

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: P333163-830

Luminaire Tested: **S125DIP-S610D365U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333163-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S610D365U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3643.6 lumens
Efficiency: N/A
Efficacy: 132.5 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: General Diffuse

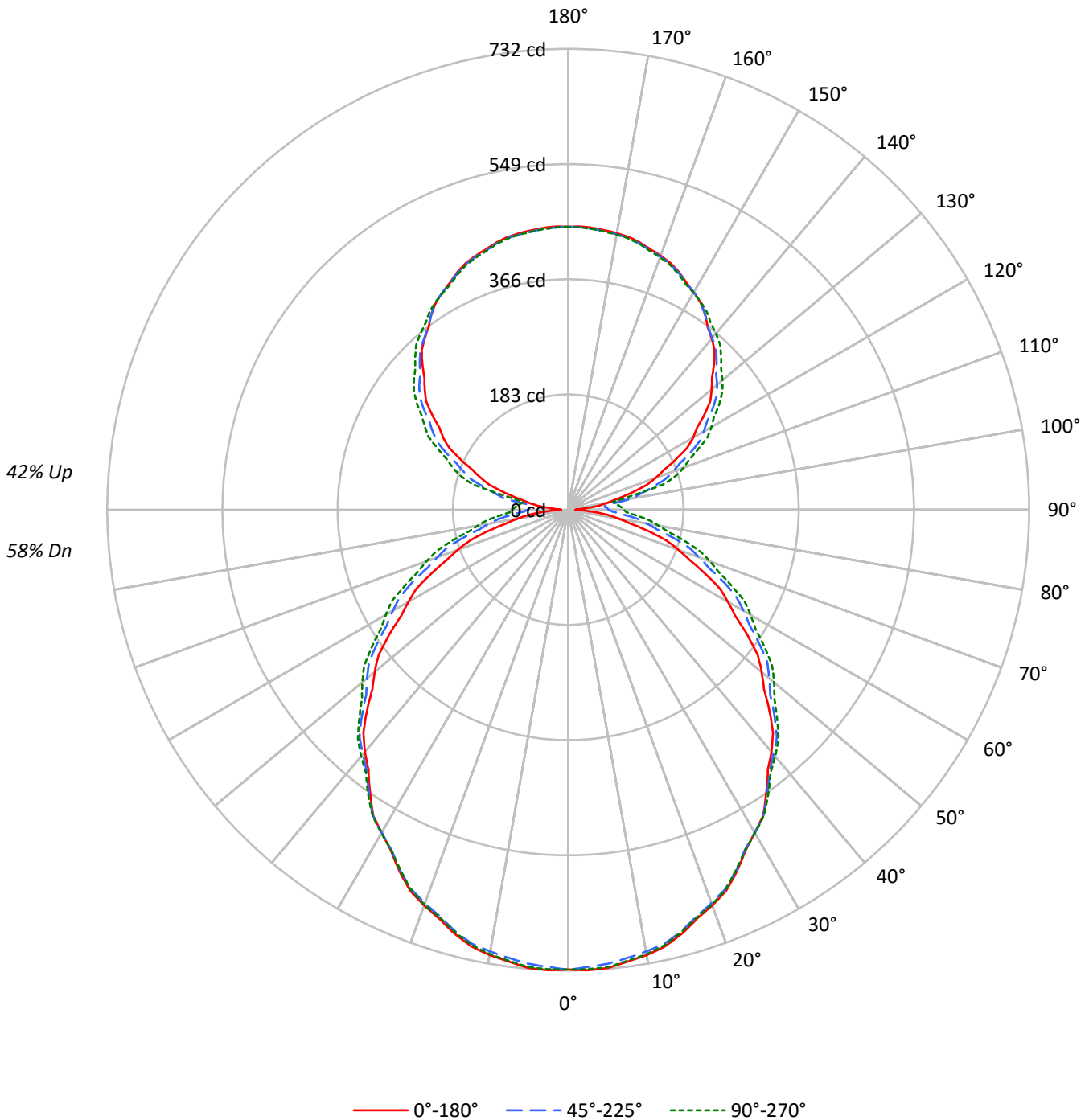
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333163-830

CATALOG NUMBER: S125DIP-S610D365U830-4F0-1E-UDD-D

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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	64	64	64	58
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	54	52	47
2	90	82	75	69	83	76	70	65	66	62	58	57	53	50	48	45	43	39
3	82	71	64	58	76	67	60	54	58	53	48	50	46	42	42	39	36	33
4	75	63	55	48	69	59	52	46	51	45	41	44	40	36	38	34	31	28
5	68	56	48	41	63	53	45	39	46	40	35	40	35	31	34	30	27	24
6	63	50	42	36	58	47	40	34	41	35	31	36	31	27	31	27	24	21
7	58	45	37	31	54	43	35	30	37	31	27	32	28	24	28	24	21	18
8	54	41	33	28	50	39	32	26	34	28	24	30	25	21	26	22	19	16
9	50	38	30	25	47	35	28	24	31	25	21	27	23	19	24	20	17	15
10	47	35	27	22	44	33	26	21	29	23	19	25	21	17	22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4718	4718	4718
5°	4727	4630	4645
10°	4693	4548	4541
15°	4638	4449	4409
20°	4562	4326	4276
25°	4473	4195	4112
30°	4364	4051	3964
35°	4263	3919	3829
40°	4160	3779	3691
45°	4043	3661	3570
50°	3932	3531	3463
55°	3798	3408	3337
60°	3652	3269	3208
65°	3499	3124	3063
70°	3326	2924	2915
75°	3052	2732	2732
80°	2694	2501	2532
85°	2358	2344	2469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	1.9
10°-20°	196.1	5.4
20°-30°	291.6	8.0
30°-40°	345.4	9.5
40°-50°	357.1	9.8
50°-60°	329.0	9.0
60°-70°	265.9	7.3
70°-80°	178.1	4.9
80°-90°	93.3	2.6
90°-100°	68.2	1.9
100°-110°	138.9	3.8
110°-120°	208.2	5.7
120°-130°	248.8	6.8
130°-140°	258.4	7.1
140°-150°	237.8	6.5
150°-160°	191.4	5.3
160°-170°	123.8	3.4
170°-180°	42.7	1.2
0°-30°	556.7	15.3
0°-40°	902.2	24.8
0°-60°	1588.2	43.6
0°-90°	2125.6	58.3
90°-120°	415.2	11.4
90°-150°	1160.3	31.8
90°-180°	1518.0	41.7
0°-180°	3643.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	730	729	724	729	729	69
15°	698	698	693	697	695	196
25°	634	636	632	634	631	292
35°	549	553	551	554	554	343
45°	452	460	463	468	469	349
55°	347	359	370	378	381	310
