

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: P333559-930

Luminaire Tested: **S125RDIP-S850D590U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333559-930
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: S125RDIP-S850D590U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4576.8 lumens
Efficiency: N/A
Efficacy: 113.6 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: General Diffuse

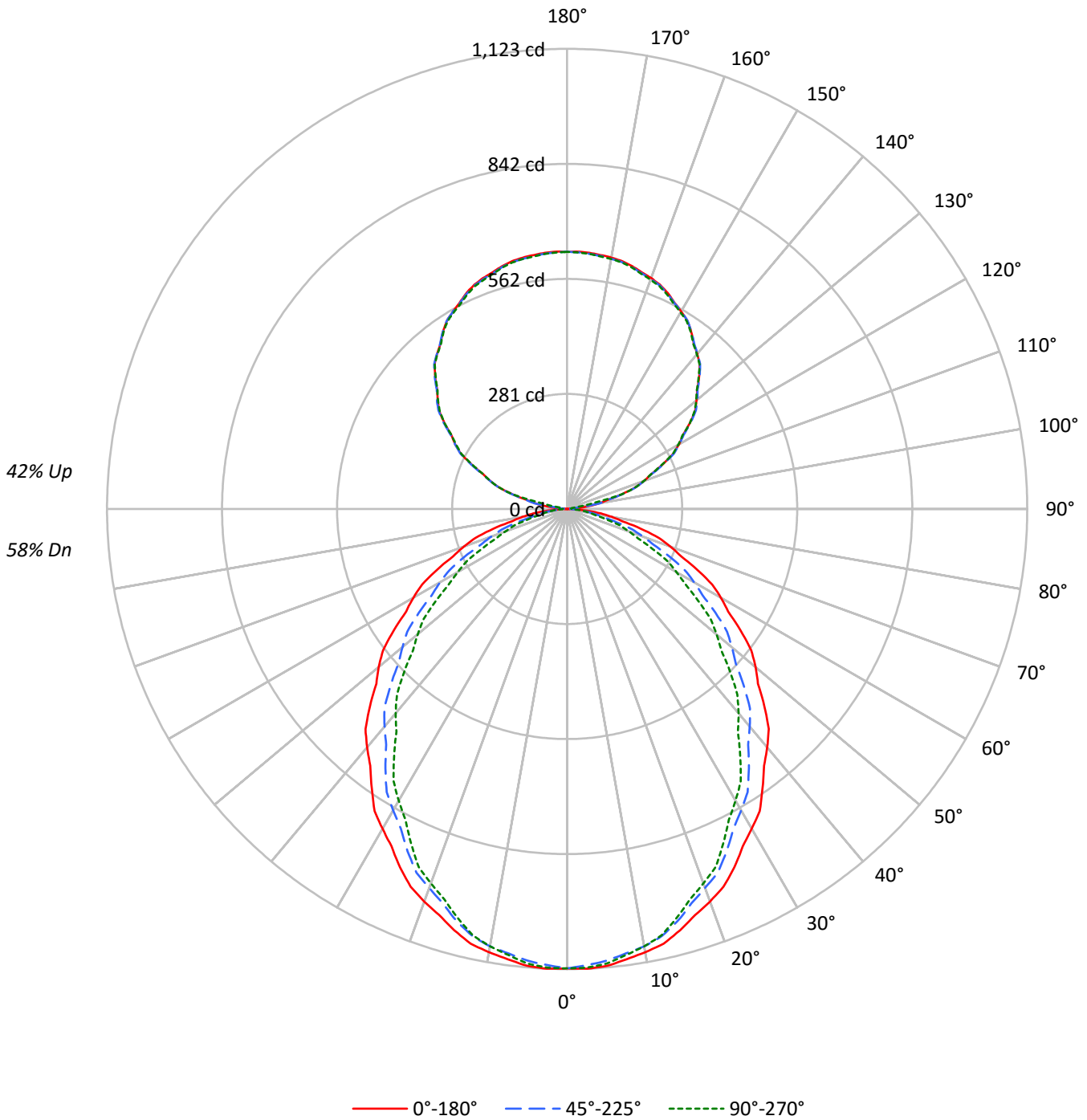
Input Watts (W): 40.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333559-930

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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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	100	96	92	88	93	89	86	83	77	75	73	66	65	63	56	55	54	49
2	91	84	78	72	85	78	73	68	68	64	61	59	56	53	50	48	46	42
3	83	74	66	61	77	69	63	57	60	55	51	52	48	45	44	42	39	36
4	76	65	58	52	71	61	54	49	54	48	44	47	42	39	40	37	34	31
5	70	59	50	44	65	55	48	42	48	42	38	42	37	34	36	33	30	27
6	65	53	44	39	60	49	42	37	44	38	33	38	33	30	33	29	26	24
7	60	48	40	34	56	45	38	32	40	34	29	35	30	26	30	26	24	21
8	56	43	36	30	52	41	34	29	36	30	26	32	27	24	28	24	21	19
9	52	40	32	27	48	37	31	26	33	28	24	29	25	21	26	22	19	17
10	49	36	29	24	45	34	28	23	31	25	21	27	23	19	24	20	17	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7240	7240	7240
5°	7257	7175	7219
10°	7202	7108	7108
15°	7117	6964	6907
20°	7007	6762	6681
25°	6879	6565	6420
30°	6718	6334	6131
35°	6556	6095	5807
40°	6403	5847	5490
45°	6218	5569	5142
50°	6031	5267	4782
55°	5816	4977	4396
60°	5599	4627	3981
65°	5344	4219	3506
70°	5053	3709	3021
75°	4649	3127	2515
80°	4095	2455	2109
85°	3453	2008	1882



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.4	2.3
10°-20°	294.6	6.4
20°-30°	427.2	9.3
30°-40°	486.9	10.6
40°-50°	474.6	10.4
50°-60°	399.5	8.7
60°-70°	280.0	6.1
70°-80°	143.9	3.1
80°-90°	37.7	0.8
90°-100°	22.8	0.5
100°-110°	140.5	3.1
110°-120°	254.9	5.6
120°-130°	327.1	7.1
130°-140°	351.8	7.7
140°-150°	330.3	7.2
150°-160°	267.1	5.8
160°-170°	172.8	3.8
170°-180°	59.6	1.3
0°-30°	827.2	18.1
0°-40°	1314.1	28.7
0°-60°	2188.2	47.8
0°-90°	2649.8	57.9
90°-120°	418.2	9.1
90°-150°	1427.4	31.2
90°-180°	1927.0	42.1
0°-180°	4576.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1121	1121	1121	1121	1121	
5°	1119	1116	1107	1115	1114	106
15°	1064	1059	1042	1040	1033	300
25°	965	952	921	910	901	444
35°	832	810	773	749	737	520
