

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: P333131-830

Luminaire Tested: **S125DIP-S375D590U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333131-830
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-S375D590U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH 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: 3362.3 lumens
Efficiency: N/A
Efficacy: 131.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

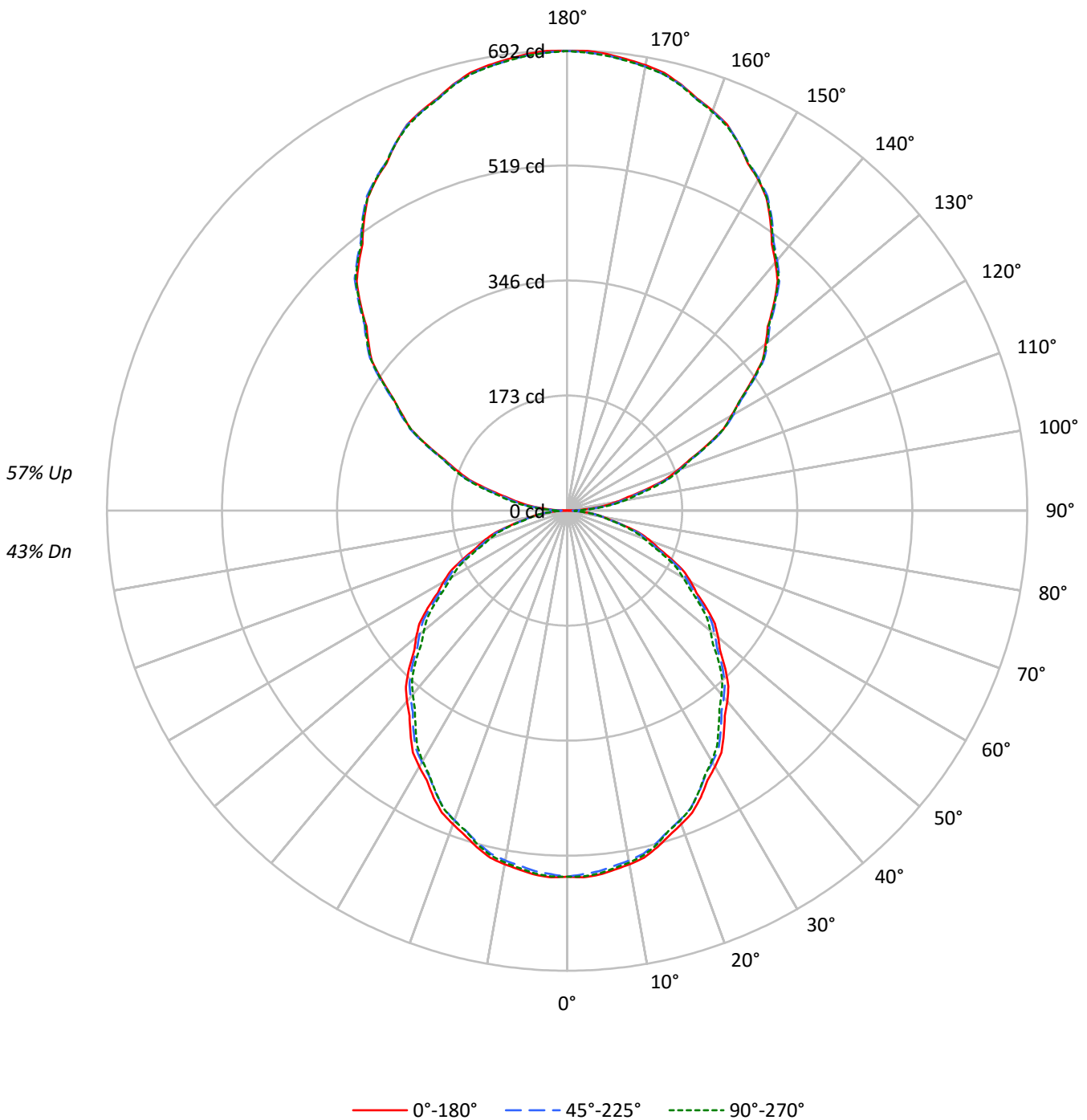
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	64	64	64	49	49	49	43																				
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	44	43	42	36																				
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	37	35	30																				
3	80	70	63	57	73	65	58	53	54	49	45	43	40	37	34	32	30	25																				
4	73	62	54	48	66	57	50	45	47	42	38	39	35	32	30	28	26	22																				
5	67	55	47	41	61	51	44	39	42	37	33	35	31	28	27	24	22	19																				
6	62	50	42	36	56	46	39	33	38	33	29	31	27	24	25	22	20	17																				
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15																				
8	53	41	33	28	48	37	31	26	32	26	22	26	22	19	21	18	16	13																				
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12																				
10	46	34	27	22	42	31	25	21	27	21	18	22	18	15	18	15	13	11																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3556	3556	3556
5°	3564	3530	3553
10°	3543	3505	3525
15°	3504	3463	3477
20°	3449	3404	3410
25°	3390	3334	3331
30°	3317	3258	3242
35°	3239	3177	3132
40°	3159	3089	3044
45°	3072	3008	2948
50°	2976	2910	2823
55°	2884	2800	2723
60°	2773	2689	2595
65°	2644	2557	2470
70°	2517	2402	2319
75°	2293	2218	2141
80°	2042	2008	1960
85°	1771	1808	1712



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.9	1.5
10°-20°	146.6	4.4
20°-30°	216.5	6.4
30°-40°	252.7	7.5
40°-50°	253.8	7.5
50°-60°	222.8	6.6
60°-70°	166.0	4.9
70°-80°	94.9	2.8
80°-90°	29.1	0.9
90°-100°	46.3	1.4
100°-110°	136.7	4.1
110°-120°	231.5	6.9
120°-130°	304.6	9.1
130°-140°	341.3	10.2
140°-150°	334.5	9.9
150°-160°	281.0	8.4
160°-170°	186.8	5.6
170°-180°	65.4	1.9
0°-30°	415.1	12.3
0°-40°	667.8	19.9
0°-60°	1144.3	34.0
0°-90°	1434.3	42.7
90°-120°	414.4	12.3
90°-150°	1394.9	41.5
90°-180°	1928.0	57.3
0°-180°	3362.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	551	551	551	551	551	
5°	550	549	544	548	548	52