65°	239	256	273	283	286	237
75°	132	151	173	187	191	140
85°	39	63	88	103	110	42
90°	12	37	64	82	88	8
95°	28	46	58	74	80	32
105°	104	118	139	152	158	111
115°	188	196	214	225	228	186
125°	264	267	280	290	293	236
135°	328	329	333	341	344	252
145°	379	379	379	383	384	237
155°	416	415	415	416	414	192
165°	439	438	438	440	437	124
175°	449	448	448	450	447	43
180°	449	449	449	449	449	



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CATALOG NUMBER: S125DIP-S610D365U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	732.2	731.9	731.7	731.4	731.1	730.6	729.7	728.8	727.9	727.0	727.9
5°	730.5	730.1	729.8	729.5	729.2	728.5	727.4	726.2	725.1	724.0	725.3
7.5°	724.0	723.9	723.8	723.6	723.5	722.8	721.7	720.6	719.4	718.3	719.3
10°	718.3	718.3	718.3	718.3	718.3	717.7	716.3	715.1	713.8	712.6	713.7
12.5°	710.3	710.4	710.5	710.7	710.8	710.3	709.3	708.3	707.3	706.2	707.1
15°	697.5	697.7	697.9	698.0	698.1	697.7	696.5	695.4	694.4	693.2	694.2
17.5°	680.9	681.2	681.6	681.8	682.2	681.7	680.7	679.6	678.4	677.3	678.1
20°	668.8	669.2	669.5	669.9	670.1	669.8	668.6	667.5	666.4	665.2	665.7
22.5°	655.2	655.7	656.3	656.9	657.4	657.0	655.8	654.6	653.4	652.1	652.7
25°	633.8	634.2	634.7	635.2	635.7	635.5	634.5	633.6	632.5	631.6	632.3
27.5°	610.0	610.7	611.4	612.1	612.8	612.7	611.5	610.5	609.4	608.3	608.7
30°	592.2	593.2	594.2	595.1	596.1	596.1	595.1	594.2	593.2	592.2	592.6
32.5°	576.2	577.0	577.9	578.7	579.5	579.6	578.9	578.2	577.5	576.7	577.1
35°	548.6	549.7	550.8	551.9	553.0	553.4	552.9	552.3	551.9	551.4	551.9
37.5°	520.9	522.0	522.9	524.0	525.0	525.4	525.3	525.1	524.9	524.8	525.4
40°	502.0	503.3	504.5	505.9	507.1	507.7	507.5	507.4	507.2	507.0	507.7
42.5°	481.4	483.1	484.7	486.4	488.0	489.0	489.4	489.7	490.0	490.4	491.2
45°	451.9	453.6	455.3	457.1	458.9	460.1	461.0	461.8	462.5	463.4	464.5
47.5°	421.7	423.3	424.9	426.5	428.2	429.6	431.0	432.3	433.8	435.1	436.8
50°	401.1	402.7	404.5	406.3	408.0	409.8	411.5	413.3	415.0	416.8	418.6
52.5°	379.3	381.4	383.5	385.7	387.8	389.9	392.1	394.2	396.3	398.4	400.3
55°	347.3	349.9	352.4	355.0	357.5	360.1	362.6	365.1	367.7	370.2	372.0
57.5°	314.7	317.7	320.7	323.9	326.9	329.9	332.8	335.7	338.7	341.6	343.6
60°	292.9	296.1	299.3	302.5	305.7	308.8	312.0	315.2	318.4	321.5	324.0
62.5°	271.7	274.8	278.1	281.3	284.5	287.8	291.2	294.6	298.0	301.5	304.2
65°	239.2	242.9	246.5	250.2	253.8	257.6	261.4	265.2	269.0	272.9	275.2
