

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: P333403-935

Luminaire Tested: **S125DIW-S850D470U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333403-935
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: S125DIW-S850D470U935-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4225.4 lumens
Efficiency: N/A
Efficacy: 112.1 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

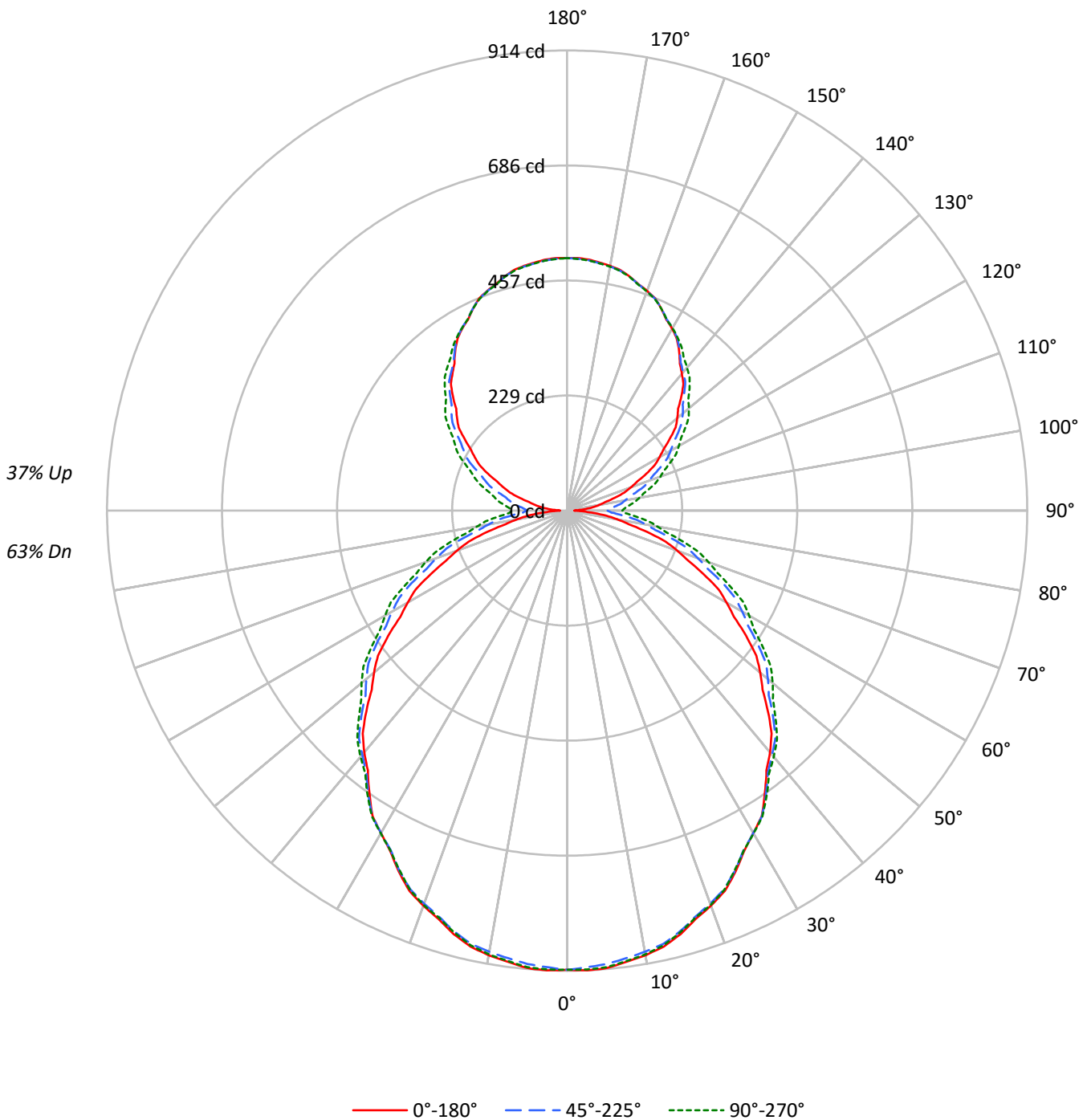
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68
1	100	95	91	87	93	89	85	82	78	75	72	68	66	64	59	57	55
2	90	82	76	70	84	77	71	66	68	63	59	59	56	53	51	48	46
3	82	72	64	58	77	68	61	55	60	54	49	52	48	44	45	42	39
4	75	64	55	49	70	60	52	47	53	47	42	46	41	38	40	36	33
5	69	57	48	42	64	53	46	40	47	41	36	41	36	32	36	32	29
6	64	51	42	36	59	48	40	35	42	36	31	37	32	28	33	28	25
7	59	46	38	32	55	43	36	30	39	32	28	34	29	25	30	26	22
8	55	42	34	28	51	39	32	27	35	29	25	31	26	22	27	23	20
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	25	21	18
10	48	35	28	23	45	33	26	22	30	24	20	26	22	18	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5891	5891	5891
5°	5902	5782	5800
10°	5860	5679	5670
15°	5791	5555	5505
20°	5697	5402	5339
25°	5585	5239	5135
30°	5449	5059	4950
35°	5322	4893	4780
40°	5194	4719	4609
45°	5048	4570	4458
50°	4910	4408	4325
55°	4742	4256	4166
60°	4560	4082	4006
65°	4369	3900	3826
70°	4153	3651	3640
75°	3809	3412	3412
80°	3363	3122	3163
85°	2945	2924	3085



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.2	2.0
10°-20°	244.8	5.8
20°-30°	364.1	8.6
30°-40°	431.3	10.2
40°-50°	445.9	10.6
50°-60°	410.8	9.7
60°-70°	332.0	7.9
70°-80°	222.4	5.3
80°-90°	116.4	2.8
90°-100°	98.3	2.3
100°-110°	146.9	3.5
110°-120°	200.0	4.7
120°-130°	239.2	5.7
130°-140°	255.7	6.1
140°-150°	244.4	5.8
150°-160°	203.9	4.8
160°-170°	135.6	3.2
170°-180°	47.4	1.1
0°-30°	695.2	16.5
0°-40°	1126.5	26.7
0°-60°	1983.2	46.9
0°-90°	2654.0	62.8
90°-120°	445.1	10.5
90°-150°	1184.4	28.0
90°-180°	1571.0	37.2
0°-180°	4225.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	912	912	912	912	912	
5°	912	910	904	911	910	86
15°	871	872	866	870	867	245
25°	791	794	789	792	788	364
35°	685	691	688	691	691	428
45°	564	574	578	584	586	435
55°	434	448	462	472	476	388
