

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: P333122

Luminaire Tested: **S125DIP-S375D365U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333122  
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-S375D365U835-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH 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: 2788.4 lumens  
Efficiency: N/A  
Efficacy: 137.4 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

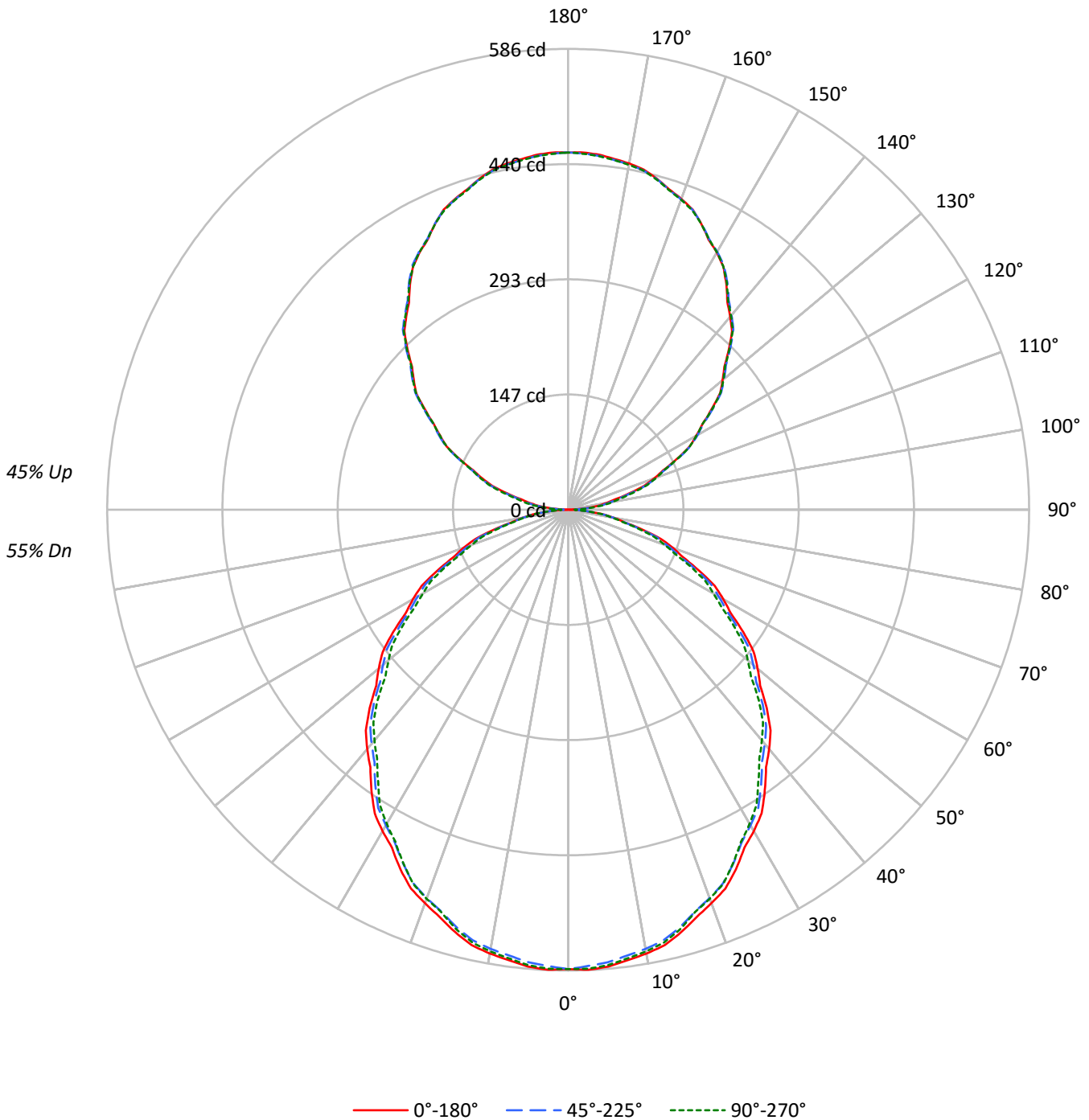
Input Watts (W): 20.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
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	50	30	10	50	30	10	0														
RCR																																						
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55																				
1	99	94	90	87	91	88	84	81	75	73	70	64	62	60	53	52	51	46																				
2	90	82	76	71	83	77	71	67	66	62	58	56	53	50	47	45	43	38																				
3	82	72	65	59	76	67	61	56	58	53	49	49	46	43	41	39	36	32																				
4	75	64	56	50	69	60	53	47	52	46	42	44	40	36	37	34	31	28																				
5	69	57	49	43	64	53	46	40	46	40	36	40	35	32	33	30	27	24																				
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	30	27	24	21																				
7	59	46	38	33	54	43	36	31	38	32	28	33	28	24	28	24	21	19																				
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	25	22	19	17																				
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	23	20	17	15																				
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14																				

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

	0°	45°	90°
0°	3773	3773	3773
5°	3781	3745	3769
10°	3758	3719	3740
15°	3718	3674	3689
20°	3659	3612	3618
25°	3596	3537	3534
30°	3519	3457	3439
35°	3436	3370	3323
40°	3351	3277	3230
45°	3259	3191	3128
50°	3158	3088	2995
55°	3059	2971	2888
60°	2942	2853	2753
65°	2804	2713	2621
70°	2670	2549	2460
75°	2433	2353	2271
80°	2165	2131	2079
85°	1882	1919	1815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.1	2.0
10°-20°	155.6	5.6
20°-30°	229.7	8.2
30°-40°	268.1	9.6
40°-50°	269.2	9.7
50°-60°	236.3	8.5
60°-70°	176.1	6.3
70°-80°	100.7	3.6
80°-90°	30.3	1.1
90°-100°	30.4	1.1
100°-110°	89.8	3.2
110°-120°	152.1	5.5
120°-130°	200.2	7.2
130°-140°	224.4	8.0
140°-150°	219.9	7.9
150°-160°	184.7	6.6
160°-170°	122.8	4.4
170°-180°	43.0	1.5
0°-30°	440.4	15.8
0°-40°	708.5	25.4
0°-60°	1214.0	43.5
