

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: P333646

Luminaire Tested: **S125RDIW-S375D770U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333646
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: S125RDIW-S375D770U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4517.1 lumens
Efficiency: N/A
Efficacy: 148.6 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: Semi-Indirect

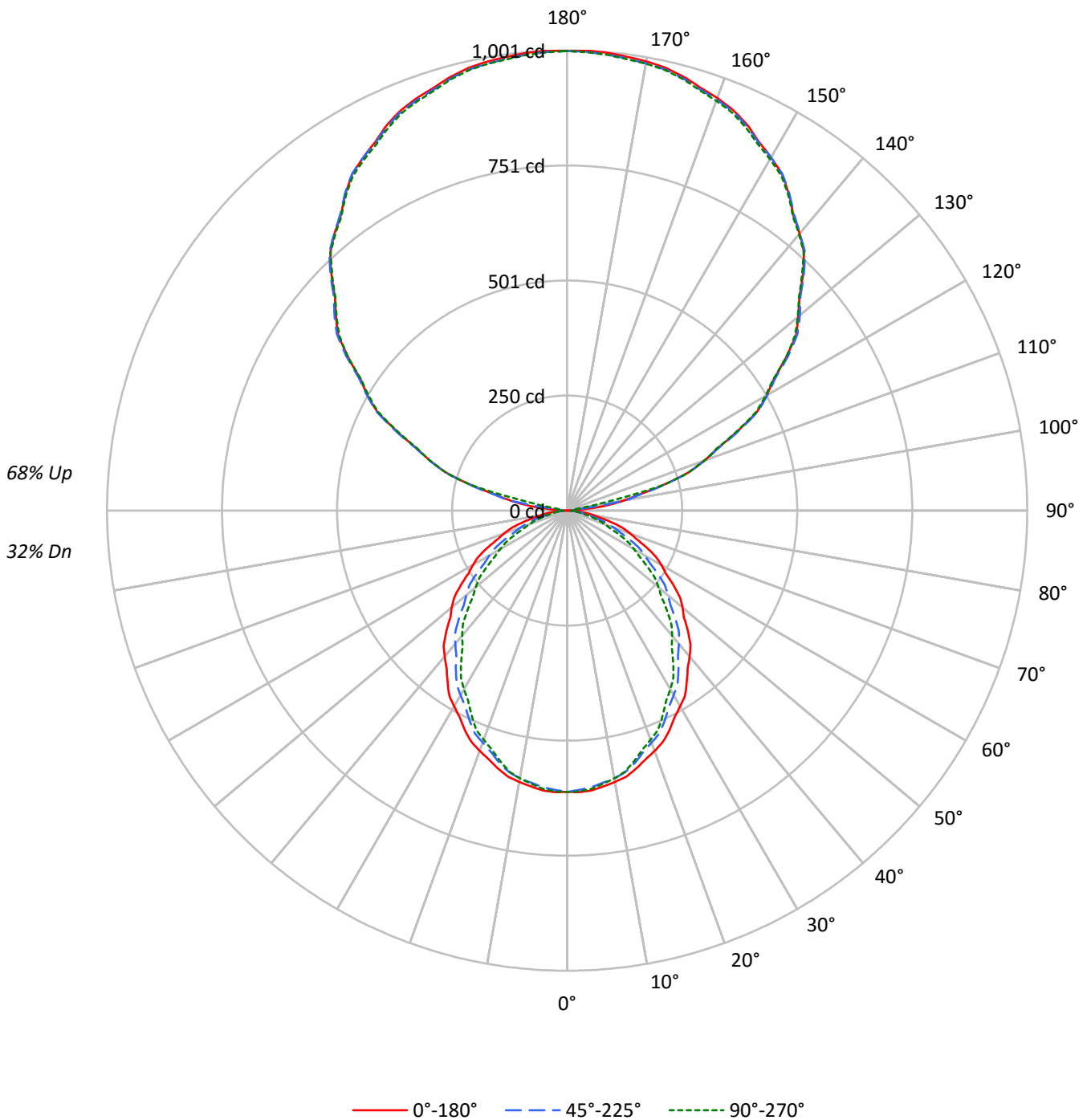
Input Watts (W): 30.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	34	34	27
2	86	78	73	68	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	52	50	46	42	38	36	33	28	26	24	20
4	71	61	53	48	64	55	49	44	44	40	36	34	31	28	25	23	21	17
5	66	54	47	41	59	49	43	37	40	35	31	31	27	25	22	20	18	15
6	60	49	41	35	54	44	37	32	36	31	27	28	24	22	20	18	16	13
7	56	44	36	31	50	40	33	28	32	27	24	25	22	19	19	16	14	12
8	52	40	32	27	46	36	30	25	29	24	21	23	20	17	17	15	13	10
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	13	12	9
10	45	33	26	21	40	30	24	20	25	20	17	19	16	14	15	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3952	3952	3952
5°	3961	3916	3940
10°	3931	3880	3880
15°	3884	3801	3770
20°	3824	3691	3647
25°	3755	3583	3504
30°	3667	3457	3347
35°	3578	3327	3170
40°	3495	3191	2996
45°	3394	3040	2807
50°	3293	2875	2609
55°	3174	2716	2399
60°	3056	2525	2173
65°	2917	2303	1913
70°	2757	2024	1648
75°	2538	1707	1372
80°	2235	1339	1153
85°	1882	1097	1030



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.5	1.3
10°-20°	160.8	3.6
20°-30°	233.2	5.2
30°-40°	265.7	5.9
40°-50°	259.0	5.7
50°-60°	218.0	4.8
60°-70°	152.8	3.4
70°-80°	78.6	1.7
80°-90°	21.9	0.5
90°-100°	36.3	0.8
100°-110°	223.9	5.0
110°-120°	406.0	9.0
120°-130°	521.1	11.5
130°-140°	560.5	12.4
140°-150°	526.1	11.6
150°-160°	425.5	9.4
160°-170°	275.2	6.1
170°-180°	94.9	2.1
0°-30°	451.5	10.0
0°-40°	717.3	15.9
0°-60°	1194.3	26.4
0°-90°	1447.7	32.0
90°-120°	666.2	14.7
90°-150°	2273.8	50.3
90°-180°	3069.0	67.9
0°-180°	4517.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	611	609	604	608	608	58
15°	581	578	568	568	564	164
25°	527	519	503	497	492	242
35°	454	442	422	409	402	284
45°	372	358	333	315	307	287
55°	282	267	241	221	213	252
65°	191	175	151	133	125	189
75°	102	88	68	59	55	108
85°	25	17	15	14	14	29
90°	1	7	12	15	18	3
95°	42	39	12	15	16	54
105°	218	221	221	221	220	231
