

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: P333173-830

Luminaire Tested: **S125DIP-S610D590U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333173-830
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-S610D590U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4192.0 lumens
Efficiency: N/A
Efficacy: 127.8 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

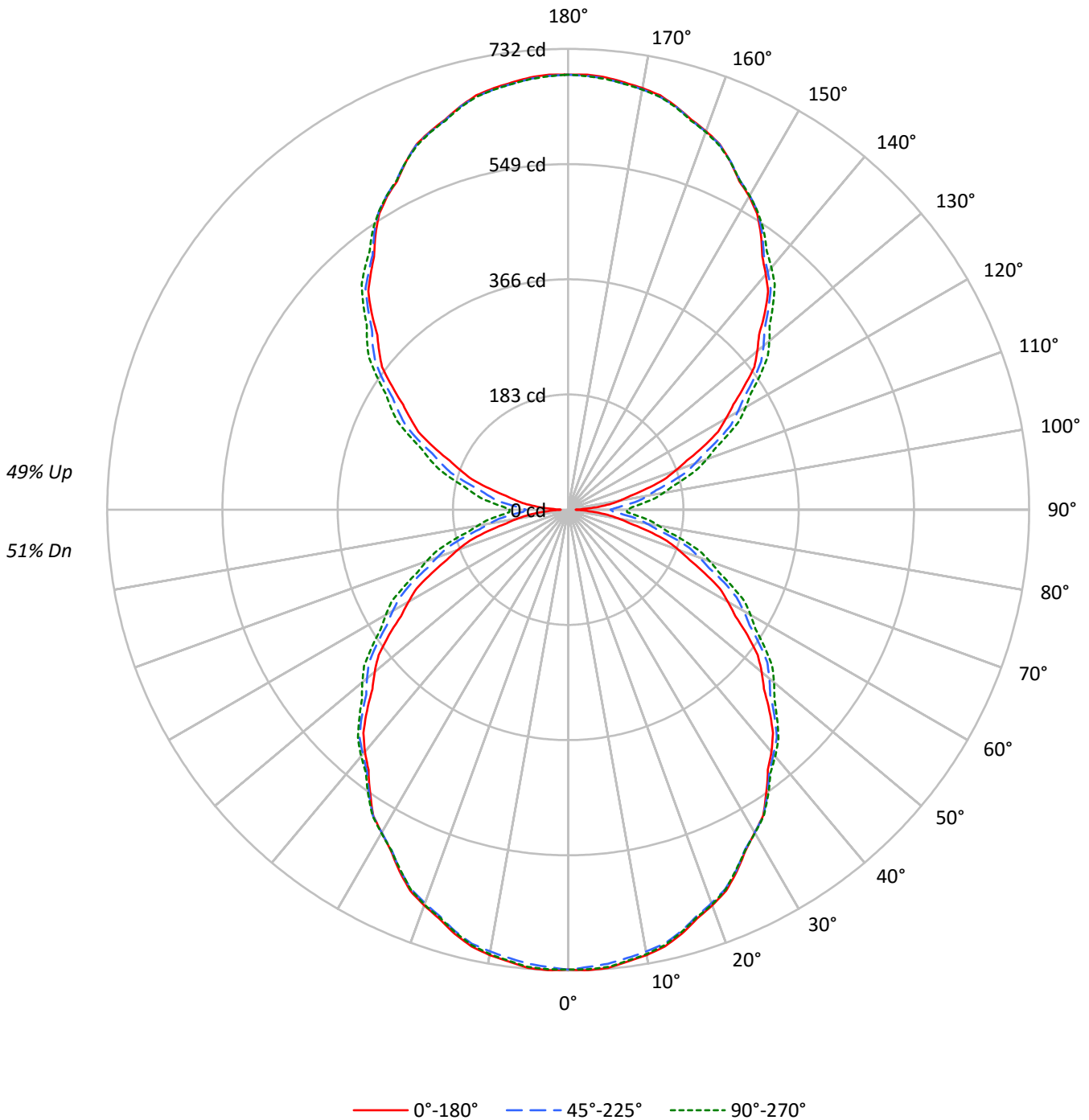
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	39	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	29	25	27	24	21	18
7	57	45	37	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°	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	1.6
10°-20°	196.1	4.7
20°-30°	291.6	7.0
30°-40°	345.4	8.2
40°-50°	357.1	8.5
50°-60°	329.0	7.8
60°-70°	265.9	6.3
70°-80°	178.1	4.2
80°-90°	93.9	2.2
90°-100°	98.1	2.3
100°-110°	174.9	4.2
110°-120°	257.1	6.1
120°-130°	319.2	7.6
130°-140°	347.7	8.3
140°-150°	335.8	8.0
150°-160°	281.0	6.7
160°-170°	186.8	4.5
170°-180°	65.4	1.6
0°-30°	556.7	13.3
0°-40°	902.2	21.5
0°-60°	1588.2	37.9
0°-90°	2126.1	50.7
90°-120°	530.0	12.6
90°-150°	1532.7	36.6
90°-180°	2066.0	49.3
0°-180°	4192.0	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	39	67	86	93	10
95°	44	64	94	112	119	45
105°	129	144	168	185	192	138
115°	236	244	263	275	279	233
125°	341	344	358	368	372	305
135°	441	444	449	458	460	340
145°	534	535	537	540	542	333
155°	610	610	610	612	610	281
165°	663	662	662	664	661	187
175°	689	687	687	690	687	65
180°	691	691	691	691	691	



