

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: P333209

Luminaire Tested: **S125DIP-S850D365U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333209
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D365U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4549.4 lumens
Efficiency: N/A
Efficacy: 130.0 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-Direct

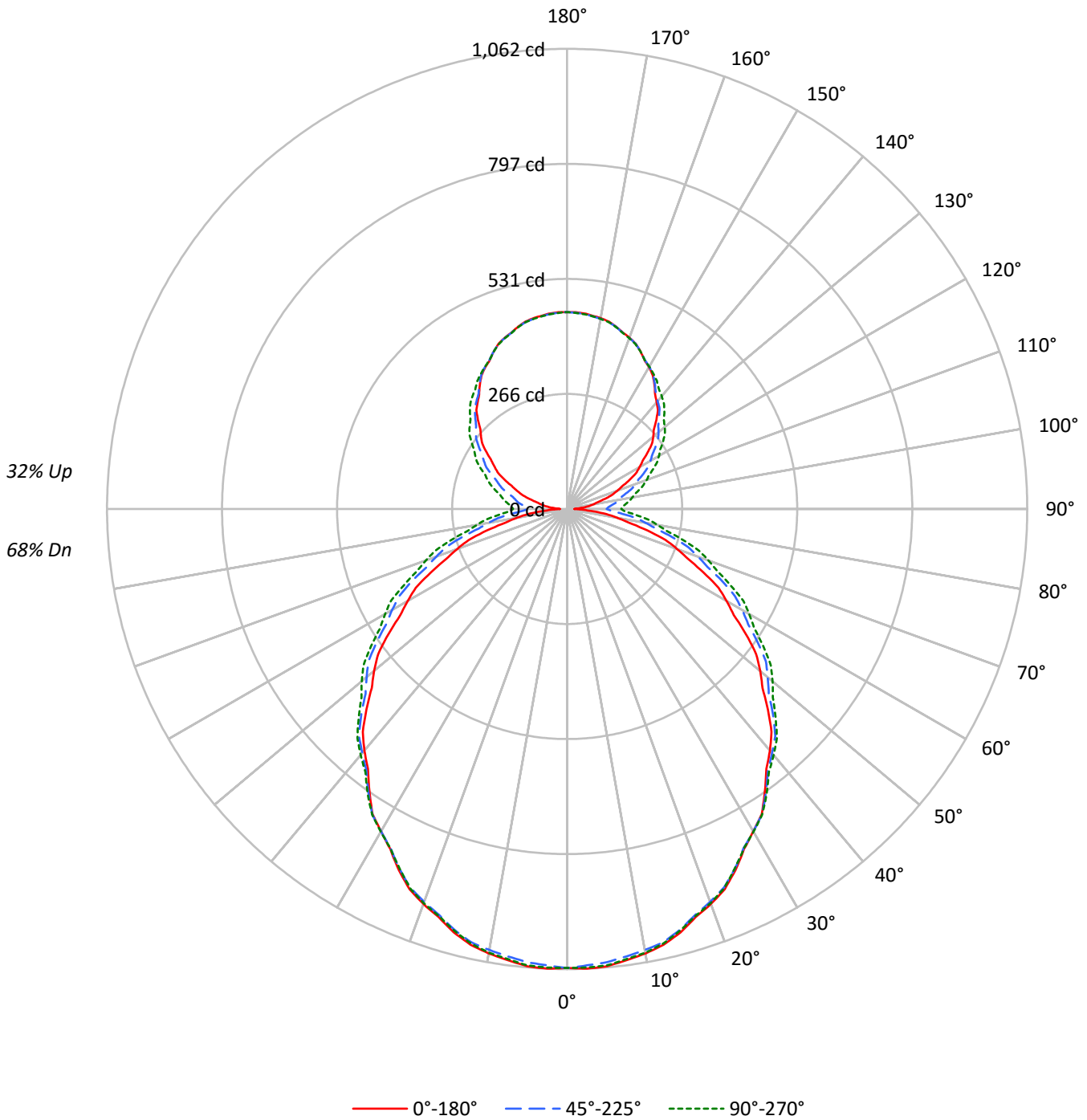
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0		
RCR																										
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	68								
1	101	96	91	88	95	90	87	83	80	77	75	71	69	67	62	61	59	55								
2	91	83	76	71	86	79	73	67	70	65	61	62	58	55	54	52	49	45								
3	83	73	65	59	78	69	62	56	61	56	51	54	50	46	48	44	41	38								
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	43	39	35	32								
5	70	57	49	42	65	54	46	41	49	42	37	43	38	34	38	34	31	28								
6	64	51	43	37	60	49	41	35	44	37	32	39	34	30	35	30	27	24								
7	59	46	38	32	56	44	36	31	40	33	29	36	30	26	32	27	24	21								
8	55	42	34	28	52	40	33	27	36	30	25	33	27	23	29	25	21	19								
9	51	39	31	25	48	37	30	25	33	27	23	30	25	21	27	22	19	17								
10	48	35	28	23	45	34	27	22	31	25	21	28	23	19	25	21	18	16								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6841	6841	6841
5°	6855	6715	6737
10°	6806	6595	6585
15°	6726	6452	6393
20°	6616	6274	6201
25°	6486	6084	5964
30°	6329	5876	5749
35°	6182	5684	5552
40°	6032	5481	5353
45°	5863	5308	5178
50°	5702	5120	5022
55°	5508	4943	4839
60°	5296	4741	4653
65°	5075	4530	4443
70°	4822	4240	4228
75°	4425	3962	3962
80°	3905	3625	3673
85°	3417	3398	3583



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.2	2.2
10°-20°	284.4	6.3
20°-30°	422.9	9.3
30°-40°	500.9	11.0
40°-50°	517.9	11.4
50°-60°	477.1	10.5
60°-70°	385.7	8.5
70°-80°	258.3	5.7
80°-90°	134.9	3.0
90°-100°	105.6	2.3
100°-110°	145.2	3.2
110°-120°	189.3	4.2
120°-130°	221.3	4.9
130°-140°	233.6	5.1
140°-150°	221.8	4.9
150°-160°	184.7	4.1
160°-170°	122.8	2.7
170°-180°	43.0	0.9
0°-30°	807.4	17.7
0°-40°	1308.3	28.8
0°-60°	2303.3	50.6
0°-90°	3082.2	67.7
90°-120°	440.1	9.7
90°-150°	1116.8	24.5
90°-180°	1467.0	32.2
0°-180°	4549.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1059	1057	1050	1058	1057	100
15°	1012	1012	1005	1011	1007	285
25°	919	922	916	920	915	423
35°	796	802	800	803	803	498
45°	655	666	672	679	680	506
55°	504	520	537	548	552	450
