

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: P333500-830

Luminaire Tested: **S125RDIP-S375D590U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333500-830
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: S125RDIP-S375D590U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3292.1 lumens
Efficiency: N/A
Efficacy: 128.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

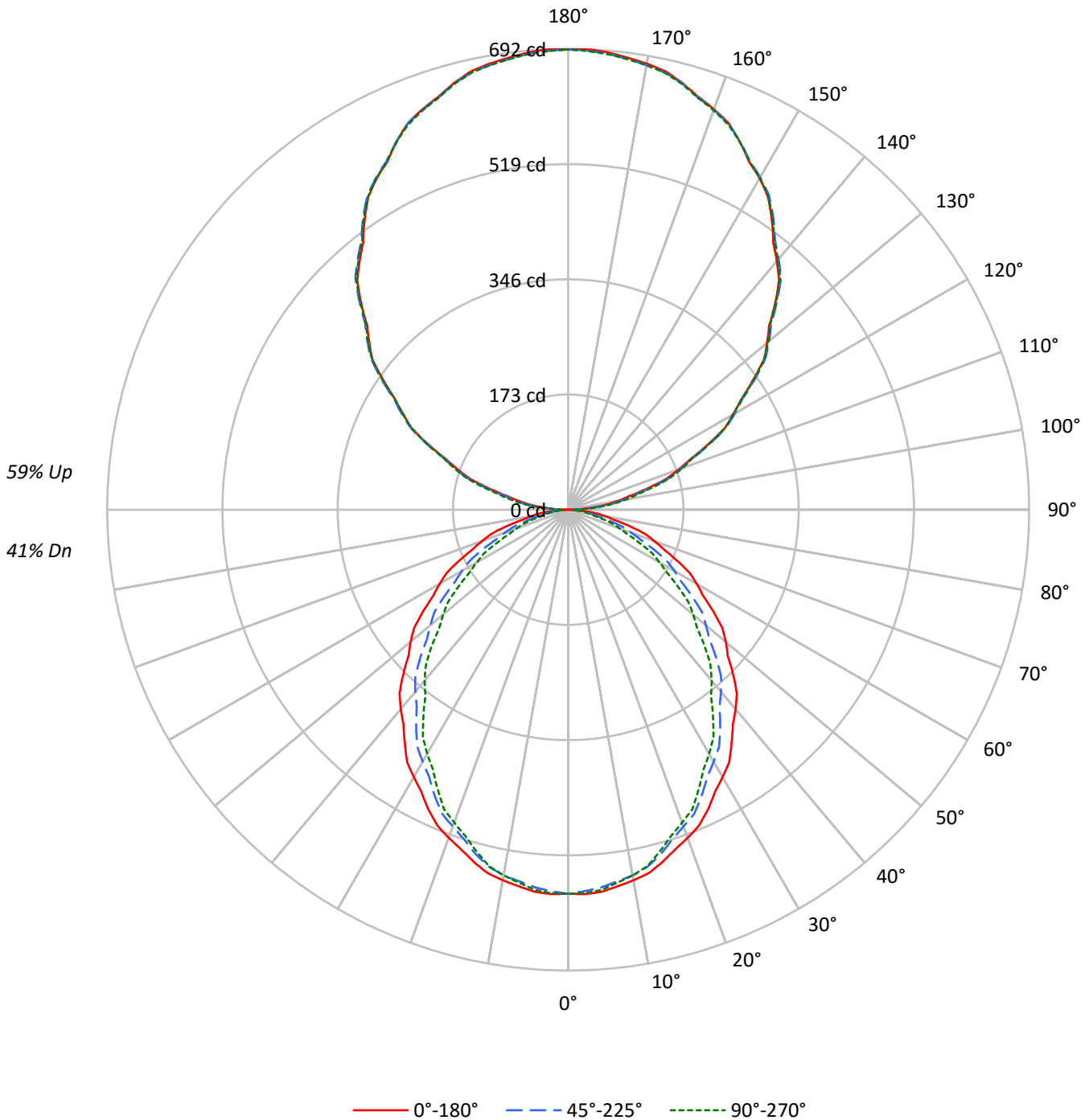
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	50	30	10	50	30	10	0														
RCR																																						
0	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41																				
1	96	92	88	85	87	84	81	78	69	67	65	55	54	53	43	42	41	35																				
2	88	80	74	69	80	74	68	64	61	57	54	49	46	44	38	36	35	30																				
3	80	71	64	58	73	65	59	54	54	49	45	43	40	38	34	32	30	25																				
4	73	63	55	49	67	58	51	46	48	43	39	39	35	32	30	28	26	22																				
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	27	25	23	19																				
6	62	50	42	36	56	46	39	34	39	33	29	31	28	25	25	22	20	17																				
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15																				
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16	13																				
9	49	37	30	25	45	35	28	24	29	24	20	24	20	17	19	16	14	12																				
10	46	34	27	23	42	32	25	21	27	22	18	22	18	16	18	15	13	11																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3725	3725	3725
5°	3734	3691	3713
10°	3705	3657	3657
15°	3661	3582	3553
20°	3604	3478	3437
25°	3539	3377	3302
30°	3456	3258	3155
35°	3372	3136	2988
40°	3295	3008	2824
45°	3199	2865	2645
50°	3104	2710	2460
55°	2992	2559	2262
60°	2880	2381	2047
65°	2749	2170	1803
70°	2598	1907	1554
75°	2393	1609	1293
80°	2105	1261	1086
85°	1771	1030	971



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.6
10°-20°	151.6	4.6
20°-30°	219.8	6.7
30°-40°	250.5	7.6
40°-50°	244.1	7.4
50°-60°	205.5	6.2
60°-70°	144.1	4.4
70°-80°	74.1	2.2
80°-90°	20.2	0.6
90°-100°	46.3	1.4
100°-110°	136.7	4.2
110°-120°	231.5	7.0
120°-130°	304.6	9.3