45°	681	655	610	577	563	525
55°	516	488	442	405	390	462
65°	350	320	276	243	229	346
75°	186	160	125	107	101	197
85°	47	32	27	26	25	52
90°	0	4	7	10	11	3
95°	26	24	7	10	10	34
105°	137	138	139	139	138	145
115°	257	259	260	258	255	254
125°	365	368	368	367	365	326
135°	455	458	457	456	454	351
145°	528	529	529	529	526	330
155°	582	579	580	581	577	268
165°	614	611	611	614	610	173
175°	628	625	625	628	625	60
180°	628	628	628	628	628	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1
2.5°	1123.1	1122.7	1122.2	1121.8	1121.3	1120.3	1118.8	1117.3	1115.8	1114.3	1115.8
5°	1119.4	1118.7	1117.9	1117.1	1116.4	1115.0	1112.9	1110.8	1108.7	1106.7	1108.6
7.5°	1108.4	1107.7	1106.9	1106.2	1105.5	1103.9	1101.5	1098.9	1096.5	1094.0	1095.3
10°	1098.2	1097.6	1097.1	1096.5	1095.9	1094.4	1091.8	1089.1	1086.5	1083.9	1084.3
12.5°	1086.7	1086.0	1085.2	1084.6	1083.9	1081.7	1078.2	1074.6	1071.1	1067.6	1068.0
15°	1064.4	1063.2	1062.1	1060.9	1059.8	1057.3	1053.4	1049.4	1045.5	1041.5	1041.3
17.5°	1039.1	1037.4	1035.7	1034.0	1032.2	1028.8	1023.9	1018.9	1013.9	1008.9	1008.0
20°	1019.5	1017.6	1015.7	1013.8	1011.9	1008.0	1002.0	996.0	989.9	983.9	983.0
22.5°	997.8	995.9	994.0	992.1	990.3	986.2	979.8	973.5	967.2	960.9	959.0
25°	965.3	962.5	959.6	956.8	954.0	949.1	942.2	935.1	928.2	921.3	918.8
27.5°	928.1	924.6	921.2	917.8	914.4	908.9	901.5	894.0	886.6	879.1	875.6
30°	900.9	897.3	893.8	890.2	886.6	880.8	873.0	865.1	857.2	849.3	845.0
32.5°	874.5	870.3	866.2	862.0	857.8	851.7	843.7	835.6	827.5	819.5	814.7
35°	831.5	827.0	822.5	817.9	813.4	806.9	798.5	790.0	781.5	773.1	767.6
37.5°	789.3	783.8	778.4	772.8	767.4	760.3	751.5	742.7	734.0	725.3	718.8
40°	759.5	753.9	748.2	742.6	736.9	729.6	720.6	711.5	702.5	693.5	686.3
42.5°	728.4	722.6	716.8	710.9	705.2	697.7	688.3	679.0	669.6	660.3	653.5
45°	680.8	675.3	669.8	664.4	658.9	651.0	640.7	630.4	620.0	609.7	602.1
47.5°	631.5	625.7	620.0	614.2	608.5	600.4	590.0	579.5	569.1	558.6	550.9
50°	600.3	594.1	587.9	581.7	575.5	567.0	556.3	545.6	534.8	524.2	516.2
52.5°	566.5	560.1	553.8	547.4	541.0	532.8	522.7	512.6	502.4	492.3	483.8
55°	516.5	510.5	504.5	498.5	492.4	484.1	473.6	463.1	452.6	442.0	433.5
57.5°	466.0	459.6	453.1	446.7	440.3	432.0	421.8	411.6	401.5	391.3	383.1
60°	433.5	427.0	420.4	413.8	407.2	398.8	388.7	378.5	368.4	358.2	349.9
62.5°	399.0	392.7	386.5	380.1	373.8	365.6	355.2	345.0	334.6	324.3	316.7
