

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: P333500-930

Luminaire Tested: **S125RDIP-S375D590U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333500-930
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: S125RDIP-S375D590U930-4F0-1E-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: 2847.6 lumens
Efficiency: N/A
Efficacy: 111.2 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

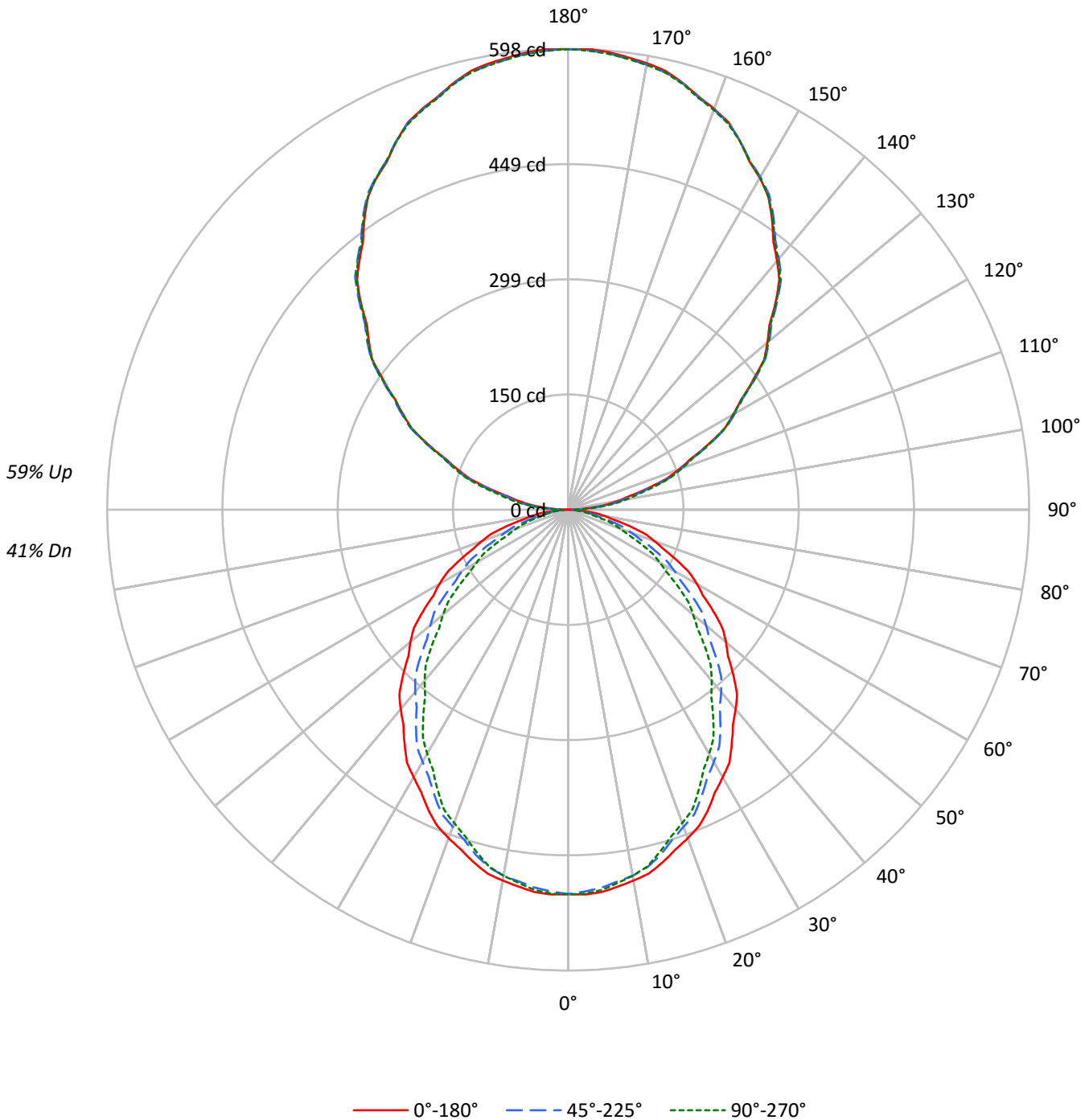
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	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°	3222	3222	3222
5°	3229	3192	3212
10°	3205	3163	3163
15°	3167	3099	3074
20°	3118	3009	2973
25°	3061	2921	2857
30°	2990	2818	2729
35°	2917	2713	2584
40°	2850	2602	2443
45°	2767	2478	2288
50°	2685	2344	2127
55°	2587	2215	1956
60°	2492	2059	1771
65°	2378	1878	1560
70°	2247	1650	1344
75°	2069	1392	1118
80°	1822	1093	941
85°	1534	897	837



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.9	1.6
10°-20°	131.1	4.6
20°-30°	190.1	6.7
30°-40°	216.7	7.6
40°-50°	211.2	7.4
50°-60°	177.8	6.2
60°-70°	124.6	4.4
70°-80°	64.1	2.2
80°-90°	17.5	0.6
90°-100°	40.0	1.4
100°-110°	118.2	4.2
110°-120°	200.2	7.0
120°-130°	263.5	9.3
130°-140°	295.3	10.4
140°-150°	289.4	10.2
150°-160°	243.0	8.5
160°-170°	161.6	5.7
170°-180°	56.5	2.0
0°-30°	368.1	12.9
0°-40°	584.8	20.5
0°-60°	973.7	34.2
0°-90°	1179.9	41.4
90°-120°	358.5	12.6
90°-150°	1206.6	42.4
90°-180°	1668.0	58.6
0°-180°	2847.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	499	499	499	499	499	
5°	498	496	492	496	496	47
15°	474	471	464	463	460	133
25°	430	423	410	405	401	198
35°	370	361	344	333	328	232
45°	303	292	271	257	250	234
55°	230	217	197	180	174	206
65°	156	142	123	108	102	154
75°	83	71	56	48	45	88
85°	21	14	12	12	11	23
90°	0	4	7	10	11	3
95°	30	31	36	39	40	32
105°	106	108	111	114	115	113
115°	200	202	203	203	202	198
125°	292	295	296	295	294	262
135°	380	383	384	384	382	293
145°	461	463	464	464	463	288
155°	527	527	528	530	527	243
165°	574	573	573	575	572	162
175°	596	594	594	597	594	57
180°	598	598	598	598	598	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	499.8	499.6	499.4	499.2	499.0	498.6	497.9	497.2	496.5	495.9	496.5