130°-140°	341.3	10.4
140°-150°	334.5	10.2
150°-160°	281.0	8.5
160°-170°	186.8	5.7
170°-180°	65.4	2.0
0°-30°	425.6	12.9
0°-40°	676.0	20.5
0°-60°	1125.7	34.2
0°-90°	1364.0	41.4
90°-120°	414.4	12.6
90°-150°	1394.9	42.4
90°-180°	1928.0	58.6
0°-180°	3292.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	576	574	569	573	573	55
15°	548	545	536	535	531	154
25°	497	490	474	468	463	228
35°	428	417	398	385	379	268
45°	350	337	314	297	290	270
55°	266	251	227	208	201	238
65°	180	165	142	125	118	178
75°	96	83	64	55	52	101
85°	24	16	14	14	13	27
90°	1	5	9	11	13	3
95°	35	36	41	45	46	37
105°	123	125	128	132	133	131
115°	232	234	235	234	234	229
125°	338	341	342	341	340	303
135°	440	443	444	444	442	339
145°	533	535	537	536	535	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°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	577.8	577.6	577.3	577.1	576.8	576.4	575.6	574.8	574.0	573.3	574.0
5°	575.9	575.5	575.1	574.7	574.3	573.6	572.5	571.5	570.4	569.3	570.3
7.5°	570.2	569.9	569.5	569.1	568.7	567.9	566.7	565.3	564.1	562.8	563.5
10°	565.0	564.7	564.4	564.1	563.8	563.0	561.7	560.2	558.9	557.6	557.9
12.5°	559.0	558.6	558.4	558.0	557.6	556.5	554.7	552.9	551.0	549.2	549.4
15°	547.5	547.0	546.4	545.8	545.3	543.9	541.9	539.9	537.8	535.8	535.7
17.5°	534.6	533.7	532.8	531.9	531.0	529.3	526.7	524.1	521.6	519.1	518.6
20°	524.4	523.5	522.5	521.6	520.6	518.6	515.5	512.4	509.3	506.1	505.7
22.5°	513.3	512.4	511.4	510.4	509.4	507.4	504.1	500.9	497.6	494.4	493.4
25°	496.6	495.1	493.7	492.2	490.8	488.2	484.7	481.1	477.5	473.9	472.7
27.5°	477.4	475.7	473.9	472.1	470.3	467.6	463.7	459.9	456.1	452.2	450.4
30°	463.4	461.7	459.8	458.0	456.1	453.2	449.1	445.1	441.0	436.9	434.7
32.5°	449.9	447.7	445.6	443.5	441.3	438.2	434.0	429.9	425.7	421.6	419.1
35°	427.7	425.5	423.1	420.8	418.5	415.1	410.8	406.4	402.1	397.8	394.9
37.5°	406.0	403.2	400.4	397.6	394.7	391.1	386.6	382.1	377.7	373.2	369.8
40°	390.8	387.9	384.9	382.0	379.1	375.3	370.7	366.1	361.4	356.8	353.1
42.5°	374.7	371.7	368.7	365.8	362.8	358.9	354.1	349.3	344.5	339.7	336.2
45°	350.2	347.4	344.6	341.8	339.0	334.9	329.6	324.3	319.0	313.7	309.7
