

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: P333553-930

Luminaire Tested: **S125RDIP-S850D365U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333553-930
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-S850D365U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3843.2 lumens
Efficiency: N/A
Efficacy: 109.8 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-Direct

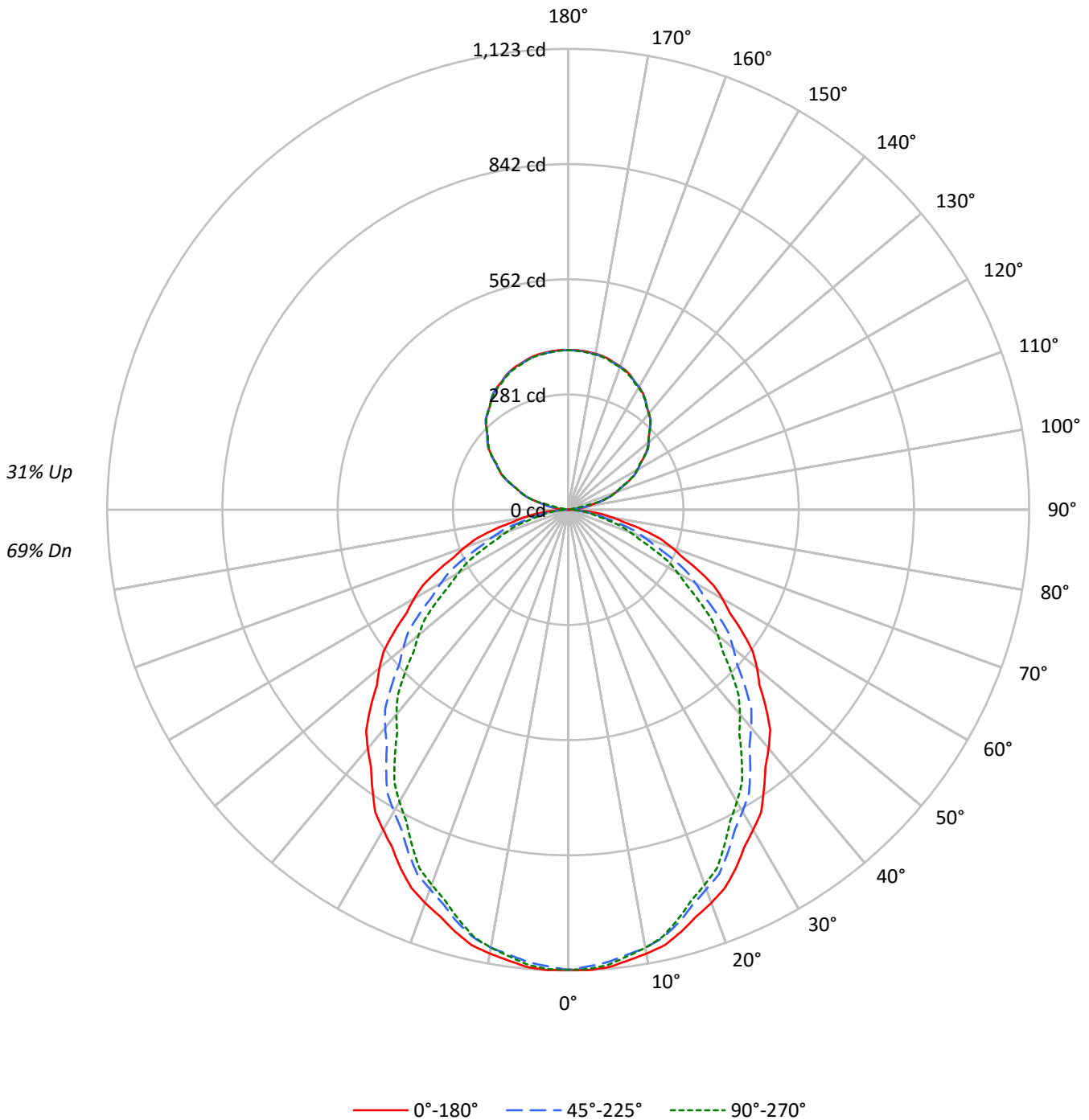
Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	74	74	74	69
1	102	98	94	91	97	93	89	86	83	80	78	74	72	70	66	64	63	59
2	93	86	80	75	88	81	76	71	73	69	65	65	62	59	58	56	53	50
3	85	76	68	62	80	72	65	60	65	59	55	58	54	50	52	48	46	42
4	78	67	59	53	74	64	57	51	58	52	47	52	47	43	46	43	40	37
5	72	60	52	46	68	57	50	44	52	46	41	47	42	38	42	38	35	32
6	67	54	46	40	63	52	44	39	47	41	36	42	37	33	38	34	31	28
7	62	49	41	35	58	47	40	34	43	36	32	39	33	30	35	31	27	25
8	57	45	37	32	54	43	36	31	39	33	29	35	30	27	32	28	25	22
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	30	25	22	20
10	50	38	30	26	47	36	29	25	33	27	23	30	25	22	28	23	20	18