67.5°	208.6	212.1	215.6	219.1	222.6	226.4	230.3	234.1	238.0	242.0	244.8
70°	186.2	189.8	193.5	197.2	200.9	204.7	208.9	213.0	217.2	221.3	224.3
72.5°	164.4	168.2	172.0	175.8	179.6	183.7	188.2	192.7	197.3	201.8	205.1
75°	131.8	135.9	140.1	144.2	148.4	153.0	158.1	163.2	168.2	173.3	176.4
77.5°	100.4	105.2	110.0	114.7	119.5	124.3	129.2	134.1	139.0	143.9	147.4
80°	81.0	85.7	90.5	95.3	100.0	105.1	110.6	115.9	121.3	126.8	130.3
82.5°	63.2	68.1	73.2	78.2	83.3	88.6	94.1	99.6	105.2	110.7	114.0
85°	39.4	44.7	49.9	55.1	60.4	65.8	71.4	76.9	82.5	88.1	91.6
87.5°	22.4	27.6	32.8	38.1	43.3	48.6	54.1	59.7	65.1	70.7	74.4
90°	11.8	17.4	23.2	28.8	34.5	40.3	46.3	52.2	58.2	64.1	68.1
92.5°	15.5	19.7	24.0	28.4	32.6	37.8	43.7	49.8	55.8	61.7	65.7
95°	28.3	32.2	36.1	40.1	43.9	47.2	49.9	52.4	55.0	57.6	61.5
97.5°	48.1	52.2	56.4	60.5	64.6	66.4	66.2	65.8	65.4	65.1	66.4
100°	63.5	67.1	70.7	74.2	77.8	82.3	87.7	93.0	98.4	103.8	96.1
102.5°	79.2	82.6	86.0	89.4	92.7	96.9	102.1	107.3	112.4	117.5	118.7
105°	104.4	107.3	110.1	112.9	115.7	119.6	124.3	129.1	133.9	138.6	141.9
107.5°	130.6	132.7	134.9	137.0	139.2	142.7	147.4	152.1	156.9	161.6	164.8
110°	147.6	149.5	151.5	153.4	155.2	158.5	163.2	167.7	172.3	176.9	179.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	164.1	165.9	167.6	169.3	171.0	174.0	178.4	182.9	187.3	191.7	194.3
115°	188.2	189.7	191.1	192.7	194.2	197.0	201.2	205.4	209.6	213.9	216.4
117.5°	213.1	213.9	214.6	215.3	216.0	218.5	222.6	226.9	231.0	235.3	237.6
120°	229.1	229.5	230.0	230.4	230.7	232.9	236.8	240.6	244.5	248.5	251.0
122.5°	242.7	243.2	243.7	244.2	244.7	246.8	250.4	254.0	257.7	261.4	263.7
125°	264.4	264.8	265.1	265.5	265.8	267.6	270.8	274.0	277.2	280.3	282.6
127.5°	284.6	284.7	284.9	285.2	285.4	286.8	289.4	291.9	294.5	297.0	299.3
130°	297.4	297.6	297.7	297.9	298.2	299.4	301.7	304.1	306.3	308.7	310.7
132.5°	309.5	310.0	310.4	310.8	311.1	312.2	313.7	315.3	316.8	318.4	320.6
135°	327.6	327.9	328.2	328.5	328.8	329.4	330.4	331.3	332.2	333.3	335.2
137.5°	344.2	344.4	344.7	345.0	345.3	345.5	346.0	346.4	346.8	347.1	349.1
140°	354.6	354.7	354.9	355.0	355.2	355.2	355.3	355.4	355.5	355.6	357.5
142.5°	364.4	364.4	364.3	364.3	364.3	364.3	364.5	364.6	364.7	364.9	366.4
145°	378.9	378.9	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	379.7
147.5°	390.8	390.8	390.8	390.7	390.7	390.7	390.8	390.9	391.0	391.1	391.4
150°	398.8	398.7	398.5	398.3	398.2	398.2	398.3	398.5	398.7	398.8	399.0
