

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

Luminaire Tested: **S125DIP-S610D365U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333164  
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-S610D365U835-4F0-1E-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: 3668.7 lumens  
Efficiency: N/A  
Efficacy: 133.4 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

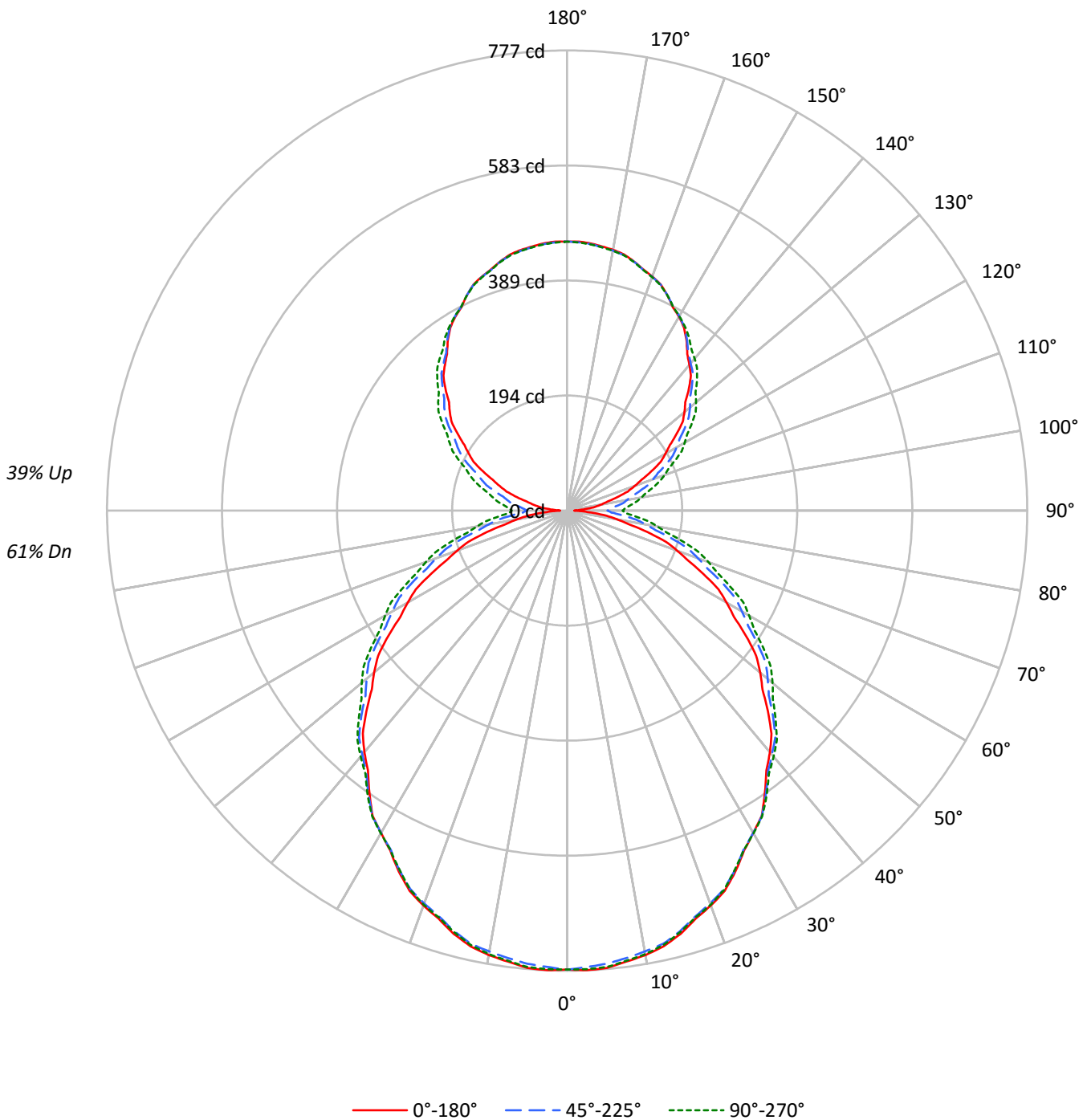
Input Watts (W): 27.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5005	5005	5005
5°	5015	4912	4928
10°	4980	4825	4817
15°	4920	4720	4677
20°	4840	4590	4536
25°	4745	4451	4363
30°	4630	4298	4206
35°	4523	4158	4062
40°	4413	4010	3916
45°	4289	3884	3788
50°	4172	3746	3674
55°	4029	3616	3540
60°	3875	3468	3404
65°	3713	3314	3250
70°	3527	3103	3093
75°	3237	2899	2899
80°	2857	2653	2687
85°	2502	2488	2620



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.3	2.0
10°-20°	208.0	5.7
20°-30°	309.4	8.4
30°-40°	366.5	10.0
40°-50°	378.9	10.3
50°-60°	349.0	9.5
60°-70°	282.1	7.7
70°-80°	189.0	5.2
80°-90°	99.0	2.7
90°-100°	85.4	2.3
100°-110°	130.4	3.6
110°-120°	179.3	4.9
120°-130°	215.7	5.9
130°-140°	231.1	6.3
140°-150°	221.3	6.0
150°-160°	184.7	5.0
160°-170°	122.8	3.3
170°-180°	43.0	1.2
0°-30°	590.7	16.1
0°-40°	957.1	26.1
0°-60°	1685.1	45.9
0°-90°	2255.1	61.5
90°-120°	395.1	10.8
90°-150°	1063.1	29.0
90°-180°	1414.0	38.5
0°-180°	3668.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	775	773	768	774	774	73
15°	740	740	736	740	737	208
25°	672	674	670	673	669	309
35°	582	587	585	587	587	364
45°	479	488	492	497	498	370
55°	368	381	393	401	404	329
65°	254	271	290	300	304	252
75°	140	160	184	198	203	148
85°	42	67	94	110	116	45
90°	12	40	68	86	94	9
95°	33	54	83	101	108	32
105°	87	102	126	143	150	93
115°	157	164	184	197	202	155
125°	225	228	242	253	257	202
135°	291	292	298	307	310	224
145°	351	352	353	356	358	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°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	776.8	776.5	776.3	776.0	775.7	775.1	774.2	773.2	772.3	771.3	772.3
5°	775.0	774.6	774.3	774.0	773.6	772.9	771.7	770.5	769.3	768.1	769.5
7.5°	768.1	768.0	767.9	767.7	767.6	766.9	765.7	764.5	763.3	762.1	763.2
10°	762.1	762.1	762.1	762.1	762.1	761.4	760.0	758.7	757.3	756.0	757.2
12.5°	753.6	753.7	753.8	754.0	754.1	753.6	752.5	751.5	750.4	749.3	750.2
15°	740.0	740.2	740.4	740.5	740.7	740.2	739.0	737.8	736.7	735.5	736.5
