

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: P333184-830

Luminaire Tested: **S125DIP-S610D810U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333184-830
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-S610D810U830-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5411.0 lumens
Efficiency: N/A
Efficacy: 140.9 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

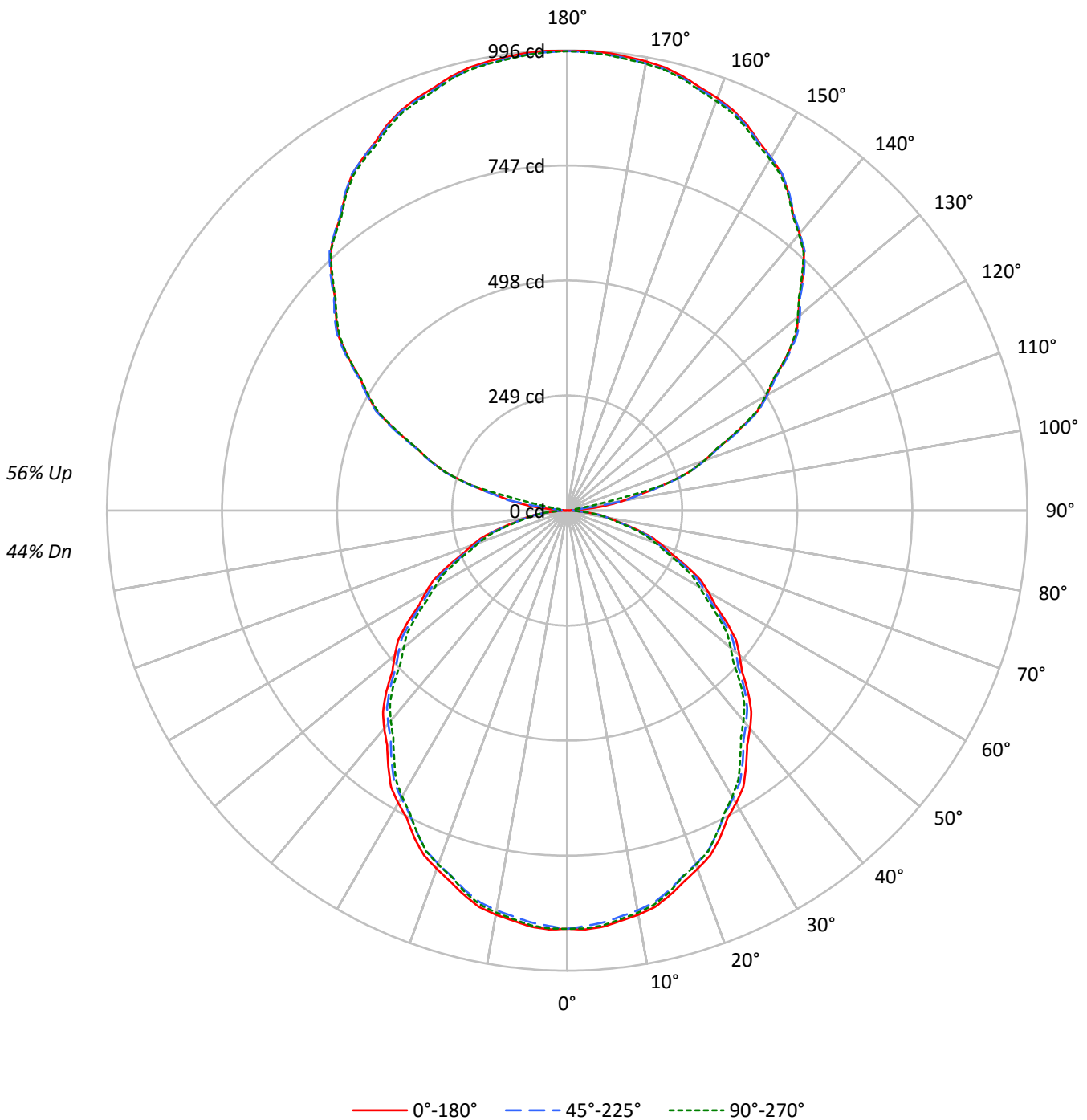
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	0	
RCR																						
0	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	44				44
1	96	92	88	85	88	84	81	78	70	67	65	57	55	53	44	43	42				37	
2	88	80	74	69	80	74	68	64	61	57	54	50	47	45	39	37	36				31	
3	80	71	63	57	73	65	58	53	54	49	45	44	40	38	34	32	30				26	
4	73	62	55	49	67	57	50	45	48	43	39	39	35	32	31	28	26				22	
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23				19	
6	62	50	42	36	56	46	39	34	38	33	29	32	27	24	25	22	20				17	
7	57	45	37	31	52	41	34	29	35	29	25	29	25	22	23	20	18				15	
8	53	41	33	28	48	38	31	26	32	26	23	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	22	18	22	18	16	18	15	13				11	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5846	5846	5846
5°	5859	5803	5841
10°	5823	5762	5795
15°	5760	5693	5717
20°	5670	5597	5606
25°	5573	5481	5476
30°	5452	5357	5330
35°	5324	5222	5149
40°	5193	5078	5005
45°	5050	4945	4847
50°	4893	4786	4641
55°	4741	4604	4476
60°	4561	4421	4265
65°	4345	4202	4060
70°	4137	3950	3814
75°	3770	3646	3521
80°	3355	3303	3221
85°	2920	2971	2816



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.3	1.6
10°-20°	241.1	4.5
20°-30°	356.0	6.6
30°-40°	415.4	7.7
40°-50°	417.2	7.7
50°-60°	366.2	6.8
60°-70°	272.9	5.0
70°-80°	156.0	2.9
80°-90°	47.5	0.9
90°-100°	36.1	0.7
100°-110°	222.7	4.1
110°-120°	403.9	7.5
120°-130°	518.4	9.6
130°-140°	557.5	10.3
140°-150°	523.3	9.7
150°-160°	423.3	7.8
160°-170°	273.8	5.1
170°-180°	94.4	1.7
0°-30°	682.4	12.6
0°-40°	1097.8	20.3
0°-60°	1881.2	34.8
0°-90°	2357.5	43.6
90°-120°	662.7	12.2
90°-150°	2262.0	41.8
90°-180°	3054.0	56.4
0°-180°	5411.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	904	902	895	901	901	86
15°	862	859	852	855	855	243
25°	782	778	769	770	768	360
35°	675	672	662	659	653	422
45°	553	550	541	533	531	426
55°	421	418	409	403	398	376
65°	284	282	275	269	266	282
75°	151	150	146	144	141	161