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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	27.7	33.0	38.3	43.5	49.0	54.6	60.1	65.8	71.4	75.1
90°	12.0	18.0	24.1	30.2	36.2	42.3	48.5	54.9	61.1	67.3	71.5
92.5°	23.3	28.7	34.1	39.5	44.9	50.8	57.4	63.9	70.5	77.1	81.4
95°	44.3	48.6	53.0	57.4	61.7	67.3	73.9	80.5	87.1	93.7	98.0
97.5°	66.5	70.3	74.2	77.9	81.8	87.2	94.0	100.9	107.7	114.6	118.8
100°	83.1	86.5	89.8	93.2	96.5	101.5	108.2	114.8	121.5	128.1	132.5
102.5°	101.0	104.6	108.2	111.8	115.4	120.0	125.7	131.5	137.2	143.0	147.4
105°	129.0	132.1	135.3	138.5	141.6	145.9	151.5	156.9	162.4	167.9	171.8
107.5°	160.0	162.8	165.5	168.3	171.1	175.0	180.1	185.3	190.4	195.6	199.1
110°	181.3	183.9	186.4	188.9	191.4	195.1	199.9	204.7	209.5	214.3	217.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	203.8	205.6	207.5	209.2	211.1	214.4	219.2	223.9	228.8	233.6	236.6
115°	236.0	237.6	239.2	240.8	242.4	245.4	249.8	254.1	258.5	262.9	265.6
117.5°	268.4	269.4	270.3	271.3	272.2	274.8	278.9	283.0	287.2	291.3	294.1
120°	289.1	290.2	291.2	292.3	293.4	295.9	299.6	303.4	307.2	310.9	313.7
122.5°	310.9	311.3	311.8	312.2	312.6	314.8	318.7	322.4	326.3	330.2	332.6
125°	341.1	341.7	342.1	342.7	343.3	345.3	348.6	351.9	355.2	358.4	360.7
127.5°	372.6	372.9	373.2	373.3	373.6	375.1	377.9	380.6	383.3	386.2	388.3
130°	392.0	392.4	392.9	393.3	393.7	395.2	397.7	400.1	402.6	405.0	407.2
132.5°	410.8	411.7	412.6	413.6	414.5	415.8	417.5	419.2	420.8	422.5	424.6
135°	441.3	441.9	442.3	442.9	443.5	444.4	445.6	446.9	448.1	449.3	451.4
137.5°	470.0	470.5	471.1	471.6	472.2	472.9	473.7	474.5	475.3	476.1	478.2
140°	487.9	488.4	489.1	489.7	490.2	490.8	491.3	491.8	492.4	492.9	494.8
142.5°	506.3	506.7	507.1	507.5	507.8	508.3	508.8	509.3	509.7	510.2	511.9
145°	533.6	533.9	534.2	534.5	534.9	535.2	535.6	535.9	536.3	536.6	537.4
147.5°	558.0	558.3	558.6	558.8	559.1	559.3	559.6	560.0	560.2	560.5	561.0
150°	574.8	574.7	574.6	574.5	574.3	574.5	575.0	575.4	575.9	576.4	576.4
152.5°	588.5	588.7	588.9	589.1	589.2	589.4	589.6	589.7	589.9	590.2	590.5
155°	609.7	609.7	609.7	609.7	609.7	609.8	609.9	610.0	610.2	610.3	610.8
157.5°	628.7	628.4	628.1	627.9	627.6	627.5	627.6	627.8	627.9	628.0	628.5
160°	639.9	639.5	639.1	638.8	638.4	638.3	638.4	638.6	638.7	638.8	639.2
162.5°	649.8	649.5	649.2	648.9	648.7	648.6	648.6	648.7	648.7	648.7	649.2
165°	663.0	662.7	662.5	662.2	662.0	661.9	662.0	662.2	662.3	662.4	662.9
167.5°	674.2	673.7	673.2	672.7	672.2	672.0	672.0	672.0	672.0	672.0	672.7
170°	680.1	679.7	679.2	678.7	678.3	678.1	678.1	678.1	678.1	678.1	678.7
172.5°	684.5	684.0	683.5	683.1	682.6	682.3	682.3	682.3	682.3	682.3	683.1
175°	689.3	688.8	688.3	687.9	687.4	687.2	687.2	687.2	687.2	687.2	687.9
177.5°	691.8	691.4	691.1	690.7	690.2	690.0	689.9	689.8	689.8	689.7	690.2
180°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0