47.5°	324.9	321.9	319.0	315.9	313.0	308.9	303.5	298.1	292.8	287.4	283.4
50°	308.9	305.7	302.5	299.3	296.1	291.7	286.2	280.7	275.1	269.7	265.6
52.5°	291.4	288.1	284.8	281.6	278.3	274.1	268.9	263.6	258.4	253.3	248.9
55°	265.7	262.6	259.5	256.5	253.4	249.1	243.6	238.2	232.8	227.3	223.0
57.5°	239.8	236.5	233.1	229.8	226.5	222.3	217.0	211.8	206.6	201.3	197.1
60°	223.0	219.6	216.2	212.8	209.4	205.2	199.9	194.7	189.5	184.3	180.0
62.5°	205.3	202.0	198.8	195.6	192.3	188.0	182.8	177.5	172.1	166.8	162.9
65°	179.9	176.6	173.3	170.0	166.7	162.5	157.4	152.3	147.1	142.0	138.2
67.5°	154.8	151.5	148.2	144.9	141.6	137.4	132.5	127.6	122.7	117.8	114.2
70°	137.6	134.4	131.1	127.8	124.5	120.5	115.6	110.7	105.9	101.0	98.0
72.5°	120.9	117.7	114.5	111.3	108.1	104.2	99.6	95.1	90.6	86.1	83.3
75°	95.9	92.9	90.0	87.1	84.3	80.8	76.6	72.6	68.5	64.5	62.3
77.5°	70.9	68.6	66.3	63.9	61.6	58.8	55.6	52.3	49.1	45.8	44.3
80°	56.6	54.3	52.0	49.7	47.3	44.9	42.1	39.4	36.7	33.9	33.1
82.5°	42.7	40.6	38.5	36.4	34.3	32.3	30.5	28.7	26.8	24.9	24.5
85°	23.9	22.2	20.5	18.8	17.0	15.8	15.4	14.9	14.4	13.9	13.9
87.5°	8.1	7.7	7.4	7.1	6.7	6.6	6.7	6.8	6.9	7.0	7.1
90°	0.6	1.5	2.5	3.4	4.3	5.3	6.1	7.0	7.7	8.6	9.2
92.5°	13.0	13.7	14.3	15.0	15.6	16.5	17.5	18.6	19.6	20.6	21.4
95°	35.0	35.2	35.4	35.6	35.9	36.7	37.8	39.0	40.2	41.4	42.2
97.5°	58.1	58.2	58.2	58.3	58.4	59.3	61.0	62.6	64.3	65.9	66.7
100°	75.3	75.3	75.3	75.3	75.3	76.1	77.6	79.2	80.7	82.3	83.3
102.5°	93.8	94.3	94.7	95.2	95.7	96.3	97.1	97.9	98.7	99.4	100.7
105°	122.6	123.2	123.8	124.4	125.0	125.6	126.4	127.1	127.8	128.5	129.2
107.5°	154.4	155.0	155.6	156.2	156.8	157.4	158.0	158.4	159.0	159.6	159.9
110°	176.3	176.9	177.6	178.1	178.8	179.3	179.6	179.9	180.3	180.7	181.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	198.7	199.1	199.3	199.6	200.0	200.4	200.9	201.2	201.7	202.2	202.4
115°	231.8	232.2	232.7	233.2	233.7	234.0	234.2	234.5	234.7	235.0	234.9
117.5°	264.9	265.0	265.3	265.5	265.7	266.0	266.2	266.4	266.6	266.8	266.9
120°	285.5	286.2	286.7	287.3	287.9	288.2	288.4	288.5	288.6	288.7	288.7