115°	409	413	414	410	406	405
125°	582	587	587	584	582	519
135°	725	730	728	727	722	559
145°	841	842	842	843	839	526
155°	926	922	923	925	920	427
165°	977	973	974	978	972	276
175°	1000	995	996	1001	995	95
180°	1000	1000	1000	1000	1000	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9
2.5°	613.0	612.8	612.5	612.3	612.0	611.5	610.7	609.8	609.0	608.2	609.0
5°	611.0	610.6	610.2	609.7	609.3	608.6	607.4	606.3	605.2	604.0	605.1
7.5°	605.0	604.6	604.2	603.8	603.4	602.5	601.2	599.8	598.5	597.1	597.8
10°	599.4	599.1	598.8	598.5	598.2	597.3	595.9	594.4	593.0	591.6	591.9
12.5°	593.1	592.7	592.4	592.0	591.6	590.4	588.5	586.6	584.6	582.7	582.9
15°	580.9	580.3	579.7	579.1	578.5	577.1	574.9	572.8	570.6	568.5	568.4
17.5°	567.2	566.2	565.3	564.3	563.4	561.6	558.8	556.1	553.4	550.7	550.2
20°	556.4	555.4	554.4	553.4	552.3	550.2	546.9	543.6	540.3	537.0	536.5
22.5°	544.6	543.6	542.6	541.5	540.5	538.3	534.8	531.4	527.9	524.5	523.5
25°	526.9	525.3	523.8	522.2	520.7	518.0	514.2	510.4	506.6	502.8	501.5
27.5°	506.5	504.7	502.8	500.9	499.0	496.1	492.0	487.9	483.9	479.8	477.9
30°	491.7	489.8	487.8	485.9	483.9	480.8	476.5	472.2	467.9	463.5	461.2
32.5°	477.3	475.0	472.8	470.5	468.2	464.9	460.5	456.1	451.7	447.3	444.7
35°	453.8	451.4	448.9	446.4	444.0	440.4	435.8	431.2	426.6	422.0	419.0
37.5°	430.8	427.8	424.8	421.8	418.8	414.9	410.2	405.4	400.7	395.9	392.3
40°	414.6	411.5	408.4	405.3	402.2	398.2	393.3	388.4	383.4	378.5	374.6
42.5°	397.5	394.4	391.2	388.1	384.9	380.8	375.7	370.6	365.5	360.4	356.7
45°	371.6	368.6	365.6	362.6	359.7	355.3	349.7	344.1	338.4	332.8	328.6
47.5°	344.7	341.5	338.4	335.2	332.1	327.7	322.0	316.3	310.6	304.9	300.7
50°	327.7	324.3	320.9	317.5	314.1	309.5	303.6	297.8	291.9	286.1	281.8
52.5°	309.2	305.7	302.2	298.8	295.3	290.8	285.3	279.7	274.2	268.7	264.1
55°	281.9	278.6	275.3	272.1	268.8	264.3	258.5	252.7	247.0	241.2	236.6
57.5°	254.4	250.9	247.3	243.8	240.3	235.8	230.2	224.7	219.2	213.6	209.1
60°	236.6	233.0	229.4	225.8	222.2	217.7	212.1	206.6	201.0	195.5	191.0
62.5°	217.8	214.3	210.9	207.5	204.0	199.5	193.9	188.3	182.6	177.0	172.8
65°	190.9	187.4	183.9	180.4	176.9	172.4	167.0	161.6	156.1	150.7	146.6
67.5°	164.2	160.7	157.2	153.7	150.2	145.8	140.6	135.4	130.2	125.0	121.2
70°	146.0	142.6	139.1	135.6	132.1	127.8	122.6	117.5	112.4	107.2	104.0
