

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: P333227-930

Luminaire Tested: **S125DIP-S850D810U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333227-930
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-S850D810U930-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4962.9 lumens
Efficiency: N/A
Efficacy: 108.1 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: General Diffuse

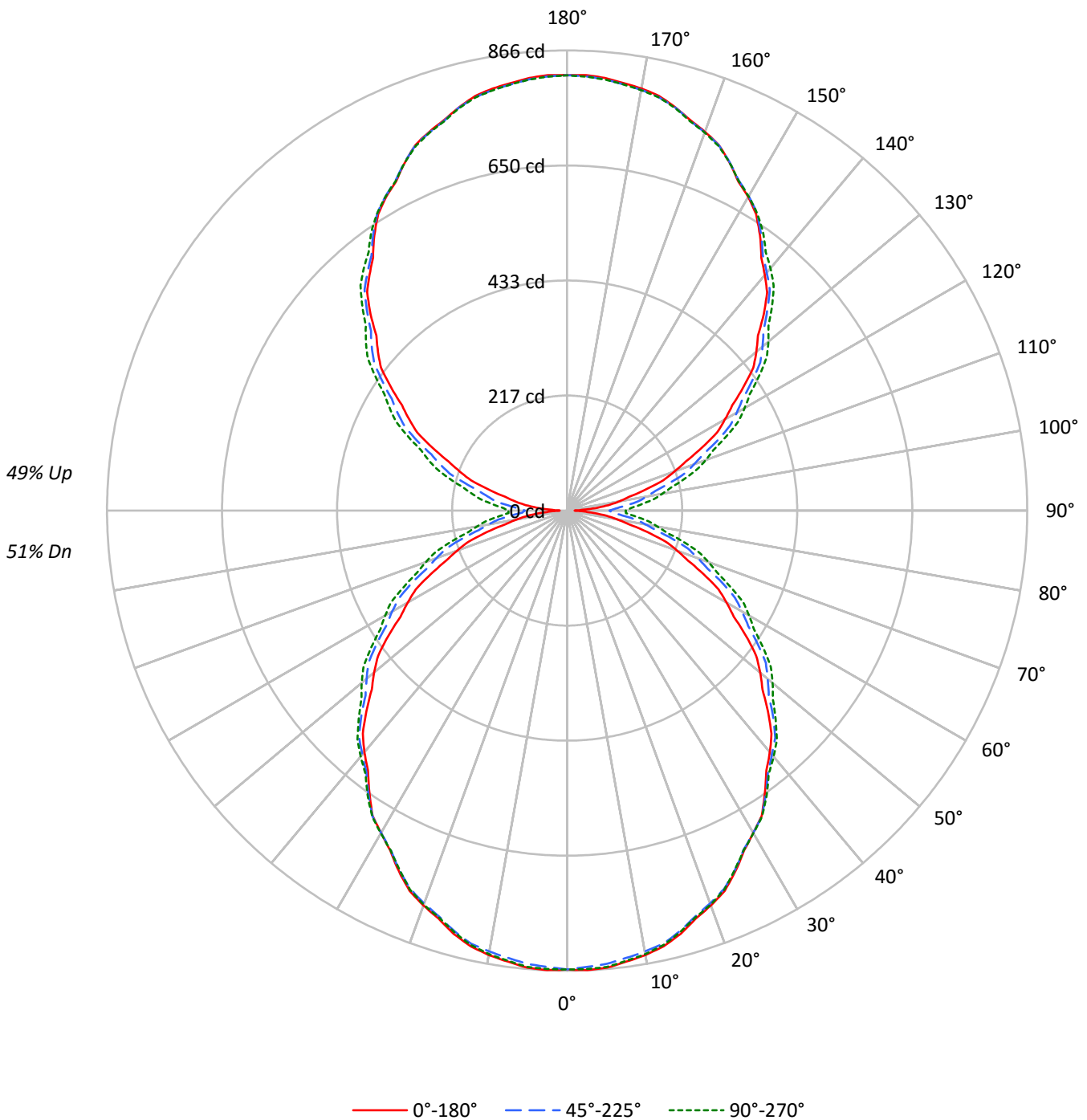
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	97	93	88	85	89	85	82	79	72	70	67	60	58	56	49	48	46	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	47	43	40	38	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	32	28
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	33	37	32	29	30	27	24	21
6	62	49	41	35	57	46	39	33	39	33	29	33	28	25	27	24	21	18
7	57	45	36	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	20	27	22	18	23	19	16	19	16	14	12