15°	524	522	518	520	520	148
25°	476	473	468	469	467	219
35°	411	409	403	401	397	257
45°	336	334	329	324	323	259
55°	256	255	249	245	242	229
65°	173	172	167	164	162	172
75°	92	91	89	88	86	98
85°	24	24	24	24	23	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°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	552.0	551.8	551.6	551.3	551.1	550.5	549.8	549.0	548.3	547.4	548.3
5°	549.7	549.5	549.3	549.1	548.9	548.4	547.4	546.5	545.4	544.5	545.4
7.5°	544.7	544.5	544.3	544.1	543.9	543.3	542.2	541.1	540.1	539.0	539.9
10°	540.2	540.0	539.8	539.6	539.4	538.8	537.7	536.6	535.6	534.5	535.3
12.5°	534.6	534.2	533.9	533.6	533.2	532.5	531.5	530.6	529.5	528.6	529.1
15°	524.1	523.8	523.5	523.2	522.8	522.2	521.1	520.1	519.0	517.9	518.4
17.5°	511.9	511.5	511.0	510.7	510.2	509.4	508.3	507.3	506.1	505.0	505.7
20°	501.8	501.6	501.4	501.2	501.1	500.3	499.1	497.8	496.5	495.3	496.0
22.5°	491.7	491.3	491.0	490.7	490.3	489.6	488.3	487.2	486.0	484.8	485.3
25°	475.7	475.2	474.7	474.2	473.7	472.9	471.6	470.3	469.1	467.9	468.1
27.5°	456.9	456.7	456.4	456.1	455.8	455.0	453.7	452.4	451.1	449.8	449.9
30°	444.8	444.5	444.1	443.8	443.6	442.7	441.3	439.8	438.4	436.9	436.7
32.5°	431.5	431.0	430.6	430.2	429.7	428.9	427.5	426.2	425.0	423.7	423.3
35°	410.8	410.4	410.0	409.6	409.3	408.3	407.0	405.7	404.3	402.9	402.5
37.5°	389.3	388.8	388.3	387.8	387.3	386.4	385.1	383.9	382.6	381.4	380.6
40°	374.7	374.1	373.6	373.2	372.7	371.7	370.4	369.1	367.7	366.4	365.5
42.5°	358.9	358.5	358.2	357.7	357.3	356.5	355.1	353.7	352.3	351.0	350.2
45°	336.3	335.9	335.5	335.2	334.7	333.9	332.8	331.7	330.5	329.3	328.2
47.5°	311.9	311.9	311.9	312.0	312.0	311.3	309.9	308.5	307.1	305.7	304.5
50°	296.2	296.0	295.7	295.3	295.0	294.4	293.1	292.0	290.9	289.6	288.4
52.5°	280.2	279.9	279.7	279.6	279.4	278.6	277.4	276.2	274.8	273.6	272.6
55°	256.1	255.8	255.5	255.2	255.0	254.1	252.8	251.5	250.1	248.7	247.9
57.5°	230.8	230.6	230.5	230.4	230.2	229.5	228.4	227.2	226.1	225.0	223.9
60°	214.7	214.3	214.0	213.6	213.2	212.4	211.4	210.4	209.2	208.2	207.3
62.5°	198.0	197.7	197.4	197.1	196.8	196.1	195.3	194.4	193.4	192.6	191.5
65°	173.0	172.8	172.6	172.4	172.2	171.5	170.5	169.4	168.3	167.3	166.4
67.5°	148.6	148.3	147.8	147.4	147.0	146.4	145.6	144.8	144.0	143.3	142.5
70°	133.3	132.8	132.3	131.9	131.4	130.6	129.8	128.9	128.1	127.2	126.6
72.5°	116.6	116.2	115.9	115.6	115.3	114.8	114.2	113.7	113.1	112.5	111.9
