

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: P333127-840

Luminaire Tested: **S125DIP-S375D590U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333127-840
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-S375D590U840-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3862.9 lumens
Efficiency: N/A
Efficacy: 150.9 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: Semi-Indirect

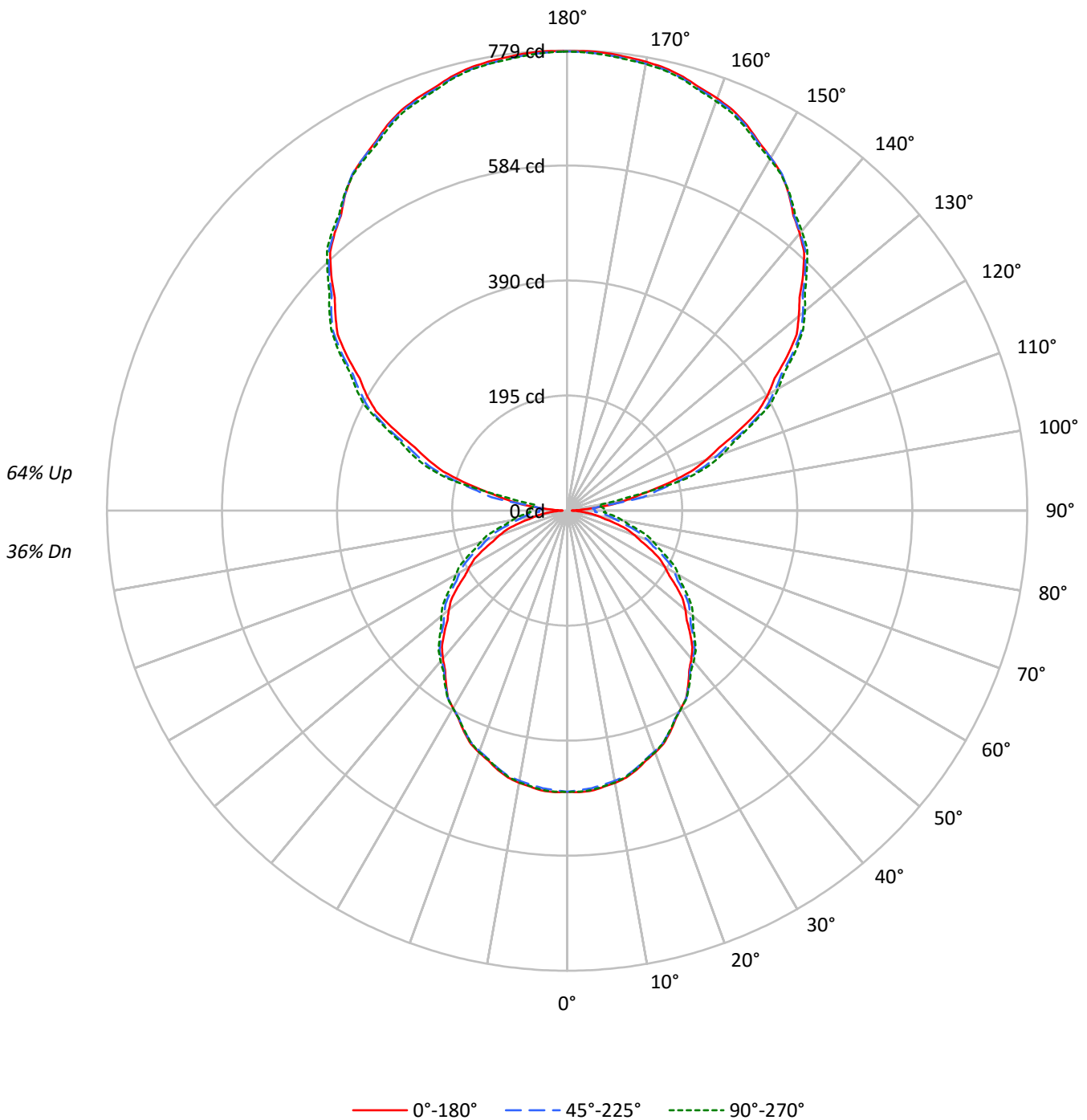
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333127-840

CATALOG NUMBER: S125DIP-S375D590U840-4F0-1E-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	104	104	104	104	94	94	94	94	75	75	75	59	59	59	43	43	43	36
1	94	90	86	82	85	81	78	75	65	63	61	51	49	48	37	36	35	29
2	85	78	72	66	77	71	65	61	57	53	50	44	42	39	32	31	29	24
3	78	68	61	55	70	62	56	50	50	45	42	39	36	33	29	27	25	20
4	71	60	52	46	64	55	48	43	44	39	35	34	31	28	25	23	21	17
5	65	53	45	39	59	49	42	36	39	34	30	31	27	24	23	20	18	15
6	60	48	40	34	54	44	36	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	30	50	39	32	27	32	27	23	25	21	19	19	16	14	11
8	51	39	31	26	46	36	29	24	29	24	20	23	19	16	17	15	13	10
9	48	35	28	23	43	32	26	21	27	22	18	21	17	15	16	13	11	9
10	44	32	25	21	40	30	23	19	24	19	16	19	16	13	15	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3075	3075	3075
5°	3081	3017	3027
10°	3059	2963	2960
15°	3022	2899	2873
20°	2974	2819	2786
25°	2915	2734	2680
30°	2844	2641	2584
35°	2778	2554	2494
40°	2711	2463	2406
45°	2635	2385	2327
50°	2563	2302	2256
55°	2474	2222	2175
60°	2380	2130	2090
65°	2281	2035	1997
70°	2168	1905	1900
75°	1987	1780	1780
80°	1753	1629	1650
85°	1538	1527	1610



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	1.2
10°-20°	127.8	3.3
20°-30°	190.0	4.9
30°-40°	225.1	5.8
40°-50°	232.7	6.0
50°-60°	214.4	5.6
60°-70°	173.3	4.5
70°-80°	116.1	3.0
80°-90°	61.8	1.6
90°-100°	62.0	1.6
100°-110°	199.0	5.2
110°-120°	332.4	8.6
120°-130°	414.7	10.7
130°-140°	439.9	11.4
140°-150°	409.9	10.6
150°-160°	330.9	8.6
160°-170°	214.0	5.5
170°-180°	73.8	1.9
0°-30°	362.8	9.4
0°-40°	587.9	15.2
0°-60°	1035.1	26.8
0°-90°	1386.3	35.9
90°-120°	593.4	15.4
90°-150°	1857.9	48.1
90°-180°	2477.0	64.1
0°-180°	3862.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	475	45
15°	454	455	452	454	453	128
25°	413	414	412	413	411	190
35°	358	360	359	361	361	224
45°	294	299	302	305	306	227
55°	226	234	241	246	248	202