152.5°	406.5	406.2	405.9	405.6	405.2	405.1	405.3	405.5	405.6	405.8	405.9
155°	416.5	416.0	415.6	415.1	414.7	414.5	414.7	414.8	415.0	415.1	415.4
157.5°	424.1	423.9	423.6	423.3	423.1	422.9	422.9	423.0	423.0	423.0	423.2
160°	429.4	429.0	428.6	428.1	427.7	427.5	427.5	427.6	427.7	427.8	428.1
162.5°	433.8	433.3	432.8	432.3	432.0	431.8	431.9	431.9	432.0	432.1	432.4
165°	439.4	439.0	438.6	438.1	437.7	437.5	437.5	437.6	437.7	437.8	438.2
167.5°	443.7	443.3	442.8	442.3	441.9	441.7	441.8	441.9	442.0	442.0	442.5
170°	446.1	445.6	445.1	444.6	444.0	443.8	443.9	443.9	444.0	444.1	444.7
172.5°	447.7	447.2	446.7	446.2	445.6	445.4	445.5	445.7	445.8	446.0	446.5
175°	449.4	449.0	448.6	448.1	447.7	447.5	447.5	447.6	447.7	447.8	448.4
177.5°	450.3	449.9	449.5	449.2	448.8	448.7	448.7	448.8	448.8	448.9	449.3
180°	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	728.8	729.7	730.6	730.9	730.8	730.8	730.6	730.5
5°	726.5	727.8	729.1	729.6	729.5	729.3	729.2	729.1
7.5°	720.5	721.6	722.7	723.2	723.0	722.9	722.7	722.6
10°	714.8	715.9	717.0	717.5	717.4	717.2	717.0	716.8
12.5°	707.9	708.8	709.7	709.9	709.5	709.1	708.7	708.2
15°	695.1	696.1	697.0	697.2	696.5	695.9	695.3	694.7
17.5°	678.8	679.5	680.2	680.4	680.0	679.7	679.3	678.9
20°	666.3	666.8	667.2	667.4	667.4	667.4	667.4	667.4
22.5°	653.3	653.9	654.5	654.6	654.2	653.8	653.5	653.1
25°	632.9	633.6	634.1	634.1	633.3	632.5	631.7	630.9
27.5°	609.2	609.6	610.1	610.1	609.8	609.5	609.3	609.0
30°	592.9	593.2	593.5	593.6	593.4	593.2	593.1	593.0
32.5°	577.4	577.7	578.1	578.2	578.0	577.8	577.7	577.5
35°	552.3	552.9	553.4	553.6	553.6	553.6	553.6	553.6
37.5°	526.0	526.7	527.4	527.6	527.5	527.4	527.4	527.4
40°	508.3	509.0	509.5	510.0	510.4	510.7	511.0	511.3
42.5°	491.9	492.7	493.4	493.9	494.0	494.0	494.1	494.2
45°	465.5	466.7	467.8	468.4	468.6	468.7	468.9	469.1
47.5°	438.4	440.0	441.6	442.6	443.0	443.3	443.7	444.0
50°	420.3	422.1	423.8	424.9	425.4	425.8	426.3	426.8
52.5°	402.2	404.1	406.0	407.1	407.5	407.7	408.1	408.5
55°	373.7	375.5	377.2	378.4	379.1	379.8	380.3	381.0
57.5°	345.6	347.6	349.6	350.8	351.4	351.9	352.3	352.8
60°	326.3	328.7	331.1	332.5	333.0	333.5	333.9	334.4
62.5°	306.8	309.4	312.1	313.7	314.2	314.9	315.5	316.1
65°	277.6	280.0	282.4	283.9	284.6	285.2	285.8	286.4
67.5°	247.7	250.6	253.4	255.3	256.2	257.0	257.9	258.6
70°	227.3	230.4	233.4	235.4	236.3	237.2	238.3	239.2
72.5°	208.4	211.6	214.9	216.9	217.6	218.3	219.0	219.7