85°	39	40	40	39	38	44
90°	1	7	12	15	18	4
95°	42	38	12	15	16	54
105°	217	219	220	220	219	230
115°	407	410	411	408	404	403
125°	579	584	584	581	579	517
135°	722	726	725	723	719	556
145°	837	838	838	839	834	523
155°	921	917	918	920	915	424
165°	972	968	969	972	967	275
175°	994	990	991	996	990	95
180°	994	994	994	994	994	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2
2.5°	907.5	907.1	906.7	906.3	906.0	905.1	903.9	902.6	901.4	900.0	901.4
5°	903.8	903.4	903.1	902.8	902.5	901.5	899.9	898.3	896.7	895.1	896.6
7.5°	895.4	895.1	894.8	894.5	894.2	893.2	891.4	889.7	887.9	886.2	887.5
10°	888.0	887.7	887.4	887.0	886.7	885.7	883.9	882.2	880.4	878.7	880.0
12.5°	878.8	878.3	877.7	877.1	876.6	875.4	873.8	872.2	870.5	868.9	870.0
15°	861.5	861.0	860.5	860.1	859.6	858.5	856.8	855.0	853.2	851.5	852.2
17.5°	841.6	840.9	840.2	839.5	838.8	837.5	835.8	833.9	832.1	830.3	831.2
20°	825.0	824.6	824.3	824.1	823.7	822.6	820.5	818.4	816.3	814.3	815.4
22.5°	808.3	807.8	807.2	806.6	806.1	804.8	802.9	801.0	799.0	797.0	797.8
25°	782.0	781.2	780.4	779.7	778.8	777.4	775.3	773.3	771.2	769.1	769.5
27.5°	751.2	750.7	750.3	749.8	749.3	748.0	745.8	743.8	741.6	739.5	739.5
30°	731.1	730.7	730.2	729.7	729.2	727.8	725.5	723.0	720.7	718.3	717.9
32.5°	709.4	708.7	707.9	707.2	706.4	705.0	702.9	700.8	698.6	696.5	696.0
35°	675.3	674.7	674.0	673.4	672.8	671.4	669.1	666.8	664.7	662.4	661.7
37.5°	639.9	639.1	638.4	637.5	636.8	635.3	633.2	631.1	629.0	626.9	625.8
40°	615.9	615.1	614.3	613.5	612.7	611.1	609.0	606.7	604.5	602.3	600.9
42.5°	590.1	589.5	588.7	588.1	587.4	586.0	583.7	581.5	579.3	577.0	575.8
45°	552.9	552.2	551.6	550.9	550.4	549.0	547.1	545.3	543.3	541.4	539.5
47.5°	512.7	512.7	512.8	512.8	512.8	511.7	509.4	507.2	504.9	502.6	500.7
50°	487.0	486.4	486.0	485.5	485.0	483.9	481.9	480.0	478.2	476.3	474.2
52.5°	460.6	460.2	460.0	459.6	459.2	458.0	456.0	453.9	451.9	449.9	448.1
55°	421.1	420.6	420.1	419.6	419.1	417.8	415.6	413.4	411.1	408.9	407.5
57.5°	379.4	379.2	378.9	378.6	378.4	377.3	375.4	373.5	371.6	369.9	368.0
60°	353.1	352.4	351.8	351.1	350.5	349.3	347.6	345.8	344.0	342.3	340.7
62.5°	325.6	325.1	324.5	324.0	323.5	322.5	321.0	319.5	318.0	316.5	314.8
65°	284.3	284.0	283.7	283.3	283.0	282.0	280.2	278.5	276.7	275.0	273.5
67.5°	244.3	243.6	243.0	242.3	241.7	240.7	239.4	238.1	236.8	235.4	234.2
70°	219.1	218.4	217.5	216.8	215.9	214.8	213.4	212.0	210.6	209.2	208.1