65°	156	167	178	184	187	155
75°	86	98	113	122	125	91
85°	26	41	57	67	71	27
90°	8	28	48	61	66	6
95°	39	48	43	56	60	47
105°	174	184	197	206	209	184
115°	321	327	340	345	345	318
125°	454	458	467	472	473	405
135°	565	568	570	575	574	435
145°	654	655	655	658	656	409
155°	720	717	718	719	715	332
165°	760	757	757	760	756	215
175°	777	774	774	778	774	74
180°	777	777	777	777	777	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	477.2	477.0	476.9	476.7	476.6	476.2	475.5	474.9	474.4	473.8	474.4
5°	476.1	475.8	475.6	475.4	475.2	474.7	474.0	473.3	472.6	471.8	472.7
7.5°	471.8	471.8	471.7	471.6	471.5	471.1	470.4	469.6	468.9	468.1	468.9
10°	468.1	468.1	468.1	468.1	468.1	467.7	466.9	466.1	465.2	464.3	465.1
12.5°	462.9	463.0	463.0	463.1	463.2	462.9	462.3	461.6	460.9	460.3	460.8
15°	454.5	454.6	454.7	454.9	455.0	454.6	453.9	453.2	452.5	451.8	452.4
17.5°	443.7	443.9	444.1	444.3	444.5	444.3	443.6	442.8	442.1	441.4	441.9
20°	436.0	436.2	436.4	436.6	436.8	436.5	435.8	435.0	434.3	433.5	433.9
22.5°	427.0	427.4	427.7	428.1	428.5	428.2	427.4	426.6	425.8	425.0	425.4
25°	413.0	413.3	413.6	413.9	414.2	414.1	413.5	412.9	412.2	411.6	412.0
27.5°	397.6	398.0	398.5	398.9	399.4	399.3	398.6	397.9	397.2	396.5	396.7
30°	386.0	386.6	387.2	387.9	388.5	388.5	387.9	387.2	386.6	386.0	386.2
32.5°	375.6	376.1	376.6	377.2	377.7	377.7	377.3	376.8	376.4	375.9	376.1
35°	357.5	358.2	359.0	359.7	360.4	360.6	360.3	360.0	359.7	359.4	359.7
37.5°	339.5	340.1	340.8	341.4	342.1	342.4	342.3	342.2	342.1	342.0	342.4
40°	327.2	328.0	328.8	329.6	330.5	330.8	330.7	330.6	330.5	330.4	330.8
42.5°	313.8	314.8	315.9	317.0	318.0	318.7	318.9	319.1	319.4	319.6	320.1
45°	294.5	295.7	296.8	297.9	299.0	299.9	300.4	300.9	301.4	301.9	302.7
47.5°	274.8	275.9	276.9	278.0	279.0	280.0	280.9	281.8	282.7	283.6	284.7
50°	261.4	262.5	263.7	264.8	265.9	267.1	268.2	269.3	270.4	271.7	272.8
52.5°	247.2	248.5	249.9	251.4	252.8	254.1	255.5	256.9	258.3	259.6	260.9
55°	226.3	228.0	229.6	231.4	233.0	234.7	236.3	237.9	239.6	241.3	242.5
57.5°	205.1	207.0	209.0	211.1	213.1	215.0	216.9	218.8	220.8	222.6	223.9
60°	190.9	193.0	195.0	197.1	199.1	201.3	203.3	205.4	207.5	209.5	211.1
62.5°	177.0	179.2	181.3	183.3	185.4	187.5	189.8	192.0	194.3	196.5	198.2
65°	155.9	158.2	160.7	163.0	165.4	167.8	170.4	172.9	175.3	177.8	179.4
67.5°	135.9	138.3	140.5	142.8	145.1	147.5	150.1	152.6	155.1	157.6	159.6