72.5°	128.3	124.9	121.5	118.1	114.7	110.5	105.7	100.9	96.1	91.3	88.4
75°	101.7	98.6	95.5	92.4	89.4	85.7	81.3	77.0	72.7	68.4	66.1
77.5°	75.2	72.8	70.3	67.8	65.4	62.4	59.0	55.5	52.1	48.6	47.0
80°	60.1	57.6	55.2	52.7	50.2	47.6	44.7	41.8	38.9	36.0	35.1
82.5°	45.3	43.1	40.9	38.6	36.4	34.3	32.4	30.4	28.4	26.4	26.0
85°	25.4	23.6	21.7	19.9	18.0	16.8	16.3	15.8	15.3	14.8	14.7
87.5°	8.7	8.3	8.0	7.7	7.4	7.3	7.5	7.6	7.8	7.9	8.1
90°	0.7	2.1	3.4	4.7	6.0	7.2	8.4	9.6	10.7	11.9	12.7
92.5°	11.4	10.5	9.6	8.6	7.7	7.8	8.8	9.8	10.8	11.9	12.7
95°	42.2	41.7	41.2	40.8	40.3	36.9	30.6	24.4	18.1	11.9	12.7
97.5°	88.2	89.1	90.0	90.8	91.7	86.0	73.6	61.2	48.8	36.5	31.8
100°	123.7	124.2	124.7	125.2	125.7	126.3	127.0	127.6	128.3	128.9	104.4
102.5°	159.9	160.5	161.2	161.8	162.4	162.9	163.3	163.7	164.1	164.5	159.9
105°	217.8	218.5	219.2	219.8	220.5	220.8	220.8	220.8	220.8	220.8	220.8
107.5°	278.0	278.0	278.0	278.0	278.0	278.2	278.5	278.8	279.2	279.5	279.5
110°	317.1	317.1	317.1	317.1	317.1	317.3	317.6	318.0	318.3	318.6	318.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	353.9	354.3	354.7	355.1	355.5	355.8	356.0	356.2	356.4	356.6	355.9
115°	409.0	409.8	410.7	411.5	412.3	412.8	413.0	413.1	413.3	413.5	412.8
117.5°	466.1	466.0	466.0	466.0	465.9	466.2	466.9	467.5	468.1	468.7	467.9
120°	501.6	501.5	501.3	501.1	501.0	501.1	501.6	502.1	502.6	503.1	502.8
122.5°	533.0	533.7	534.3	534.9	535.6	536.0	536.2	536.4	536.7	536.9	536.6
125°	581.7	582.8	584.0	585.1	586.3	586.8	586.8	586.8	586.8	586.8	586.2
127.5°	628.0	628.9	629.7	630.5	631.3	631.7	631.6	631.5	631.4	631.3	630.9
130°	656.5	657.3	658.1	659.0	659.8	660.3	660.4	660.6	660.8	660.9	660.4
132.5°	684.9	685.9	686.9	687.8	688.8	689.1	688.7	688.3	688.0	687.6	687.5
135°	725.4	726.4	727.4	728.4	729.4	729.7	729.4	729.0	728.7	728.4	728.0
137.5°	762.6	763.5	764.3	765.2	766.0	766.3	766.0	765.7	765.4	765.1	765.2
140°	786.9	787.2	787.6	787.9	788.2	788.3	788.1	788.0	787.8	787.6	788.0
142.5°	808.8	809.0	809.2	809.4	809.6	809.8	810.1	810.3	810.5	810.8	810.8
145°	841.0	841.3	841.7	842.0	842.3	842.5	842.5	842.5	842.5	842.5	842.6
147.5°	869.2	869.1	869.0	869.0	868.9	869.0	869.2	869.3	869.5	869.7	869.9
150°	886.9	886.6	886.3	885.9	885.6	885.6	885.9	886.3	886.6	886.9	887.3
152.5°	904.1	903.4	902.7	902.0	901.2	901.0	901.4	901.7	902.0	902.3	902.7
155°	926.2	925.2	924.2	923.2	922.3	921.9	922.3	922.6	922.9	923.2	923.7