65°	299	319	341	354	358	296
75°	164	188	216	234	239	175
85°	49	79	110	129	137	52
90°	15	46	80	101	110	11
95°	37	62	95	117	125	36
105°	97	114	142	162	170	104
115°	174	182	205	221	226	172
125°	249	251	269	282	286	223
135°	321	323	329	340	344	247
145°	388	388	389	394	396	242
155°	443	443	443	444	443	204
165°	481	480	481	482	480	136
175°	500	499	499	501	498	48
180°	501	501	501	501	501	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	914.2	914.0	913.6	913.3	912.9	912.2	911.1	910.0	908.9	907.8	908.9
5°	912.1	911.7	911.3	910.9	910.5	909.6	908.2	906.8	905.4	904.0	905.6
7.5°	904.0	903.9	903.7	903.5	903.4	902.6	901.2	899.7	898.3	896.9	898.3
10°	896.9	896.9	896.9	896.9	896.9	896.1	894.5	892.9	891.3	889.8	891.1
12.5°	886.8	887.0	887.2	887.3	887.5	886.9	885.7	884.4	883.1	881.8	883.0
15°	871.0	871.2	871.3	871.5	871.8	871.2	869.8	868.4	866.9	865.6	866.8
17.5°	850.2	850.6	851.0	851.4	851.8	851.3	849.9	848.5	847.1	845.8	846.6
20°	835.2	835.6	835.9	836.4	836.8	836.3	834.9	833.5	832.1	830.7	831.3
22.5°	818.0	818.7	819.4	820.2	820.9	820.4	818.9	817.3	815.8	814.2	815.0
25°	791.3	791.9	792.6	793.2	793.8	793.4	792.3	791.1	789.9	788.7	789.5
27.5°	761.6	762.6	763.4	764.3	765.2	764.9	763.6	762.2	760.9	759.6	760.1
30°	739.5	740.7	741.9	743.0	744.2	744.2	743.0	741.9	740.7	739.5	739.9
32.5°	719.5	720.5	721.5	722.6	723.6	723.7	722.8	721.9	721.1	720.2	720.6
35°	684.9	686.4	687.8	689.1	690.5	691.0	690.3	689.7	689.1	688.5	689.1
37.5°	650.4	651.7	653.0	654.3	655.6	656.1	655.8	655.7	655.5	655.3	656.1
40°	626.8	628.4	630.0	631.6	633.2	633.9	633.7	633.5	633.3	633.1	633.9
42.5°	601.1	603.1	605.2	607.3	609.3	610.6	611.1	611.5	611.9	612.3	613.3
45°	564.2	566.5	568.6	570.8	573.0	574.5	575.6	576.5	577.6	578.5	580.0
47.5°	526.5	528.6	530.5	532.6	534.6	536.5	538.2	539.9	541.6	543.3	545.4
50°	500.8	502.9	505.1	507.3	509.5	511.7	513.8	516.1	518.2	520.4	522.6
52.5°	473.6	476.2	478.9	481.6	484.2	486.9	489.6	492.2	494.9	497.6	499.9
55°	433.7	436.9	440.1	443.2	446.4	449.6	452.8	456.0	459.1	462.3	464.5
57.5°	392.9	396.7	400.5	404.3	408.2	411.9	415.6	419.2	422.8	426.5	429.0
60°	365.8	369.7	373.7	377.6	381.6	385.6	389.6	393.6	397.5	401.5	404.5
62.5°	339.2	343.2	347.2	351.2	355.2	359.3	363.6	367.9	372.1	376.4	379.8
