

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: P333210-930

Luminaire Tested: **S125DIP-S850D365U930-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333210-930
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-S850D365U930-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3747.6 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

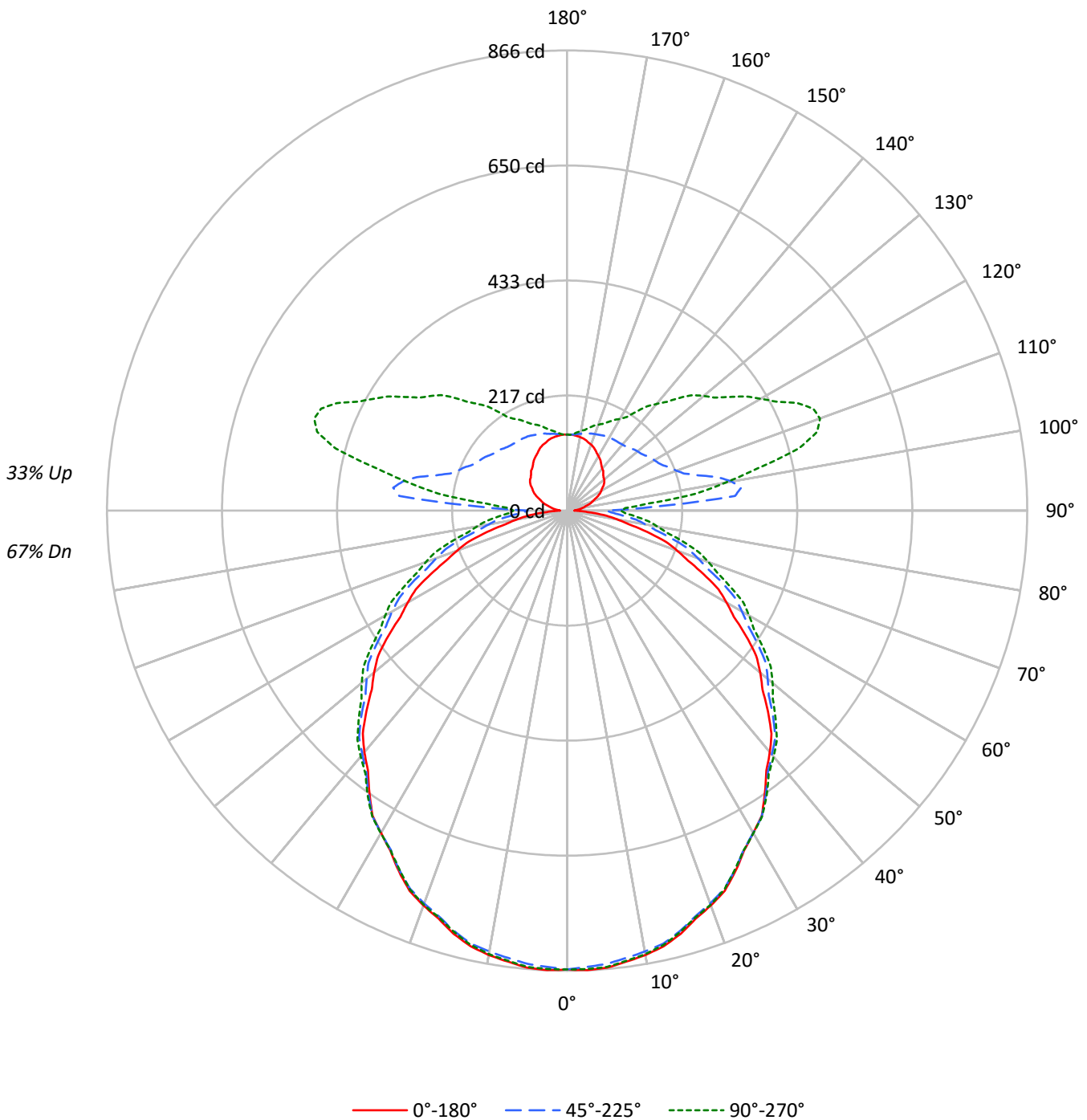
Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	101	96	91	87	95	90	86	83	80	77	74	71	68	66	62	60	59	54
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45
3	83	73	65	58	78	69	62	56	61	55	51	54	50	46	47	44	41	37
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	42	38	35	32
5	70	57	49	42	65	54	46	40	48	42	37	43	38	34	38	34	30	28
6	64	51	43	37	60	49	41	35	44	37	32	39	34	29	34	30	27	24
7	59	46	38	32	56	44	36	31	40	33	28	35	30	26	31	27	24	21
8	55	42	34	28	52	40	33	27	36	30	25	32	27	23	29	24	21	19
9	51	39	31	25	48	37	29	24	33	27	23	30	25	21	27	22	19	17
10	48	35	28	23	45	34	27	22	31	25	20	28	22	19	25	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5577	5577	5577
5°	5589	5475	5492
10°	5549	5377	5369
15°	5484	5260	5212
20°	5394	5115	5055
25°	5288	4960	4863
30°	5160	4791	4687
35°	5040	4634	4526
40°	4918	4469	4364
45°	4780	4328	4221
50°	4649	4175	4095
55°	4491	4030	3946
60°	4317	3865	3793
65°	4137	3693	3622
70°	3931	3457	3446
75°	3607	3230	3231
80°	3183	2957	2996
85°	2789	2770	2923



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	2.2
10°-20°	231.8	6.2
20°-30°	344.8	9.2
30°-40°	408.4	10.9
40°-50°	422.2	11.3
50°-60°	389.0	10.4
60°-70°	314.4	8.4
70°-80°	210.6	5.6
80°-90°	110.0	2.9
90°-100°	164.9	4.4
100°-110°	267.9	7.1
110°-120°	239.3	6.4
120°-130°	186.6	5.0
130°-140°	143.4	3.8
140°-150°	104.1	2.8
150°-160°	72.2	1.9
160°-170°	42.6	1.1
170°-180°	13.8	0.4
0°-30°	658.3	17.6
0°-40°	1066.7	28.5
0°-60°	1877.9	50.1
0°-90°	2512.9	67.1
90°-120°	672.0	17.9
90°-150°	1106.1	29.5
90°-180°	1235.0	33.0
0°-180°	3747.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	862	856	862	862	82
15°	825	825	820	824	821	232
25°	749	751	747	750	746	345
35°	649	654	652	654	654	406
45°	534	543	548	553	555	412
55°	411	424	438	447	450	367
65°	283	302	323	335	339	280
75°	156	178	205	221	226	165
85°	47	75	104	122	130	50
90°	14	43	74	94	101	10
95°	20	62	317	196	154	19
105°	40	67	255	474	451	42