5°	498.1	497.8	497.5	497.1	496.8	496.2	495.2	494.3	493.4	492.4	493.3
7.5°	493.3	492.9	492.6	492.3	492.0	491.2	490.2	489.0	488.0	486.8	487.4
10°	488.7	488.4	488.2	488.0	487.7	487.0	485.8	484.6	483.5	482.3	482.6
12.5°	483.6	483.2	483.0	482.7	482.3	481.4	479.8	478.3	476.6	475.1	475.2
15°	473.6	473.1	472.6	472.1	471.7	470.5	468.7	467.0	465.2	463.5	463.4
17.5°	462.4	461.6	460.9	460.1	459.3	457.9	455.6	453.4	451.2	449.0	448.6
20°	453.6	452.8	452.0	451.2	450.3	448.6	445.9	443.2	440.5	437.8	437.4
22.5°	444.0	443.2	442.4	441.5	440.7	438.9	436.0	433.3	430.4	427.6	426.8
25°	429.6	428.3	427.1	425.7	424.5	422.3	419.2	416.1	413.0	409.9	408.9
27.5°	412.9	411.5	409.9	408.4	406.8	404.5	401.1	397.8	394.5	391.2	389.6
30°	400.9	399.3	397.7	396.2	394.5	392.0	388.5	385.0	381.5	377.9	376.0
32.5°	389.1	387.3	385.5	383.6	381.7	379.0	375.4	371.9	368.3	364.7	362.6
35°	370.0	368.0	366.0	363.9	362.0	359.1	355.3	351.6	347.8	344.1	341.6
37.5°	351.2	348.8	346.3	343.9	341.4	338.3	334.4	330.5	326.7	322.8	319.8
40°	338.0	335.5	333.0	330.4	327.9	324.7	320.7	316.7	312.6	308.6	305.4
42.5°	324.1	321.6	318.9	316.4	313.8	310.5	306.3	302.1	298.0	293.8	290.8
45°	303.0	300.5	298.1	295.6	293.3	289.7	285.1	280.5	275.9	271.3	267.9
47.5°	281.0	278.4	275.9	273.3	270.8	267.2	262.5	257.9	253.2	248.6	245.2
50°	267.2	264.4	261.6	258.9	256.1	252.3	247.5	242.8	238.0	233.3	229.8
52.5°	252.1	249.2	246.4	243.6	240.8	237.1	232.6	228.0	223.6	219.1	215.3
55°	229.8	227.1	224.5	221.8	219.2	215.5	210.8	206.0	201.4	196.7	192.9
57.5°	207.4	204.6	201.6	198.8	195.9	192.2	187.7	183.2	178.7	174.1	170.5
60°	192.9	190.0	187.0	184.1	181.2	177.5	172.9	168.4	163.9	159.4	155.7
62.5°	177.6	174.7	171.9	169.2	166.3	162.7	158.1	153.5	148.9	144.3	140.9
65°	155.6	152.8	149.9	147.1	144.2	140.6	136.2	131.8	127.3	122.9	119.5
67.5°	133.9	131.0	128.2	125.3	122.5	118.9	114.6	110.4	106.2	101.9	98.8
70°	119.0	116.3	113.4	110.6	107.7	104.2	100.0	95.8	91.6	87.4	84.8
72.5°	104.6	101.8	99.1	96.3	93.5	90.1	86.2	82.3	78.4	74.4	72.1
75°	82.9	80.4	77.9	75.3	72.9	69.9	66.3	62.8	59.3	55.8	53.9
77.5°	61.3	59.4	57.3	55.3	53.3	50.9	48.1	45.2	42.5	39.6	38.3
80°	49.0	47.0	45.0	43.0	40.9	38.8	36.4	34.1	31.7	29.4	28.6
82.5°	36.9	35.1	33.3	31.5	29.7	28.0	26.4	24.8	23.2	21.5	21.2