65°	298.7	303.2	307.8	312.4	316.9	321.6	326.4	331.1	336.0	340.7	343.7
67.5°	260.4	264.8	269.2	273.6	278.0	282.7	287.5	292.4	297.2	302.0	305.7
70°	232.5	237.0	241.6	246.2	250.8	255.6	260.8	266.0	271.1	276.3	280.1
72.5°	205.3	210.0	214.7	219.5	224.2	229.4	235.1	240.7	246.3	252.0	256.1
75°	164.5	169.7	174.9	180.0	185.2	191.0	197.3	203.7	210.0	216.4	220.3
77.5°	125.4	131.3	137.3	143.3	149.2	155.2	161.4	167.5	173.6	179.8	184.1
80°	101.1	107.0	113.0	118.9	124.9	131.2	138.0	144.7	151.5	158.3	162.6
82.5°	78.9	85.2	91.4	97.7	104.0	110.6	117.5	124.4	131.3	138.3	142.5
85°	49.2	55.7	62.3	68.9	75.4	82.1	89.1	96.1	103.1	109.9	114.3
87.5°	28.0	34.4	41.0	47.4	54.0	60.6	67.5	74.4	81.3	88.2	92.8
90°	14.7	21.8	28.8	35.8	42.9	50.1	57.5	64.8	72.2	79.6	84.6
92.5°	22.3	28.7	35.0	41.4	47.8	54.8	62.4	70.1	77.7	85.4	90.4
95°	37.0	42.4	47.7	53.0	58.4	64.8	72.5	80.1	87.7	95.3	100.3
97.5°	52.7	57.4	62.2	66.8	71.5	77.7	85.5	93.2	100.9	108.7	113.4
100°	64.5	68.6	72.8	77.0	81.2	87.0	94.5	101.9	109.4	116.9	121.9
102.5°	77.1	81.4	85.6	89.8	94.0	99.4	106.2	113.0	119.8	126.6	131.4
105°	97.0	100.7	104.3	107.9	111.5	116.5	123.0	129.5	136.0	142.4	147.0
107.5°	119.1	122.2	125.4	128.5	131.6	136.2	142.3	148.4	154.5	160.7	164.9
110°	134.2	137.1	139.9	142.8	145.5	149.8	155.7	161.5	167.3	173.1	177.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	150.5	152.7	154.7	156.9	159.0	163.0	168.7	174.4	180.1	185.9	189.6
115°	173.6	175.3	177.0	178.7	180.6	184.1	189.4	194.8	200.1	205.4	208.9
117.5°	196.7	197.8	198.8	199.9	201.0	204.1	209.1	214.1	219.2	224.2	227.6
120°	211.7	212.8	213.8	214.8	215.8	218.6	223.3	228.0	232.6	237.3	240.6
122.5°	227.2	227.6	228.1	228.5	228.9	231.4	236.1	240.7	245.4	250.0	253.1
125°	249.0	249.3	249.7	250.0	250.3	252.5	256.6	260.6	264.7	268.7	271.7
127.5°	271.6	271.6	271.7	271.8	271.9	273.7	277.1	280.4	283.8	287.1	290.0
130°	285.6	285.9	286.1	286.3	286.5	288.2	291.1	294.0	297.0	300.0	302.6
132.5°	298.9	299.6	300.3	300.9	301.6	303.0	305.1	307.2	309.4	311.4	314.2
135°	321.0	321.3	321.7	321.9	322.3	323.2	324.7	326.1	327.6	329.1	331.7
137.5°	341.7	342.1	342.4	342.8	343.1	343.7	344.6	345.4	346.3	347.2	349.7
140°	354.5	354.9	355.3	355.8	356.2	356.6	357.1	357.6	358.0	358.4	360.8