72.5°	191.6	191.1	190.6	190.0	189.5	188.7	187.8	186.9	186.0	185.0	184.0
75°	151.1	150.8	150.4	150.1	149.9	149.3	148.5	147.7	146.8	146.1	145.6
77.5°	113.8	113.6	113.5	113.3	113.2	112.9	112.4	112.1	111.6	111.1	110.8
80°	90.2	90.2	90.2	90.2	90.2	90.1	89.7	89.4	89.2	88.8	88.6
82.5°	69.7	69.4	69.1	68.8	68.6	68.4	68.3	68.3	68.2	68.1	67.9
85°	39.4	39.6	39.7	39.9	40.1	40.1	40.1	40.1	40.1	40.1	40.0
87.5°	15.6	15.8	16.1	16.4	16.7	16.9	17.0	17.1	17.2	17.2	17.4
90°	0.8	2.1	3.4	4.7	5.9	7.2	8.4	9.5	10.7	11.8	12.6
92.5°	11.3	10.5	9.5	8.6	7.7	7.7	8.8	9.8	10.7	11.8	12.6
95°	42.0	41.6	41.0	40.5	40.1	36.7	30.4	24.2	18.0	11.8	12.6
97.5°	87.8	88.6	89.4	90.4	91.2	85.6	73.2	60.9	48.5	36.3	31.7
100°	123.1	123.6	124.0	124.6	125.1	125.6	126.3	127.0	127.6	128.3	103.9
102.5°	159.1	159.7	160.3	160.9	161.6	162.0	162.5	162.9	163.2	163.6	159.0
105°	216.7	217.4	218.0	218.7	219.3	219.6	219.6	219.6	219.6	219.6	219.6
107.5°	276.5	276.5	276.5	276.5	276.5	276.7	277.0	277.4	277.7	278.1	278.1
110°	315.5	315.5	315.5	315.5	315.5	315.7	315.9	316.3	316.6	317.0	316.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	352.0	352.4	352.8	353.3	353.6	353.9	354.1	354.3	354.5	354.7	354.1
115°	406.9	407.7	408.5	409.3	410.2	410.7	410.9	410.9	411.1	411.3	410.7
117.5°	463.6	463.6	463.5	463.5	463.5	463.8	464.4	465.1	465.7	466.3	465.4
120°	499.0	498.9	498.7	498.5	498.3	498.5	499.0	499.5	500.0	500.5	500.2
122.5°	530.3	530.9	531.5	532.2	532.7	533.2	533.4	533.7	533.9	534.1	533.8
125°	578.6	579.8	580.9	582.1	583.2	583.8	583.8	583.8	583.8	583.8	583.2
127.5°	624.8	625.6	626.4	627.3	628.0	628.4	628.3	628.2	628.1	628.0	627.6
130°	653.1	653.9	654.7	655.5	656.4	656.9	657.0	657.1	657.3	657.5	657.0
132.5°	681.4	682.3	683.2	684.2	685.2	685.5	685.1	684.8	684.4	684.0	683.9
135°	721.6	722.6	723.6	724.6	725.6	725.9	725.6	725.2	724.9	724.6	724.2
137.5°	758.7	759.5	760.3	761.2	762.0	762.3	762.0	761.8	761.5	761.1	761.2
140°	782.8	783.2	783.4	783.8	784.1	784.2	784.0	783.9	783.7	783.5	783.9
142.5°	804.6	804.8	805.0	805.2	805.4	805.6	805.9	806.1	806.3	806.5	806.6
145°	836.6	837.0	837.3	837.6	837.9	838.1	838.1	838.1	838.1	838.1	838.3
147.5°	864.6	864.6	864.5	864.4	864.4	864.4	864.6	864.8	865.1	865.3	865.4
150°	882.3	882.0	881.7	881.4	881.0	881.0	881.4	881.7	882.0	882.3	882.7
152.5°	899.5	898.7	898.0	897.3	896.5	896.4	896.6	897.0	897.3	897.7	898.0