85°	20.7	19.2	17.7	16.2	14.7	13.7	13.3	12.9	12.5	12.1	12.0
87.5°	7.0	6.7	6.4	6.1	5.8	5.7	5.8	5.9	6.0	6.0	6.1
90°	0.5	1.3	2.1	2.9	3.8	4.6	5.3	6.0	6.7	7.4	8.0
92.5°	11.3	11.8	12.4	13.0	13.5	14.3	15.2	16.1	17.0	17.9	18.5
95°	30.2	30.4	30.7	30.8	31.1	31.7	32.7	33.8	34.8	35.8	36.5
97.5°	50.2	50.3	50.4	50.5	50.5	51.3	52.7	54.1	55.6	57.0	57.7
100°	65.1	65.1	65.1	65.1	65.1	65.8	67.1	68.5	69.8	71.2	72.1
102.5°	81.1	81.5	81.9	82.3	82.8	83.3	84.0	84.7	85.4	86.0	87.1
105°	106.1	106.6	107.0	107.6	108.1	108.7	109.3	109.9	110.6	111.1	111.8
107.5°	133.5	134.1	134.6	135.1	135.7	136.2	136.6	137.1	137.5	138.0	138.4
110°	152.5	153.0	153.6	154.1	154.7	155.1	155.3	155.6	156.0	156.3	156.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	171.9	172.2	172.4	172.7	173.0	173.3	173.7	174.1	174.5	174.9	175.0
115°	200.5	200.9	201.3	201.7	202.1	202.4	202.6	202.8	203.0	203.3	203.2
117.5°	229.1	229.3	229.5	229.7	229.8	230.1	230.2	230.4	230.6	230.8	230.9
120°	247.0	247.5	248.0	248.5	249.1	249.3	249.5	249.6	249.6	249.7	249.7
122.5°	266.4	266.5	266.7	266.8	267.1	267.3	267.6	267.8	268.1	268.4	268.3
125°	292.5	293.2	293.8	294.4	295.1	295.4	295.5	295.6	295.7	295.8	295.6
127.5°	320.5	320.8	321.1	321.5	321.9	322.1	322.2	322.4	322.5	322.6	322.5
130°	337.2	337.7	338.3	338.8	339.2	339.7	339.8	340.1	340.2	340.5	340.4
132.5°	353.9	354.8	355.6	356.4	357.3	357.8	357.7	357.7	357.6	357.6	357.5
135°	380.4	381.1	381.7	382.3	382.9	383.3	383.4	383.5	383.6	383.7	383.7
137.5°	405.4	406.0	406.6	407.2	407.8	408.2	408.5	408.6	408.9	409.1	409.2
140°	421.3	421.9	422.4	422.9	423.5	423.9	424.2	424.5	424.8	425.1	425.3
142.5°	437.4	437.8	438.2	438.7	439.1	439.5	439.9	440.3	440.8	441.1	441.2
145°	460.9	461.3	461.8	462.2	462.6	462.9	463.3	463.6	463.9	464.1	464.1
147.5°	482.7	482.9	483.1	483.4	483.6	483.8	484.0	484.4	484.6	484.9	485.1
150°	497.2	497.1	497.0	496.9	496.8	496.9	497.3	497.7	498.1	498.6	498.6
152.5°	509.1	509.2	509.4	509.6	509.6	509.8	510.0	510.1	510.3	510.5	510.8
155°	527.4	527.4	527.4	527.4	527.4	527.5	527.6	527.7	527.8	527.9	528.3
157.5°	543.8	543.6	543.3	543.2	542.9	542.8	542.9	543.1	543.2	543.2	543.6
160°	553.5	553.2	552.9	552.5	552.2	552.1	552.2	552.4	552.4	552.5	552.9