65°	347	371	396	411	415	344
75°	191	218	251	271	277	203
85°	57	92	128	150	159	61
90°	17	53	91	116	125	12
95°	36	65	103	127	136	35
105°	90	109	142	164	173	96
115°	159	168	195	213	219	157
125°	226	229	249	264	269	203
135°	291	293	300	313	317	224
145°	351	352	353	358	361	219
155°	401	401	401	402	401	185
165°	436	435	435	437	435	123
175°	453	452	452	454	451	43
180°	454	454	454	454	454	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1061.8	1061.5	1061.1	1060.7	1060.3	1059.5	1058.2	1056.9	1055.6	1054.3	1055.6
5°	1059.3	1058.9	1058.4	1057.9	1057.5	1056.4	1054.8	1053.2	1051.6	1050.0	1051.8
7.5°	1050.0	1049.8	1049.6	1049.4	1049.2	1048.3	1046.7	1045.0	1043.3	1041.7	1043.3
10°	1041.7	1041.7	1041.7	1041.7	1041.7	1040.8	1038.9	1037.1	1035.2	1033.4	1035.0
12.5°	1030.0	1030.2	1030.4	1030.6	1030.8	1030.1	1028.7	1027.2	1025.7	1024.2	1025.5
15°	1011.6	1011.8	1012.0	1012.2	1012.5	1011.8	1010.2	1008.6	1006.9	1005.3	1006.7
17.5°	987.5	987.9	988.4	988.8	989.3	988.7	987.1	985.5	983.9	982.3	983.3
20°	970.0	970.5	970.9	971.4	971.9	971.3	969.7	968.1	966.4	964.8	965.5
22.5°	950.1	950.9	951.7	952.6	953.4	952.9	951.1	949.3	947.5	945.7	946.6
25°	919.1	919.8	920.5	921.2	921.9	921.5	920.2	918.8	917.4	916.0	916.9
27.5°	884.6	885.7	886.7	887.7	888.7	888.4	886.9	885.3	883.7	882.2	882.8
30°	858.9	860.3	861.7	863.0	864.4	864.4	863.0	861.7	860.3	858.9	859.4
32.5°	835.6	836.8	838.0	839.2	840.4	840.5	839.5	838.5	837.5	836.5	836.9
35°	795.5	797.2	798.8	800.4	802.0	802.5	801.8	801.1	800.4	799.7	800.4
37.5°	755.4	756.9	758.4	759.9	761.4	762.0	761.7	761.5	761.3	761.1	762.0
40°	728.0	729.9	731.7	733.6	735.4	736.2	736.0	735.8	735.5	735.3	736.2
42.5°	698.1	700.5	702.9	705.3	707.7	709.2	709.7	710.2	710.7	711.2	712.3
45°	655.3	657.9	660.4	662.9	665.5	667.3	668.5	669.6	670.8	671.9	673.6
47.5°	611.5	613.9	616.2	618.6	620.9	623.1	625.1	627.1	629.0	631.0	633.4
50°	581.6	584.1	586.7	589.2	591.7	594.3	596.8	599.4	601.9	604.4	607.0
52.5°	550.0	553.1	556.2	559.3	562.4	565.5	568.6	571.7	574.8	577.9	580.6
55°	503.7	507.4	511.1	514.8	518.5	522.2	525.9	529.6	533.2	536.9	539.5
57.5°	456.3	460.8	465.2	469.6	474.1	478.4	482.7	486.9	491.1	495.4	498.3
60°	424.8	429.4	434.0	438.6	443.2	447.9	452.5	457.1	461.7	466.3	469.8
62.5°	394.0	398.6	403.3	407.9	412.5	417.3	422.3	427.3	432.2	437.2	441.1
65°	346.9	352.2	357.5	362.8	368.1	373.5	379.1	384.6	390.2	395.7	399.2
67.5°	302.4	307.6	312.7	317.8	322.9	328.3	333.9	339.6	345.2	350.8	355.0
