382.9	383.6	383.9	383.8	383.8	383.7	383.6
7.5°	379.1	379.7	380.3	380.5	380.4	380.3	380.3	380.2
10°	376.1	376.7	377.2	377.5	377.4	377.3	377.2	377.2
12.5°	372.5	372.9	373.4	373.5	373.3	373.1	372.8	372.7
15°	365.7	366.2	366.7	366.8	366.5	366.2	365.8	365.5
17.5°	357.2	357.5	357.9	358.0	357.8	357.6	357.4	357.2
20°	350.6	350.8	351.1	351.1	351.1	351.1	351.1	351.1
22.5°	343.7	344.1	344.4	344.5	344.2	344.1	343.8	343.6
25°	333.0	333.4	333.7	333.6	333.2	332.8	332.4	332.0
27.5°	320.5	320.7	321.0	321.1	320.9	320.7	320.6	320.4
30°	311.9	312.1	312.3	312.3	312.3	312.2	312.1	312.0
32.5°	303.8	303.9	304.1	304.2	304.1	304.0	303.9	303.9
35°	290.7	290.9	291.1	291.2	291.2	291.2	291.2	291.2
37.5°	276.8	277.1	277.4	277.6	277.6	277.5	277.5	277.4
40°	267.4	267.7	268.2	268.4	268.6	268.7	268.9	269.0
42.5°	258.9	259.3	259.7	259.8	259.9	259.9	259.9	260.0
45°	245.0	245.6	246.1	246.5	246.5	246.6	246.7	246.8
47.5°	230.6	231.5	232.4	232.8	233.1	233.3	233.4	233.6
50°	221.1	222.1	223.0	223.6	223.8	224.0	224.3	224.5
52.5°	211.7	212.6	213.6	214.2	214.3	214.6	214.7	214.9
55°	196.7	197.5	198.5	199.1	199.4	199.7	200.2	200.5
57.5°	181.8	182.9	183.9	184.6	184.8	185.1	185.4	185.6
60°	171.7	172.9	174.2	175.0	175.2	175.5	175.7	175.9
62.5°	161.4	162.8	164.2	165.0	165.3	165.7	166.0	166.3
65°	146.1	147.3	148.5	149.4	149.7	150.0	150.4	150.7
67.5°	130.4	131.8	133.4	134.4	134.8	135.3	135.7	136.1
70°	119.6	121.2	122.8	123.8	124.3	124.8	125.3	125.9
72.5°	109.7	111.4	113.1	114.1	114.5	114.9	115.2	115.6
75°	94.6	96.2	97.9	98.9	99.4	99.8	100.2	100.6
77.5°	79.4	81.3	83.1	84.2	84.5	84.9	85.2	85.5
80°	70.4	72.2	74.0	75.2	75.5	75.8	76.1	76.5
82.5°	61.8	63.6	65.4	66.5	67.2	67.8	68.3	69.0
85°	50.1	51.9	53.7	55.0	55.6	56.3	57.0	57.6
87.5°	42.2	44.2	46.2	47.5	48.2	48.8	49.5	50.1
90°	43.2	45.7	48.1	49.8	50.7	51.6	52.5	53.4
92.5°	52.7	55.2	57.7	59.4	60.2	61.0	61.8	62.6
95°	68.5	71.0	73.6	75.3	76.1	76.9	77.6	78.4
97.5°	87.6	89.9	92.4	94.0	94.7	95.4	96.0	96.8
100°	100.7	103.4	106.1	107.7	108.4	109.2	109.8	110.6
102.5°	114.4	117.1	119.8	121.5	122.3	123.1	123.9	124.7
105°	136.5	138.8	141.0	142.7	143.6	144.5	145.4	146.3
107.5°	160.9	162.9	164.9	166.1	166.6	167.1	167.5	168.0
110°	177.8	179.7	181.6	182.8	183.3	183.8	184.3	184.7





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	194.7	196.4	198.0	199.1	199.5	199.9	200.3	200.7
115°	220.8	222.2	223.6	224.5	224.9	225.3	225.7	226.1
117.5°	246.7	248.2	249.7	250.5	250.7	250.9	251.0	251.1
120°	264.3	265.7	267.2	267.9	268.0	268.1	268.2	268.2
122.5°	281.4	282.7	284.0	284.6	284.9	285.0	285.2	285.4
125°	306.7	307.9	309.0	309.7	310.1	310.4	310.7	311.0
127.5°	331.8	333.0	334.1	334.8	335.1	335.3	335.7	335.9
130°	348.6	349.7	350.7	351.4	351.6	351.8	352.0	352.3
132.5°	364.5	365.6	366.6	367.2	367.3	367.4	367.5	367.5
135°	388.9	390.0	391.1	391.6	391.7	391.7	391.7	391.7
137.5°	412.9	414.1	415.2	415.6	415.5	415.3	415.2	415.0
140°	428.1	429.3	430.4	430.8	430.6	430.5	430.3	430.2
142.5°	443.1	444.0	444.9	445.2	445.1	444.9	444.7	444.5
145°	465.0	465.5	465.9	466.1	466.1	466.1	466.1	466.2
147.5°	485.6	486.0	486.3	486.2	485.8	485.2	484.6	484.0
150°	498.6	498.6	498.6	498.6	498.4	498.3	498.1	498.1
152.5°	511.0	511.3	511.5	511.4	511.1	510.7	510.4	510.1
155°	528.7	529.1	529.5	529.5	529.0	528.5	527.9	527.4
157.5°	544.0	544.5	544.9	544.8	544.0	543.4	542.7	542.0
160°	553.3	553.8	554.2	554.2	553.7	553.1	552.6	552.1
162.5°	562.1	562.6	563.1	563.0	562.5	561.8	561.3	560.6
165°	573.8	574.2	574.7	574.5	574.0	573.3	572.7	572.1
167.5°	582.5	583.2	583.8	583.8	583.1	582.4	581.8	581.2
170°	587.7	588.3	589.0	588.9	588.2	587.5	586.8	586.0
172.5°	591.5	592.1	592.7	592.7	592.1	591.4	590.8	590.1
175°	595.7	596.2	596.9	596.8	596.1	595.4	594.7	593.9
177.5°	597.5	598.0	598.5	598.5	597.9	597.4	596.7	596.1
180°	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7

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