

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: P333524-930

Luminaire Tested: **S125RDIP-S610D365U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333524-930
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: S125RDIP-S610D365U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2971.7 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

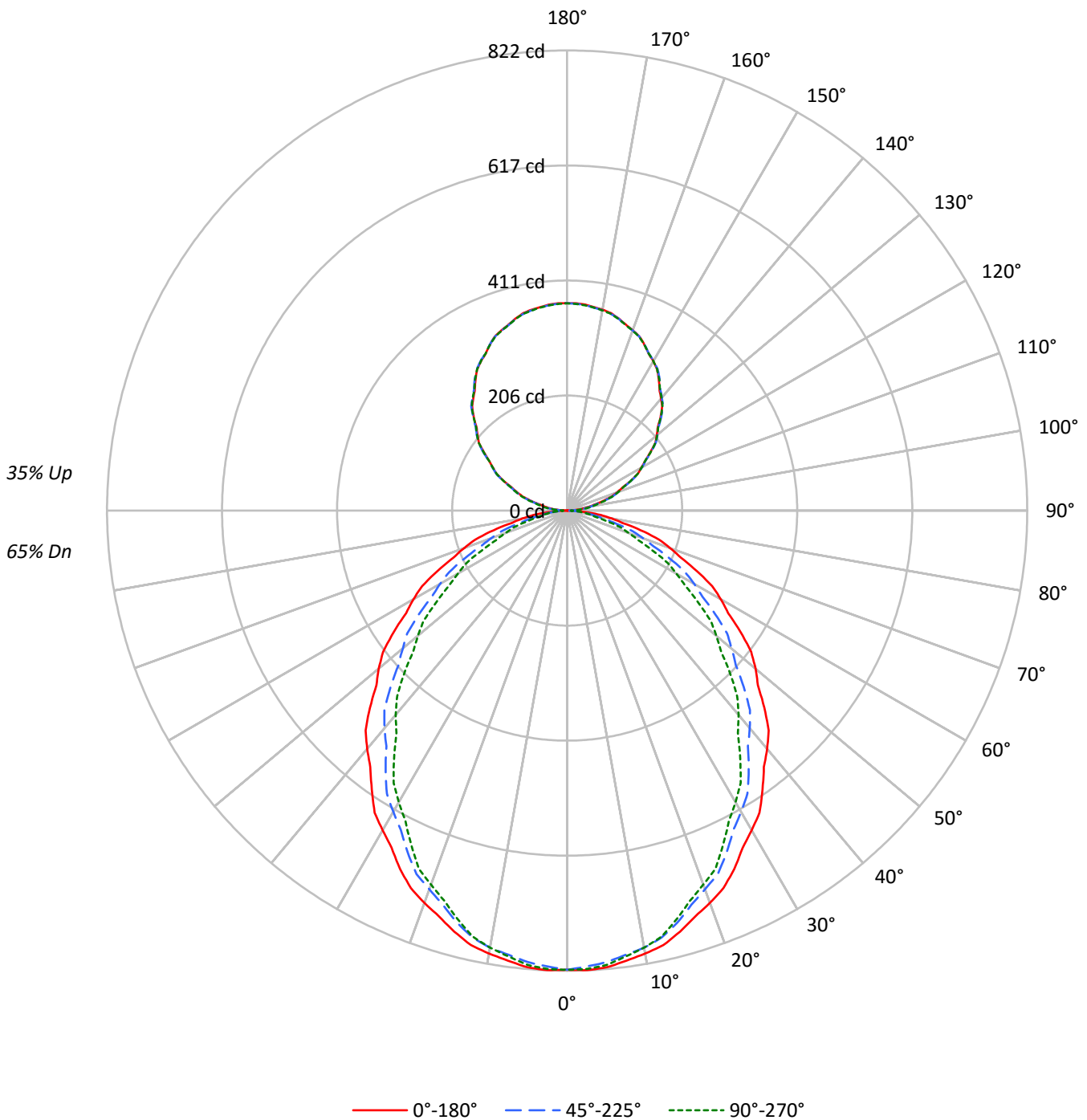
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	92	92	92	80	80	80	70	70	70	65
1	102	97	93	90	95	92	88	85	81	78	76	71	69	68	62	61	60	56
2	93	85	79	74	87	80	75	70	71	67	64	63	60	57	55	53	51	47
3	85	75	68	62	79	71	64	59	63	58	54	56	52	49	49	46	44	40
4	78	67	59	53	73	63	56	50	56	51	46	50	46	42	44	41	38	35
5	71	60	51	45	67	57	49	44	51	45	40	45	40	36	40	36	33	30
6	66	54	46	40	62	51	44	38	46	40	35	41	36	32	36	32	29	27
7	61	49	41	35	57	46	39	34	42	36	31	37	32	29	33	29	26	24
8	57	44	36	31	53	42	35	30	38	32	28	34	29	26	31	27	23	21
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	28	24	21	19
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5297	5297	5297
5°	5309	5249	5281
10°	5269	5200	5200
15°	5207	5094	5053
20°	5126	4947	4887
25°	5032	4802	4697
30°	4915	4633	4486
35°	4796	4459	4249
40°	4684	4278	4016
45°	4549	4074	3763
50°	4413	3852	3497
55°	4255	3640	3216
60°	4097	3384	2913
65°	3909	3085	2566
70°	3697	2713	2211
75°	3401	2286	1839
80°	2998	1796	1543
85°	2527	1467	1378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.1	2.6
10°-20°	215.5	7.3
20°-30°	312.5	10.5
30°-40°	356.2	12.0
40°-50°	347.2	11.7
50°-60°	292.3	9.8
60°-70°	204.9	6.9
70°-80°	105.3	3.5
80°-90°	27.4	0.9
90°-100°	24.8	0.8
100°-110°	73.2	2.5
110°-120°	124.0	4.2
120°-130°	163.2	5.5
130°-140°	182.9	6.2
140°-150°	179.3	6.0
150°-160°	150.6	5.1
160°-170°	100.1	3.4
170°-180°	35.0	1.2
0°-30°	605.2	20.4
0°-40°	961.4	32.4
0°-60°	1600.8	53.9
0°-90°	1938.4	65.2
90°-120°	222.1	7.5
90°-150°	747.5	25.2
90°-180°	1033.0	34.8
0°-180°	2971.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	819	816	810	815	815	78
15°	779	774	762	761	756	219
25°	706	696	674	666	659	325
35°	608	593	566	548	539	381
45°	498	479	446	422	412	384
55°	378	357	323	296	286	338
65°	256	234	202	178	168	253
75°	136	117	92	79	74	144