162.5°	562.1	561.8	561.6	561.3	561.1	561.0	561.0	561.1	561.1	561.1	561.6
165°	573.5	573.2	573.1	572.8	572.7	572.6	572.7	572.8	572.9	573.0	573.4
167.5°	583.2	582.8	582.3	581.9	581.5	581.3	581.3	581.3	581.3	581.3	581.9
170°	588.3	587.9	587.5	587.1	586.7	586.5	586.5	586.5	586.5	586.5	587.1
172.5°	592.1	591.7	591.3	590.8	590.4	590.2	590.2	590.2	590.2	590.2	590.8
175°	596.2	595.8	595.4	595.0	594.6	594.4	594.4	594.4	594.4	594.4	595.0
177.5°	598.4	598.1	597.8	597.5	597.0	596.9	596.8	596.7	596.6	596.6	597.0
180°	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	497.2	497.9	498.6	498.9	498.8	498.7	498.6	498.6
5°	494.2	495.0	495.8	496.2	496.0	495.8	495.6	495.5
7.5°	488.0	488.6	489.2	489.3	489.2	489.0	488.9	488.6
10°	482.8	483.1	483.3	483.3	483.1	482.8	482.6	482.3
12.5°	475.4	475.6	475.8	475.7	475.3	474.9	474.6	474.2
15°	463.3	463.2	463.1	462.7	461.9	461.2	460.5	459.7
17.5°	448.2	447.8	447.4	446.8	446.2	445.6	444.9	444.3
20°	437.0	436.6	436.2	435.6	434.8	434.1	433.3	432.6
22.5°	425.9	425.1	424.3	423.5	423.0	422.3	421.8	421.1
25°	407.8	406.7	405.6	404.6	403.7	402.8	401.9	400.9
27.5°	388.2	386.6	385.1	383.9	383.0	382.1	381.2	380.3
30°	374.1	372.2	370.2	368.9	368.1	367.4	366.6	365.9
32.5°	360.4	358.3	356.1	354.7	353.7	352.7	351.7	350.8
35°	339.2	336.7	334.3	332.5	331.3	330.2	329.0	327.8
37.5°	316.9	314.1	311.1	309.1	307.9	306.8	305.7	304.5
40°	302.2	299.1	295.9	293.8	292.8	291.8	290.7	289.8
42.5°	287.7	284.7	281.6	279.4	277.9	276.4	274.9	273.5
45°	264.6	261.2	257.9	255.6	254.4	253.1	251.8	250.5
47.5°	241.7	238.2	234.8	232.4	231.0	229.6	228.2	226.8
50°	226.2	222.7	219.2	216.8	215.6	214.3	213.0	211.7
52.5°	211.5	207.7	203.9	201.4	200.2	198.9	197.6	196.4
55°	189.1	185.4	181.6	179.0	177.7	176.3	175.0	173.7
57.5°	166.8	163.1	159.4	156.9	155.8	154.6	153.4	152.2
60°	152.1	148.3	144.6	142.2	140.9	139.7	138.4	137.1
62.5°	137.5	134.0	130.6	128.3	127.0	125.8	124.6	123.3
65°	116.1	112.8	109.4	107.1	105.9	104.6	103.4	102.1
67.5°	95.7	92.7	89.6	87.6	86.6	85.6	84.5	83.6
70°	82.3	79.7	77.0	75.3	74.2	73.2	72.2	71.2
72.5°	69.6	67.3	64.9	63.3	62.7	62.0	61.3	60.7
75°	52.1	50.2	48.4	47.2	46.6	46.0	45.4	44.8
77.5°	37.1	35.8	34.5	33.6	33.2	32.8	32.3	31.9
80°	27.9	27.1	26.4	25.9	25.8	25.6	25.4	25.3
