

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: P333164-930

Luminaire Tested: **S125DIP-S610D365U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333164-930  
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-S610D365U930-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

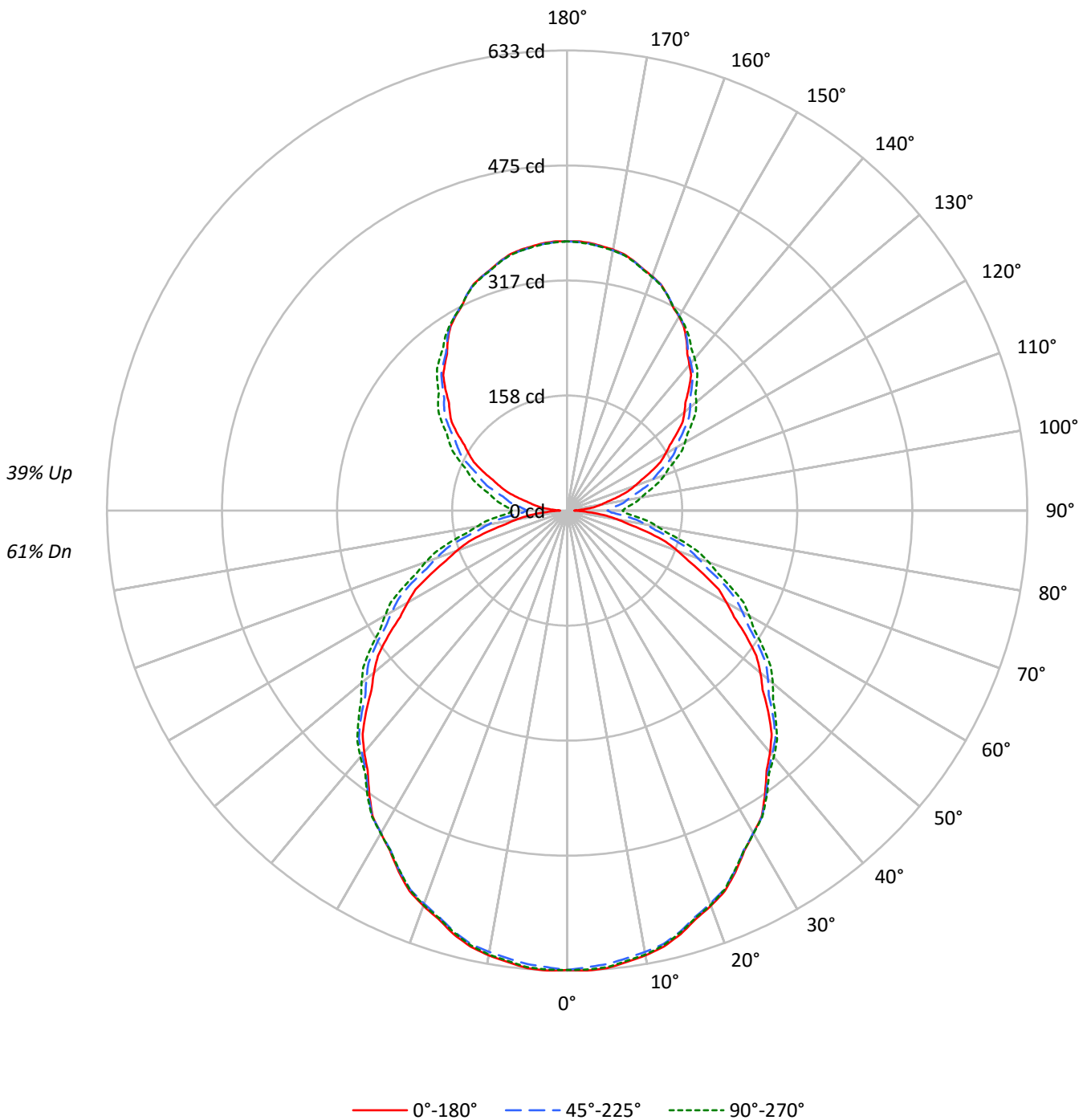
Lumens per Lamp: N/A  
Luminaire Lumens: 2991.1 lumens  
Efficiency: N/A  
Efficacy: 108.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: Semi-Direct  
  
Input Watts (W): 27.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61
1	99	95	90	86	93	89	85	81	77	74	72	67	65	63	57	56	54	50
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	47	45	41
3	82	72	64	58	76	67	60	55	59	54	49	51	47	43	44	41	38	34
4	75	64	55	49	70	60	52	46	52	46	42	46	41	37	39	36	33	29
5	69	57	48	42	64	53	45	40	47	41	36	41	36	32	35	31	28	25
6	63	51	42	36	59	48	40	34	42	36	31	37	32	28	32	28	25	22
7	59	46	37	32	55	43	36	30	38	32	27	34	28	25	29	25	22	19
8	54	42	34	28	51	39	32	27	35	29	24	31	26	22	27	23	20	17
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	25	21	18	16
10	47	35	27	22	44	33	26	22	29	24	20	26	21	18	23	19	16	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4081	4081	4081
5°	4089	4005	4018
10°	4060	3934	3927
15°	4011	3849	3813
20°	3946	3742	3698
25°	3869	3629	3558
30°	3775	3505	3429
35°	3687	3390	3311
40°	3598	3269	3193
45°	3497	3166	3089
50°	3401	3054	2996
55°	3285	2948	2886
60°	3159	2827	2775
65°	3027	2702	2650
70°	2876	2529	2521
75°	2639	2363	2363
80°	2328	2164	2190
85°	2041	2028	2136



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.7	2.0
10°-20°	169.6	5.7
20°-30°	252.2	8.4
30°-40°	298.8	10.0
40°-50°	308.9	10.3
50°-60°	284.6	9.5
60°-70°	230.0	7.7
70°-80°	154.0	5.2
80°-90°	80.7	2.7
90°-100°	69.6	2.3
100°-110°	106.3	3.6
110°-120°	146.2	4.9
120°-130°	175.8	5.9
130°-140°	188.4	6.3
140°-150°	180.4	6.0
150°-160°	150.6	5.0
160°-170°	100.1	3.3
170°-180°	35.0	1.2
0°-30°	481.6	16.1
0°-40°	780.4	26.1
0°-60°	1373.8	45.9
0°-90°	1838.6	61.5
90°-120°	322.1	10.8
90°-150°	866.8	29.0
90°-180°	1152.0	38.5
0°-180°	2991.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	632	630	626	631	631	60
15°	603	604	600	603	601	170
25°	548	550	546	548	546	252
35°	474	478	477	479	479	297
45°	391	398	401	405	406	302
55°	300	310	320	327	330	268
65°	207	221	236	245	248	205
75°	114	130	150	162	165	121