157.5°	943.2	942.7	942.1	941.5	940.9	940.6	940.6	940.7	940.7	940.7	941.3
160°	955.1	954.1	953.1	952.1	951.2	950.7	950.9	951.1	951.2	951.4	952.1
162.5°	964.6	963.6	962.6	961.6	960.6	960.2	960.4	960.6	960.7	960.9	961.8
165°	977.3	976.3	975.4	974.4	973.4	973.0	973.1	973.3	973.5	973.6	974.6
167.5°	986.8	985.8	984.8	983.8	982.7	982.3	982.5	982.6	982.8	983.0	984.1
170°	992.2	991.0	989.8	988.7	987.5	987.0	987.2	987.4	987.5	987.7	989.0
172.5°	995.7	994.6	993.4	992.2	991.1	990.7	991.0	991.3	991.6	991.9	993.0
175°	999.6	998.6	997.6	996.6	995.6	995.2	995.4	995.5	995.7	995.9	997.2
177.5°	1001.3	1000.5	999.8	999.0	998.2	997.8	998.0	998.1	998.2	998.4	999.3
180°	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9
2.5°	609.8	610.7	611.5	611.9	611.8	611.7	611.6	611.5
5°	606.1	607.1	608.1	608.6	608.4	608.1	607.9	607.7
7.5°	598.5	599.3	600.0	600.2	600.0	599.8	599.6	599.3
10°	592.2	592.5	592.8	592.8	592.5	592.2	591.9	591.6
12.5°	583.1	583.4	583.6	583.5	583.0	582.5	582.1	581.6
15°	568.2	568.1	568.0	567.5	566.6	565.7	564.8	563.8
17.5°	549.7	549.2	548.7	548.0	547.3	546.5	545.7	545.0
20°	536.0	535.5	535.0	534.3	533.3	532.4	531.5	530.6
22.5°	522.4	521.4	520.4	519.5	518.8	518.0	517.3	516.5
25°	500.2	498.8	497.5	496.3	495.1	494.0	492.9	491.7
27.5°	476.1	474.2	472.3	470.9	469.8	468.7	467.6	466.5
30°	458.8	456.5	454.1	452.5	451.5	450.6	449.7	448.8
32.5°	442.1	439.5	436.8	435.0	433.8	432.6	431.4	430.3
35°	416.0	413.0	410.0	407.8	406.4	405.0	403.5	402.1
37.5°	388.7	385.2	381.6	379.1	377.7	376.3	374.9	373.5
40°	370.7	366.8	362.9	360.3	359.1	357.9	356.6	355.4
42.5°	352.9	349.2	345.4	342.7	340.9	339.0	337.2	335.4
45°	324.5	320.4	316.3	313.5	312.0	310.4	308.9	307.3
47.5°	296.5	292.2	288.0	285.0	283.3	281.6	279.9	278.2
50°	277.4	273.1	268.8	265.9	264.4	262.8	261.3	259.7
52.5°	259.4	254.8	250.1	247.0	245.5	244.0	242.4	240.9
55°	232.0	227.4	222.8	219.6	218.0	216.3	214.7	213.1
57.5°	204.6	200.1	195.5	192.5	191.1	189.6	188.2	186.7
60°	186.5	181.9	177.4	174.4	172.8	171.3	169.8	168.2
62.5°	168.6	164.4	160.2	157.4	155.8	154.3	152.8	151.2
65°	142.4	138.3	134.2	131.4	129.9	128.3	126.8	125.2
67.5°	117.4	113.7	109.9	107.4	106.2	105.0	103.7	102.5
70°	100.9	97.7	94.5	92.3	91.0	89.8	88.6	87.3
72.5°	85.4	82.5	79.6	77.7	76.9	76.1	75.2	74.4
75°	63.9	61.6	59.4	57.9	57.2	56.4	55.7	55.0