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	1.6
10°-20°	231.8	4.7
20°-30°	344.8	6.9
30°-40°	408.4	8.2
40°-50°	422.2	8.5
50°-60°	389.0	7.8
60°-70°	314.4	6.3
70°-80°	210.6	4.2
80°-90°	111.0	2.2
90°-100°	116.1	2.3
100°-110°	207.2	4.2
110°-120°	304.7	6.1
120°-130°	378.4	7.6
130°-140°	412.2	8.3
140°-150°	398.2	8.0
150°-160°	333.2	6.7
160°-170°	221.5	4.5
170°-180°	77.5	1.6
0°-30°	658.3	13.3
0°-40°	1066.7	21.5
0°-60°	1877.9	37.8
0°-90°	2513.9	50.7
90°-120°	628.1	12.7
90°-150°	1816.9	36.6
90°-180°	2449.0	49.3
0°-180°	4962.9	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	46	80	101	110	11
95°	52	76	111	133	141	53
105°	153	170	199	219	228	163
115°	280	289	312	326	331	277
125°	404	408	425	437	441	362
135°	523	526	533	543	545	403
145°	633	634	636	640	642	395
155°	723	723	724	726	723	333
165°	786	785	786	788	784	222
175°	817	815	815	818	814	78
180°	819	819	819	819	819	



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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°	26.6	32.8	39.1	45.2	51.5	58.0	64.6	71.2	77.8	84.4	88.8
90°	14.2	21.4	28.5	35.6	42.8	50.1	57.5	64.8	72.2	79.7	84.7
92.5°	27.6	34.0	40.4	46.7	53.1	60.2	67.9	75.7	83.4	91.2	96.3
95°	52.4	57.6	62.8	68.0	73.1	79.7	87.5	95.3	103.1	110.9	116.0
97.5°	78.8	83.3	87.9	92.4	96.9	103.2	111.4	119.5	127.6	135.7	140.6
100°	98.6	102.5	106.5	110.4	114.4	120.3	128.2	136.0	143.9	151.7	156.9
102.5°	119.8	124.0	128.2	132.5	136.7	142.2	149.0	155.8	162.7	169.4	174.6
105°	153.0	156.7	160.5	164.1	167.9	172.9	179.4	186.0	192.4	198.9	203.6
107.5°	189.7	193.0	196.2	199.5	202.8	207.4	213.5	219.6	225.7	231.7	235.9
110°	215.1	218.0	220.9	224.0	226.9	231.2	236.9	242.6	248.3	254.0	258.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	241.6	243.7	245.9	248.1	250.2	254.2	259.8	265.5	271.2	276.8	280.4
115°	279.9	281.8	283.6	285.5	287.4	290.9	296.1	301.3	306.5	311.6	314.9
117.5°	318.3	319.4	320.5	321.6	322.8	325.8	330.7	335.5	340.4	345.3	348.6
120°	342.8	344.1	345.3	346.6	347.9	350.7	355.2	359.6	364.1	368.6	371.8
122.5°	368.6	369.1	369.7	370.1	370.7	373.2	377.7	382.3	386.9	391.4	394.4
125°	404.4	405.0	405.7	406.3	407.1	409.4	413.2	417.1	421.0	424.9	427.7
127.5°	441.8	442.1	442.4	442.7	443.0	444.7	448.0	451.3	454.5	457.8	460.4
130°	464.7	465.3	465.8	466.3	466.8	468.6	471.5	474.4	477.3	480.2	482.7
132.5°	487.1	488.1	489.3	490.4	491.5	493.1	495.0	497.0	499.0	501.0	503.4
135°	523.2	523.8	524.5	525.2	525.9	526.9	528.4	529.8	531.2	532.7	535.2
137.5°	557.2	557.8	558.6	559.2	559.9	560.7	561.7	562.6	563.5	564.5	566.9
140°	578.5	579.2	579.8	580.6	581.3	582.0	582.5	583.2	583.8	584.4	586.8
142.5°	600.4	600.8	601.3	601.7	602.2	602.7	603.2	603.8	604.4	605.0	606.9
145°	632.7	633.0	633.4	633.7	634.1	634.5	635.0	635.4	635.9	636.3	637.2
147.5°	661.6	661.9	662.3	662.6	662.8	663.2	663.6	663.9	664.2	664.6	665.2
150°	681.5	681.3	681.3	681.1	680.9	681.2	681.8	682.3	682.9	683.5	683.5
152.5°	697.8	698.1	698.2	698.5	698.6	698.9	699.0	699.3	699.5	699.8	700.1
155°	722.9	722.9	722.9	722.9	722.9	723.0	723.2	723.3	723.4	723.6	724.1
157.5°	745.4	745.1	744.8	744.4	744.1	744.0	744.2	744.4	744.4	744.6	745.2
160°	758.6	758.2	757.8	757.4	756.9	756.8	756.9	757.1	757.2	757.4	758.0
162.5°	770.4	770.1	769.7	769.5	769.2	769.0	769.0	769.1	769.1	769.2	769.8
165°	786.1	785.8	785.5	785.2	785.0	784.9	785.0	785.1	785.3	785.5	786.0
167.5°	799.3	798.7	798.2	797.6	797.0	796.8	796.8	796.8	796.8	796.8	797.6
170°	806.5	805.9	805.4	804.8	804.2	803.9	803.9	803.9	803.9	803.9	804.8
172.5°	811.5	811.0	810.4	809.8	809.3	809.0	809.0	809.0	809.0	809.0	809.8
175°	817.3	816.8	816.2	815.6	815.1	814.7	814.7	814.7	814.7	814.7	815.6
177.5°	820.3	819.8	819.4	818.9	818.4	818.2	818.1	817.9	817.8	817.7	818.4
180°	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2