70°	121.4	123.7	126.1	128.5	130.9	133.4	136.1	138.9	141.5	144.2	146.2
72.5°	107.1	109.7	112.1	114.5	117.0	119.8	122.7	125.6	128.6	131.5	133.7
75°	85.8	88.6	91.3	93.9	96.6	99.7	103.0	106.3	109.7	112.9	115.0
77.5°	65.4	68.6	71.7	74.7	77.9	81.0	84.2	87.5	90.6	93.8	96.1
80°	52.7	55.8	59.0	62.1	65.1	68.5	72.0	75.5	79.1	82.6	84.9
82.5°	41.2	44.4	47.8	51.0	54.2	57.8	61.3	64.9	68.6	72.1	74.3
85°	25.7	29.1	32.5	36.0	39.4	42.9	46.6	50.2	53.8	57.4	59.7
87.5°	14.6	18.2	21.7	25.2	28.8	32.4	36.1	39.8	43.5	47.2	49.7
90°	8.1	12.4	16.8	21.1	25.4	29.8	34.2	38.7	43.0	47.5	50.5
92.5°	15.6	18.0	20.3	22.6	25.0	28.4	32.8	37.2	41.6	45.9	49.0
95°	38.9	41.2	43.5	45.8	48.2	48.7	47.3	45.9	44.6	43.3	46.3
97.5°	74.0	77.2	80.3	83.4	86.5	85.0	78.8	72.5	66.3	60.1	58.7
100°	101.4	103.9	106.4	109.1	111.6	114.8	118.7	122.5	126.3	130.2	113.2
102.5°	129.1	131.6	134.1	136.6	139.1	142.1	145.6	149.2	152.8	156.3	154.8
105°	173.6	175.7	177.9	180.1	182.3	184.9	188.0	191.2	194.3	197.3	199.4
107.5°	219.8	221.3	222.7	224.1	225.5	227.8	231.1	234.3	237.5	240.8	242.9
110°	249.8	251.2	252.4	253.6	254.9	257.0	260.2	263.4	266.5	269.7	271.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	278.4	279.7	281.0	282.4	283.7	285.8	288.7	291.8	294.7	297.7	299.1
115°	320.8	322.2	323.6	325.0	326.3	328.4	331.2	334.1	336.9	339.7	341.0
117.5°	364.8	365.2	365.7	366.1	366.6	368.3	371.3	374.4	377.4	380.4	381.5
120°	392.4	392.5	392.7	392.9	393.1	394.7	397.4	400.1	402.9	405.7	407.2
122.5°	416.5	417.1	417.7	418.4	419.0	420.5	423.0	425.5	428.0	430.5	431.9
125°	454.1	454.9	455.8	456.6	457.4	458.8	460.8	462.9	464.9	467.1	468.2
127.5°	489.8	490.3	490.8	491.4	491.9	493.0	494.6	496.2	497.9	499.5	500.7
130°	511.9	512.4	512.9	513.5	514.0	515.1	516.6	518.3	519.9	521.4	522.5
132.5°	533.6	534.3	535.1	535.8	536.5	537.3	538.2	539.0	539.8	540.7	542.0
135°	565.0	565.6	566.3	567.0	567.6	568.3	568.7	569.2	569.7	570.1	571.2
137.5°	593.8	594.4	595.0	595.6	596.1	596.5	596.6	596.7	596.9	597.0	598.2
140°	612.4	612.6	612.9	613.1	613.4	613.5	613.5	613.5	613.4	613.4	614.8
142.5°	629.4	629.4	629.5	629.7	629.7	629.9	630.1	630.3	630.5	630.7	631.7
145°	654.4	654.6	654.7	654.9	655.0	655.1	655.1	655.1	655.1	655.1	655.7
147.5°	675.8	675.8	675.7	675.7	675.6	675.7	675.8	676.0	676.1	676.3	676.6
150°	689.6	689.4	689.1	688.9	688.6	688.6	688.9	689.1	689.4	689.6	689.9
152.5°	703.1	702.5	702.0	701.4	700.7	700.6	700.8	701.1	701.4	701.7	702.0