85°	34	55	76	89	95	36
90°	10	32	55	71	76	8
95°	27	44	67	82	88	26
105°	71	83	103	117	122	76
115°	128	134	150	160	164	126
125°	184	185	198	206	210	164
135°	237	238	243	250	253	183
145°	286	287	288	291	292	179
155°	327	327	327	328	327	150
165°	355	355	355	356	354	100
175°	369	368	368	370	368	35
180°	370	370	370	370	370	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	633.3	633.1	632.9	632.7	632.4	631.9	631.2	630.4	629.7	628.8	629.7
5°	631.9	631.5	631.3	631.0	630.7	630.1	629.2	628.2	627.2	626.2	627.4
7.5°	626.2	626.1	626.1	625.9	625.8	625.3	624.3	623.3	622.3	621.3	622.2
10°	621.3	621.3	621.3	621.3	621.3	620.8	619.6	618.6	617.4	616.4	617.3
12.5°	614.4	614.5	614.6	614.7	614.8	614.4	613.5	612.7	611.8	610.9	611.6
15°	603.3	603.5	603.6	603.7	603.9	603.5	602.5	601.5	600.6	599.7	600.5
17.5°	589.0	589.2	589.5	589.8	590.1	589.7	588.8	587.8	586.9	585.9	586.5
20°	578.5	578.9	579.1	579.4	579.7	579.4	578.4	577.4	576.4	575.4	575.8
22.5°	566.7	567.2	567.7	568.2	568.7	568.3	567.3	566.2	565.2	564.1	564.6
25°	548.2	548.6	549.0	549.4	549.8	549.7	548.9	548.0	547.1	546.3	546.9
27.5°	527.7	528.2	528.9	529.5	530.1	529.9	529.0	528.1	527.1	526.2	526.5
30°	512.3	513.1	514.0	514.8	515.6	515.6	514.8	514.0	513.1	512.3	512.6
32.5°	498.4	499.1	499.9	500.6	501.2	501.3	500.8	500.1	499.5	498.9	499.2
35°	474.5	475.5	476.5	477.4	478.3	478.7	478.3	477.8	477.4	477.0	477.4
37.5°	450.6	451.5	452.3	453.2	454.1	454.4	454.4	454.2	454.0	454.0	454.4
40°	434.2	435.4	436.4	437.6	438.6	439.1	439.0	438.9	438.7	438.5	439.1
42.5°	416.4	417.8	419.2	420.7	422.2	423.0	423.3	423.6	423.9	424.2	424.9
45°	390.9	392.4	393.9	395.4	397.0	398.0	398.8	399.4	400.1	400.8	401.8
47.5°	364.8	366.2	367.5	368.9	370.4	371.6	372.8	374.0	375.2	376.3	377.8
50°	346.9	348.4	349.9	351.5	352.9	354.5	356.0	357.5	359.0	360.5	362.1
52.5°	328.1	329.9	331.7	333.6	335.4	337.3	339.2	341.0	342.8	344.6	346.3
55°	300.4	302.6	304.8	307.0	309.2	311.4	313.6	315.8	318.0	320.2	321.8
57.5°	272.2	274.8	277.4	280.1	282.7	285.4	287.9	290.4	292.9	295.5	297.2
60°	253.4	256.1	258.9	261.6	264.4	267.1	269.9	272.6	275.4	278.1	280.2
62.5°	235.1	237.7	240.5	243.3	246.1	248.9	251.8	254.9	257.8	260.8	263.1
65°	206.9	210.1	213.2	216.4	219.6	222.8	226.1	229.4	232.7	236.0	238.1
67.5°	180.4	183.4	186.5	189.6	192.6	195.8	199.2	202.5	205.9	209.3	211.7
70°	161.0	164.2	167.4	170.6	173.7	177.1	180.7	184.3	187.8	191.4	194.0
