

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: P333209-830

Luminaire Tested: **S125DIP-S850D365U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333209-830
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-S850D365U830-4F0-1E-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: 4288.0 lumens
Efficiency: N/A
Efficacy: 122.5 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

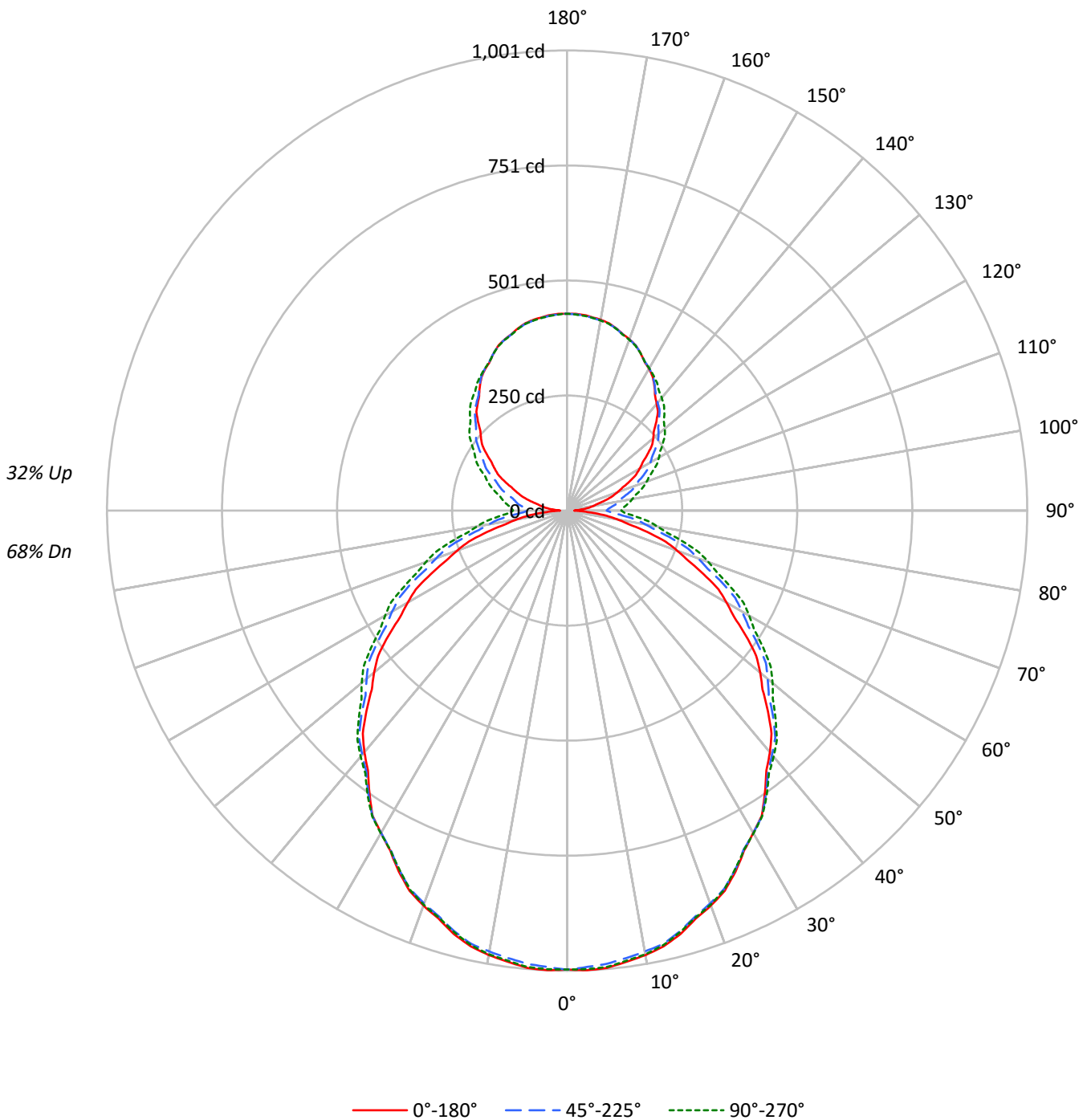
Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	6448	6448	6448
5°	6461	6330	6350
10°	6415	6216	6207
15°	6340	6081	6026
20°	6237	5914	5845
25°	6114	5735	5621
30°	5965	5538	5419
35°	5827	5357	5233
40°	5686	5166	5046
45°	5526	5003	4880
50°	5375	4826	4733
55°	5192	4659	4561
60°	4992	4468	4385
65°	4783	4270	4187
70°	4546	3997	3985
75°	4170	3735	3735
80°	3682	3416	3463
85°	3220	3204	3378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.4	2.2
10°-20°	268.0	6.3
20°-30°	398.6	9.3
30°-40°	472.1	11.0
40°-50°	488.1	11.4
50°-60°	449.7	10.5
60°-70°	363.5	8.5
70°-80°	243.4	5.7
80°-90°	127.2	3.0
90°-100°	99.5	2.3
100°-110°	136.9	3.2
110°-120°	178.4	4.2
120°-130°	208.6	4.9
130°-140°	220.2	5.1
140°-150°	209.0	4.9
150°-160°	174.1	4.1
160°-170°	115.7	2.7
170°-180°	40.5	0.9
0°-30°	761.0	17.7
0°-40°	1233.2	28.8
0°-60°	2171.0	50.6
0°-90°	2905.1	67.7
90°-120°	414.8	9.7
90°-150°	1052.6	24.5
90°-180°	1383.0	32.3
0°-180°	4288.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	998	998	998	998	998	
5°	998	996	990	997	997	95
15°	954	954	948	953	950	268
25°	866	869	863	867	862	399
35°	750	756	754	757	757	469
45°	618	628	633	640	641	477
55°	475	490	506	516	521	424
65°	327	349	373	387	392	324
75°	180	206	237	256	261	191
85°	54	86	120	141	150	57
90°	16	50	86	109	118	12
95°	34	61	97	120	128	33
105°	85	103	134	154	163	90
115°	150	159	184	200	207	148
125°	214	216	234	249	254	191
135°	274	276	283	295	299	212
145°	331	332	332	337	340	207
155°	378	378	378	379	378	174
165°	411	410	410	412	410	116
175°	427	426	426	427	425	41
180°	428	428	428	428	428	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4
2.5°	1000.8	1000.5	1000.1	999.8	999.4	998.6	997.4	996.2	994.9	993.7	994.9
5°	998.4	998.1	997.6	997.1	996.7	995.7	994.2	992.7	991.2	989.7	991.4