0°-90°	1521.1	54.6
90°-120°	272.4	9.8
90°-150°	916.9	32.9
90°-180°	1267.0	45.4
0°-180°	2788.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	583	582	578	582	581	55
15°	556	554	550	552	552	157
25°	505	502	496	497	496	232
35°	436	434	428	425	422	272
45°	357	355	349	344	342	275
55°	272	270	264	260	256	243
65°	184	182	178	173	172	182
75°	98	96	94	93	91	104
85°	25	26	26	25	24	28
90°	0	3	6	7	8	3
95°	23	24	27	30	30	25
105°	81	82	84	87	88	86
115°	152	154	154	154	154	151
125°	222	224	225	224	224	199
135°	289	291	292	292	290	223
145°	350	352	353	353	352	219
155°	401	401	401	402	401	185
165°	436	435	435	437	435	123
175°	453	452	452	454	451	43
180°	454	454	454	454	454	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	585.6	585.4	585.2	584.9	584.7	584.1	583.3	582.5	581.7	580.8	581.7
5°	583.2	583.0	582.8	582.6	582.4	581.8	580.8	579.8	578.7	577.7	578.6
7.5°	577.9	577.7	577.5	577.3	577.1	576.4	575.3	574.1	573.0	571.9	572.8
10°	573.1	572.9	572.7	572.5	572.3	571.6	570.5	569.3	568.2	567.1	567.9
12.5°	567.2	566.8	566.4	566.1	565.7	565.0	563.9	562.9	561.8	560.8	561.4
15°	556.0	555.7	555.4	555.1	554.7	554.0	552.9	551.8	550.6	549.5	550.0
17.5°	543.1	542.7	542.2	541.8	541.3	540.5	539.3	538.2	537.0	535.8	536.5
20°	532.4	532.2	532.0	531.8	531.6	530.8	529.5	528.1	526.8	525.5	526.2
22.5°	521.7	521.3	520.9	520.6	520.2	519.4	518.1	516.9	515.6	514.4	514.9
25°	504.7	504.2	503.6	503.1	502.6	501.7	500.4	499.0	497.7	496.4	496.6
27.5°	484.8	484.5	484.2	483.9	483.6	482.7	481.4	480.0	478.6	477.2	477.3
30°	471.9	471.6	471.2	470.9	470.6	469.7	468.2	466.6	465.1	463.5	463.3
32.5°	457.8	457.3	456.9	456.4	455.9	455.0	453.6	452.2	450.9	449.5	449.1
35°	435.8	435.4	435.0	434.6	434.2	433.2	431.8	430.4	428.9	427.5	427.0
37.5°	413.0	412.5	412.0	411.4	410.9	410.0	408.6	407.3	405.9	404.6	403.8
40°	397.5	396.9	396.4	395.9	395.4	394.4	393.0	391.6	390.1	388.7	387.8
42.5°	380.8	380.4	380.0	379.5	379.1	378.2	376.7	375.3	373.8	372.4	371.6
45°	356.8	356.4	356.0	355.6	355.1	354.3	353.1	351.9	350.6	349.4	348.2
47.5°	330.9	330.9	330.9	331.0	331.0	330.3	328.8	327.3	325.8	324.3	323.1
50°	314.3	314.0	313.7	313.3	313.0	312.3	311.0	309.8	308.6	307.3	306.0
52.5°	297.3	297.0	296.8	296.6	296.4	295.6	294.3	293.0	291.6	290.3	289.2
55°	271.7	271.4	271.1	270.8	270.5	269.6	268.2	266.8	265.3	263.9	263.0
57.5°	244.9	244.7	244.5	244.4	244.2	243.5	242.3	241.1	239.9	238.7	237.5
60°	227.8	227.4	227.0	226.6	226.2	225.4	224.3	223.2	222.0	220.9	219.9
