

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: P333167-930

Luminaire Tested: **S125DIP-S610D365U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333167-930  
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-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 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: 3071.5 lumens  
Efficiency: N/A  
Efficacy: 111.7 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: Semi-Direct

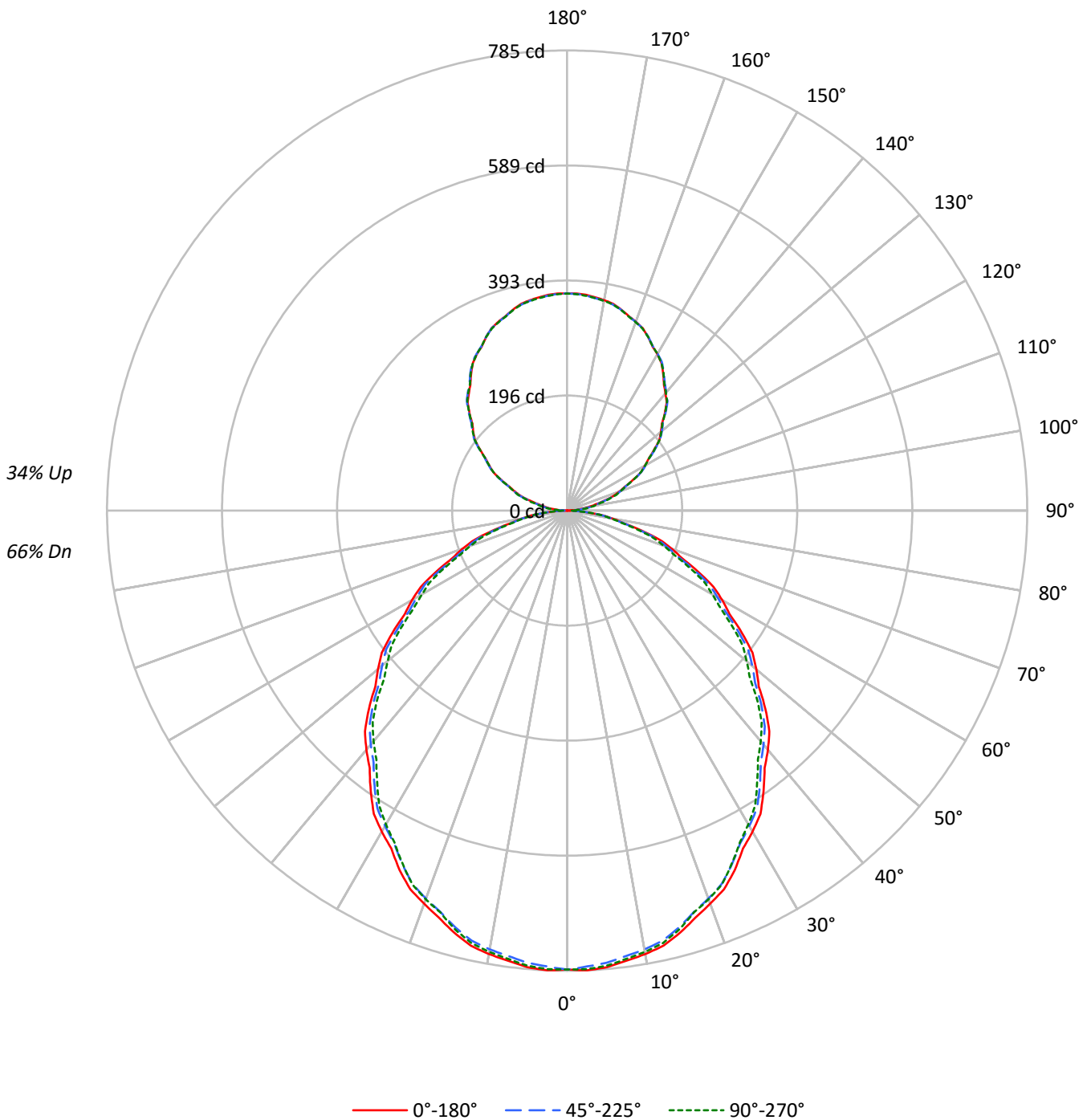
Input Watts (W): 27.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	78	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	56	55	53	50	47
3	84	74	67	61	79	70	64	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	36	39	35	32	29
6	65	53	44	38	61	50	43	37	45	39	34	40	35	31	36	32	28	26
7	60	48	40	34	57	45	38	33	41	35	30	37	31	28	33	28	25	23
8	56	43	36	30	53	41	34	29	37	31	27	34	28	25	30	26	23	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	20	18
10	49	37	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17

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

	0°	45°	90°
0°	5057	5057	5057
5°	5068	5020	5052
10°	5037	4985	5013
15°	4983	4924	4945
20°	4904	4841	4849
25°	4821	4741	4737
30°	4716	4633	4610
35°	4606	4518	4454
40°	4491	4392	4330
45°	4369	4277	4192
50°	4233	4140	4015
55°	4102	3983	3871
60°	3945	3825	3689
65°	3758	3636	3512
70°	3580	3416	3299
75°	3261	3154	3047
80°	2901	2856	2786
85°	2527	2571	2438



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.8	2.4
10°-20°	208.5	6.8
20°-30°	307.9	10.0
30°-40°	359.3	11.7
40°-50°	360.9	11.7
50°-60°	316.8	10.3
60°-70°	236.0	7.7
70°-80°	135.0	4.4
80°-90°	40.1	1.3
90°-100°	24.8	0.8
100°-110°	73.2	2.4
110°-120°	124.0	4.0
120°-130°	163.2	5.3
130°-140°	182.9	6.0
140°-150°	179.3	5.8
150°-160°	150.6	4.9
160°-170°	100.1	3.3
170°-180°	35.0	1.1
0°-30°	590.3	19.2
0°-40°	949.6	30.9
0°-60°	1627.2	53.0
0°-90°	2038.3	66.4
90°-120°	222.1	7.2
90°-150°	747.5	24.3
90°-180°	1033.0	33.6
0°-180°	3071.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	782	780	774	780	779	74