70°	270.0	275.3	280.6	286.0	291.3	296.9	302.9	308.9	314.9	320.9	325.3
72.5°	238.5	243.9	249.4	254.9	260.4	266.4	273.0	279.6	286.1	292.7	297.4
75°	191.1	197.1	203.1	209.1	215.1	221.8	229.2	236.6	243.9	251.3	255.9
77.5°	145.6	152.5	159.5	166.4	173.3	180.3	187.4	194.5	201.6	208.8	213.8
80°	117.4	124.3	131.2	138.1	145.1	152.4	160.3	168.1	176.0	183.8	188.9
82.5°	91.6	98.9	106.2	113.5	120.8	128.4	136.5	144.5	152.5	160.6	165.5
85°	57.1	64.7	72.4	80.0	87.6	95.4	103.5	111.6	119.7	127.7	132.8
87.5°	32.5	40.0	47.5	55.0	62.5	70.3	78.2	86.2	94.1	102.1	107.5
90°	17.0	25.0	33.0	41.0	49.0	57.2	65.6	74.0	82.4	90.8	96.5
92.5°	23.5	30.8	38.1	45.3	52.6	60.6	69.3	78.0	86.7	95.4	101.1
95°	36.5	42.6	48.8	54.9	61.1	68.5	77.1	85.8	94.4	103.0	108.7
97.5°	50.4	55.9	61.4	66.8	72.3	79.3	88.0	96.6	105.3	114.0	119.3
100°	60.9	65.8	70.6	75.4	80.3	86.9	95.3	103.7	112.1	120.5	126.1
102.5°	72.2	77.0	81.8	86.6	91.4	97.7	105.4	113.1	120.8	128.5	134.0
105°	89.9	94.0	98.1	102.2	106.3	112.0	119.4	126.8	134.2	141.6	146.7
107.5°	109.6	113.1	116.7	120.2	123.7	129.0	136.0	143.0	150.0	157.0	161.8
110°	123.2	126.4	129.5	132.7	135.8	140.8	147.5	154.2	160.9	167.6	172.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	137.9	140.3	142.7	145.2	147.6	152.1	158.7	165.2	171.8	178.4	182.7
115°	158.6	160.5	162.4	164.4	166.3	170.3	176.5	182.6	188.8	195.0	199.0
117.5°	179.3	180.5	181.7	182.9	184.1	187.6	193.4	199.3	205.1	210.9	214.9
120°	192.9	194.0	195.0	196.1	197.2	200.4	205.8	211.2	216.6	222.0	225.9
122.5°	206.7	207.2	207.7	208.1	208.6	211.5	216.8	222.2	227.5	232.8	236.5
125°	226.5	226.7	227.0	227.2	227.4	229.9	234.6	239.3	244.0	248.7	252.2
127.5°	246.6	246.7	246.7	246.7	246.8	248.7	252.6	256.5	260.4	264.3	267.6
130°	259.4	259.5	259.7	259.8	260.0	261.8	265.2	268.6	271.9	275.3	278.5
132.5°	271.3	271.9	272.4	273.0	273.6	275.2	277.6	280.1	282.6	285.0	288.2
135°	291.2	291.4	291.7	291.9	292.2	293.1	294.8	296.5	298.2	299.9	302.9
137.5°	309.9	310.2	310.5	310.7	311.0	311.6	312.6	313.5	314.5	315.5	318.3
140°	321.3	321.6	322.0	322.4	322.8	323.3	323.7	324.2	324.7	325.1	327.8
142.5°	333.4	333.6	333.7	333.9	334.0	334.2	334.6	334.9	335.3	335.6	337.9
145°	351.3	351.4	351.5	351.5	351.6	351.8	352.0	352.3	352.5	352.7	353.9
147.5°	366.8	367.0	367.1	367.3	367.5	367.7	367.9	368.1	368.2	368.4	369.0
150°	377.8	377.8	377.7	377.6	377.5	377.6	377.9	378.3	378.6	378.9	378.9