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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°	78.9	82.7	86.4	89.0	90.1	91.3	92.5	93.7
90°	75.9	80.1	84.4	87.2	88.7	90.2	91.6	93.1
92.5°	85.7	90.0	94.3	97.2	98.6	100.0	101.3	102.7
95°	102.4	106.7	111.0	113.9	115.3	116.6	117.9	119.3
97.5°	122.9	127.1	131.1	133.8	135.1	136.3	137.5	138.7
100°	137.0	141.4	145.8	148.5	149.8	151.0	152.1	153.4
102.5°	151.7	156.2	160.5	163.4	164.7	166.0	167.3	168.5
105°	175.7	179.6	183.5	186.2	187.7	189.2	190.6	192.1
107.5°	202.6	206.0	209.6	211.8	212.7	213.8	214.7	215.7
110°	221.1	224.5	227.8	230.1	231.0	232.1	233.0	234.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	239.7	242.7	245.8	247.8	248.6	249.6	250.4	251.4
115°	268.4	271.2	273.9	275.7	276.5	277.3	278.1	279.0
117.5°	296.9	299.7	302.5	304.2	304.8	305.4	306.0	306.6
120°	316.3	319.1	321.8	323.4	323.9	324.3	324.8	325.3
122.5°	335.2	337.6	340.1	341.6	342.1	342.8	343.4	343.9
125°	363.1	365.3	367.7	369.2	369.9	370.5	371.2	371.8
127.5°	390.6	392.9	395.0	396.5	397.2	397.8	398.6	399.3
130°	409.3	411.4	413.5	414.8	415.4	415.9	416.5	417.1
132.5°	426.8	428.9	431.0	432.2	432.5	432.9	433.2	433.6
135°	453.5	455.5	457.6	458.8	459.1	459.4	459.8	460.1
137.5°	480.1	482.2	484.2	485.2	485.2	485.3	485.3	485.4
140°	496.9	498.9	500.9	501.9	501.9	501.9	502.0	502.0
142.5°	513.5	515.2	516.8	517.6	517.6	517.7	517.7	517.8
145°	538.2	539.0	539.8	540.4	540.6	540.9	541.2	541.5
147.5°	561.6	562.1	562.7	562.7	562.1	561.7	561.1	560.5
150°	576.4	576.4	576.4	576.4	576.3	576.2	576.2	576.1
152.5°	590.8	591.1	591.4	591.3	590.9	590.5	590.0	589.7
155°	611.2	611.7	612.2	612.2	611.5	611.0	610.3	609.7
157.5°	629.0	629.4	629.9	629.8	629.0	628.2	627.5	626.6
160°	639.7	640.2	640.6	640.6	640.1	639.4	638.9	638.3
162.5°	649.8	650.4	651.0	650.9	650.3	649.5	648.8	648.1
165°	663.4	663.8	664.4	664.2	663.5	662.8	662.0	661.4
167.5°	673.4	674.2	674.9	674.9	674.1	673.4	672.6	671.9
170°	679.5	680.1	680.9	680.8	680.0	679.2	678.3	677.5
172.5°	683.8	684.5	685.2	685.2	684.5	683.7	683.0	682.2
175°	688.6	689.3	690.0	689.9	689.2	688.3	687.5	686.6
177.5°	690.8	691.4	691.9	691.9	691.3	690.6	689.8	689.2
180°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0

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