85°	34	23	20	19	19	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°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	821.7	821.3	821.0	820.7	820.4	819.6	818.5	817.4	816.3	815.2	816.3
5°	818.9	818.4	817.8	817.3	816.7	815.7	814.2	812.7	811.1	809.6	811.0
7.5°	810.9	810.3	809.8	809.3	808.8	807.6	805.8	804.0	802.2	800.3	801.3
10°	803.4	803.0	802.6	802.2	801.8	800.6	798.7	796.8	794.8	792.9	793.3
12.5°	795.0	794.5	793.9	793.4	792.9	791.3	788.8	786.2	783.6	781.0	781.3
15°	778.7	777.8	777.0	776.2	775.3	773.5	770.6	767.7	764.8	761.9	761.8
17.5°	760.2	759.0	757.7	756.4	755.1	752.7	749.0	745.4	741.8	738.2	737.4
20°	745.8	744.4	743.1	741.7	740.3	737.4	733.0	728.6	724.2	719.8	719.1
22.5°	729.9	728.6	727.2	725.9	724.5	721.5	716.8	712.2	707.6	703.0	701.6
25°	706.2	704.1	702.1	700.0	697.9	694.3	689.3	684.1	679.1	673.9	672.2
27.5°	678.9	676.5	673.9	671.4	668.9	665.0	659.5	654.0	648.6	643.1	640.6
30°	659.1	656.5	653.9	651.3	648.7	644.4	638.6	632.9	627.1	621.3	618.2
32.5°	639.8	636.7	633.7	630.6	627.5	623.1	617.2	611.3	605.4	599.5	596.0
35°	608.3	605.0	601.7	598.4	595.1	590.4	584.2	578.0	571.8	565.6	561.6
37.5°	577.5	573.4	569.4	565.4	561.4	556.2	549.8	543.4	537.0	530.6	525.9
40°	555.6	551.5	547.4	543.2	539.2	533.8	527.2	520.6	514.0	507.4	502.1
42.5°	532.9	528.6	524.4	520.2	515.9	510.4	503.5	496.7	489.9	483.1	478.0
45°	498.1	494.1	490.1	486.1	482.1	476.3	468.7	461.1	453.6	446.0	440.5
47.5°	462.0	457.8	453.6	449.4	445.2	439.2	431.6	424.0	416.4	408.7	403.1
50°	439.2	434.6	430.1	425.6	421.0	414.8	407.0	399.2	391.3	383.4	377.6
52.5°	414.4	409.8	405.1	400.5	395.8	389.8	382.4	375.0	367.5	360.1	353.9
55°	377.9	373.5	369.1	364.7	360.3	354.2	346.5	338.8	331.1	323.3	317.2
57.5°	341.0	336.2	331.5	326.9	322.1	316.0	308.6	301.2	293.8	286.3	280.2
60°	317.2	312.3	307.5	302.7	297.9	291.8	284.3	276.9	269.5	262.0	256.0
62.5°	291.9	287.3	282.7	278.1	273.5	267.4	259.9	252.3	244.8	237.3	231.6
65°	255.8	251.2	246.5	241.8	237.1	231.1	223.8	216.5	209.2	201.9	196.4
67.5°	220.0	215.3	210.7	206.0	201.3	195.5	188.5	181.5	174.5	167.5	162.5
70°	195.8	191.1	186.4	181.7	177.0	171.2	164.4	157.5	150.6	143.7	139.4
72.5°	171.9	167.4	162.8	158.2	153.7	148.1	141.7	135.3	128.8	122.4	118.5
75°	136.3	132.2	128.0	123.9	119.8	114.8	109.0	103.2	97.4	91.6	88.6
77.5°	100.9	97.5	94.2	90.9	87.6	83.6	79.0	74.4	69.8	65.1	63.0