15°	745	743	736	739	740	210
25°	676	673	665	666	665	311
35°	584	581	573	570	565	365
45°	478	476	468	461	459	368
55°	364	362	354	348	344	325
65°	246	244	238	232	230	244
75°	131	129	126	124	122	139
85°	34	35	35	34	33	38
90°	0	3	5	6	7	3
95°	19	19	22	24	25	20
105°	66	67	69	71	72	70
115°	124	125	126	126	125	123
125°	181	183	183	183	182	162
135°	236	237	238	238	237	182
145°	286	287	288	288	287	178
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°	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0
2.5°	785.0	784.6	784.3	784.0	783.7	782.9	781.9	780.7	779.7	778.5	779.7
5°	781.8	781.5	781.2	780.9	780.6	779.8	778.4	777.1	775.7	774.3	775.6
7.5°	774.5	774.3	774.0	773.7	773.5	772.6	771.0	769.6	768.0	766.5	767.7
10°	768.1	767.8	767.6	767.3	767.0	766.1	764.6	763.1	761.6	760.1	761.2
12.5°	760.2	759.7	759.2	758.7	758.2	757.2	755.9	754.5	753.0	751.6	752.5
15°	745.2	744.8	744.4	744.0	743.6	742.6	741.1	739.6	738.0	736.5	737.2
17.5°	728.0	727.4	726.8	726.2	725.5	724.5	722.9	721.3	719.7	718.2	719.0
20°	713.6	713.3	713.1	712.8	712.5	711.5	709.7	707.9	706.1	704.3	705.3
22.5°	699.2	698.7	698.2	697.7	697.2	696.2	694.5	692.8	691.1	689.4	690.1
25°	676.5	675.7	675.1	674.4	673.7	672.5	670.7	668.9	667.1	665.3	665.6
27.5°	649.8	649.4	649.0	648.6	648.2	647.0	645.1	643.4	641.5	639.7	639.7
30°	632.4	632.0	631.6	631.2	630.8	629.6	627.5	625.4	623.4	621.3	621.0
32.5°	613.6	613.0	612.4	611.7	611.1	609.8	608.1	606.2	604.3	602.5	602.0
35°	584.2	583.6	583.0	582.5	582.0	580.7	578.8	576.8	574.9	573.0	572.3
37.5°	553.5	552.9	552.2	551.5	550.8	549.5	547.7	545.9	544.0	542.3	541.3
40°	532.7	532.1	531.3	530.7	529.9	528.6	526.8	524.8	522.9	521.0	519.8
42.5°	510.5	509.9	509.2	508.7	508.1	506.9	504.9	503.0	501.1	499.1	498.1
45°	478.3	477.7	477.1	476.5	476.1	474.9	473.3	471.7	469.9	468.3	466.7
47.5°	443.5	443.5	443.6	443.6	443.6	442.6	440.7	438.7	436.8	434.7	433.1
50°	421.3	420.8	420.4	420.0	419.6	418.6	416.9	415.2	413.6	412.0	410.2
52.5°	398.4	398.1	397.9	397.5	397.2	396.2	394.4	392.6	390.9	389.1	387.6