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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°	93.3	97.8	102.2	105.2	106.6	107.9	109.3	110.8
90°	89.7	94.7	99.8	103.1	104.9	106.6	108.4	110.1
92.5°	101.4	106.6	111.6	115.0	116.7	118.3	119.9	121.6
95°	121.2	126.3	131.4	134.8	136.4	138.0	139.6	141.2
97.5°	145.5	150.4	155.3	158.4	159.9	161.3	162.8	164.3
100°	162.2	167.4	172.6	175.9	177.4	178.8	180.2	181.6
102.5°	179.8	185.0	190.2	193.6	195.1	196.6	198.1	199.7
105°	208.1	212.8	217.4	220.5	222.3	224.0	225.8	227.6
107.5°	240.0	244.2	248.3	250.9	252.1	253.2	254.4	255.5
110°	262.0	266.0	270.0	272.6	273.8	274.9	276.1	277.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	284.1	287.6	291.3	293.7	294.7	295.8	296.9	297.9
115°	318.1	321.4	324.6	326.7	327.7	328.7	329.7	330.7
117.5°	351.9	355.2	358.6	360.5	361.3	362.0	362.7	363.4
120°	375.0	378.2	381.4	383.3	383.8	384.4	385.0	385.6
122.5°	397.3	400.2	403.2	405.0	405.6	406.3	407.0	407.6
125°	430.4	433.1	435.9	437.7	438.4	439.2	440.0	440.8
127.5°	463.1	465.7	468.3	470.1	470.8	471.7	472.5	473.3
130°	485.2	487.7	490.2	491.8	492.4	493.1	493.7	494.4
132.5°	506.0	508.4	510.9	512.4	512.7	513.1	513.6	514.0
135°	537.6	540.1	542.5	544.0	544.3	544.7	545.0	545.4
137.5°	569.2	571.7	574.1	575.3	575.4	575.4	575.4	575.4
140°	589.1	591.4	593.8	595.0	595.1	595.1	595.2	595.2
142.5°	608.9	610.8	612.7	613.7	613.8	613.8	613.8	613.9
145°	638.1	639.1	640.0	640.7	641.0	641.3	641.6	642.0
147.5°	665.9	666.5	667.2	667.2	666.5	665.9	665.3	664.6
150°	683.5	683.5	683.5	683.4	683.3	683.2	683.1	683.0
152.5°	700.4	700.7	701.1	701.1	700.6	700.1	699.6	699.1
155°	724.7	725.3	725.9	725.8	725.0	724.4	723.7	722.9
157.5°	745.8	746.3	746.9	746.7	745.8	744.9	743.9	743.0
160°	758.6	759.0	759.6	759.6	758.9	758.1	757.4	756.8
162.5°	770.5	771.2	771.8	771.8	770.9	770.1	769.3	768.5
165°	786.6	787.2	787.7	787.6	786.7	785.9	785.0	784.2
167.5°	798.5	799.3	800.2	800.1	799.3	798.4	797.5	796.6
170°	805.6	806.5	807.3	807.2	806.2	805.3	804.3	803.3
172.5°	810.7	811.5	812.4	812.4	811.5	810.7	809.8	808.9
175°	816.4	817.3	818.2	818.1	817.1	816.1	815.1	814.2
177.5°	819.0	819.7	820.4	820.4	819.5	818.8	818.0	817.2
180°	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2

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