

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: P333168-935

Luminaire Tested: **S125DIP-S610D365U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333168-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S610D365U935-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3284.4 lumens
Efficiency: N/A
Efficacy: 119.4 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: Semi-Direct

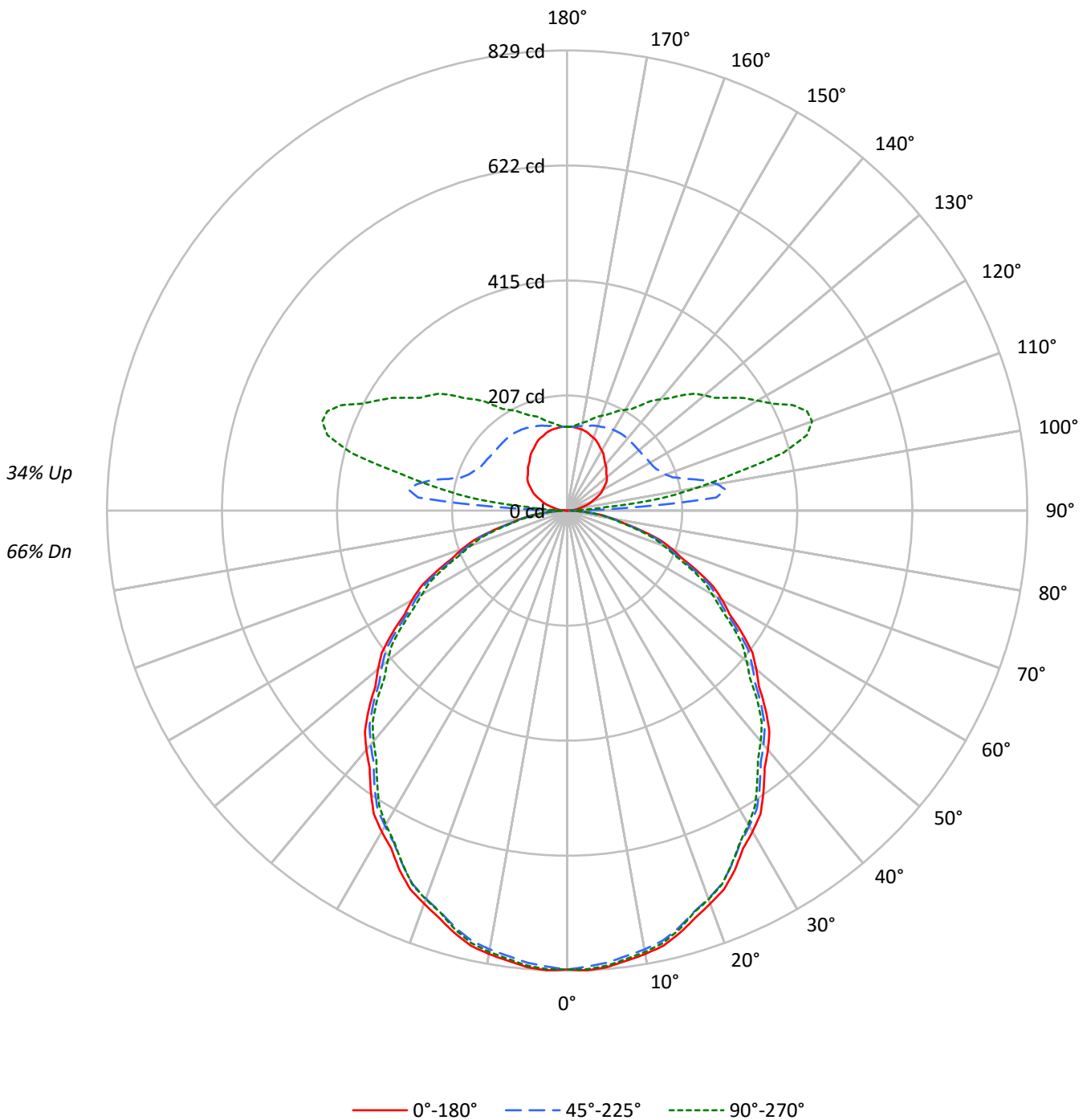
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	81	81	81	70	70	70	66
1	101	97	93	89	95	91	88	84	81	78	76	71	69	67	62	61	59	55
2	92	84	78	73	86	80	74	69	71	66	62	62	59	56	55	52	50	46
3	84	74	67	61	79	70	63	58	62	57	53	55	51	47	48	45	42	39
4	77	66	58	51	72	62	55	49	55	49	45	49	44	41	43	40	37	33
5	71	59	50	44	66	56	48	42	50	43	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	35	31	28	25
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	25	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	22	28	23	20	25	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5340	5340	5340
5°	5352	5301	5335
10°	5319	5264	5294
15°	5262	5201	5223
20°	5179	5112	5121
25°	5091	5007	5002
30°	4981	4894	4869
35°	4864	4771	4704
40°	4743	4639	4572
45°	4613	4517	4427
50°	4470	4372	4240
55°	4332	4206	4088
60°	4166	4039	3896
65°	3969	3839	3709
70°	3780	3609	3484
75°	3444	3331	3216
80°	3065	3016	2942
85°	2668	2712	2571



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	2.4
10°-20°	220.2	6.7
20°-30°	325.2	9.9
30°-40°	379.4	11.6
40°-50°	381.1	11.6
50°-60°	334.5	10.2
60°-70°	249.3	7.6
70°-80°	142.5	4.3
80°-90°	42.3	1.3
90°-100°	109.4	3.3
100°-110°	235.2	7.2
110°-120°	220.7	6.7
120°-130°	178.9	5.4
130°-140°	143.5	4.4
140°-150°	108.3	3.3
150°-160°	76.2	2.3
160°-170°	44.9	1.4
170°-180°	14.6	0.4
0°-30°	623.4	19.0
0°-40°	1002.8	30.5
0°-60°	1718.4	52.3
0°-90°	2152.5	65.5
90°-120°	565.3	17.2
90°-150°	996.0	30.3
90°-180°	1132.0	34.5
0°-180°	3284.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	827	827	827	827	827	
5°	826	824	818	823	823	78
15°	787	785	778	781	781	222
25°	714	711	703	704	702	329
35°	617	614	605	602	597	386
45°	505	502	495	487	485	389
55°	385	382	374	368	363	343
65°	260	258	251	246	243	258
75°	138	137	134	131	129	147
85°	36	37	37	36	35	40
90°	0	3	5	6	7	3
95°	10	30	270	122	72	11
105°	34	48	221	434	403	36