72.5°	142.2	145.5	148.8	152.1	155.3	158.9	162.8	166.7	170.6	174.6	177.4
75°	114.0	117.6	121.2	124.7	128.3	132.3	136.7	141.1	145.5	149.9	152.6
77.5°	86.8	91.0	95.1	99.2	103.4	107.5	111.8	116.0	120.3	124.5	127.5
80°	70.0	74.1	78.3	82.4	86.5	90.9	95.6	100.3	104.9	109.7	112.7
82.5°	54.6	58.9	63.3	67.7	72.1	76.6	81.4	86.2	91.0	95.8	98.7
85°	34.1	38.6	43.1	47.7	52.3	56.9	61.7	66.5	71.3	76.2	79.2
87.5°	19.4	23.9	28.4	32.9	37.4	42.1	46.8	51.6	56.3	61.1	64.3
90°	10.2	15.1	20.1	24.9	29.8	34.9	40.0	45.2	50.3	55.4	58.9
92.5°	15.9	20.3	24.8	29.2	33.6	38.5	43.9	49.2	54.5	59.8	63.3
95°	26.8	30.5	34.2	37.9	41.6	46.1	51.4	56.7	62.1	67.4	70.8
97.5°	38.4	41.7	45.0	48.3	51.5	55.8	61.2	66.7	72.1	77.5	80.8
100°	47.1	50.1	52.9	55.8	58.7	62.8	68.0	73.3	78.5	83.7	87.2
102.5°	56.6	59.5	62.5	65.4	68.2	72.1	76.8	81.5	86.3	91.0	94.4
105°	71.3	73.8	76.3	78.8	81.4	84.9	89.4	93.9	98.4	103.0	106.1
107.5°	87.6	89.8	92.0	94.2	96.4	99.5	103.9	108.1	112.3	116.6	119.5
110°	98.8	100.9	102.8	104.8	106.7	109.7	113.8	117.8	121.9	126.0	128.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	110.9	112.3	113.8	115.3	116.8	119.5	123.5	127.5	131.5	135.5	138.1
115°	127.9	129.1	130.4	131.6	132.8	135.3	138.9	142.7	146.3	150.1	152.5
117.5°	145.0	145.8	146.5	147.3	148.1	150.2	153.7	157.2	160.7	164.2	166.6
120°	156.1	156.9	157.6	158.3	159.1	161.0	164.3	167.5	170.7	174.0	176.3
122.5°	167.6	167.9	168.2	168.5	168.8	170.6	173.8	177.1	180.3	183.5	185.6
125°	183.8	184.0	184.3	184.5	184.7	186.2	189.1	191.9	194.7	197.5	199.6
127.5°	200.4	200.5	200.6	200.6	200.7	201.9	204.2	206.6	209.0	211.2	213.2
130°	210.8	210.9	211.2	211.3	211.5	212.6	214.7	216.7	218.8	220.9	222.7
132.5°	220.6	221.2	221.7	222.2	222.7	223.6	225.1	226.6	228.0	229.5	231.3
135°	236.9	237.2	237.4	237.7	237.9	238.6	239.6	240.6	241.7	242.7	244.5
137.5°	252.3	252.5	252.8	253.1	253.3	253.7	254.4	254.9	255.6	256.2	257.9
140°	261.7	262.0	262.4	262.7	262.9	263.3	263.7	264.0	264.3	264.6	266.3
142.5°	271.6	271.7	271.9	272.1	272.2	272.5	272.7	273.0	273.3	273.5	274.9
145°	286.2	286.3	286.4	286.6	286.7	286.8	287.0	287.2	287.4	287.6	288.3
147.5°	299.1	299.2	299.3	299.5	299.6	299.8	299.9	300.1	300.2	300.4	300.8
150°	308.0	308.0	307.9	307.9	307.8	307.9	308.1	308.4	308.7	308.9	308.9
152.5°	315.4	315.5	315.6	315.7	315.8	315.8	316.0	316.1	316.2	316.3	316.4