65°	349.7	343.3	336.9	330.5	324.1	315.9	306.0	296.0	286.0	276.1	268.5
67.5°	300.8	294.3	288.0	281.6	275.2	267.2	257.6	248.1	238.6	228.9	222.1
70°	267.6	261.1	254.8	248.3	242.0	234.1	224.7	215.2	205.9	196.4	190.6
72.5°	235.1	228.8	222.6	216.3	210.1	202.5	193.7	184.9	176.1	167.3	161.9
75°	186.3	180.7	175.0	169.3	163.7	156.9	149.0	141.1	133.2	125.3	121.2
77.5°	137.9	133.3	128.8	124.3	119.8	114.4	108.0	101.7	95.4	89.1	86.2
80°	110.1	105.6	101.0	96.5	92.0	87.2	81.9	76.6	71.3	66.0	64.3
82.5°	83.0	78.9	74.8	70.8	66.7	62.9	59.3	55.7	52.0	48.4	47.6
85°	46.6	43.2	39.8	36.4	33.0	30.8	29.9	28.9	28.0	27.1	26.9
87.5°	15.7	14.8	13.9	13.0	12.1	11.7	11.7	11.7	11.7	11.7	11.7
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°	7.2	6.6	6.0	5.5	4.8	4.9	5.5	6.2	6.8	7.4	8.0
95°	26.5	26.2	25.9	25.6	25.3	23.2	19.2	15.3	11.3	7.4	8.0
97.5°	55.4	55.9	56.5	57.0	57.6	54.0	46.2	38.4	30.7	22.9	20.0
100°	77.7	78.0	78.3	78.6	78.9	79.2	79.7	80.1	80.6	81.0	65.6
102.5°	100.4	100.8	101.2	101.6	101.9	102.2	102.5	102.8	103.1	103.3	100.4
105°	136.7	137.1	137.6	138.0	138.4	138.6	138.6	138.6	138.6	138.6	138.6
107.5°	174.6	174.6	174.6	174.6	174.6	174.6	174.8	175.0	175.3	175.5	175.5
110°	199.1	199.1	199.1	199.1	199.1	199.2	199.4	199.6	199.8	200.0	199.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	222.2	222.4	222.7	222.9	223.1	223.3	223.5	223.6	223.7	223.8	223.5
115°	256.7	257.3	257.8	258.3	258.9	259.2	259.3	259.3	259.4	259.6	259.2
117.5°	292.6	292.5	292.5	292.5	292.5	292.7	293.1	293.5	293.8	294.2	293.8
120°	315.0	314.8	314.7	314.6	314.5	314.6	315.0	315.2	315.5	315.8	315.6
122.5°	334.6	335.0	335.4	335.8	336.2	336.5	336.6	336.8	336.9	337.0	336.9
125°	365.2	365.9	366.6	367.3	368.0	368.4	368.4	368.4	368.4	368.4	368.0
127.5°	394.3	394.8	395.3	395.8	396.3	396.6	396.5	396.5	396.4	396.3	396.1
130°	412.1	412.6	413.2	413.7	414.2	414.5	414.6	414.7	414.8	414.9	414.6
132.5°	430.0	430.6	431.2	431.8	432.4	432.6	432.4	432.1	431.9	431.7	431.6
135°	455.4	456.0	456.6	457.2	457.9	458.1	457.9	457.6	457.5	457.2	457.1
137.5°	478.7	479.3	479.8	480.4	480.9	481.1	480.9	480.7	480.5	480.3	480.4
140°	494.0	494.2	494.4	494.6	494.8	494.9	494.8	494.6	494.6	494.5	494.6
142.5°	507.8	507.9	508.0	508.2	508.3	508.4	508.6	508.7	508.8	509.0	509.0
145°	528.0	528.2	528.4	528.6	528.8	528.9	528.9	528.9	528.9	528.9	529.0
147.5°	545.6	545.6	545.5	545.5	545.4	545.5	545.6	545.8	545.8	546.0	546.2