17.5°	722.4	722.7	723.1	723.4	723.8	723.3	722.2	721.0	719.8	718.6	719.4
20°	709.6	710.0	710.3	710.7	711.0	710.6	709.4	708.2	707.0	705.8	706.3
22.5°	695.1	695.7	696.3	696.9	697.5	697.1	695.8	694.5	693.2	691.9	692.5
25°	672.4	672.9	673.4	673.9	674.4	674.2	673.2	672.2	671.1	670.1	670.8
27.5°	647.2	647.9	648.7	649.4	650.2	650.0	648.8	647.7	646.5	645.4	645.8
30°	628.3	629.4	630.4	631.4	632.4	632.4	631.4	630.4	629.4	628.3	628.7
32.5°	611.3	612.2	613.1	614.0	614.8	614.9	614.2	613.4	612.7	611.9	612.3
35°	582.0	583.2	584.4	585.5	586.7	587.1	586.6	586.0	585.5	585.0	585.5
37.5°	552.7	553.8	554.8	555.9	557.0	557.4	557.3	557.1	556.9	556.8	557.4
40°	532.6	534.0	535.3	536.7	538.0	538.6	538.4	538.3	538.1	537.9	538.6
42.5°	510.7	512.5	514.2	516.0	517.8	518.8	519.2	519.6	519.9	520.3	521.1
45°	479.4	481.3	483.1	485.0	486.9	488.2	489.1	489.9	490.7	491.6	492.8
47.5°	447.4	449.1	450.8	452.5	454.3	455.8	457.3	458.7	460.2	461.6	463.4
50°	425.5	427.3	429.2	431.1	432.9	434.8	436.6	438.5	440.3	442.2	444.1
52.5°	402.4	404.6	406.9	409.2	411.4	413.7	416.0	418.2	420.5	422.7	424.7
55°	368.5	371.2	373.9	376.6	379.3	382.0	384.7	387.4	390.1	392.8	394.7
57.5°	333.9	337.1	340.3	343.6	346.8	350.0	353.1	356.2	359.3	362.4	364.5
60°	310.8	314.1	317.5	320.9	324.3	327.6	331.0	334.4	337.8	341.1	343.7
62.5°	288.3	291.6	295.0	298.4	301.8	305.3	308.9	312.6	316.2	319.9	322.7
65°	253.8	257.7	261.5	265.4	269.3	273.3	277.3	281.4	285.4	289.5	292.0
67.5°	221.3	225.0	228.7	232.5	236.2	240.2	244.3	248.4	252.5	256.7	259.7
70°	197.5	201.4	205.3	209.2	213.1	217.2	221.6	226.0	230.4	234.8	238.0
72.5°	174.4	178.5	182.5	186.5	190.5	194.9	199.7	204.5	209.3	214.1	217.6
75°	139.8	144.2	148.6	153.0	157.4	162.3	167.7	173.1	178.5	183.9	187.2
77.5°	106.5	111.6	116.7	121.7	126.8	131.9	137.1	142.3	147.5	152.7	156.4
80°	85.9	90.9	96.0	101.1	106.1	111.5	117.3	123.0	128.7	134.5	138.2
82.5°	67.0	72.3	77.7	83.0	88.4	94.0	99.8	105.7	111.6	117.5	121.0
85°	41.8	47.4	52.9	58.5	64.1	69.8	75.7	81.6	87.5	93.5	97.2
87.5°	23.8	29.3	34.8	40.4	45.9	51.6	57.4	63.3	69.1	75.0	78.9
90°	12.5	18.5	24.6	30.6	36.6	42.8	49.1	55.4	61.7	68.0	72.2
92.5°	19.5	24.9	30.4	35.8	41.2	47.2	53.8	60.3	66.9	73.4	77.7
95°	32.9	37.4	41.9	46.5	51.0	56.6	63.1	69.6	76.2	82.7	86.9
97.5°	47.1	51.2	55.2	59.2	63.2	68.5	75.1	81.8	88.4	95.0	99.1
100°	57.8	61.4	64.9	68.5	72.0	77.0	83.4	89.9	96.3	102.7	107.0
102.5°	69.4	73.0	76.6	80.2	83.7	88.4	94.2	100.0	105.8	111.6	115.8