155°	326.8	326.8	326.8	326.8	326.8	326.8	326.9	326.9	327.0	327.1	327.3
157.5°	336.9	336.8	336.6	336.5	336.4	336.3	336.4	336.5	336.5	336.6	336.8
160°	342.9	342.8	342.5	342.3	342.2	342.1	342.2	342.2	342.3	342.3	342.6
162.5°	348.2	348.1	348.0	347.8	347.6	347.6	347.6	347.6	347.6	347.6	348.0
165°	355.3	355.1	355.1	354.9	354.8	354.7	354.8	354.9	355.0	355.0	355.3
167.5°	361.3	361.0	360.8	360.5	360.3	360.1	360.1	360.1	360.1	360.1	360.5
170°	364.5	364.3	364.0	363.8	363.5	363.4	363.4	363.4	363.4	363.4	363.8
172.5°	366.8	366.6	366.3	366.1	365.8	365.7	365.7	365.7	365.7	365.7	366.1
175°	369.4	369.2	368.9	368.7	368.4	368.3	368.3	368.3	368.3	368.3	368.7
177.5°	370.7	370.6	370.3	370.1	369.9	369.8	369.7	369.7	369.7	369.6	369.9
180°	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	630.4	631.2	631.9	632.3	632.2	632.1	631.9	631.9
5°	628.4	629.6	630.6	631.1	631.0	630.9	630.7	630.6
7.5°	623.2	624.2	625.2	625.6	625.4	625.3	625.2	625.0
10°	618.3	619.2	620.2	620.6	620.5	620.4	620.2	620.0
12.5°	612.4	613.1	613.9	614.1	613.7	613.3	613.0	612.6
15°	601.3	602.1	602.9	603.1	602.5	601.9	601.4	600.9
17.5°	587.2	587.7	588.4	588.6	588.2	587.9	587.6	587.3
20°	576.3	576.7	577.2	577.3	577.3	577.3	577.3	577.3
22.5°	565.1	565.7	566.1	566.2	565.9	565.6	565.2	564.9
25°	547.5	548.0	548.5	548.5	547.8	547.1	546.4	545.8
27.5°	526.9	527.3	527.7	527.7	527.5	527.3	527.0	526.8
30°	512.8	513.1	513.4	513.5	513.3	513.1	513.1	512.9
32.5°	499.5	499.7	500.0	500.1	499.9	499.8	499.7	499.5
35°	477.8	478.3	478.7	478.8	478.8	478.8	478.8	478.8
37.5°	455.0	455.6	456.2	456.4	456.3	456.2	456.2	456.2
40°	439.7	440.3	440.8	441.2	441.5	441.7	442.1	442.3
42.5°	425.5	426.2	426.8	427.2	427.3	427.3	427.4	427.5
45°	402.7	403.7	404.6	405.2	405.4	405.4	405.6	405.8
47.5°	379.2	380.6	382.0	382.9	383.2	383.4	383.8	384.1
50°	363.5	365.1	366.6	367.5	367.9	368.4	368.8	369.2
52.5°	347.9	349.5	351.1	352.1	352.5	352.7	353.0	353.4
55°	323.3	324.8	326.3	327.3	327.9	328.5	329.0	329.5
57.5°	299.0	300.7	302.4	303.5	303.9	304.4	304.8	305.2
60°	282.3	284.3	286.4	287.6	288.0	288.5	288.9	289.3
62.5°	265.4	267.7	269.9	271.3	271.8	272.4	272.9	273.5
65°	240.1	242.2	244.3	245.6	246.1	246.7	247.2	247.8
67.5°	214.3	216.8	219.2	220.9	221.6	222.3	223.1	223.7
70°	196.7	199.3	201.9	203.6	204.4	205.2	206.1	206.9
72.5°	180.3	183.0	185.9	187.6	188.3	188.8	189.5	190.0
75°	155.4	158.2	160.9	162.7	163.3	164.0	164.7	165.4