77.5°	45.5	43.9	42.3	41.2	40.7	40.2	39.6	39.1
80°	34.2	33.3	32.4	31.8	31.6	31.4	31.2	31.0
82.5°	25.6	25.1	24.7	24.4	24.3	24.2	24.1	23.9
85°	14.6	14.5	14.4	14.3	14.2	14.1	14.0	13.9
87.5°	8.2	8.4	8.6	8.7	8.7	8.7	8.7	8.7
90°	13.5	14.3	15.1	15.8	16.3	16.8	17.3	17.8
92.5°	13.5	14.3	15.1	15.7	15.9	16.1	16.4	16.6
95°	13.5	14.3	15.1	15.6	15.6	15.6	15.6	15.6
97.5°	27.2	22.5	17.9	15.6	15.6	15.6	15.6	15.6
100°	79.9	55.3	30.8	18.2	17.5	16.9	16.2	15.6
102.5°	155.2	150.6	145.9	138.0	126.8	115.6	104.4	93.2
105°	220.8	220.8	220.8	220.7	220.6	220.4	220.2	220.1
107.5°	279.6	279.6	279.6	279.4	278.9	278.4	277.9	277.4
110°	317.6	317.1	316.6	316.5	316.6	316.8	317.0	317.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	355.3	354.7	354.0	353.6	353.4	353.2	352.9	352.7
115°	412.1	411.5	410.8	410.0	409.0	408.0	407.0	406.0
117.5°	467.0	466.2	465.3	464.7	464.2	463.8	463.4	463.0
120°	502.5	502.1	501.8	501.2	500.4	499.6	498.8	497.9
122.5°	536.2	535.9	535.6	534.9	534.0	533.0	532.1	531.1
125°	585.5	584.9	584.2	583.6	583.1	582.6	582.2	581.7
127.5°	630.6	630.2	629.9	629.1	627.8	626.6	625.4	624.2
130°	660.0	659.5	659.0	658.3	657.5	656.7	655.8	655.0
132.5°	687.4	687.3	687.2	686.8	685.9	685.1	684.3	683.5
135°	727.7	727.4	727.1	726.4	725.4	724.4	723.4	722.4
137.5°	765.3	765.3	765.4	765.0	764.1	763.3	762.4	761.6
140°	788.3	788.6	789.0	788.6	787.6	786.7	785.7	784.7
142.5°	810.9	811.0	811.0	810.6	809.6	808.6	807.6	806.6
145°	842.8	843.0	843.1	842.7	841.7	840.7	839.8	838.8
147.5°	870.1	870.3	870.5	870.0	868.9	867.7	866.5	865.3
150°	887.6	887.9	888.3	887.8	886.4	885.1	883.8	882.5
152.5°	903.0	903.3	903.7	903.2	902.0	900.9	899.7	898.5
155°	924.2	924.7	925.2	924.8	923.5	922.2	920.9	919.5
157.5°	941.8	942.3	942.8	942.4	941.1	939.8	938.5	937.2
160°	952.7	953.4	954.0	953.7	952.4	951.1	949.8	948.4
162.5°	962.7	963.6	964.6	964.3	962.9	961.4	960.0	958.5
165°	975.6	976.6	977.6	977.4	976.1	974.8	973.5	972.1
167.5°	985.3	986.5	987.7	987.6	986.1	984.6	983.1	981.6
170°	990.3	991.7	993.0	992.9	991.4	989.9	988.4	987.0
172.5°	994.2	995.4	996.6	996.4	995.0	993.5	992.0	990.5
175°	998.5	999.8	1001.1	1001.0	999.6	998.1	996.6	995.1
177.5°	1000.2	1001.1	1002.1	1002.0	1000.9	999.9	998.8	997.8
180°	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6

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