122.5°	307.9	308.1	308.3	308.5	308.8	309.0	309.3	309.6	309.9	310.3	310.2
125°	338.2	338.9	339.6	340.4	341.1	341.5	341.6	341.8	341.9	342.0	341.8
127.5°	370.5	370.9	371.3	371.6	372.1	372.4	372.5	372.7	372.8	373.0	372.9
130°	389.8	390.4	391.1	391.6	392.2	392.7	392.9	393.1	393.3	393.6	393.5
132.5°	409.2	410.2	411.1	412.1	413.1	413.6	413.5	413.5	413.4	413.4	413.3
135°	439.8	440.5	441.3	442.0	442.7	443.1	443.3	443.4	443.5	443.6	443.6
137.5°	468.6	469.4	470.0	470.7	471.5	471.9	472.2	472.4	472.7	473.0	473.1
140°	487.1	487.8	488.3	488.9	489.6	490.0	490.4	490.8	491.1	491.4	491.7
142.5°	505.7	506.1	506.6	507.2	507.7	508.1	508.6	509.1	509.5	509.9	510.1
145°	532.8	533.3	533.9	534.3	534.8	535.2	535.6	535.9	536.3	536.6	536.6
147.5°	558.0	558.3	558.6	558.8	559.1	559.3	559.6	560.0	560.2	560.5	560.8
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°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	574.8	575.6	576.4	576.7	576.6	576.6	576.5	576.4
5°	571.3	572.2	573.2	573.6	573.4	573.2	573.0	572.8
7.5°	564.1	564.9	565.5	565.7	565.5	565.3	565.1	564.9
10°	558.2	558.5	558.7	558.7	558.5	558.2	557.9	557.6
12.5°	549.6	549.9	550.1	550.0	549.5	549.0	548.7	548.2
15°	535.6	535.5	535.4	534.9	534.0	533.2	532.3	531.4
17.5°	518.1	517.6	517.2	516.5	515.9	515.1	514.3	513.7
20°	505.2	504.7	504.3	503.6	502.7	501.8	501.0	500.1
22.5°	492.4	491.4	490.5	489.7	489.0	488.2	487.6	486.8
25°	471.5	470.1	468.9	467.8	466.7	465.6	464.6	463.4
27.5°	448.7	447.0	445.2	443.8	442.8	441.8	440.7	439.7
30°	432.4	430.3	428.0	426.5	425.6	424.7	423.9	423.0
32.5°	416.7	414.2	411.7	410.0	408.9	407.7	406.6	405.6
35°	392.1	389.3	386.4	384.4	383.0	381.7	380.3	379.0
37.5°	366.4	363.1	359.7	357.3	356.0	354.7	353.4	352.0
40°	349.4	345.7	342.0	339.6	338.5	337.3	336.1	335.0
42.5°	332.6	329.1	325.6	323.0	321.3	319.5	317.8	316.1
45°	305.9	302.0	298.1	295.5	294.1	292.6	291.2	289.6
47.5°	279.5	275.4	271.5	268.6	267.0	265.4	263.8	262.2
50°	261.5	257.4	253.4	250.6	249.2	247.7	246.3	244.8
52.5°	244.5	240.2	235.7	232.8	231.4	230.0	228.5	227.1
55°	218.7	214.3	210.0	207.0	205.5	203.9	202.4	200.9
57.5°	192.8	188.6	184.3	181.4	180.1	178.7	177.4	176.0