77.5°	130.5	133.6	136.6	138.4	138.9	139.5	140.1	140.6
80°	115.7	118.7	121.7	123.5	124.1	124.7	125.2	125.7
82.5°	101.6	104.5	107.5	109.4	110.4	111.4	112.3	113.3
85°	82.3	85.3	88.3	90.3	91.5	92.5	93.7	94.7
87.5°	67.6	70.8	74.0	76.1	77.2	78.2	79.2	80.1
90°	62.4	65.9	69.4	71.7	72.8	73.9	75.2	76.3
92.5°	66.9	70.3	73.8	76.1	77.2	78.3	79.4	80.5
95°	74.4	77.9	81.3	83.6	84.7	85.8	86.9	88.0
97.5°	84.1	87.4	90.7	92.9	93.8	94.9	95.9	96.9
100°	90.7	94.2	97.6	99.8	100.8	101.7	102.6	103.6
102.5°	97.8	101.2	104.6	106.8	107.8	108.8	109.8	110.8
105°	109.3	112.3	115.5	117.6	118.8	119.9	121.1	122.3
107.5°	122.5	125.4	128.3	130.2	131.0	131.8	132.7	133.5
110°	131.6	134.4	137.1	139.0	139.9	140.8	141.7	142.6





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	140.6	143.2	145.9	147.6	148.5	149.3	150.1	151.0
115°	154.9	157.4	159.7	161.3	162.1	162.8	163.6	164.4
117.5°	168.9	171.4	173.7	175.3	175.9	176.6	177.3	178.0
120°	178.6	181.0	183.3	184.7	185.3	185.9	186.5	187.0
122.5°	187.8	190.0	192.2	193.6	194.2	194.9	195.4	196.1
125°	201.7	203.7	205.8	207.2	207.8	208.4	209.0	209.7
127.5°	215.2	217.2	219.2	220.5	221.2	221.8	222.5	223.1
130°	224.5	226.4	228.3	229.5	230.1	230.6	231.2	231.8
132.5°	233.2	235.1	236.9	238.1	238.5	238.9	239.2	239.6
135°	246.3	248.1	249.8	250.9	251.4	251.8	252.3	252.7
137.5°	259.6	261.3	263.0	264.0	264.2	264.4	264.6	264.9
140°	267.9	269.5	271.2	272.1	272.4	272.6	272.8	273.0
142.5°	276.3	277.7	279.0	279.8	280.1	280.3	280.5	280.7
145°	288.9	289.7	290.3	290.9	291.2	291.6	292.0	292.3
147.5°	301.1	301.5	301.9	302.0	301.7	301.6	301.4	301.3
150°	308.9	308.9	308.9	308.9	308.9	308.9	308.9	308.9
152.5°	316.6	316.7	316.9	316.9	316.7	316.5	316.3	316.1
155°	327.6	327.8	328.1	328.1	327.8	327.4	327.1	326.8
157.5°	337.0	337.4	337.6	337.5	337.1	336.6	336.2	335.8
160°	342.8	343.1	343.3	343.3	343.0	342.7	342.3	342.0
162.5°	348.2	348.5	348.9	348.9	348.5	348.1	347.7	347.3
165°	355.6	355.8	356.0	356.0	355.6	355.2	354.8	354.4
167.5°	360.9	361.3	361.7	361.7	361.3	360.9	360.4	360.1
170°	364.1	364.5	364.9	364.8	364.4	363.9	363.5	363.1
172.5°	366.5	366.8	367.2	367.2	366.8	366.4	366.0	365.6
175°	369.0	369.4	369.8	369.7	369.3	368.8	368.4	367.9
177.5°	370.2	370.6	370.8	370.8	370.5	370.1	369.7	369.3
180°	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3

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