155°	921.4	920.4	919.5	918.4	917.5	917.1	917.5	917.8	918.1	918.4	918.9
157.5°	938.3	937.7	937.2	936.6	935.9	935.7	935.8	935.8	935.8	935.9	936.3
160°	950.2	949.1	948.2	947.2	946.2	945.8	945.9	946.1	946.3	946.4	947.1
162.5°	959.6	958.6	957.6	956.6	955.6	955.3	955.4	955.5	955.7	955.9	956.8
165°	972.2	971.3	970.3	969.3	968.3	967.9	968.1	968.3	968.4	968.6	969.6
167.5°	981.7	980.7	979.7	978.6	977.6	977.2	977.3	977.5	977.7	977.9	979.0
170°	987.0	985.8	984.7	983.5	982.4	981.9	982.0	982.2	982.4	982.6	983.9
172.5°	990.5	989.4	988.3	987.1	985.9	985.5	985.8	986.1	986.4	986.7	987.9
175°	994.4	993.3	992.4	991.5	990.4	990.0	990.1	990.3	990.5	990.7	992.0
177.5°	996.2	995.3	994.6	993.8	993.0	992.7	992.8	992.9	993.1	993.2	994.1
180°	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2
2.5°	902.6	903.9	905.1	905.7	905.6	905.4	905.3	905.2
5°	898.1	899.5	900.9	901.5	901.4	901.3	901.1	900.9
7.5°	888.9	890.3	891.7	892.4	892.2	892.0	891.9	891.7
10°	881.3	882.5	883.8	884.4	884.2	884.0	883.8	883.7
12.5°	871.0	872.0	873.0	873.5	873.5	873.5	873.5	873.4
15°	853.1	853.8	854.7	855.1	855.1	855.1	855.1	855.1
17.5°	832.3	833.2	834.2	834.3	833.5	832.7	832.0	831.1
20°	816.4	817.6	818.7	818.9	818.0	817.3	816.4	815.7
22.5°	798.5	799.3	800.0	800.1	799.6	799.0	798.4	798.0
25°	769.8	770.1	770.4	770.3	769.9	769.4	768.9	768.5
27.5°	739.6	739.7	739.7	739.5	739.0	738.6	738.1	737.6
30°	717.7	717.4	717.0	716.6	716.1	715.7	715.2	714.7
32.5°	695.4	694.7	694.2	693.5	692.7	691.8	690.9	690.0
35°	660.8	660.1	659.2	658.2	657.0	655.6	654.4	653.1
37.5°	624.5	623.4	622.2	621.2	620.5	619.8	619.1	618.3
40°	599.4	597.9	596.5	595.6	595.1	594.7	594.2	593.7
42.5°	574.5	573.2	571.8	570.8	570.0	569.4	568.6	567.9
45°	537.5	535.6	533.8	532.5	532.1	531.6	531.1	530.7
47.5°	498.7	496.7	494.8	493.3	492.2	491.1	489.9	488.8
50°	472.1	470.0	468.0	466.4	465.2	464.1	463.0	461.9
52.5°	446.2	444.4	442.6	441.1	439.9	438.6	437.3	436.1
55°	406.0	404.6	403.2	401.9	400.8	399.6	398.6	397.5
57.5°	366.1	364.3	362.4	361.2	360.6	360.0	359.4	358.8
60°	339.1	337.5	335.9	334.6	333.5	332.3	331.2	330.2
62.5°	313.1	311.4	309.6	308.4	307.6	306.6	305.8	304.9
65°	272.1	270.7	269.3	268.2	267.6	266.9	266.4	265.7
67.5°	233.1	231.9	230.6	229.8	229.4	229.0	228.7	228.3
70°	207.2	206.2	205.3	204.5	203.9	203.2	202.6	202.0
72.5°	182.9	181.8	180.7	179.8	179.2	178.6	178.0	177.3