155°	720.2	719.4	718.7	717.9	717.1	716.9	717.1	717.4	717.6	717.9	718.3
157.5°	733.5	733.0	732.6	732.1	731.6	731.4	731.4	731.4	731.4	731.5	732.0
160°	742.7	741.9	741.1	740.3	739.6	739.3	739.4	739.5	739.6	739.8	740.3
162.5°	750.0	749.3	748.5	747.7	747.0	746.7	746.8	746.9	747.0	747.2	747.9
165°	759.9	759.2	758.4	757.7	756.9	756.6	756.7	756.8	757.0	757.1	757.8
167.5°	767.3	766.6	765.8	765.0	764.2	763.9	764.0	764.1	764.2	764.4	765.3
170°	771.5	770.6	769.7	768.8	767.9	767.5	767.6	767.8	767.9	768.0	769.0
172.5°	774.3	773.4	772.4	771.5	770.6	770.3	770.5	770.8	771.0	771.2	772.1
175°	777.3	776.5	775.7	775.0	774.2	773.9	774.0	774.2	774.3	774.4	775.4
177.5°	778.6	778.0	777.4	776.8	776.2	775.9	776.0	776.1	776.2	776.3	777.1
180°	777.3	777.3	777.3	777.3	777.3	777.3	777.3	777.3	777.3	777.3	777.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	474.9	475.5	476.2	476.4	476.3	476.3	476.2	476.1
5°	473.5	474.3	475.1	475.5	475.4	475.3	475.2	475.1
7.5°	469.6	470.3	471.0	471.3	471.2	471.1	471.0	470.9
10°	465.9	466.6	467.3	467.6	467.5	467.4	467.3	467.2
12.5°	461.4	461.9	462.5	462.6	462.4	462.1	461.8	461.6
15°	453.0	453.6	454.2	454.3	453.9	453.5	453.1	452.7
17.5°	442.4	442.8	443.3	443.4	443.2	442.9	442.7	442.4
20°	434.2	434.5	434.8	434.9	434.9	434.9	434.9	434.9
22.5°	425.8	426.2	426.6	426.7	426.4	426.2	425.9	425.7
25°	412.4	412.9	413.3	413.2	412.7	412.2	411.7	411.2
27.5°	397.0	397.3	397.6	397.7	397.5	397.3	397.1	396.9
30°	386.4	386.6	386.8	386.9	386.8	386.7	386.6	386.5
32.5°	376.3	376.5	376.7	376.8	376.7	376.6	376.5	376.4
35°	360.0	360.3	360.6	360.7	360.7	360.7	360.7	360.7
37.5°	342.8	343.3	343.7	343.9	343.9	343.8	343.8	343.7
40°	331.2	331.6	332.1	332.4	332.6	332.9	333.1	333.3
42.5°	320.6	321.1	321.6	321.8	321.9	321.9	321.9	322.0
45°	303.5	304.2	304.9	305.3	305.4	305.5	305.6	305.7
47.5°	285.7	286.8	287.8	288.4	288.7	288.9	289.1	289.3
50°	273.9	275.1	276.2	276.9	277.2	277.5	277.8	278.1
52.5°	262.2	263.4	264.6	265.3	265.5	265.8	266.0	266.2
55°	243.6	244.7	245.9	246.6	247.0	247.4	247.9	248.3
57.5°	225.2	226.5	227.8	228.6	228.9	229.2	229.6	229.9
60°	212.7	214.2	215.8	216.7	217.0	217.3	217.6	217.9
62.5°	200.0	201.7	203.4	204.4	204.8	205.2	205.6	206.0
65°	181.0	182.5	184.0	185.0	185.4	185.8	186.3	186.7
67.5°	161.5	163.3	165.2	166.4	166.9	167.5	168.0	168.5
70°	148.1	150.2	152.1	153.4	154.0	154.6	155.2	155.9
72.5°	135.8	137.9	140.1	141.4	141.8	142.3	142.7	143.2