75°	179.6	182.9	186.1	188.0	188.8	189.6	190.4	191.2
77.5°	150.9	154.5	158.0	160.0	160.6	161.3	161.9	162.6
80°	133.7	137.2	140.7	142.8	143.5	144.1	144.8	145.3
82.5°	117.4	120.8	124.2	126.5	127.6	128.8	129.9	131.0
85°	95.1	98.6	102.1	104.4	105.8	107.0	108.3	109.5
87.5°	78.1	81.9	85.6	88.0	89.3	90.4	91.5	92.7
90°	72.1	76.2	80.2	82.8	84.2	85.5	86.9	88.2
92.5°	69.6	73.5	77.4	79.9	81.2	82.4	83.6	84.8
95°	65.3	69.2	73.0	75.6	76.7	77.9	78.9	80.0
97.5°	67.6	68.8	70.1	71.3	72.4	73.4	74.6	75.6
100°	88.4	80.8	73.0	69.6	70.2	70.9	71.5	72.2
102.5°	119.8	120.9	122.1	120.6	116.5	112.4	108.3	104.2
105°	145.1	148.3	151.4	153.5	154.6	155.6	156.7	157.7
107.5°	168.0	171.2	174.3	176.3	177.0	177.8	178.5	179.3
110°	182.6	185.3	188.1	190.1	191.3	192.5	193.7	194.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	196.9	199.5	202.2	204.0	205.0	205.9	207.0	208.0
115°	219.0	221.5	224.1	225.6	226.1	226.7	227.2	227.7
117.5°	239.9	242.2	244.5	246.1	247.0	247.9	248.8	249.7
120°	253.5	256.1	258.6	260.2	260.8	261.4	261.9	262.6
122.5°	266.2	268.6	271.1	272.5	273.1	273.6	274.1	274.7
125°	284.8	287.1	289.4	290.8	291.3	291.9	292.5	293.0
127.5°	301.4	303.6	305.9	307.1	307.5	307.8	308.2	308.6
130°	312.6	314.6	316.7	317.9	318.3	318.8	319.1	319.6
132.5°	322.7	324.9	327.1	328.3	328.7	328.9	329.2	329.5
135°	337.1	339.0	340.9	342.0	342.4	342.8	343.1	343.5
137.5°	351.0	352.9	354.8	355.9	356.2	356.4	356.7	356.9
140°	359.4	361.3	363.2	364.2	364.4	364.6	364.9	365.0
142.5°	367.9	369.4	371.0	371.8	372.0	372.2	372.4	372.6
145°	380.6	381.4	382.3	382.9	383.0	383.2	383.4	383.6
147.5°	391.7	392.1	392.5	392.5	392.3	392.0	391.7	391.5
150°	399.1	399.3	399.4	399.3	398.8	398.4	397.9	397.6
152.5°	406.0	406.1	406.3	406.1	405.7	405.1	404.6	404.2
155°	415.6	415.8	416.0	415.8	415.3	414.6	414.1	413.5
157.5°	423.5	423.7	424.0	423.8	423.2	422.5	422.0	421.4
160°	428.4	428.7	429.0	428.9	428.2	427.6	427.1	426.5
162.5°	432.9	433.3	433.8	433.6	432.9	432.3	431.7	431.0
165°	438.7	439.1	439.6	439.5	438.9	438.3	437.7	437.2
167.5°	443.1	443.6	444.1	444.0	443.4	442.7	442.1	441.4
170°	445.3	445.9	446.5	446.5	445.8	445.2	444.4	443.7
172.5°	447.0	447.6	448.1	448.1	447.4	446.7	446.0	445.4
175°	448.9	449.6	450.2	450.2	449.4	448.7	448.1	447.4
177.5°	449.8	450.2	450.5	450.5	450.1	449.6	449.1	448.7
180°	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4

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