115°	63	82	201	409	479	62
125°	84	98	180	320	372	74
135°	96	115	166	258	300	75
145°	111	126	160	204	227	69
155°	126	135	156	176	184	58
165°	137	141	150	159	161	39
175°	143	143	144	146	145	14
180°	143	143	143	143	143	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	865.7	865.4	865.1	864.8	864.5	863.8	862.7	861.7	860.6	859.6	860.6
5°	863.6	863.3	862.9	862.5	862.2	861.3	860.0	858.7	857.4	856.1	857.5
7.5°	856.1	855.9	855.7	855.6	855.4	854.7	853.4	852.0	850.6	849.3	850.6
10°	849.3	849.3	849.3	849.3	849.3	848.6	847.0	845.5	844.0	842.5	843.8
12.5°	839.8	839.9	840.1	840.2	840.4	839.8	838.7	837.5	836.3	835.0	836.1
15°	824.8	824.9	825.1	825.2	825.5	824.9	823.6	822.3	820.9	819.6	820.8
17.5°	805.1	805.4	805.8	806.2	806.6	806.1	804.8	803.5	802.2	800.9	801.7
20°	790.8	791.2	791.6	792.0	792.4	791.9	790.6	789.3	787.9	786.6	787.2
22.5°	774.6	775.3	775.9	776.7	777.3	776.9	775.4	774.0	772.5	771.0	771.8
25°	749.3	749.9	750.5	751.1	751.6	751.3	750.2	749.1	748.0	746.8	747.5
27.5°	721.2	722.1	722.9	723.7	724.6	724.3	723.1	721.8	720.5	719.3	719.7
30°	700.3	701.4	702.5	703.6	704.7	704.7	703.6	702.5	701.4	700.3	700.7
32.5°	681.3	682.2	683.2	684.2	685.2	685.3	684.4	683.6	682.8	682.0	682.3
35°	648.6	650.0	651.3	652.6	653.9	654.3	653.7	653.1	652.6	652.0	652.6
37.5°	615.9	617.1	618.3	619.5	620.8	621.3	621.0	620.9	620.7	620.5	621.3
40°	593.5	595.1	596.6	598.1	599.6	600.2	600.1	599.9	599.7	599.5	600.2
42.5°	569.2	571.1	573.1	575.0	577.0	578.2	578.6	579.0	579.4	579.8	580.7
45°	534.3	536.4	538.4	540.5	542.6	544.0	545.0	545.9	546.9	547.8	549.2
47.5°	498.6	500.5	502.4	504.3	506.2	508.0	509.6	511.3	512.8	514.5	516.4
50°	474.2	476.2	478.3	480.4	482.4	484.5	486.6	488.7	490.7	492.8	494.9
52.5°	448.4	450.9	453.5	456.0	458.5	461.1	463.6	466.1	468.6	471.2	473.4
55°	410.7	413.7	416.7	419.7	422.7	425.7	428.8	431.8	434.7	437.7	439.9
57.5°	372.0	375.7	379.3	382.9	386.5	390.0	393.5	397.0	400.4	403.9	406.3
60°	346.3	350.1	353.8	357.6	361.3	365.2	368.9	372.7	376.4	380.2	383.0
62.5°	321.2	325.0	328.8	332.6	336.3	340.2	344.3	348.4	352.4	356.4	359.6
65°	282.8	287.1	291.5	295.8	300.1	304.5	309.1	313.6	318.1	322.6	325.5
67.5°	246.5	250.8	254.9	259.1	263.3	267.7	272.2	276.9	281.4	286.0	289.4
70°	220.1	224.5	228.8	233.2	237.5	242.1	247.0	251.8	256.7	261.6	265.2
72.5°	194.4	198.9	203.3	207.8	212.3	217.2	222.6	228.0	233.3	238.6	242.5