75°	117.1	119.2	121.3	122.5	123.1	123.6	124.1	124.6
77.5°	98.4	100.7	102.9	104.3	104.7	105.1	105.5	105.9
80°	87.2	89.5	91.7	93.1	93.5	93.9	94.3	94.7
82.5°	76.5	78.8	81.0	82.4	83.2	83.9	84.6	85.4
85°	62.0	64.2	66.6	68.1	68.9	69.8	70.6	71.4
87.5°	52.2	54.7	57.3	58.9	59.7	60.5	61.3	62.1
90°	53.5	56.6	59.6	61.7	62.8	63.9	65.0	66.1
92.5°	51.9	54.8	57.8	59.7	60.6	61.5	62.4	63.3
95°	49.2	52.0	54.9	56.8	57.6	58.3	59.0	59.7
97.5°	57.3	55.7	54.3	54.0	54.7	55.4	56.1	56.9
100°	96.3	79.4	62.5	54.1	54.2	54.3	54.4	54.5
102.5°	153.3	151.8	150.3	145.4	137.3	129.3	121.2	113.1
105°	201.5	203.6	205.7	207.0	207.6	208.2	208.8	209.3
107.5°	244.9	247.0	249.0	250.2	250.5	250.7	251.1	251.3
110°	272.9	274.5	276.0	277.2	278.1	278.9	279.8	280.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	300.5	301.8	303.3	304.3	304.8	305.4	305.9	306.5
115°	342.4	343.8	345.2	345.7	345.6	345.5	345.3	345.2
117.5°	382.6	383.7	384.9	385.6	386.0	386.3	386.7	387.1
120°	408.7	410.2	411.7	412.4	412.4	412.4	412.4	412.4
122.5°	433.3	434.7	436.2	436.8	436.7	436.6	436.5	436.4
125°	469.4	470.5	471.6	472.3	472.4	472.5	472.7	472.8
127.5°	502.0	503.2	504.5	504.9	504.6	504.2	503.9	503.5
130°	523.5	524.6	525.6	526.1	526.0	525.9	525.8	525.6
132.5°	543.4	544.8	546.1	546.7	546.5	546.3	546.1	545.9
135°	572.3	573.4	574.5	574.9	574.6	574.4	574.1	573.9
137.5°	599.6	600.9	602.1	602.6	602.4	602.1	601.9	601.6
140°	616.2	617.6	618.9	619.6	619.1	618.8	618.4	618.1
142.5°	632.7	633.7	634.7	635.1	634.7	634.4	634.0	633.7
145°	656.4	657.0	657.7	657.8	657.5	657.1	656.8	656.4
147.5°	676.9	677.2	677.6	677.4	676.6	675.9	675.2	674.4
150°	690.1	690.4	690.6	690.3	689.4	688.5	687.6	686.7
152.5°	702.2	702.5	702.7	702.4	701.5	700.5	699.6	698.7
155°	718.7	719.0	719.4	719.1	718.1	717.1	716.1	715.0
157.5°	732.4	732.8	733.2	732.9	731.8	730.7	729.7	728.7
160°	740.8	741.3	741.8	741.5	740.5	739.5	738.5	737.5
162.5°	748.6	749.3	750.0	749.8	748.7	747.6	746.5	745.3
165°	758.6	759.4	760.1	760.0	759.0	758.0	757.0	755.9
167.5°	766.2	767.1	768.0	767.9	766.8	765.6	764.5	763.3
170°	770.1	771.1	772.1	772.0	770.9	769.7	768.6	767.5
172.5°	773.1	774.1	775.0	774.9	773.7	772.5	771.3	770.2
175°	776.4	777.4	778.5	778.4	777.3	776.1	775.0	773.8
177.5°	777.8	778.5	779.2	779.1	778.3	777.5	776.7	775.9
180°	777.3	777.3	777.3	777.3	777.3	777.3	777.3	777.3

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