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	2.7
10°-20°	294.6	7.7
20°-30°	427.2	11.1
30°-40°	486.9	12.7
40°-50°	474.6	12.3
50°-60°	399.5	10.4
60°-70°	280.0	7.3
70°-80°	143.9	3.7
80°-90°	37.2	1.0
90°-100°	14.1	0.4
100°-110°	87.1	2.3
110°-120°	157.9	4.1
120°-130°	202.7	5.3
130°-140°	218.0	5.7
140°-150°	204.6	5.3
150°-160°	165.5	4.3
160°-170°	107.0	2.8
170°-180°	36.9	1.0
0°-30°	827.2	21.5
0°-40°	1314.1	34.2
0°-60°	2188.2	56.9
0°-90°	2649.3	68.9
90°-120°	259.1	6.7
90°-150°	884.4	23.0
90°-180°	1194.0	31.1
0°-180°	3843.2	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	3	5	6	7	3
95°	16	15	5	6	6	21
105°	85	86	86	86	86	90
115°	159	160	161	160	158	158
125°	226	228	228	227	226	202
135°	282	284	283	283	281	217
145°	327	328	328	328	326	204
155°	360	359	359	360	358	166
165°	380	379	379	380	378	107
175°	389	387	387	389	387	37
180°	389	389	389	389	389	



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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	14.7	13.7	12.8	11.8	11.3	11.3	11.2	11.2	11.1	11.2
90°	0.3	0.8	1.3	1.8	2.4	2.9	3.3	3.8	4.2	4.6	4.9
92.5°	4.4	4.1	3.8	3.3	3.0	3.0	3.4	3.8	4.2	4.6	4.9
95°	16.4	16.2	16.1	15.8	15.7	14.3	11.9	9.5	7.0	4.6	4.9
97.5°	34.3	34.7	35.0	35.3	35.7	33.4	28.6	23.8	19.0	14.2	12.4
100°	48.1	48.3	48.5	48.7	48.9	49.1	49.4	49.7	49.9	50.1	40.6
102.5°	62.2	62.5	62.7	62.9	63.2	63.3	63.5	63.7	63.8	64.0	62.2
105°	84.7	85.0	85.3	85.5	85.8	85.9	85.9	85.9	85.9	85.9	85.9
107.5°	108.1	108.1	108.1	108.1	108.1	108.2	108.4	108.4	108.6	108.7	108.7
110°	123.4	123.4	123.4	123.4	123.4	123.4	123.5	123.7	123.8	123.9	123.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	137.6	137.8	137.9	138.1	138.3	138.4	138.4	138.5	138.6	138.7	138.4
115°	159.1	159.4	159.7	160.0	160.4	160.5	160.6	160.7	160.8	160.8	160.5
117.5°	181.2	181.2	181.2	181.2	181.2	181.3	181.6	181.8	182.1	182.3	182.0
120°	195.1	195.0	195.0	194.9	194.9	194.9	195.1	195.3	195.5	195.7	195.6
122.5°	207.3	207.6	207.8	208.1	208.3	208.5	208.6	208.6	208.7	208.8	208.7
125°	226.2	226.7	227.1	227.6	228.0	228.3	228.3	228.3	228.3	228.3	228.0
127.5°	244.3	244.6	244.9	245.2	245.6	245.7	245.6	245.6	245.6	245.6	245.4
130°	255.4	255.7	256.0	256.3	256.7	256.8	256.9	256.9	257.0	257.1	256.9
132.5°	266.4	266.8	267.2	267.5	267.9	268.0	267.9	267.7	267.6	267.4	267.4
135°	282.2	282.5	282.9	283.3	283.6	283.8	283.6	283.6	283.4	283.3	283.2
137.5°	296.6	296.9	297.3	297.6	297.9	298.1	297.9	297.8	297.7	297.6	297.6
140°	306.1	306.2	306.3	306.5	306.6	306.6	306.6	306.5	306.4	306.4	306.5
142.5°	314.6	314.7	314.8	314.8	314.9	315.0	315.1	315.2	315.3	315.4	315.4
145°	327.1	327.3	327.3	327.5	327.6	327.7	327.7	327.7	327.7	327.7	327.8
147.5°	338.0	338.0	338.0	337.9	337.9	337.9	338.0	338.1	338.2	338.3	338.3
150°	345.0	344.9	344.7	344.5	344.5	344.5	344.5	344.7	344.9	345.0	345.1
152.5°	351.6	351.4	351.1	350.8	350.5	350.4	350.6	350.7	350.8	351.0	351.1
155°	360.3	359.9	359.5	359.1	358.7	358.6	358.7	358.8	359.0	359.1	359.3
157.5°	366.9	366.6	366.4	366.2	366.0	365.8	365.8	365.9	365.9	365.9	366.1
160°	371.5	371.1	370.7	370.3	370.0	369.8	369.8	369.9	370.0	370.1	370.3
162.5°	375.2	374.8	374.4	374.0	373.7	373.5	373.6	373.6	373.7	373.7	374.1
165°	380.1	379.8	379.4	379.0	378.6	378.5	378.5	378.5	378.6	378.7	379.0
167.5°	383.8	383.4	383.0	382.6	382.2	382.0	382.1	382.2	382.3	382.3	382.8
170°	385.9	385.5	385.0	384.6	384.1	383.9	384.0	384.0	384.1	384.2	384.7
172.5°	387.3	386.9	386.4	386.0	385.5	385.3	385.4	385.6	385.6	385.8	386.2
175°	388.7	388.4	388.0	387.6	387.3	387.1	387.1	387.2	387.3	387.3	387.8
177.5°	389.5	389.1	388.8	388.6	388.2	388.1	388.2	388.2	388.2	388.3	388.7
180°	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7