55°	364.3	363.8	363.4	363.0	362.6	361.4	359.5	357.6	355.6	353.7	352.5
57.5°	328.2	328.0	327.8	327.5	327.3	326.4	324.7	323.1	321.5	319.9	318.3
60°	305.4	304.8	304.3	303.7	303.2	302.1	300.7	299.1	297.6	296.1	294.7
62.5°	281.6	281.2	280.7	280.3	279.8	279.0	277.7	276.4	275.1	273.8	272.3
65°	245.9	245.6	245.4	245.1	244.8	243.9	242.4	240.9	239.4	237.9	236.6
67.5°	211.3	210.8	210.2	209.6	209.0	208.2	207.1	205.9	204.8	203.7	202.6
70°	189.6	188.9	188.2	187.5	186.8	185.8	184.6	183.4	182.1	180.9	180.0
72.5°	165.8	165.3	164.9	164.4	163.9	163.2	162.5	161.7	160.9	160.0	159.1
75°	130.7	130.4	130.1	129.9	129.6	129.1	128.4	127.8	127.0	126.4	126.0
77.5°	98.4	98.2	98.2	98.0	97.9	97.7	97.3	96.9	96.5	96.1	95.9
80°	78.0	78.0	78.0	78.0	78.0	77.9	77.6	77.4	77.1	76.8	76.6
82.5°	60.3	60.0	59.8	59.5	59.4	59.2	59.1	59.1	59.0	58.9	58.7
85°	34.1	34.2	34.3	34.5	34.7	34.7	34.7	34.7	34.7	34.7	34.6
87.5°	13.5	13.5	13.6	13.8	13.9	13.9	13.9	13.9	13.9	13.8	13.9
90°	0.3	0.8	1.3	1.8	2.4	2.9	3.3	3.8	4.2	4.6	4.9
92.5°	7.0	7.3	7.7	8.1	8.4	8.9	9.4	9.9	10.5	11.1	11.5
95°	18.8	18.8	19.0	19.1	19.2	19.6	20.3	20.9	21.5	22.2	22.7
97.5°	31.1	31.1	31.2	31.3	31.3	31.8	32.7	33.6	34.4	35.3	35.8
100°	40.4	40.4	40.4	40.4	40.4	40.8	41.6	42.4	43.3	44.1	44.7
102.5°	50.2	50.5	50.8	51.0	51.3	51.6	52.0	52.4	52.9	53.3	54.0
105°	65.7	66.0	66.4	66.7	67.0	67.3	67.8	68.1	68.5	68.9	69.2
107.5°	82.8	83.1	83.4	83.7	84.1	84.4	84.6	85.0	85.2	85.5	85.7
110°	94.5	94.8	95.1	95.5	95.8	96.0	96.2	96.4	96.6	96.9	97.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	106.5	106.6	106.8	107.0	107.1	107.4	107.6	107.9	108.1	108.4	108.4
115°	124.2	124.4	124.7	125.0	125.2	125.4	125.6	125.6	125.8	126.0	125.9
117.5°	141.9	142.0	142.2	142.3	142.4	142.5	142.7	142.8	142.8	143.0	143.0
120°	153.0	153.4	153.7	154.0	154.3	154.5	154.6	154.6	154.7	154.7	154.7
122.5°	165.0	165.1	165.3	165.3	165.4	165.6	165.8	165.9	166.1	166.2	166.2
125°	181.2	181.6	182.1	182.4	182.8	183.0	183.1	183.1	183.2	183.3	183.1
127.5°	198.5	198.8	199.0	199.2	199.4	199.6	199.7	199.7	199.8	199.8	199.8