75°	155.8	160.7	165.6	170.5	175.4	180.8	186.9	192.9	198.9	204.9	208.6
77.5°	118.7	124.3	130.0	135.7	141.3	147.0	152.8	158.6	164.4	170.2	174.3
80°	95.7	101.3	107.0	112.6	118.3	124.3	130.7	137.1	143.5	149.9	154.0
82.5°	74.7	80.6	86.6	92.5	98.5	104.7	111.3	117.8	124.3	130.9	134.9
85°	46.6	52.7	59.0	65.2	71.4	77.8	84.4	91.0	97.6	104.1	108.3
87.5°	26.5	32.5	38.7	44.8	51.0	57.3	63.8	70.3	76.7	83.2	87.6
90°	13.9	20.1	26.7	33.3	39.9	46.7	53.4	60.4	67.1	74.0	78.7
92.5°	15.7	22.0	30.0	39.1	49.7	64.2	86.4	119.4	154.6	199.6	146.1
95°	20.5	25.7	32.9	40.9	52.2	70.8	108.0	177.8	263.7	317.1	315.8
97.5°	25.8	30.5	36.5	44.1	54.2	68.8	95.4	148.1	237.4	330.2	377.6
100°	29.5	34.0	39.1	46.2	55.7	69.3	92.0	135.5	214.1	314.4	390.4
102.5°	33.7	37.7	42.2	49.2	58.0	71.1	91.8	129.1	196.4	289.8	377.8
105°	40.2	43.2	47.6	53.6	61.1	73.5	91.9	123.2	176.9	255.4	341.9
107.5°	46.6	49.7	53.6	58.5	65.9	77.1	94.8	122.2	166.9	231.2	306.2
110°	51.2	54.0	57.4	62.3	68.8	80.1	97.2	122.3	162.5	219.0	285.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	56.5	58.9	61.6	66.0	72.1	82.8	99.3	123.1	159.9	210.8	269.2
115°	63.3	65.1	67.3	71.3	76.9	87.2	102.8	124.4	156.9	200.7	250.5
117.5°	69.4	71.1	72.9	76.3	82.1	91.8	106.6	126.4	155.0	193.7	237.6
120°	73.9	75.4	77.1	80.3	85.8	95.4	109.8	127.9	154.5	189.6	230.0
122.5°	78.1	79.0	80.2	83.1	88.7	98.1	112.3	129.7	153.5	185.7	223.0
125°	84.1	84.5	85.7	88.1	93.4	102.6	115.9	132.1	152.5	180.3	213.2
127.5°	88.0	88.7	90.3	93.4	99.1	108.0	120.3	134.8	152.4	175.7	203.9
130°	91.0	91.6	93.8	97.3	103.2	111.9	123.5	137.1	152.7	173.2	198.3
132.5°	92.6	93.7	96.4	100.6	106.8	115.3	126.3	138.6	152.6	170.5	192.8
135°	96.2	97.2	100.4	104.8	110.7	119.0	129.3	140.1	152.1	166.4	185.2
137.5°	100.8	101.5	104.5	109.0	114.8	123.0	131.8	141.5	152.4	163.7	179.0
140°	102.8	103.7	107.1	111.8	117.2	125.1	133.7	142.5	151.9	161.9	175.5
142.5°	106.1	106.6	109.7	114.1	119.2	126.5	134.4	142.6	151.4	160.8	172.7
145°	110.9	111.3	114.0	117.8	122.9	129.4	136.9	144.1	151.8	160.2	169.8
147.5°	115.1	115.4	118.0	121.7	126.2	132.0	138.6	145.1	152.1	159.5	167.4
150°	118.1	118.7	120.7	124.5	128.5	133.4	139.7	145.8	152.1	158.7	165.7
152.5°	121.4	121.7	123.5	126.8	130.6	135.0	140.9	146.3	151.9	157.8	164.0
155°	125.6	125.6	127.3	130.2	133.1	137.1	142.0	146.7	151.2	156.2	161.3