105°	87.4	90.5	93.6	96.7	99.8	104.1	109.7	115.2	120.7	126.3	130.1
107.5°	107.4	110.1	112.8	115.5	118.2	122.1	127.4	132.6	137.8	143.0	146.6
110°	121.2	123.7	126.1	128.5	130.9	134.6	139.6	144.5	149.5	154.5	157.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	136.0	137.8	139.6	141.4	143.3	146.6	151.5	156.4	161.3	166.2	169.4
115°	156.9	158.4	159.9	161.4	162.9	165.9	170.4	175.0	179.5	184.1	187.0
117.5°	177.9	178.8	179.7	180.7	181.6	184.2	188.5	192.8	197.1	201.4	204.3
120°	191.5	192.4	193.3	194.2	195.1	197.5	201.5	205.4	209.4	213.4	216.2
122.5°	205.6	205.9	206.3	206.7	207.1	209.2	213.2	217.2	221.1	225.1	227.7
125°	225.4	225.7	226.0	226.3	226.6	228.4	231.9	235.4	238.8	242.3	244.8
127.5°	245.8	245.9	246.0	246.1	246.2	247.7	250.5	253.4	256.3	259.1	261.5
130°	258.5	258.7	259.0	259.2	259.4	260.8	263.3	265.8	268.4	270.9	273.2
132.5°	270.6	271.3	271.9	272.5	273.1	274.3	276.1	277.9	279.7	281.5	283.7
135°	290.6	290.9	291.2	291.5	291.8	292.6	293.9	295.1	296.4	297.7	299.9
137.5°	309.4	309.7	310.1	310.4	310.7	311.2	312.0	312.7	313.5	314.2	316.3
140°	321.0	321.4	321.8	322.2	322.5	322.9	323.4	323.8	324.2	324.6	326.6
142.5°	333.1	333.3	333.5	333.7	333.9	334.2	334.5	334.8	335.2	335.5	337.2
145°	351.0	351.2	351.3	351.5	351.6	351.8	352.0	352.3	352.5	352.7	353.6
147.5°	366.8	367.0	367.1	367.3	367.5	367.7	367.9	368.1	368.2	368.4	368.9
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°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	773.2	774.2	775.1	775.5	775.4	775.3	775.1	775.0
5°	770.8	772.2	773.5	774.1	774.0	773.8	773.6	773.5
7.5°	764.4	765.6	766.8	767.3	767.1	767.0	766.8	766.6
10°	758.4	759.5	760.7	761.2	761.1	760.9	760.7	760.5
12.5°	751.1	752.0	753.0	753.2	752.7	752.3	751.9	751.4
15°	737.5	738.5	739.5	739.7	739.0	738.3	737.7	737.0
17.5°	720.2	720.9	721.7	721.9	721.5	721.1	720.7	720.3
20°	706.9	707.4	707.9	708.1	708.1	708.1	708.1	708.1
22.5°	693.1	693.8	694.4	694.5	694.1	693.7	693.3	692.9
25°	671.5	672.2	672.8	672.8	671.9	671.1	670.2	669.4
27.5°	646.3	646.8	647.3	647.3	647.0	646.7	646.4	646.1
30°	629.0	629.4	629.7	629.8	629.6	629.4	629.3	629.1
32.5°	612.6	612.9	613.3	613.4	613.2	613.0	612.9	612.7
35°	586.0	586.6	587.1	587.3	587.3	587.3	587.3	587.3
37.5°	558.1	558.8	559.5	559.8	559.7	559.6	559.6	559.5
40°	539.3	540.0	540.6	541.1	541.5	541.8	542.2	542.5
42.5°	521.9	522.7	523.5	524.0	524.1	524.1	524.2	524.3
45°	493.9	495.1	496.3	497.0	497.2	497.3	497.5	497.7
47.5°	465.1	466.8	468.5	469.6	470.0	470.3	470.7	471.1