150°	556.8	556.6	556.4	556.2	556.0	556.0	556.2	556.4	556.6	556.8	557.0
152.5°	567.6	567.1	566.7	566.2	565.7	565.7	565.8	566.1	566.2	566.5	566.7
155°	581.5	580.8	580.2	579.6	578.9	578.8	578.9	579.2	579.4	579.6	579.9
157.5°	592.2	591.7	591.4	591.0	590.7	590.5	590.5	590.5	590.5	590.6	590.9
160°	599.6	599.0	598.3	597.7	597.1	596.9	597.0	597.0	597.1	597.3	597.7
162.5°	605.5	605.0	604.3	603.6	603.1	602.8	602.9	603.0	603.1	603.2	603.8
165°	613.5	612.9	612.3	611.7	611.1	610.8	610.9	611.0	611.1	611.2	611.8
167.5°	619.5	618.9	618.2	617.6	616.9	616.7	616.8	616.9	616.9	617.1	617.8
170°	622.9	622.2	621.4	620.7	620.0	619.6	619.7	619.9	620.0	620.0	620.9
172.5°	625.1	624.4	623.6	622.9	622.2	621.9	622.1	622.3	622.5	622.6	623.4
175°	627.5	626.9	626.2	625.7	625.0	624.8	624.8	625.0	625.1	625.2	626.0
177.5°	628.6	628.1	627.6	627.1	626.6	626.4	626.5	626.6	626.6	626.7	627.4
180°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1
2.5°	1117.3	1118.8	1120.3	1121.0	1120.9	1120.7	1120.5	1120.4
5°	1110.4	1112.3	1114.2	1115.0	1114.6	1114.2	1113.9	1113.5
7.5°	1096.7	1098.0	1099.3	1099.7	1099.3	1098.9	1098.5	1098.0
10°	1084.9	1085.5	1086.1	1086.1	1085.5	1084.9	1084.3	1083.9
12.5°	1068.4	1068.8	1069.2	1069.0	1068.1	1067.2	1066.4	1065.5
15°	1041.1	1040.9	1040.7	1039.8	1038.1	1036.4	1034.7	1033.0
17.5°	1007.1	1006.2	1005.2	1004.0	1002.7	1001.3	999.9	998.5
20°	982.0	981.0	980.2	978.8	977.1	975.4	973.7	972.1
22.5°	957.2	955.4	953.5	951.9	950.5	949.1	947.7	946.3
25°	916.4	914.0	911.5	909.2	907.1	905.1	903.0	900.9
27.5°	872.2	868.8	865.4	862.7	860.7	858.7	856.7	854.7
30°	840.7	836.3	831.9	829.0	827.3	825.6	823.9	822.1
32.5°	809.9	805.1	800.4	796.9	794.8	792.6	790.4	788.3
35°	762.1	756.7	751.2	747.2	744.5	741.9	739.3	736.6
37.5°	712.2	705.6	699.1	694.6	692.0	689.4	686.9	684.4
40°	679.1	672.1	664.9	660.1	657.9	655.7	653.4	651.2
42.5°	646.6	639.8	632.9	627.8	624.5	621.2	617.8	614.6
45°	594.6	587.1	579.5	574.4	571.5	568.8	565.9	563.0
47.5°	543.2	535.4	527.7	522.2	519.1	516.0	512.8	509.7
50°	508.3	500.4	492.5	487.1	484.4	481.5	478.7	475.9
52.5°	475.3	466.8	458.3	452.6	449.8	446.9	444.2	441.3
55°	425.1	416.6	408.1	402.4	399.4	396.4	393.4	390.4
57.5°	374.8	366.6	358.2	352.8	350.1	347.4	344.8	342.1
60°	341.6	333.3	325.1	319.5	316.7	313.9	311.0	308.2
62.5°	308.9	301.3	293.6	288.4	285.5	282.7	279.9	277.0
65°	261.0	253.5	245.9	240.8	237.9	235.1	232.3	229.4
67.5°	215.2	208.3	201.4	196.8	194.6	192.3	190.0	187.8