75°	91.9	91.7	91.5	91.3	91.1	90.8	90.3	89.8	89.4	88.9	88.6
77.5°	69.2	69.1	69.0	68.9	68.9	68.7	68.4	68.1	67.9	67.6	67.4
80°	54.9	54.9	54.9	54.9	54.9	54.8	54.6	54.4	54.2	54.0	53.9
82.5°	42.3	42.2	42.0	41.8	41.8	41.7	41.6	41.6	41.5	41.5	41.3
85°	23.9	24.0	24.1	24.2	24.3	24.4	24.4	24.4	24.4	24.4	24.3
87.5°	9.5	9.7	9.9	10.1	10.3	10.5	10.6	10.6	10.7	10.7	10.9
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°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	549.0	549.8	550.5	550.9	550.8	550.7	550.7	550.6
5°	546.2	547.1	548.0	548.4	548.3	548.2	548.1	548.0
7.5°	540.7	541.6	542.4	542.8	542.7	542.6	542.5	542.4
10°	536.0	536.8	537.6	537.9	537.8	537.7	537.6	537.5
12.5°	529.8	530.5	531.0	531.3	531.3	531.3	531.3	531.2
15°	518.9	519.3	519.9	520.1	520.1	520.1	520.1	520.1
17.5°	506.2	506.8	507.5	507.5	507.0	506.5	506.1	505.6
20°	496.6	497.3	497.9	498.1	497.6	497.1	496.6	496.2
22.5°	485.7	486.2	486.6	486.6	486.4	486.0	485.7	485.3
25°	468.3	468.4	468.6	468.5	468.3	468.0	467.7	467.4
27.5°	449.9	449.9	450.0	449.9	449.5	449.2	448.9	448.7
30°	436.5	436.3	436.1	435.9	435.6	435.4	435.0	434.7
32.5°	423.0	422.6	422.3	421.9	421.3	420.8	420.3	419.7
35°	402.0	401.5	401.0	400.4	399.6	398.8	398.0	397.3
37.5°	379.9	379.2	378.4	377.9	377.4	377.0	376.5	376.1
40°	364.6	363.7	362.9	362.3	362.0	361.7	361.4	361.1
42.5°	349.4	348.6	347.8	347.2	346.8	346.3	345.9	345.4
45°	327.0	325.8	324.7	324.0	323.7	323.4	323.1	322.8
47.5°	303.3	302.2	301.0	300.0	299.4	298.7	298.0	297.4
50°	287.2	285.9	284.6	283.7	283.0	282.3	281.6	281.0
52.5°	271.5	270.3	269.2	268.3	267.6	266.8	266.1	265.3
55°	246.9	246.1	245.2	244.5	243.8	243.1	242.4	241.8
57.5°	222.7	221.6	220.5	219.7	219.3	219.0	218.6	218.2
60°	206.3	205.3	204.3	203.5	202.8	202.2	201.5	200.9
62.5°	190.5	189.4	188.3	187.6	187.1	186.5	186.0	185.5
65°	165.5	164.7	163.8	163.2	162.8	162.4	162.0	161.6
67.5°	141.8	141.0	140.3	139.8	139.6	139.3	139.1	138.8
70°	126.0	125.5	124.9	124.4	124.0	123.7	123.2	122.8
72.5°	111.2	110.6	109.9	109.4	109.1	108.7	108.2	107.8
75°	88.3	88.0	87.7	87.4	87.0	86.6	86.2	85.8
77.5°	67.3	67.1	66.9	66.7	66.4	66.2	65.9	65.6
80°	53.8	53.7	53.6	53.4	53.3	53.1	52.9	52.7
82.5°	41.1	40.9	40.8	40.6	40.6	40.6	40.5	40.5
85°	24.2	24.1	24.0	23.8	23.7	23.5	23.3	23.1
87.5°	11.0	11.1	11.2	11.3	11.2	11.1	11.0	10.9
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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