80°	80.6	77.2	73.9	70.6	67.3	63.8	59.8	56.0	52.2	48.3	47.0
82.5°	60.7	57.7	54.8	51.8	48.8	46.0	43.4	40.7	38.1	35.5	34.9
85°	34.1	31.6	29.1	26.7	24.1	22.6	21.9	21.2	20.5	19.8	19.6
87.5°	11.5	10.8	10.1	9.5	8.8	8.4	8.4	8.4	8.4	8.3	8.4
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°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	817.4	818.5	819.6	820.1	820.0	819.9	819.8	819.7
5°	812.4	813.8	815.1	815.7	815.4	815.1	814.9	814.6
7.5°	802.3	803.2	804.2	804.5	804.2	803.9	803.6	803.3
10°	793.7	794.1	794.6	794.6	794.1	793.7	793.3	792.9
12.5°	781.6	782.0	782.2	782.0	781.4	780.8	780.2	779.5
15°	761.7	761.5	761.4	760.7	759.5	758.2	757.0	755.7
17.5°	736.8	736.1	735.4	734.5	733.5	732.5	731.5	730.4
20°	718.4	717.7	717.1	716.1	714.9	713.6	712.4	711.1
22.5°	700.3	698.9	697.6	696.3	695.4	694.3	693.3	692.3
25°	670.4	668.6	666.8	665.1	663.7	662.1	660.6	659.1
27.5°	638.1	635.6	633.1	631.1	629.7	628.2	626.7	625.3
30°	615.0	611.8	608.6	606.4	605.2	604.0	602.8	601.5
32.5°	592.5	589.1	585.5	583.0	581.4	579.8	578.3	576.7
35°	557.6	553.6	549.6	546.7	544.7	542.7	540.9	538.9
37.5°	521.1	516.2	511.4	508.1	506.2	504.4	502.6	500.7
40°	496.8	491.6	486.4	483.0	481.4	479.6	478.0	476.4
42.5°	473.0	468.0	463.0	459.3	456.9	454.4	452.0	449.6
45°	435.0	429.5	424.0	420.2	418.2	416.0	414.0	412.0
47.5°	397.4	391.7	386.0	382.0	379.8	377.5	375.2	372.9
50°	371.9	366.1	360.3	356.4	354.3	352.3	350.2	348.1
52.5°	347.7	341.4	335.3	331.1	329.1	327.0	324.9	322.9
55°	311.0	304.8	298.6	294.4	292.2	290.0	287.8	285.6
57.5°	274.2	268.2	262.1	258.0	256.1	254.1	252.3	250.3
60°	249.9	243.9	237.8	233.7	231.7	229.6	227.6	225.5
62.5°	226.0	220.4	214.7	210.9	208.9	206.8	204.7	202.7
65°	190.9	185.4	179.9	176.1	174.1	172.0	169.9	167.9
67.5°	157.4	152.4	147.3	144.0	142.4	140.7	139.0	137.4
70°	135.2	130.9	126.6	123.7	122.1	120.4	118.7	117.1
72.5°	114.5	110.6	106.6	104.1	103.1	101.9	100.9	99.7
75°	85.6	82.6	79.6	77.5	76.6	75.7	74.7	73.7
77.5°	60.9	58.8	56.7	55.3	54.5	53.8	53.2	52.4
80°	45.8	44.6	43.4	42.6	42.3	42.1	41.7	41.5
82.5°	34.2	33.7	33.1	32.8	32.6	32.4	32.3	32.1
85°	19.6	19.4	19.2	19.2	19.0	18.8	18.8	18.6
87.5°	8.5	8.6	8.6	8.6	8.6	8.5	8.4	8.3
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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