82.5°	20.9	20.5	20.1	19.9	19.8	19.7	19.6	19.5
85°	11.9	11.8	11.7	11.7	11.6	11.5	11.4	11.3
87.5°	6.2	6.4	6.4	6.4	6.4	6.4	6.4	6.4
90°	8.5	9.0	9.5	9.9	10.3	10.5	10.8	11.2
92.5°	19.2	19.9	20.6	21.0	21.3	21.5	21.7	21.9
95°	37.3	38.0	38.7	39.1	39.4	39.6	39.8	40.0
97.5°	58.4	59.1	59.8	60.2	60.3	60.4	60.5	60.7
100°	73.1	73.9	74.8	75.4	75.7	75.9	76.1	76.3
102.5°	88.1	89.1	90.1	90.7	91.1	91.3	91.6	91.9
105°	112.4	113.0	113.7	114.1	114.4	114.7	115.0	115.4
107.5°	138.7	139.0	139.3	139.4	139.4	139.4	139.3	139.3
110°	156.9	157.2	157.5	157.6	157.5	157.4	157.3	157.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	175.2	175.3	175.5	175.5	175.3	175.0	174.9	174.7
115°	203.0	202.9	202.8	202.8	202.6	202.5	202.4	202.4
117.5°	231.0	231.1	231.1	231.0	230.6	230.2	229.8	229.3
120°	249.7	249.7	249.7	249.6	249.2	248.7	248.3	247.9
122.5°	268.2	268.2	268.1	267.8	267.5	267.2	266.8	266.5
125°	295.4	295.2	295.0	294.8	294.7	294.6	294.5	294.4
127.5°	322.4	322.3	322.2	322.0	321.8	321.6	321.4	321.2
130°	340.2	340.1	340.1	339.9	339.7	339.5	339.2	339.1
132.5°	357.3	357.3	357.2	356.9	356.7	356.4	356.1	355.8
135°	383.7	383.7	383.7	383.5	383.1	382.7	382.3	381.9
137.5°	409.4	409.4	409.6	409.4	408.9	408.4	407.9	407.3
140°	425.5	425.7	425.9	425.7	425.3	424.8	424.2	423.7
142.5°	441.3	441.5	441.6	441.4	440.9	440.3	439.9	439.4
145°	464.1	464.1	464.1	464.0	463.7	463.4	463.1	462.8
147.5°	485.3	485.6	485.8	485.6	484.9	484.2	483.5	482.8
150°	498.6	498.6	498.6	498.5	498.3	498.1	497.9	497.7
152.5°	511.0	511.3	511.5	511.4	511.0	510.7	510.3	510.0
155°	528.7	529.1	529.5	529.5	529.0	528.5	527.9	527.4
157.5°	544.0	544.5	544.9	544.8	544.0	543.4	542.7	542.0
160°	553.3	553.8	554.2	554.2	553.7	553.1	552.6	552.1
162.5°	562.1	562.6	563.1	563.0	562.5	561.8	561.3	560.6
165°	573.8	574.2	574.7	574.5	574.0	573.3	572.7	572.1
167.5°	582.5	583.2	583.8	583.8	583.1	582.4	581.8	581.2
170°	587.7	588.3	589.0	588.9	588.2	587.5	586.8	586.0
172.5°	591.5	592.1	592.7	592.7	592.1	591.4	590.8	590.1
175°	595.7	596.2	596.9	596.8	596.1	595.4	594.7	593.9
177.5°	597.5	598.0	598.5	598.5	597.9	597.4	596.7	596.1
180°	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7

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