115°	62	74	177	382	449	60
125°	85	100	170	304	354	76
135°	100	120	169	255	294	77
145°	116	133	169	211	232	73
155°	133	143	165	186	194	61
165°	145	149	158	168	170	41
175°	151	151	152	154	153	14
180°	151	151	151	151	151	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	829.0	828.6	828.3	827.9	827.6	826.8	825.7	824.5	823.4	822.2	823.4
5°	825.6	825.3	825.0	824.7	824.4	823.5	822.1	820.6	819.2	817.7	819.1
7.5°	817.9	817.7	817.4	817.1	816.8	815.9	814.2	812.7	811.1	809.5	810.7
10°	811.1	810.9	810.6	810.3	810.0	809.1	807.4	805.9	804.3	802.7	803.8
12.5°	802.8	802.3	801.8	801.2	800.7	799.7	798.2	796.8	795.2	793.8	794.7
15°	787.0	786.5	786.1	785.7	785.2	784.2	782.6	781.0	779.4	777.8	778.5
17.5°	768.8	768.2	767.5	766.9	766.2	765.1	763.4	761.7	760.1	758.5	759.3
20°	753.6	753.3	753.0	752.8	752.4	751.4	749.5	747.6	745.7	743.8	744.9
22.5°	738.4	737.9	737.4	736.8	736.3	735.2	733.4	731.7	729.9	728.1	728.8
25°	714.4	713.6	712.9	712.2	711.4	710.2	708.3	706.4	704.5	702.6	702.9
27.5°	686.2	685.8	685.4	684.9	684.5	683.3	681.3	679.4	677.4	675.5	675.5
30°	667.9	667.4	667.0	666.6	666.2	664.9	662.7	660.5	658.3	656.2	655.8
32.5°	648.0	647.4	646.7	646.0	645.3	644.0	642.1	640.2	638.2	636.3	635.8
35°	616.9	616.3	615.7	615.2	614.6	613.3	611.2	609.2	607.2	605.1	604.4
37.5°	584.5	583.8	583.2	582.4	581.7	580.3	578.4	576.5	574.5	572.7	571.6
40°	562.6	561.9	561.1	560.4	559.6	558.3	556.3	554.2	552.2	550.2	548.9
42.5°	539.1	538.5	537.8	537.2	536.6	535.3	533.2	531.2	529.2	527.1	526.0
45°	505.1	504.5	503.9	503.3	502.7	501.5	499.8	498.1	496.3	494.6	492.8
47.5°	468.4	468.4	468.5	468.5	468.5	467.4	465.4	463.3	461.2	459.1	457.4
50°	444.9	444.4	443.9	443.5	443.1	442.0	440.2	438.5	436.8	435.1	433.2
52.5°	420.8	420.4	420.2	419.8	419.5	418.4	416.6	414.7	412.8	411.0	409.3
55°	384.7	384.2	383.7	383.3	382.9	381.7	379.6	377.6	375.6	373.5	372.2
57.5°	346.6	346.4	346.1	345.9	345.7	344.7	342.9	341.2	339.5	337.9	336.1
60°	322.5	321.9	321.3	320.7	320.2	319.1	317.5	315.9	314.3	312.7	311.3
62.5°	297.4	297.0	296.4	296.0	295.5	294.6	293.3	291.9	290.5	289.1	287.6
65°	259.7	259.4	259.2	258.8	258.6	257.6	256.0	254.4	252.8	251.2	249.9
67.5°	223.2	222.6	222.0	221.4	220.8	219.9	218.7	217.5	216.3	215.1	214.0
70°	200.2	199.5	198.7	198.0	197.3	196.2	194.9	193.6	192.3	191.1	190.1
72.5°	175.0	174.5	174.1	173.6	173.1	172.4	171.6	170.7	169.9	169.0	168.1