50°	445.9	447.8	449.6	450.8	451.3	451.8	452.3	452.8
52.5°	426.7	428.7	430.7	431.9	432.3	432.6	433.0	433.4
55°	396.5	398.4	400.2	401.5	402.2	402.9	403.5	404.2
57.5°	366.7	368.8	370.9	372.2	372.8	373.3	373.8	374.3
60°	346.2	348.7	351.3	352.8	353.3	353.8	354.3	354.8
62.5°	325.5	328.3	331.1	332.8	333.4	334.1	334.7	335.4
65°	294.5	297.1	299.6	301.2	301.9	302.6	303.2	303.9
67.5°	262.8	265.9	268.9	270.9	271.8	272.7	273.6	274.4
70°	241.2	244.4	247.6	249.7	250.7	251.7	252.8	253.8
72.5°	221.1	224.5	228.0	230.1	230.9	231.6	232.4	233.1
75°	190.6	194.0	197.4	199.5	200.3	201.2	202.0	202.9
77.5°	160.1	163.9	167.6	169.8	170.4	171.1	171.8	172.5
80°	141.9	145.6	149.3	151.5	152.2	152.9	153.6	154.2
82.5°	124.6	128.2	131.8	134.2	135.4	136.6	137.8	139.0
85°	100.9	104.6	108.3	110.8	112.2	113.5	114.9	116.2
87.5°	82.9	86.9	90.8	93.4	94.7	95.9	97.1	98.3
90°	76.5	80.8	85.1	87.9	89.3	90.7	92.2	93.6
92.5°	82.0	86.2	90.5	93.3	94.7	96.0	97.4	98.7
95°	91.2	95.5	99.7	102.5	103.9	105.2	106.6	107.9
97.5°	103.1	107.2	111.3	113.9	115.1	116.4	117.6	118.9
100°	111.2	115.5	119.7	122.4	123.6	124.8	125.9	127.1
102.5°	119.9	124.1	128.3	131.0	132.2	133.5	134.7	135.9
105°	134.0	137.8	141.7	144.3	145.7	147.1	148.5	150.0
107.5°	150.2	153.8	157.4	159.7	160.7	161.7	162.8	163.8
110°	161.4	164.8	168.2	170.5	171.6	172.7	173.8	174.9





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	172.5	175.7	178.9	181.0	182.1	183.1	184.1	185.2
115°	190.0	193.0	195.9	197.9	198.8	199.7	200.7	201.6
117.5°	207.2	210.2	213.1	215.0	215.8	216.6	217.5	218.3
120°	219.1	222.0	224.8	226.6	227.3	228.0	228.7	229.4
122.5°	230.4	233.1	235.7	237.5	238.2	239.0	239.7	240.5
125°	247.4	249.9	252.4	254.1	254.9	255.6	256.4	257.2
127.5°	264.0	266.4	268.8	270.4	271.3	272.1	272.9	273.7
130°	275.4	277.7	280.0	281.5	282.2	282.9	283.6	284.3
132.5°	286.0	288.3	290.6	292.0	292.5	293.0	293.4	293.9
135°	302.1	304.3	306.4	307.8	308.3	308.9	309.4	309.9
137.5°	318.4	320.5	322.6	323.8	324.0	324.3	324.6	324.9
140°	328.6	330.6	332.6	333.8	334.1	334.3	334.6	334.9
142.5°	338.9	340.6	342.2	343.2	343.5	343.8	344.1	344.3
145°	354.4	355.3	356.1	356.8	357.2	357.6	358.1	358.5
147.5°	369.3	369.8	370.3	370.4	370.1	369.9	369.7	369.5
150°	378.9	378.9	378.9	378.9	378.9	378.9	378.9	378.9
152.5°	388.3	388.5	388.7	388.7	388.4	388.2	387.9	387.7
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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