70°	184.7	179.0	173.1	169.1	166.8	164.5	162.3	160.0
72.5°	156.5	151.2	145.8	142.4	140.8	139.3	137.9	136.3
75°	117.1	112.9	108.8	106.1	104.7	103.4	102.1	100.8
77.5°	83.2	80.4	77.5	75.6	74.6	73.6	72.6	71.7
80°	62.7	61.0	59.3	58.2	57.9	57.5	57.1	56.7
82.5°	46.9	46.1	45.2	44.8	44.5	44.4	44.1	43.9
85°	26.7	26.5	26.3	26.2	25.9	25.8	25.6	25.4
87.5°	11.8	12.0	12.1	12.1	12.0	11.9	11.8	11.7
90°	8.5	9.0	9.5	9.9	10.3	10.5	10.8	11.2
92.5°	8.5	9.0	9.5	9.9	9.9	10.1	10.3	10.4
95°	8.5	9.0	9.5	9.8	9.8	9.8	9.8	9.8
97.5°	17.0	14.1	11.3	9.8	9.8	9.8	9.8	9.8
100°	50.1	34.7	19.3	11.4	11.0	10.6	10.2	9.8
102.5°	97.4	94.5	91.6	86.7	79.6	72.6	65.6	58.5
105°	138.6	138.6	138.6	138.6	138.4	138.4	138.3	138.1
107.5°	175.5	175.5	175.5	175.4	175.1	174.8	174.5	174.1
110°	199.4	199.1	198.8	198.7	198.8	198.9	199.0	199.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	223.1	222.7	222.3	222.0	221.8	221.7	221.6	221.4
115°	258.7	258.3	257.9	257.4	256.7	256.2	255.5	254.9
117.5°	293.2	292.6	292.1	291.7	291.5	291.1	290.9	290.7
120°	315.4	315.2	315.0	314.6	314.1	313.6	313.1	312.6
122.5°	336.6	336.5	336.2	335.8	335.3	334.6	334.0	333.5
125°	367.6	367.1	366.7	366.4	366.1	365.7	365.5	365.2
127.5°	395.8	395.7	395.4	394.9	394.1	393.4	392.6	391.8
130°	414.3	414.0	413.7	413.3	412.8	412.2	411.7	411.2
132.5°	431.5	431.5	431.5	431.1	430.6	430.1	429.6	429.1
135°	456.8	456.6	456.4	456.0	455.4	454.8	454.1	453.6
137.5°	480.4	480.5	480.5	480.2	479.7	479.2	478.7	478.1
140°	494.9	495.0	495.3	495.0	494.5	493.8	493.3	492.6
142.5°	509.1	509.1	509.2	508.8	508.3	507.6	507.0	506.4
145°	529.1	529.2	529.3	529.0	528.4	527.8	527.2	526.5
147.5°	546.3	546.4	546.5	546.2	545.4	544.7	544.0	543.2
150°	557.2	557.4	557.6	557.3	556.5	555.6	554.8	554.0
152.5°	566.9	567.1	567.3	567.0	566.3	565.6	564.8	564.0
155°	580.2	580.5	580.8	580.6	579.8	578.9	578.1	577.2
157.5°	591.3	591.6	591.9	591.7	590.8	590.0	589.1	588.3
160°	598.1	598.5	598.9	598.7	597.9	597.0	596.2	595.4
162.5°	604.4	605.0	605.5	605.4	604.5	603.6	602.7	601.7
165°	612.5	613.1	613.7	613.6	612.8	612.0	611.1	610.3
167.5°	618.6	619.3	620.0	620.0	619.1	618.1	617.2	616.2
170°	621.7	622.6	623.4	623.3	622.4	621.4	620.5	619.6
172.5°	624.1	624.9	625.7	625.6	624.6	623.7	622.7	621.8
175°	626.8	627.6	628.5	628.4	627.5	626.6	625.7	624.7
177.5°	627.9	628.5	629.1	629.0	628.4	627.7	627.0	626.4
180°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5

(END OF REPORT)