7.5°	989.7	989.5	989.3	989.1	988.9	988.1	986.6	985.0	983.4	981.8	983.4
10°	981.8	981.8	981.8	981.8	981.8	981.0	979.2	977.5	975.7	974.0	975.5
12.5°	970.8	971.0	971.2	971.4	971.6	970.9	969.6	968.2	966.8	965.4	966.6
15°	953.5	953.7	953.9	954.0	954.3	953.7	952.2	950.6	949.0	947.5	948.9
17.5°	930.8	931.1	931.6	932.0	932.5	931.9	930.4	928.9	927.4	925.9	926.8
20°	914.3	914.7	915.1	915.6	916.1	915.5	914.0	912.5	910.9	909.4	910.0
22.5°	895.5	896.3	897.0	897.9	898.6	898.1	896.5	894.8	893.1	891.4	892.2
25°	866.3	867.0	867.6	868.3	868.9	868.6	867.3	866.0	864.7	863.4	864.2
27.5°	833.8	834.8	835.8	836.7	837.6	837.4	835.9	834.4	832.9	831.5	832.1
30°	809.5	810.9	812.2	813.4	814.7	814.7	813.4	812.2	810.9	809.5	810.0
32.5°	787.6	788.7	789.9	791.0	792.1	792.2	791.3	790.3	789.4	788.4	788.8
35°	749.8	751.4	752.9	754.4	755.9	756.4	755.7	755.1	754.4	753.8	754.4
37.5°	712.0	713.4	714.8	716.2	717.7	718.2	717.9	717.7	717.6	717.4	718.2
40°	686.2	688.0	689.7	691.4	693.1	693.9	693.7	693.5	693.2	693.1	693.9
42.5°	658.0	660.3	662.5	664.8	667.0	668.5	668.9	669.4	669.9	670.3	671.4
45°	617.6	620.1	622.5	624.8	627.3	629.0	630.1	631.1	632.3	633.3	634.9
47.5°	576.4	578.6	580.8	583.1	585.2	587.3	589.2	591.1	592.9	594.7	597.0
50°	548.2	550.5	553.0	555.3	557.7	560.2	562.5	565.0	567.3	569.7	572.1
52.5°	518.4	521.3	524.2	527.2	530.1	533.0	535.9	538.9	541.8	544.7	547.2
55°	474.8	478.2	481.7	485.2	488.7	492.2	495.7	499.2	502.6	506.1	508.5
57.5°	430.1	434.3	438.5	442.6	446.9	450.9	455.0	458.9	462.9	466.9	469.7
60°	400.4	404.7	409.1	413.4	417.7	422.2	426.5	430.8	435.2	439.5	442.8
62.5°	371.4	375.7	380.1	384.5	388.8	393.3	398.0	402.7	407.4	412.1	415.8
65°	327.0	332.0	337.0	342.0	346.9	352.0	357.3	362.5	367.8	373.0	376.3
67.5°	285.0	289.9	294.7	299.5	304.3	309.4	314.7	320.1	325.4	330.6	334.6
70°	254.5	259.5	264.5	269.6	274.6	279.8	285.5	291.2	296.8	302.5	306.6
72.5°	224.8	229.9	235.1	240.3	245.4	251.1	257.3	263.5	269.7	275.9	280.3
75°	180.1	185.8	191.4	197.1	202.7	209.1	216.0	223.0	229.9	236.9	241.2
77.5°	137.2	143.7	150.3	156.8	163.3	169.9	176.6	183.3	190.0	196.8	201.5
80°	110.7	117.2	123.7	130.2	136.8	143.6	151.1	158.4	165.9	173.2	178.0
82.5°	86.3	93.2	100.1	107.0	113.9	121.0	128.7	136.2	143.7	151.4	156.0
85°	53.8	61.0	68.2	75.4	82.6	89.9	97.6	105.2	112.8	120.4	125.2