152.5°	386.9	387.0	387.1	387.2	387.3	387.4	387.6	387.7	387.8	387.9	388.1
155°	400.8	400.8	400.8	400.8	400.8	400.8	400.9	401.0	401.1	401.2	401.5
157.5°	413.2	413.1	412.9	412.7	412.6	412.5	412.6	412.7	412.7	412.8	413.1
160°	420.6	420.4	420.1	419.9	419.7	419.6	419.7	419.7	419.8	419.9	420.2
162.5°	427.1	426.9	426.8	426.6	426.4	426.3	426.3	426.4	426.4	426.4	426.8
165°	435.8	435.6	435.5	435.3	435.2	435.1	435.2	435.3	435.4	435.4	435.8
167.5°	443.1	442.8	442.5	442.2	441.9	441.7	441.7	441.7	441.7	441.7	442.2
170°	447.1	446.8	446.5	446.2	445.8	445.7	445.7	445.7	445.7	445.7	446.2
172.5°	449.9	449.6	449.3	449.0	448.7	448.5	448.5	448.5	448.5	448.5	449.0
175°	453.1	452.8	452.5	452.2	451.9	451.7	451.7	451.7	451.7	451.7	452.2
177.5°	454.7	454.5	454.2	454.0	453.7	453.6	453.5	453.5	453.4	453.3	453.7
180°	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1056.9	1058.2	1059.5	1060.1	1059.9	1059.7	1059.5	1059.3
5°	1053.7	1055.5	1057.4	1058.2	1057.9	1057.7	1057.5	1057.3
7.5°	1044.9	1046.5	1048.1	1048.8	1048.6	1048.4	1048.1	1047.9
10°	1036.6	1038.2	1039.8	1040.5	1040.3	1040.1	1039.8	1039.6
12.5°	1026.7	1028.0	1029.2	1029.5	1028.9	1028.3	1027.7	1027.1
15°	1008.1	1009.5	1010.9	1011.1	1010.2	1009.2	1008.3	1007.4
17.5°	984.4	985.5	986.5	986.8	986.2	985.7	985.1	984.6
20°	966.2	966.9	967.6	967.9	967.9	967.9	967.9	967.9
22.5°	947.5	948.3	949.2	949.4	948.8	948.3	947.7	947.2
25°	917.9	918.8	919.7	919.6	918.4	917.3	916.1	915.0
27.5°	883.4	884.1	884.7	884.9	884.4	884.0	883.6	883.2
30°	859.8	860.3	860.7	860.9	860.6	860.4	860.2	859.9
32.5°	837.4	837.8	838.3	838.4	838.2	838.0	837.7	837.5
35°	801.1	801.8	802.5	802.8	802.8	802.8	802.8	802.8
37.5°	762.9	763.8	764.7	765.2	765.1	765.0	764.9	764.8
40°	737.1	738.1	739.0	739.7	740.1	740.6	741.1	741.5
42.5°	713.4	714.5	715.6	716.2	716.3	716.4	716.5	716.6
45°	675.2	676.8	678.4	679.3	679.6	679.8	680.0	680.3
47.5°	635.7	638.1	640.4	641.9	642.4	642.9	643.4	643.9
50°	609.5	612.1	614.6	616.2	616.9	617.6	618.3	619.0
52.5°	583.3	586.0	588.7	590.4	590.9	591.4	591.9	592.4
55°	542.0	544.6	547.1	548.8	549.7	550.7	551.6	552.5
57.5°	501.2	504.1	507.0	508.8	509.5	510.2	510.9	511.6
60°	473.2	476.7	480.2	482.2	482.9	483.6	484.3	485.0
62.5°	444.9	448.7	452.6	454.9	455.8	456.7	457.5	458.4
65°	402.6	406.1	409.5	411.7	412.7	413.6	414.5	415.4
67.5°	359.2	363.4	367.6	370.3	371.5	372.7	373.9	375.1
70°	329.7	334.1	338.5	341.3	342.7	344.1	345.5	346.9
72.5°	302.2	306.9	311.7	314.6	315.6	316.6	317.6	318.6