60°	175.8	171.4	167.2	164.4	162.9	161.5	160.0	158.5
62.5°	158.9	155.0	151.0	148.4	146.8	145.4	144.0	142.5
65°	134.2	130.4	126.5	123.9	122.4	120.9	119.5	118.0
67.5°	110.7	107.2	103.6	101.2	100.1	99.0	97.7	96.6
70°	95.1	92.1	89.1	87.0	85.8	84.6	83.5	82.3
72.5°	80.5	77.8	75.0	73.2	72.5	71.7	70.9	70.1
75°	60.2	58.1	56.0	54.6	53.9	53.2	52.5	51.8
77.5°	42.9	41.4	39.9	38.8	38.4	37.9	37.3	36.9
80°	32.2	31.4	30.5	30.0	29.8	29.6	29.4	29.2
82.5°	24.1	23.7	23.3	23.0	22.9	22.8	22.7	22.5
85°	13.8	13.7	13.6	13.5	13.4	13.3	13.2	13.1
87.5°	7.2	7.4	7.4	7.4	7.4	7.4	7.4	7.4
90°	9.8	10.4	11.0	11.5	11.9	12.2	12.5	12.9
92.5°	22.2	23.0	23.8	24.3	24.6	24.9	25.1	25.4
95°	43.1	43.9	44.8	45.2	45.5	45.8	46.0	46.3
97.5°	67.5	68.3	69.1	69.6	69.7	69.8	69.9	70.1
100°	84.5	85.5	86.5	87.2	87.5	87.8	87.9	88.2
102.5°	101.8	103.0	104.2	104.9	105.3	105.6	105.9	106.2
105°	130.0	130.6	131.4	132.0	132.2	132.6	133.0	133.4
107.5°	160.3	160.7	161.0	161.2	161.2	161.2	161.1	161.1
110°	181.3	181.7	182.1	182.2	182.1	182.0	181.8	181.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	202.6	202.6	202.8	202.8	202.6	202.4	202.2	202.0
115°	234.7	234.6	234.5	234.4	234.2	234.1	234.0	233.9
117.5°	267.0	267.1	267.2	267.0	266.6	266.1	265.6	265.0
120°	288.7	288.7	288.7	288.5	288.0	287.6	287.1	286.6
122.5°	310.1	310.0	309.9	309.6	309.2	308.9	308.5	308.1
125°	341.5	341.3	341.0	340.8	340.7	340.6	340.4	340.4
127.5°	372.7	372.6	372.5	372.3	372.0	371.8	371.6	371.4
130°	393.3	393.2	393.1	392.9	392.7	392.5	392.2	392.0
132.5°	413.1	413.0	412.9	412.6	412.4	412.0	411.7	411.3
135°	443.6	443.6	443.6	443.4	442.9	442.4	442.0	441.5
137.5°	473.3	473.3	473.5	473.3	472.7	472.1	471.6	470.9
140°	491.9	492.2	492.4	492.2	491.6	491.1	490.4	489.8
142.5°	510.2	510.4	510.5	510.3	509.7	509.1	508.5	507.9
145°	536.6	536.6	536.6	536.4	536.1	535.7	535.4	535.0
147.5°	561.1	561.4	561.7	561.4	560.5	559.8	558.9	558.2
150°	576.4	576.4	576.4	576.3	576.1	575.8	575.6	575.3
152.5°	590.8	591.1	591.4	591.3	590.8	590.4	589.9	589.6
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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