87.5°	30.6	37.7	44.8	51.8	58.9	66.3	73.7	81.2	88.7	96.2	101.3
90°	16.0	23.6	31.1	38.6	46.2	53.9	61.8	69.7	77.7	85.6	91.0
92.5°	22.1	29.0	35.9	42.7	49.6	57.1	65.3	73.5	81.7	89.9	95.3
95°	34.4	40.2	46.0	51.7	57.6	64.6	72.7	80.9	89.0	97.1	102.5
97.5°	47.5	52.7	57.9	63.0	68.1	74.7	82.9	91.0	99.2	107.4	112.4
100°	57.4	62.0	66.5	71.1	75.7	81.9	89.8	97.7	105.7	113.6	118.9
102.5°	68.1	72.6	77.1	81.6	86.1	92.1	99.3	106.6	113.9	121.1	126.3
105°	84.7	88.6	92.5	96.3	100.2	105.6	112.5	119.5	126.5	133.5	138.3
107.5°	103.3	106.6	110.0	113.3	116.6	121.6	128.2	134.8	141.4	148.0	152.5
110°	116.1	119.1	122.1	125.1	128.0	132.7	139.0	145.3	151.7	158.0	162.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	130.0	132.2	134.5	136.9	139.1	143.4	149.6	155.7	161.9	168.1	172.2
115°	149.5	151.3	153.1	155.0	156.7	160.5	166.4	172.1	178.0	183.8	187.6
117.5°	169.0	170.1	171.3	172.4	173.5	176.8	182.3	187.8	193.3	198.8	202.6
120°	181.8	182.9	183.8	184.8	185.9	188.9	194.0	199.1	204.2	209.2	212.9
122.5°	194.8	195.3	195.8	196.1	196.6	199.3	204.3	209.4	214.4	219.4	222.9
125°	213.5	213.7	214.0	214.1	214.3	216.7	221.1	225.6	230.0	234.4	237.7
127.5°	232.4	232.5	232.5	232.5	232.6	234.4	238.1	241.8	245.4	249.1	252.2
130°	244.5	244.6	244.8	244.9	245.1	246.8	250.0	253.2	256.3	259.5	262.5
132.5°	255.7	256.3	256.7	257.3	257.9	259.4	261.6	264.0	266.4	268.6	271.6
135°	274.5	274.7	274.9	275.1	275.4	276.3	277.9	279.5	281.1	282.7	285.5
137.5°	292.1	292.4	292.7	292.8	293.1	293.7	294.6	295.5	296.4	297.4	300.0
140°	302.8	303.1	303.5	303.9	304.3	304.7	305.1	305.6	306.0	306.4	309.0
142.5°	314.2	314.4	314.5	314.7	314.8	315.0	315.4	315.7	316.0	316.3	318.5
145°	331.1	331.2	331.3	331.3	331.4	331.6	331.8	332.1	332.2	332.4	333.6
147.5°	345.7	345.9	346.0	346.2	346.4	346.6	346.8	346.9	347.0	347.2	347.8
150°	356.1	356.1	356.0	355.9	355.8	355.9	356.2	356.6	356.8	357.1	357.1
152.5°	364.7	364.8	364.9	365.0	365.0	365.1	365.3	365.4	365.5	365.6	365.8
155°	377.8	377.8	377.8	377.8	377.8	377.8	377.9	378.0	378.1	378.1	378.4
157.5°	389.5	389.4	389.2	389.0	388.9	388.8	388.9	389.0	389.0	389.1	389.4
160°	396.4	396.2	396.0	395.8	395.6	395.5	395.6	395.6	395.7	395.8	396.1
162.5°	402.6	402.4	402.3	402.1	401.9	401.8	401.8	401.9	401.9	401.9	402.3