75°	260.6	265.2	269.8	272.7	273.8	275.0	276.1	277.3
77.5°	218.9	224.0	229.1	232.1	233.0	233.9	234.8	235.8
80°	194.0	199.1	204.1	207.1	208.1	209.0	209.9	210.8
82.5°	170.3	175.2	180.1	183.4	185.1	186.7	188.4	190.1
85°	137.9	143.0	148.1	151.5	153.4	155.2	157.1	158.9
87.5°	112.9	118.2	123.6	127.2	128.8	130.5	132.1	133.8
90°	102.2	107.9	113.6	117.4	119.2	121.1	123.0	124.8
92.5°	106.7	112.3	118.0	121.7	123.5	125.3	127.1	128.8
95°	114.3	119.9	125.5	129.2	131.0	132.8	134.6	136.3
97.5°	124.7	130.0	135.4	138.9	140.6	142.3	143.9	145.6
100°	131.7	137.2	142.8	146.3	147.8	149.4	150.9	152.5
102.5°	139.4	144.8	150.3	153.8	155.4	157.0	158.6	160.2
105°	151.8	156.9	161.9	165.4	167.3	169.1	171.0	172.8
107.5°	166.6	171.5	176.3	179.4	180.8	182.2	183.6	185.0
110°	176.8	181.4	186.1	189.1	190.7	192.2	193.7	195.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	187.0	191.3	195.6	198.5	200.0	201.5	202.9	204.4
115°	203.1	207.2	211.3	214.0	215.3	216.6	217.9	219.2
117.5°	218.9	222.9	226.8	229.5	230.7	232.0	233.2	234.5
120°	229.8	233.8	237.7	240.2	241.3	242.3	243.4	244.5
122.5°	240.2	243.8	247.5	249.9	251.0	252.2	253.3	254.5
125°	255.7	259.3	262.8	265.1	266.2	267.3	268.3	269.4
127.5°	270.9	274.3	277.6	279.9	281.0	282.2	283.4	284.6
130°	281.6	284.8	287.9	290.0	291.0	292.0	293.0	294.0
132.5°	291.3	294.5	297.6	299.6	300.3	301.1	301.8	302.6
135°	305.9	308.9	311.9	313.8	314.7	315.5	316.3	317.2
137.5°	321.1	323.9	326.7	328.4	328.9	329.5	330.0	330.5
140°	330.5	333.2	335.9	337.5	338.0	338.6	339.1	339.6
142.5°	340.1	342.4	344.7	346.1	346.6	347.1	347.7	348.2
145°	355.0	356.2	357.4	358.3	359.0	359.6	360.3	361.0
147.5°	369.5	370.1	370.7	370.9	370.8	370.6	370.5	370.4
150°	378.9	378.9	378.9	378.9	379.0	379.1	379.1	379.2
152.5°	388.3	388.5	388.7	388.7	388.4	388.2	388.0	387.7
155°	401.8	402.1	402.4	402.4	402.0	401.6	401.2	400.8
157.5°	413.4	413.8	414.1	414.0	413.5	412.9	412.4	411.9
160°	420.5	420.8	421.1	421.1	420.7	420.3	419.9	419.5
162.5°	427.1	427.5	427.9	427.9	427.4	426.9	426.5	426.0
165°	436.1	436.4	436.7	436.6	436.1	435.7	435.2	434.7
167.5°	442.7	443.1	443.6	443.6	443.1	442.6	442.1	441.7
170°	446.6	447.1	447.6	447.5	447.0	446.4	445.9	445.3
172.5°	449.5	449.9	450.4	450.4	449.9	449.4	448.9	448.4
175°	452.6	453.1	453.6	453.5	453.0	452.4	451.9	451.3
177.5°	454.1	454.5	454.8	454.8	454.4	453.9	453.5	453.0
180°	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2

(END OF REPORT)