75°	138.0	137.8	137.4	137.2	136.9	136.4	135.6	134.9	134.1	133.5	133.0
77.5°	103.9	103.8	103.7	103.5	103.4	103.1	102.7	102.4	101.9	101.5	101.3
80°	82.4	82.4	82.4	82.4	82.4	82.3	82.0	81.7	81.5	81.1	80.9
82.5°	63.6	63.4	63.1	62.9	62.7	62.5	62.4	62.4	62.3	62.3	62.0
85°	36.0	36.2	36.2	36.4	36.6	36.6	36.6	36.6	36.6	36.6	36.5
87.5°	14.2	14.3	14.4	14.5	14.6	14.7	14.6	14.6	14.6	14.6	14.6
90°	0.3	0.6	1.2	1.8	2.4	3.0	3.4	4.0	4.2	4.9	5.2
92.5°	3.7	4.5	7.1	10.8	16.1	25.0	41.6	69.4	99.7	98.1	79.4
95°	10.1	10.3	12.7	16.1	22.8	36.5	69.1	136.0	220.0	269.6	263.8
97.5°	16.7	17.0	18.8	22.1	28.2	38.0	59.5	108.6	196.5	287.9	333.8
100°	21.3	21.9	23.2	26.4	32.3	41.4	59.1	98.6	175.3	274.7	350.9
102.5°	26.4	26.8	27.7	31.3	36.7	45.5	61.2	94.5	159.2	251.7	340.6
105°	34.4	34.4	35.9	38.9	43.8	52.3	65.7	92.8	143.6	220.6	308.0
107.5°	42.2	42.8	44.3	46.8	51.8	59.5	72.4	95.6	137.1	199.2	274.6
110°	47.8	48.4	49.6	52.3	56.9	64.8	77.3	98.3	135.1	189.2	255.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	53.4	54.0	54.9	57.7	62.3	69.9	81.9	101.7	135.1	183.4	241.5
115°	61.5	62.1	63.0	65.7	70.3	77.9	89.2	106.8	136.0	177.1	226.1
117.5°	68.8	69.7	70.7	73.4	78.6	85.9	96.6	112.6	138.0	174.0	216.9
120°	73.6	74.6	75.8	78.5	83.7	91.3	101.9	116.6	140.0	172.5	211.8
122.5°	78.8	79.4	80.4	83.2	88.8	96.4	107.0	120.9	141.6	171.3	207.4
125°	85.2	85.8	87.3	90.1	95.8	103.8	113.8	126.9	144.6	169.8	201.5
127.5°	90.2	91.2	93.1	96.6	102.7	110.6	120.3	132.3	147.7	169.1	196.0
130°	93.4	94.4	96.8	100.7	107.1	115.0	124.4	136.0	149.7	168.6	192.3
132.5°	95.8	97.0	100.0	104.4	111.0	118.9	128.4	139.2	151.9	168.6	189.4
135°	99.8	101.0	104.7	109.5	116.0	124.2	133.5	143.6	154.9	168.6	185.9
137.5°	104.8	105.7	109.1	114.0	120.3	128.7	137.3	146.9	157.6	168.9	182.8
140°	107.7	108.7	112.3	117.2	123.0	131.1	140.0	149.1	158.9	169.2	181.3
142.5°	111.2	111.8	115.2	120.1	125.6	133.4	141.6	150.3	159.5	169.4	180.1
145°	116.2	116.8	119.9	124.2	129.7	136.6	144.6	152.1	160.3	169.2	178.3
147.5°	121.6	121.9	124.6	128.5	133.3	139.4	146.4	153.3	160.7	168.4	176.4
150°	124.8	125.4	127.5	131.5	135.7	140.9	147.6	153.9	160.7	167.6	175.0
152.5°	128.2	128.5	130.4	133.9	137.9	142.6	148.8	154.5	160.4	166.7	173.2
155°	132.7	132.7	134.5	137.5	140.6	144.8	150.0	154.9	159.7	165.0	170.4