165°	410.8	410.6	410.5	410.3	410.2	410.1	410.2	410.3	410.4	410.4	410.8
167.5°	417.6	417.4	417.1	416.8	416.5	416.3	416.3	416.3	416.3	416.3	416.8
170°	421.4	421.1	420.8	420.6	420.2	420.1	420.1	420.1	420.1	420.1	420.6
172.5°	424.0	423.8	423.5	423.2	422.9	422.7	422.7	422.7	422.7	422.7	423.2
175°	427.1	426.8	426.5	426.2	425.9	425.7	425.7	425.7	425.7	425.7	426.2
177.5°	428.6	428.4	428.1	427.9	427.6	427.5	427.4	427.4	427.3	427.3	427.6
180°	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4
2.5°	996.2	997.4	998.6	999.2	999.0	998.8	998.6	998.4
5°	993.2	994.9	996.6	997.4	997.1	996.9	996.7	996.6
7.5°	984.9	986.4	987.9	988.5	988.4	988.2	987.9	987.7
10°	977.0	978.5	980.1	980.7	980.5	980.3	980.1	979.9
12.5°	967.7	968.9	970.1	970.3	969.8	969.2	968.7	968.1
15°	950.2	951.5	952.8	953.0	952.2	951.2	950.4	949.5
17.5°	927.8	928.9	929.8	930.1	929.5	929.1	928.5	928.0
20°	910.7	911.3	912.0	912.3	912.3	912.3	912.3	912.3
22.5°	893.1	893.8	894.7	894.8	894.3	893.8	893.2	892.8
25°	865.2	866.0	866.9	866.8	865.6	864.6	863.5	862.4
27.5°	832.6	833.3	833.9	834.1	833.6	833.2	832.8	832.5
30°	810.4	810.9	811.2	811.4	811.2	811.0	810.8	810.5
32.5°	789.3	789.7	790.1	790.2	790.0	789.9	789.6	789.4
35°	755.1	755.7	756.4	756.7	756.7	756.7	756.7	756.7
37.5°	719.1	719.9	720.8	721.2	721.1	721.0	721.0	720.9
40°	694.7	695.7	696.5	697.2	697.6	698.0	698.5	698.9
42.5°	672.4	673.4	674.5	675.0	675.1	675.2	675.3	675.4
45°	636.4	637.9	639.4	640.3	640.6	640.7	640.9	641.2
47.5°	599.2	601.4	603.6	605.0	605.5	606.0	606.4	606.9
50°	574.5	576.9	579.3	580.8	581.5	582.1	582.8	583.4
52.5°	549.8	552.3	554.9	556.5	556.9	557.4	557.9	558.4
55°	510.9	513.3	515.7	517.3	518.1	519.1	519.9	520.8
57.5°	472.4	475.1	477.9	479.6	480.2	480.9	481.5	482.2
60°	446.0	449.3	452.6	454.5	455.2	455.8	456.5	457.1
62.5°	419.3	422.9	426.6	428.8	429.6	430.5	431.2	432.1
65°	379.5	382.8	386.0	388.0	389.0	389.8	390.7	391.5
67.5°	338.6	342.5	346.5	349.0	350.2	351.3	352.4	353.5
70°	310.8	314.9	319.1	321.7	323.0	324.3	325.6	327.0
72.5°	284.8	289.3	293.8	296.5	297.5	298.4	299.4	300.3
75°	245.6	250.0	254.3	257.0	258.1	259.2	260.2	261.4
77.5°	206.3	211.1	215.9	218.8	219.6	220.5	221.3	222.3
80°	182.9	187.7	192.4	195.2	196.1	197.0	197.8	198.7
82.5°	160.5	165.1	169.8	172.9	174.5	176.0	177.6	179.2