157.5°	129.5	129.4	130.8	133.2	135.7	138.8	143.0	146.9	150.5	154.4	158.8
160°	132.0	131.7	132.8	134.9	137.1	139.7	143.5	146.9	149.9	153.3	156.8
162.5°	134.0	133.8	134.9	136.7	138.5	140.6	144.0	146.8	149.1	151.9	154.9
165°	137.1	136.6	137.5	138.8	140.1	141.8	144.1	146.3	148.1	149.9	152.1
167.5°	139.3	138.9	139.5	140.2	141.0	142.2	144.1	145.7	146.5	147.8	149.4
170°	140.6	140.3	140.6	141.2	141.8	142.6	144.1	145.2	145.8	146.7	147.8
172.5°	141.5	141.0	141.3	141.9	142.2	142.6	143.8	144.8	144.9	145.3	146.2
175°	142.6	142.0	142.4	142.6	142.6	142.6	143.5	144.1	143.8	143.8	144.1
177.5°	143.2	142.7	142.7	142.9	142.7	142.7	143.2	143.4	142.9	142.9	143.2
180°	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	861.7	862.7	863.8	864.3	864.1	864.0	863.8	863.6
5°	859.1	860.5	862.1	862.7	862.5	862.3	862.2	862.0
7.5°	851.9	853.2	854.5	855.1	854.9	854.8	854.5	854.4
10°	845.1	846.4	847.7	848.3	848.2	848.0	847.7	847.6
12.5°	837.1	838.1	839.1	839.4	838.9	838.4	837.9	837.4
15°	821.9	823.0	824.2	824.3	823.6	822.8	822.1	821.3
17.5°	802.6	803.5	804.3	804.5	804.0	803.6	803.2	802.7
20°	787.7	788.3	788.9	789.1	789.1	789.1	789.1	789.1
22.5°	772.5	773.1	773.9	774.0	773.6	773.1	772.7	772.3
25°	748.4	749.1	749.8	749.7	748.8	747.9	746.9	746.0
27.5°	720.2	720.8	721.3	721.5	721.1	720.7	720.4	720.1
30°	701.0	701.4	701.7	701.9	701.6	701.5	701.3	701.1
32.5°	682.7	683.1	683.5	683.5	683.4	683.2	683.0	682.8
35°	653.1	653.7	654.3	654.5	654.5	654.5	654.5	654.5
37.5°	622.0	622.7	623.5	623.9	623.8	623.7	623.6	623.5
40°	601.0	601.8	602.5	603.1	603.4	603.8	604.2	604.5
42.5°	581.6	582.5	583.4	583.9	584.0	584.1	584.2	584.2
45°	550.5	551.8	553.1	553.8	554.1	554.2	554.4	554.6
47.5°	518.3	520.2	522.1	523.3	523.7	524.2	524.6	525.0
50°	496.9	499.0	501.1	502.4	503.0	503.5	504.1	504.7
52.5°	475.6	477.8	480.0	481.4	481.8	482.2	482.6	483.0
55°	441.9	444.0	446.1	447.4	448.2	449.0	449.7	450.5
57.5°	408.6	411.0	413.4	414.8	415.4	416.0	416.5	417.1
60°	385.8	388.7	391.5	393.1	393.7	394.3	394.8	395.4
62.5°	362.7	365.8	369.0	370.9	371.6	372.3	373.0	373.7
65°	328.2	331.1	333.9	335.7	336.5	337.2	337.9	338.7
67.5°	292.9	296.3	299.7	301.9	302.9	303.9	304.8	305.8
70°	268.8	272.4	276.0	278.3	279.4	280.5	281.7	282.8
72.5°	246.4	250.2	254.1	256.5	257.3	258.1	258.9	259.8
75°	212.5	216.2	220.0	222.3	223.2	224.2	225.1	226.1
77.5°	178.5	182.6	186.8	189.2	190.0	190.7	191.4	192.2