142.5°	367.9	368.1	368.2	368.5	368.7	369.0	369.4	369.7	370.1	370.5	372.5
145°	387.6	387.8	387.9	388.1	388.2	388.4	388.7	388.9	389.2	389.4	390.5
147.5°	405.0	405.2	405.4	405.5	405.8	406.0	406.1	406.4	406.6	406.8	407.3
150°	417.2	417.1	417.0	416.9	416.8	417.0	417.3	417.7	418.0	418.4	418.4
152.5°	427.1	427.3	427.4	427.5	427.7	427.7	427.9	428.1	428.2	428.3	428.5
155°	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.7	442.8	442.9	443.2
157.5°	456.2	456.1	455.9	455.7	455.5	455.5	455.6	455.6	455.7	455.8	456.2
160°	464.4	464.2	463.8	463.6	463.3	463.2	463.3	463.4	463.5	463.6	464.0
162.5°	471.6	471.4	471.2	471.0	470.8	470.7	470.7	470.7	470.8	470.8	471.2
165°	481.1	481.0	480.8	480.6	480.4	480.4	480.5	480.6	480.7	480.8	481.1
167.5°	489.3	489.0	488.6	488.3	487.9	487.8	487.8	487.8	487.8	487.8	488.3
170°	493.6	493.3	492.9	492.6	492.2	492.1	492.1	492.1	492.1	492.1	492.6
172.5°	496.8	496.5	496.1	495.8	495.4	495.2	495.2	495.2	495.2	495.2	495.8
175°	500.3	499.9	499.6	499.2	498.9	498.7	498.7	498.7	498.7	498.7	499.2
177.5°	502.0	501.8	501.5	501.3	500.9	500.8	500.8	500.7	500.6	500.5	500.9
180°	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	910.0	911.1	912.2	912.7	912.6	912.4	912.2	912.1
5°	907.2	908.8	910.4	911.1	910.9	910.7	910.5	910.3
7.5°	899.7	901.0	902.4	903.0	902.8	902.7	902.4	902.2
10°	892.5	893.9	895.3	895.9	895.7	895.5	895.3	895.1
12.5°	884.0	885.1	886.1	886.4	885.9	885.4	884.8	884.3
15°	868.0	869.2	870.4	870.6	869.8	868.9	868.1	867.4
17.5°	847.6	848.5	849.4	849.6	849.1	848.7	848.2	847.7
20°	831.9	832.5	833.1	833.4	833.4	833.4	833.4	833.4
22.5°	815.8	816.5	817.3	817.4	816.9	816.5	816.0	815.5
25°	790.3	791.1	791.9	791.8	790.7	789.8	788.8	787.8
27.5°	760.6	761.2	761.7	761.9	761.5	761.1	760.8	760.4
30°	740.3	740.7	741.1	741.2	741.0	740.8	740.6	740.4
32.5°	721.0	721.3	721.8	721.9	721.7	721.5	721.3	721.1
35°	689.7	690.3	691.0	691.2	691.2	691.2	691.2	691.2
37.5°	656.9	657.6	658.4	658.8	658.8	658.7	658.6	658.5
40°	634.6	635.5	636.3	636.9	637.2	637.7	638.1	638.4
42.5°	614.2	615.2	616.1	616.6	616.7	616.8	616.9	617.0
45°	581.3	582.7	584.1	584.9	585.1	585.3	585.5	585.7
47.5°	547.3	549.4	551.4	552.7	553.1	553.5	554.0	554.4