75°	145.2	144.7	144.2	143.6	143.0	142.3	141.8	141.1
77.5°	110.6	110.3	110.0	109.6	109.1	108.8	108.3	107.8
80°	88.5	88.3	88.1	87.9	87.6	87.3	87.0	86.6
82.5°	67.6	67.3	67.0	66.8	66.8	66.7	66.6	66.6
85°	39.8	39.6	39.5	39.2	38.9	38.5	38.3	38.0
87.5°	17.6	17.7	17.9	17.9	17.7	17.6	17.4	17.2
90°	13.5	14.2	15.1	15.7	16.2	16.7	17.2	17.7
92.5°	13.5	14.2	15.1	15.6	15.8	16.0	16.3	16.5
95°	13.5	14.2	15.1	15.5	15.5	15.5	15.5	15.5
97.5°	27.1	22.4	17.8	15.5	15.5	15.5	15.5	15.5
100°	79.5	55.0	30.6	18.1	17.4	16.8	16.1	15.5
102.5°	154.4	149.8	145.2	137.3	126.1	115.0	103.9	92.7
105°	219.6	219.6	219.6	219.6	219.4	219.2	219.0	219.0
107.5°	278.1	278.1	278.1	278.0	277.5	276.9	276.4	276.0
110°	315.9	315.5	315.0	314.8	315.0	315.2	315.3	315.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	353.5	352.8	352.2	351.8	351.6	351.3	351.1	350.9
115°	410.0	409.3	408.7	407.8	406.9	405.9	404.9	404.0
117.5°	464.6	463.7	462.9	462.2	461.8	461.4	461.0	460.5
120°	499.8	499.5	499.2	498.6	497.8	497.0	496.2	495.3
122.5°	533.5	533.1	532.8	532.2	531.2	530.3	529.3	528.4
125°	582.5	581.8	581.2	580.6	580.1	579.6	579.1	578.6
127.5°	627.3	627.0	626.6	625.8	624.6	623.4	622.2	620.9
130°	656.5	656.0	655.5	654.9	654.0	653.3	652.4	651.6
132.5°	683.8	683.7	683.6	683.2	682.4	681.6	680.7	680.0
135°	724.0	723.6	723.3	722.6	721.6	720.7	719.6	718.7
137.5°	761.3	761.3	761.4	761.0	760.2	759.3	758.5	757.6
140°	784.2	784.6	784.9	784.6	783.5	782.6	781.6	780.6
142.5°	806.7	806.7	806.8	806.3	805.4	804.4	803.4	802.4
145°	838.4	838.6	838.8	838.3	837.4	836.4	835.4	834.4
147.5°	865.6	865.8	866.0	865.5	864.3	863.2	862.0	860.8
150°	883.0	883.4	883.6	883.2	881.8	880.5	879.2	877.9
152.5°	898.3	898.6	899.0	898.5	897.4	896.2	895.0	893.8
155°	919.5	919.9	920.4	920.0	918.7	917.4	916.1	914.7
157.5°	936.9	937.5	937.9	937.5	936.2	934.9	933.6	932.3
160°	947.7	948.4	949.0	948.8	947.4	946.1	944.8	943.5
162.5°	957.7	958.7	959.5	959.3	957.8	956.4	955.0	953.6
165°	970.5	971.5	972.5	972.3	971.0	969.7	968.4	967.0
167.5°	980.2	981.4	982.6	982.4	980.9	979.5	978.0	976.6
170°	985.1	986.5	987.8	987.7	986.3	984.8	983.3	981.8
172.5°	989.0	990.2	991.5	991.3	989.8	988.4	986.8	985.3
175°	993.3	994.6	995.9	995.8	994.4	992.9	991.5	990.0
177.5°	995.0	995.9	996.8	996.8	995.7	994.7	993.6	992.6
180°	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4

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