157.5°	136.7	136.6	138.1	140.7	143.4	146.6	151.0	155.2	158.9	163.1	167.7
160°	139.4	139.1	140.3	142.4	144.8	147.6	151.5	155.2	158.3	161.9	165.6
162.5°	141.5	141.3	142.5	144.4	146.3	148.5	152.1	155.0	157.5	160.4	163.6
165°	144.8	144.2	145.2	146.6	147.9	149.7	152.1	154.5	156.4	158.3	160.7
167.5°	147.1	146.7	147.3	148.1	149.0	150.2	152.1	153.9	154.7	156.1	157.8
170°	148.5	148.2	148.5	149.1	149.7	150.6	152.1	153.3	153.9	154.9	156.1
172.5°	149.5	149.0	149.2	149.8	150.2	150.6	151.9	152.9	153.0	153.4	154.4
175°	150.6	150.0	150.3	150.6	150.6	150.6	151.5	152.1	151.9	151.9	152.1
177.5°	151.2	150.7	150.7	150.9	150.7	150.7	151.2	151.4	150.9	150.9	151.2
180°	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	824.5	825.7	826.8	827.3	827.2	827.1	827.0	826.9
5°	820.4	821.7	822.9	823.5	823.4	823.3	823.1	822.9
7.5°	812.0	813.3	814.6	815.2	815.0	814.9	814.8	814.6
10°	805.0	806.2	807.4	807.9	807.7	807.5	807.4	807.3
12.5°	795.7	796.6	797.5	798.0	797.9	797.9	797.9	797.8
15°	779.3	780.0	780.8	781.1	781.1	781.1	781.1	781.1
17.5°	760.3	761.1	762.1	762.2	761.4	760.7	760.0	759.2
20°	745.8	746.8	747.9	748.0	747.3	746.6	745.8	745.1
22.5°	729.4	730.1	730.8	730.9	730.4	729.9	729.4	728.9
25°	703.2	703.4	703.8	703.7	703.3	702.8	702.4	702.0
27.5°	675.6	675.7	675.7	675.5	675.1	674.7	674.2	673.8
30°	655.6	655.3	655.0	654.6	654.2	653.8	653.3	652.9
32.5°	635.2	634.6	634.1	633.5	632.7	632.0	631.1	630.3
35°	603.6	603.0	602.2	601.2	600.1	598.9	597.8	596.6
37.5°	570.5	569.5	568.3	567.5	566.8	566.2	565.5	564.8
40°	547.5	546.2	544.9	544.1	543.6	543.2	542.8	542.3
42.5°	524.8	523.6	522.4	521.4	520.7	520.1	519.4	518.8
45°	491.0	489.3	487.6	486.5	486.0	485.6	485.2	484.7
47.5°	455.6	453.7	452.0	450.6	449.6	448.6	447.5	446.5
50°	431.3	429.4	427.5	426.0	425.0	424.0	422.9	422.0
52.5°	407.6	406.0	404.3	402.9	401.8	400.6	399.5	398.4
55°	370.9	369.6	368.3	367.1	366.1	365.1	364.1	363.1
57.5°	334.4	332.8	331.1	329.9	329.4	328.8	328.3	327.8
60°	309.8	308.3	306.9	305.7	304.6	303.6	302.6	301.6
62.5°	286.0	284.5	282.8	281.7	280.9	280.1	279.3	278.5
65°	248.6	247.3	246.0	245.0	244.4	243.8	243.3	242.7
67.5°	212.9	211.8	210.7	209.9	209.6	209.2	208.9	208.5
70°	189.2	188.4	187.5	186.8	186.2	185.6	185.0	184.5
72.5°	167.0	166.1	165.1	164.3	163.7	163.2	162.6	162.0
75°	132.6	132.2	131.7	131.2	130.6	130.0	129.5	128.9