85°	130.0	134.8	139.6	142.8	144.6	146.3	148.1	149.8
87.5°	106.4	111.4	116.5	119.9	121.4	123.0	124.5	126.1
90°	96.3	101.7	107.1	110.7	112.4	114.1	115.9	117.6
92.5°	100.6	105.8	111.2	114.7	116.4	118.1	119.8	121.4
95°	107.7	113.0	118.3	121.8	123.5	125.2	126.9	128.5
97.5°	117.5	122.5	127.6	130.9	132.5	134.1	135.6	137.2
100°	124.1	129.3	134.6	137.9	139.3	140.8	142.2	143.7
102.5°	131.4	136.5	141.7	145.0	146.5	148.0	149.5	151.0
105°	143.1	147.9	152.6	155.9	157.7	159.4	161.2	162.9
107.5°	157.0	161.6	166.2	169.1	170.4	171.7	173.1	174.4
110°	166.6	171.0	175.4	178.2	179.7	181.2	182.6	184.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	176.3	180.3	184.4	187.1	188.5	189.9	191.2	192.7
115°	191.4	195.3	199.2	201.7	202.9	204.2	205.4	206.6
117.5°	206.3	210.1	213.8	216.3	217.4	218.7	219.8	221.0
120°	216.6	220.4	224.0	226.4	227.4	228.4	229.4	230.5
122.5°	226.4	229.8	233.3	235.5	236.6	237.7	238.7	239.9
125°	241.0	244.4	247.7	249.9	250.9	251.9	252.9	253.9
127.5°	255.3	258.5	261.6	263.8	264.9	266.0	267.1	268.2
130°	265.4	268.4	271.4	273.3	274.3	275.2	276.2	277.1
132.5°	274.6	277.6	280.5	282.4	283.0	283.8	284.5	285.2
135°	288.3	291.2	294.0	295.8	296.6	297.4	298.1	299.0
137.5°	302.7	305.3	307.9	309.5	310.0	310.6	311.0	311.5
140°	311.5	314.1	316.6	318.1	318.6	319.1	319.6	320.1
142.5°	320.6	322.7	324.9	326.2	326.7	327.2	327.7	328.2
145°	334.6	335.7	336.9	337.7	338.4	338.9	339.6	340.3
147.5°	348.3	348.8	349.4	349.6	349.5	349.3	349.2	349.1
150°	357.1	357.1	357.1	357.1	357.2	357.3	357.3	357.4
152.5°	366.0	366.2	366.4	366.4	366.1	365.9	365.7	365.4
155°	378.7	379.0	379.3	379.3	378.9	378.5	378.1	377.8
157.5°	389.6	390.0	390.3	390.2	389.7	389.2	388.7	388.2
160°	396.3	396.6	396.9	396.9	396.5	396.2	395.8	395.4
162.5°	402.6	402.9	403.3	403.3	402.8	402.4	402.0	401.5
165°	411.0	411.3	411.6	411.5	411.0	410.7	410.2	409.7
167.5°	417.3	417.6	418.1	418.1	417.6	417.2	416.7	416.3
170°	420.9	421.4	421.9	421.8	421.3	420.8	420.3	419.7
172.5°	423.7	424.0	424.5	424.5	424.0	423.6	423.1	422.6
175°	426.6	427.1	427.5	427.4	427.0	426.4	425.9	425.4
177.5°	428.0	428.4	428.7	428.7	428.3	427.8	427.4	427.0
180°	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1

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