62.5°	210.1	209.8	209.4	209.1	208.8	208.1	207.2	206.2	205.2	204.3	203.2
65°	183.5	183.3	183.1	182.9	182.7	182.0	180.9	179.7	178.6	177.5	176.5
67.5°	157.7	157.3	156.8	156.4	156.0	155.3	154.5	153.6	152.8	152.0	151.2
70°	141.4	140.9	140.4	139.9	139.4	138.6	137.7	136.8	135.9	135.0	134.3
72.5°	123.7	123.3	123.0	122.6	122.3	121.8	121.2	120.6	120.0	119.4	118.7
75°	97.5	97.3	97.1	96.9	96.7	96.3	95.8	95.3	94.8	94.3	94.0
77.5°	73.4	73.3	73.2	73.1	73.1	72.9	72.6	72.3	72.0	71.7	71.5
80°	58.2	58.2	58.2	58.2	58.2	58.1	57.9	57.7	57.5	57.3	57.2
82.5°	44.9	44.8	44.6	44.4	44.3	44.2	44.1	44.1	44.0	44.0	43.8
85°	25.4	25.5	25.6	25.7	25.8	25.9	25.9	25.9	25.9	25.9	25.8
87.5°	10.1	10.2	10.3	10.4	10.6	10.6	10.7	10.7	10.7	10.7	10.8
90°	0.4	1.0	1.6	2.2	2.9	3.5	4.0	4.6	5.1	5.7	6.0
92.5°	8.6	9.0	9.4	9.9	10.3	10.9	11.5	12.2	12.9	13.6	14.1
95°	23.0	23.1	23.3	23.4	23.6	24.1	24.9	25.6	26.4	27.2	27.8
97.5°	38.2	38.2	38.3	38.4	38.4	39.0	40.1	41.2	42.2	43.3	43.9
100°	49.5	49.5	49.5	49.5	49.5	50.0	51.0	52.0	53.1	54.1	54.8
102.5°	61.6	62.0	62.3	62.6	62.9	63.3	63.8	64.3	64.9	65.4	66.2
105°	80.6	81.0	81.4	81.8	82.2	82.6	83.1	83.5	84.0	84.5	84.9
107.5°	101.5	101.9	102.3	102.7	103.1	103.5	103.8	104.2	104.5	104.9	105.1
110°	115.9	116.3	116.7	117.1	117.5	117.8	118.0	118.3	118.5	118.8	119.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	130.6	130.8	131.0	131.2	131.4	131.7	132.0	132.3	132.6	132.9	133.0
115°	152.3	152.6	153.0	153.3	153.6	153.8	154.0	154.1	154.3	154.5	154.4
117.5°	174.1	174.2	174.4	174.5	174.7	174.8	175.0	175.1	175.2	175.4	175.4
120°	187.7	188.1	188.5	188.9	189.2	189.5	189.6	189.6	189.7	189.8	189.8
122.5°	202.4	202.5	202.7	202.8	202.9	203.1	203.3	203.5	203.7	203.9	203.9
125°	222.3	222.8	223.3	223.7	224.2	224.5	224.6	224.6	224.7	224.8	224.6
127.5°	243.5	243.8	244.1	244.3	244.6	244.8	244.9	245.0	245.1	245.1	245.1
130°	256.2	256.6	257.0	257.4	257.8	258.1	258.2	258.4	258.6	258.7	258.6
132.5°	269.0	269.6	270.3	270.9	271.5	271.9	271.8	271.8	271.8	271.7	271.6
135°	289.1	289.6	290.1	290.5	291.0	291.3	291.4	291.4	291.5	291.6	291.6
137.5°	308.1	308.5	309.0	309.4	309.9	310.2	310.4	310.5	310.7	310.9	311.0
140°	320.2	320.6	321.0	321.4	321.8	322.1	322.3	322.6	322.8	323.0	323.2
142.5°	332.4	332.7	333.0	333.4	333.7	334.0	334.3	334.6	334.9	335.2	335.3
145°	350.3	350.6	350.9	351.2	351.5	351.8	352.0	352.3	352.5	352.7	352.7
147.5°	366.8	367.0	367.1	367.3	367.5	367.7	367.9	368.1	368.2	368.4	368.6