77.5°	101.0	100.7	100.5	100.1	99.7	99.4	98.9	98.5
80°	80.8	80.7	80.5	80.3	80.0	79.7	79.5	79.1
82.5°	61.7	61.5	61.2	61.0	61.0	61.0	60.9	60.9
85°	36.3	36.2	36.1	35.8	35.6	35.2	35.0	34.7
87.5°	14.7	14.7	14.8	14.8	14.6	14.4	14.2	13.9
90°	5.5	5.8	6.1	6.7	6.7	6.7	7.0	7.0
92.5°	53.9	39.1	29.4	25.0	21.1	20.3	19.9	19.4
95°	218.8	172.5	135.1	109.5	87.9	78.8	76.4	71.5
97.5°	325.8	293.4	256.9	221.4	202.6	185.5	176.8	172.8
100°	374.3	359.4	328.0	296.4	275.3	253.5	242.2	237.4
102.5°	390.5	399.8	384.8	363.3	340.9	325.3	313.1	309.4
105°	381.0	422.7	436.0	432.7	422.9	412.9	406.8	403.2
107.5°	346.6	402.3	436.6	452.5	457.4	457.4	455.4	453.0
110°	321.3	379.2	422.1	447.9	461.6	467.4	469.5	469.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	301.4	356.3	399.7	430.2	450.1	460.1	465.4	467.6
115°	276.3	323.5	365.2	398.3	422.1	436.6	445.1	449.1
117.5°	260.1	300.7	336.7	367.1	390.8	406.0	414.4	416.8
120°	251.3	287.8	321.3	348.1	370.7	385.2	393.5	395.9
122.5°	244.8	278.6	308.4	333.5	353.6	367.0	375.2	377.4
125°	235.2	266.2	292.7	314.6	331.7	344.1	350.9	353.9
127.5°	225.5	254.4	279.1	299.6	315.1	326.1	332.4	333.8
130°	219.4	246.2	269.9	289.7	304.9	315.0	321.1	322.9
132.5°	213.3	238.4	259.9	279.0	294.2	304.2	309.8	311.9
135°	205.4	226.4	245.9	263.2	276.6	286.6	292.1	293.9
137.5°	198.7	215.7	231.9	246.6	258.6	267.7	272.8	274.7
140°	195.0	209.3	223.3	236.1	247.4	255.3	259.8	261.4
142.5°	191.9	204.0	216.0	227.1	236.7	243.4	247.7	249.0
145°	187.8	197.2	206.6	214.8	222.1	227.3	230.7	231.9
147.5°	183.8	191.5	198.8	205.0	210.8	214.9	216.8	217.4
150°	181.7	188.4	194.2	199.6	204.1	207.8	209.1	209.3
152.5°	179.3	185.2	190.5	194.8	198.5	201.5	202.7	203.0
155°	175.6	180.5	184.7	188.0	191.1	193.2	194.2	194.4
157.5°	171.9	175.9	179.3	181.8	184.3	186.0	186.8	186.8
160°	169.5	172.5	175.6	177.7	179.9	181.3	181.9	181.7
162.5°	166.8	169.6	172.2	174.1	175.7	176.9	177.1	177.0
165°	163.1	165.2	167.0	168.6	169.8	170.4	170.4	170.4
167.5°	159.5	161.0	162.4	163.5	164.1	164.6	164.4	164.3
170°	157.6	158.5	159.5	160.1	160.7	161.0	161.0	160.7
172.5°	155.4	156.4	157.0	157.4	157.5	158.1	157.6	157.2
175°	153.1	153.1	153.7	153.7	153.7	153.9	153.3	153.1
177.5°	151.4	151.6	151.6	151.6	151.4	151.6	150.9	150.9
180°	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9

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