130°	208.9	209.2	209.5	209.9	210.2	210.4	210.5	210.7	210.8	210.9	210.8
132.5°	219.3	219.8	220.4	220.9	221.4	221.7	221.6	221.6	221.6	221.5	221.4
135°	235.7	236.1	236.5	236.8	237.3	237.5	237.6	237.6	237.7	237.7	237.7
137.5°	251.2	251.5	251.9	252.3	252.7	252.9	253.1	253.2	253.3	253.5	253.6
140°	261.1	261.4	261.7	262.0	262.4	262.6	262.8	263.0	263.2	263.3	263.5
142.5°	271.0	271.3	271.5	271.8	272.1	272.3	272.6	272.8	273.0	273.3	273.4
145°	285.6	285.8	286.1	286.3	286.6	286.8	287.0	287.2	287.4	287.6	287.6
147.5°	299.1	299.2	299.3	299.5	299.6	299.8	299.9	300.1	300.2	300.4	300.5
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°	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0
2.5°	780.7	781.9	782.9	783.4	783.3	783.2	783.1	783.0
5°	776.8	778.0	779.3	779.8	779.7	779.6	779.4	779.3
7.5°	768.9	770.1	771.4	771.9	771.8	771.6	771.5	771.4
10°	762.3	763.4	764.5	765.0	764.8	764.7	764.5	764.4
12.5°	753.4	754.3	755.1	755.6	755.5	755.5	755.5	755.5
15°	737.9	738.6	739.3	739.6	739.6	739.6	739.6	739.6
17.5°	719.9	720.7	721.6	721.7	721.0	720.3	719.7	718.9
20°	706.2	707.2	708.2	708.3	707.6	706.9	706.2	705.6
22.5°	690.7	691.4	692.0	692.1	691.6	691.1	690.6	690.2
25°	665.9	666.1	666.4	666.3	665.9	665.5	665.1	664.7
27.5°	639.8	639.8	639.8	639.7	639.3	638.9	638.5	638.1
30°	620.8	620.5	620.2	619.9	619.5	619.1	618.6	618.2
32.5°	601.5	601.0	600.5	599.9	599.2	598.4	597.6	596.9
35°	571.6	571.0	570.2	569.3	568.3	567.1	566.1	564.9
37.5°	540.2	539.2	538.2	537.4	536.7	536.1	535.5	534.8
40°	518.4	517.2	516.0	515.2	514.8	514.4	514.0	513.6
42.5°	496.9	495.8	494.6	493.7	493.1	492.5	491.9	491.2
45°	465.0	463.3	461.7	460.6	460.2	459.8	459.4	459.0
47.5°	431.4	429.7	428.0	426.7	425.7	424.8	423.8	422.8
50°	408.4	406.6	404.8	403.4	402.4	401.5	400.5	399.6
52.5°	386.0	384.4	382.9	381.6	380.5	379.4	378.3	377.2
55°	351.2	350.0	348.8	347.6	346.7	345.7	344.8	343.8
57.5°	316.7	315.1	313.5	312.4	311.9	311.4	310.9	310.4
60°	293.3	292.0	290.6	289.4	288.5	287.5	286.5	285.6