80°	158.2	162.3	166.4	168.8	169.7	170.4	171.1	171.9
82.5°	138.8	142.8	146.8	149.5	150.9	152.2	153.6	155.0
85°	112.4	116.6	120.7	123.5	125.1	126.5	128.1	129.6
87.5°	92.0	96.4	100.8	103.7	105.0	106.3	107.7	109.0
90°	83.2	87.9	92.5	95.9	97.2	98.6	100.1	101.4
92.5°	126.1	116.3	111.3	109.8	107.5	108.0	109.0	109.8
95°	277.3	237.6	206.3	184.8	165.7	158.3	157.4	154.1
97.5°	374.1	347.2	316.7	285.7	269.1	254.3	247.2	244.8
100°	416.5	406.3	380.6	353.2	334.4	314.8	305.2	301.8
102.5°	428.9	441.4	431.0	413.2	393.1	379.4	369.0	366.6
105°	414.8	458.1	474.5	473.9	466.0	457.8	453.4	451.2
107.5°	378.2	434.6	470.9	488.4	494.2	495.3	494.6	493.4
110°	351.2	409.5	453.7	480.7	495.0	501.7	505.1	506.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	329.3	384.7	429.3	460.5	480.8	491.5	497.8	501.2
115°	301.4	349.4	392.3	426.0	449.6	464.6	473.8	478.7
117.5°	281.7	323.3	360.5	391.6	415.4	431.0	440.2	443.8
120°	270.7	308.4	343.3	370.8	393.3	408.2	417.2	420.6
122.5°	261.4	296.5	327.8	353.6	373.7	387.6	396.5	399.7
125°	248.3	280.6	308.7	331.4	348.5	361.3	368.5	372.3
127.5°	234.6	264.9	291.1	312.4	328.2	339.7	346.7	349.1
130°	226.6	254.5	279.6	300.2	315.5	326.0	332.6	335.3
132.5°	218.1	244.5	267.5	287.2	302.5	312.7	318.9	321.6
135°	206.2	228.4	249.4	267.5	281.1	291.6	297.7	300.4
137.5°	196.3	214.6	232.2	247.6	259.7	269.1	274.7	277.3
140°	190.5	206.1	221.4	235.0	246.4	254.6	259.7	261.9
142.5°	185.6	198.9	212.0	223.7	233.5	240.6	245.5	247.4
145°	179.7	189.6	199.4	208.1	215.7	221.4	225.3	227.1
147.5°	174.7	182.2	189.4	195.6	201.5	205.7	207.9	208.7
150°	172.0	178.4	183.8	189.1	193.6	197.3	198.6	199.1
152.5°	169.7	175.4	180.3	184.4	188.1	190.9	192.1	192.4
155°	166.2	170.9	174.9	178.1	180.9	183.0	183.8	184.1
157.5°	162.8	166.6	169.7	172.2	174.5	176.1	176.9	176.8
160°	160.5	163.4	166.2	168.3	170.3	171.7	172.3	172.0
162.5°	157.9	160.6	163.1	164.9	166.4	167.5	167.7	167.6
165°	154.4	156.5	158.2	159.6	160.8	161.3	161.3	161.3
167.5°	151.1	152.5	153.8	154.8	155.4	155.9	155.6	155.6
170°	149.3	150.1	151.0	151.6	152.1	152.5	152.5	152.1
172.5°	147.2	148.1	148.7	149.0	149.1	149.7	149.2	148.9
175°	145.0	145.0	145.5	145.5	145.5	145.8	145.2	145.0
177.5°	143.4	143.6	143.6	143.6	143.4	143.6	142.9	142.9
180°	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9

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