150°	377.8	377.8	377.7	377.6	377.5	377.6	377.9	378.3	378.6	378.9	378.9
152.5°	386.9	387.0	387.1	387.2	387.3	387.4	387.6	387.7	387.8	387.9	388.1
155°	400.8	400.8	400.8	400.8	400.8	400.8	400.9	401.0	401.1	401.2	401.5
157.5°	413.2	413.1	412.9	412.7	412.6	412.5	412.6	412.7	412.7	412.8	413.1
160°	420.6	420.4	420.1	419.9	419.7	419.6	419.7	419.7	419.8	419.9	420.2
162.5°	427.1	426.9	426.8	426.6	426.4	426.3	426.3	426.4	426.4	426.4	426.8
165°	435.8	435.6	435.5	435.3	435.2	435.1	435.2	435.3	435.4	435.4	435.8
167.5°	443.1	442.8	442.5	442.2	441.9	441.7	441.7	441.7	441.7	441.7	442.2
170°	447.1	446.8	446.5	446.2	445.8	445.7	445.7	445.7	445.7	445.7	446.2
172.5°	449.9	449.6	449.3	449.0	448.7	448.5	448.5	448.5	448.5	448.5	449.0
175°	453.1	452.8	452.5	452.2	451.9	451.7	451.7	451.7	451.7	451.7	452.2
177.5°	454.7	454.5	454.2	454.0	453.7	453.6	453.5	453.5	453.4	453.3	453.7
180°	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	582.5	583.3	584.1	584.5	584.4	584.3	584.3	584.2
5°	579.5	580.5	581.4	581.8	581.7	581.6	581.5	581.4
7.5°	573.7	574.6	575.5	575.9	575.8	575.7	575.6	575.5
10°	568.7	569.5	570.4	570.7	570.6	570.5	570.4	570.3
12.5°	562.1	562.8	563.4	563.7	563.7	563.7	563.7	563.6
15°	550.5	551.0	551.6	551.8	551.8	551.8	551.8	551.8
17.5°	537.1	537.7	538.4	538.4	537.9	537.4	536.9	536.4
20°	526.9	527.6	528.3	528.5	527.9	527.4	526.9	526.4
22.5°	515.3	515.8	516.3	516.3	516.0	515.6	515.3	514.9
25°	496.8	497.0	497.2	497.1	496.8	496.5	496.2	495.9
27.5°	477.3	477.3	477.4	477.3	476.9	476.6	476.3	476.0
30°	463.1	462.9	462.7	462.5	462.2	461.9	461.5	461.2
32.5°	448.8	448.4	448.0	447.6	447.0	446.4	445.9	445.3
35°	426.5	426.0	425.4	424.8	424.0	423.1	422.3	421.5
37.5°	403.1	402.3	401.5	400.9	400.4	400.0	399.5	399.0
40°	386.8	385.9	385.0	384.4	384.1	383.7	383.4	383.1
42.5°	370.7	369.9	369.0	368.4	367.9	367.4	367.0	366.5
45°	346.9	345.7	344.5	343.7	343.4	343.1	342.8	342.5
47.5°	321.8	320.6	319.3	318.3	317.6	316.9	316.2	315.5
50°	304.7	303.3	302.0	301.0	300.2	299.5	298.8	298.1
52.5°	288.0	286.8	285.6	284.7	283.9	283.1	282.3	281.5
55°	262.0	261.1	260.2	259.4	258.7	257.9	257.2	256.5
57.5°	236.3	235.1	233.9	233.1	232.7	232.3	231.9	231.5
60°	218.9	217.8	216.8	215.9	215.2	214.5	213.8	213.1
62.5°	202.1	200.9	199.8	199.0	198.5	197.9	197.3	196.8
65°	175.6	174.7	173.8	173.1	172.7	172.3	171.9	171.5
67.5°	150.4	149.6	148.8	148.3	148.1	147.8	147.6	147.3