62.5°	270.8	269.4	267.8	266.8	266.0	265.2	264.5	263.7
65°	235.4	234.2	232.9	232.0	231.5	230.9	230.4	229.8
67.5°	201.6	200.6	199.5	198.8	198.4	198.1	197.8	197.5
70°	179.2	178.4	177.6	176.9	176.3	175.8	175.2	174.7
72.5°	158.2	157.3	156.3	155.6	155.0	154.5	153.9	153.4
75°	125.6	125.1	124.7	124.3	123.7	123.1	122.6	122.1
77.5°	95.6	95.4	95.1	94.8	94.4	94.1	93.7	93.3
80°	76.6	76.4	76.2	76.1	75.7	75.5	75.3	74.9
82.5°	58.5	58.2	58.0	57.8	57.8	57.7	57.6	57.6
85°	34.4	34.2	34.2	33.9	33.7	33.3	33.1	32.9
87.5°	13.9	14.0	14.0	14.0	13.9	13.6	13.5	13.3
90°	5.2	5.5	5.9	6.1	6.4	6.5	6.7	6.9
92.5°	11.9	12.3	12.7	13.0	13.2	13.3	13.5	13.6
95°	23.1	23.6	24.0	24.3	24.4	24.5	24.6	24.8
97.5°	36.2	36.6	37.0	37.3	37.3	37.4	37.5	37.6
100°	45.2	45.8	46.4	46.7	46.9	47.0	47.1	47.3
102.5°	54.5	55.2	55.8	56.3	56.4	56.6	56.7	56.9
105°	69.6	70.0	70.4	70.7	70.8	71.1	71.3	71.5
107.5°	85.9	86.1	86.3	86.4	86.3	86.3	86.3	86.3
110°	97.2	97.4	97.6	97.7	97.6	97.5	97.4	97.4





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	108.5	108.6	108.7	108.7	108.6	108.4	108.4	108.3
115°	125.8	125.7	125.6	125.6	125.6	125.5	125.4	125.3
117.5°	143.1	143.2	143.2	143.1	142.8	142.6	142.4	142.0
120°	154.7	154.7	154.7	154.6	154.3	154.1	153.8	153.6
122.5°	166.2	166.1	166.1	165.9	165.8	165.5	165.3	165.1
125°	183.0	182.9	182.8	182.6	182.6	182.5	182.5	182.4
127.5°	199.7	199.7	199.6	199.5	199.4	199.3	199.1	199.0
130°	210.8	210.8	210.7	210.6	210.4	210.3	210.2	210.1
132.5°	221.4	221.4	221.3	221.2	220.9	220.8	220.6	220.5
135°	237.7	237.7	237.7	237.6	237.3	237.1	236.8	236.6
137.5°	253.6	253.7	253.8	253.6	253.3	253.0	252.7	252.3
140°	263.7	263.7	263.9	263.8	263.5	263.2	262.9	262.5
142.5°	273.5	273.5	273.6	273.5	273.1	272.8	272.6	272.2
145°	287.6	287.6	287.6	287.5	287.3	287.1	286.9	286.7
147.5°	300.7	300.8	301.0	300.8	300.4	299.9	299.5	299.1
150°	308.9	308.9	308.9	308.8	308.8	308.6	308.4	308.3
152.5°	316.6	316.7	316.9	316.8	316.7	316.4	316.2	315.9
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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