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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°	11.3	11.3	11.3	11.3	11.2	11.1	11.0	10.8
90°	5.2	5.5	5.9	6.1	6.4	6.5	6.7	6.9
92.5°	5.2	5.5	5.9	6.1	6.2	6.3	6.4	6.4
95°	5.2	5.5	5.9	6.0	6.0	6.0	6.0	6.0
97.5°	10.6	8.7	6.9	6.0	6.0	6.0	6.0	6.0
100°	31.1	21.5	12.0	7.1	6.8	6.6	6.3	6.0
102.5°	60.3	58.5	56.7	53.6	49.3	45.0	40.6	36.3
105°	85.9	85.9	85.9	85.9	85.8	85.7	85.7	85.6
107.5°	108.8	108.8	108.8	108.7	108.5	108.3	108.1	107.9
110°	123.5	123.4	123.2	123.1	123.2	123.2	123.3	123.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	138.2	137.9	137.7	137.5	137.5	137.4	137.3	137.2
115°	160.3	160.0	159.8	159.5	159.1	158.7	158.3	157.9
117.5°	181.6	181.3	181.0	180.8	180.6	180.4	180.3	180.1
120°	195.4	195.3	195.2	194.9	194.6	194.3	194.0	193.6
122.5°	208.6	208.5	208.3	208.1	207.7	207.3	206.9	206.6
125°	227.7	227.5	227.2	227.0	226.8	226.7	226.4	226.2
127.5°	245.2	245.1	245.0	244.7	244.2	243.7	243.3	242.8
130°	256.7	256.5	256.3	256.0	255.8	255.4	255.1	254.8
132.5°	267.3	267.3	267.3	267.1	266.8	266.4	266.1	265.9
135°	283.1	282.9	282.7	282.5	282.2	281.8	281.4	281.0
137.5°	297.7	297.7	297.7	297.5	297.2	296.9	296.5	296.2
140°	306.6	306.7	306.9	306.7	306.4	306.0	305.6	305.2
142.5°	315.4	315.4	315.4	315.3	314.9	314.5	314.1	313.7
145°	327.8	327.8	327.9	327.8	327.4	327.0	326.6	326.2
147.5°	338.4	338.5	338.6	338.4	337.9	337.5	337.0	336.6
150°	345.2	345.4	345.4	345.3	344.8	344.3	343.7	343.2
152.5°	351.2	351.3	351.5	351.3	350.8	350.4	349.9	349.4
155°	359.5	359.6	359.9	359.7	359.2	358.7	358.2	357.7
157.5°	366.3	366.5	366.7	366.6	366.1	365.5	365.0	364.5
160°	370.6	370.8	371.0	371.0	370.4	369.9	369.4	368.9
162.5°	374.5	374.8	375.2	375.0	374.5	373.9	373.4	372.8
165°	379.4	379.8	380.3	380.2	379.7	379.1	378.6	378.1
167.5°	383.3	383.7	384.2	384.1	383.5	382.9	382.4	381.8
170°	385.1	385.7	386.2	386.2	385.6	385.1	384.4	383.8
172.5°	386.7	387.2	387.6	387.6	387.0	386.4	385.8	385.2
175°	388.3	388.9	389.4	389.4	388.7	388.2	387.6	387.0
177.5°	389.1	389.4	389.7	389.7	389.3	388.9	388.5	388.1
180°	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7

(END OF REPORT)