70°	133.7	133.1	132.5	132.0	131.6	131.2	130.7	130.3
72.5°	118.0	117.3	116.6	116.1	115.7	115.3	114.8	114.4
75°	93.7	93.4	93.0	92.7	92.3	91.9	91.5	91.0
77.5°	71.4	71.2	71.0	70.8	70.5	70.2	69.9	69.6
80°	57.1	57.0	56.9	56.7	56.5	56.3	56.1	55.9
82.5°	43.6	43.4	43.3	43.1	43.1	43.1	43.0	43.0
85°	25.7	25.6	25.5	25.3	25.1	24.9	24.7	24.5
87.5°	10.9	11.0	11.1	11.0	10.9	10.8	10.7	10.6
90°	6.4	6.8	7.2	7.5	7.8	8.0	8.2	8.5
92.5°	14.6	15.1	15.6	16.0	16.2	16.3	16.5	16.7
95°	28.3	28.9	29.4	29.8	29.9	30.1	30.2	30.4
97.5°	44.4	44.9	45.4	45.7	45.8	45.9	46.0	46.1
100°	55.5	56.2	56.9	57.3	57.5	57.7	57.8	58.0
102.5°	66.9	67.7	68.5	69.0	69.2	69.4	69.6	69.8
105°	85.4	85.9	86.4	86.7	86.9	87.2	87.4	87.7
107.5°	105.4	105.6	105.8	106.0	105.9	105.9	105.9	105.9
110°	119.2	119.5	119.7	119.8	119.7	119.6	119.5	119.5





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	133.1	133.2	133.3	133.3	133.2	133.0	132.9	132.8
115°	154.3	154.2	154.1	154.1	154.0	153.9	153.8	153.7
117.5°	175.5	175.6	175.6	175.5	175.2	174.9	174.6	174.2
120°	189.8	189.8	189.8	189.6	189.3	189.0	188.7	188.4
122.5°	203.8	203.7	203.7	203.5	203.3	203.0	202.8	202.5
125°	224.5	224.3	224.2	224.0	224.0	223.9	223.8	223.7
127.5°	245.0	244.9	244.8	244.7	244.6	244.4	244.2	244.1
130°	258.6	258.5	258.4	258.3	258.1	258.0	257.8	257.7
132.5°	271.6	271.5	271.4	271.3	271.0	270.8	270.6	270.4
135°	291.6	291.6	291.6	291.4	291.1	290.8	290.5	290.2
137.5°	311.1	311.2	311.3	311.1	310.7	310.3	309.9	309.5
140°	323.4	323.5	323.7	323.6	323.2	322.8	322.4	322.0
142.5°	335.4	335.5	335.6	335.4	335.0	334.6	334.3	333.9
145°	352.7	352.7	352.7	352.6	352.4	352.1	351.9	351.7
147.5°	368.8	369.0	369.2	369.0	368.5	367.9	367.4	366.9
150°	378.9	378.9	378.9	378.8	378.7	378.5	378.3	378.2
152.5°	388.3	388.5	388.7	388.6	388.4	388.1	387.8	387.5
155°	401.8	402.1	402.4	402.4	402.0	401.6	401.2	400.8
157.5°	413.4	413.8	414.1	414.0	413.5	412.9	412.4	411.9
160°	420.5	420.8	421.1	421.1	420.7	420.3	419.9	419.5
162.5°	427.1	427.5	427.9	427.9	427.4	426.9	426.5	426.0
165°	436.1	436.4	436.7	436.6	436.1	435.7	435.2	434.7
167.5°	442.7	443.1	443.6	443.6	443.1	442.6	442.1	441.7
170°	446.6	447.1	447.6	447.5	447.0	446.4	445.9	445.3
172.5°	449.5	449.9	450.4	450.4	449.9	449.4	448.9	448.4
175°	452.6	453.1	453.6	453.5	453.0	452.4	451.9	451.3
177.5°	454.1	454.5	454.8	454.8	454.4	453.9	453.5	453.0
180°	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2

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