50°	524.8	527.0	529.2	530.5	531.2	531.8	532.4	533.0
52.5°	502.2	504.5	506.9	508.3	508.8	509.2	509.6	510.1
55°	466.7	468.9	471.1	472.5	473.3	474.2	474.9	475.7
57.5°	431.5	434.0	436.5	438.1	438.7	439.3	439.9	440.5
60°	407.4	410.4	413.5	415.2	415.8	416.4	417.0	417.6
62.5°	383.1	386.3	389.7	391.7	392.4	393.2	393.9	394.7
65°	346.6	349.7	352.6	354.5	355.3	356.1	356.9	357.7
67.5°	309.3	312.9	316.5	318.8	319.9	320.9	321.9	323.0
70°	283.9	287.7	291.4	293.9	295.1	296.3	297.5	298.7
72.5°	260.2	264.2	268.4	270.9	271.7	272.6	273.5	274.3
75°	224.4	228.3	232.3	234.8	235.7	236.8	237.7	238.8
77.5°	188.5	192.9	197.3	199.8	200.6	201.4	202.2	203.0
80°	167.0	171.4	175.7	178.3	179.2	179.9	180.7	181.5
82.5°	146.6	150.8	155.1	157.9	159.4	160.7	162.2	163.7
85°	118.7	123.1	127.5	130.4	132.1	133.6	135.3	136.8
87.5°	97.5	102.1	106.8	109.9	111.3	112.7	114.2	115.6
90°	89.5	94.5	99.6	102.9	104.5	106.2	107.9	109.5
92.5°	95.4	100.4	105.4	108.7	110.2	111.8	113.4	115.0
95°	105.3	110.3	115.2	118.5	120.1	121.7	123.2	124.8
97.5°	118.1	122.9	127.6	130.7	132.2	133.6	135.1	136.6
100°	126.8	131.8	136.7	139.9	141.3	142.7	144.0	145.3
102.5°	136.3	141.1	146.0	149.1	150.6	152.1	153.4	154.9
105°	151.4	155.9	160.4	163.5	165.1	166.8	168.4	170.1
107.5°	169.1	173.3	177.5	180.2	181.4	182.6	183.8	185.0
110°	181.2	185.3	189.2	192.0	193.3	194.6	195.9	197.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	193.4	197.1	200.9	203.4	204.6	205.8	207.1	208.3
115°	212.4	215.9	219.4	221.7	222.7	223.9	225.0	226.1
117.5°	231.1	234.5	238.0	240.2	241.3	242.3	243.2	244.3
120°	244.0	247.5	250.8	252.9	253.7	254.6	255.5	256.3
122.5°	256.3	259.5	262.6	264.7	265.5	266.5	267.4	268.3
125°	274.7	277.8	280.8	282.8	283.6	284.6	285.4	286.4
127.5°	292.8	295.7	298.5	300.5	301.4	302.4	303.4	304.4
130°	305.3	308.1	310.7	312.5	313.3	314.2	315.0	315.8
132.5°	316.8	319.5	322.3	323.9	324.5	325.0	325.6	326.2
135°	334.2	336.8	339.4	341.0	341.7	342.3	343.0	343.6
137.5°	352.1	354.6	357.0	358.3	358.8	359.1	359.5	359.8
140°	363.2	365.6	367.9	369.3	369.6	370.0	370.3	370.7
142.5°	374.4	376.3	378.3	379.5	379.9	380.2	380.6	381.0
145°	391.4	392.4	393.4	394.2	394.8	395.3	395.8	396.3
147.5°	407.9	408.4	408.9	409.1	408.8	408.5	408.4	408.1
150°	418.4	418.4	418.4	418.4	418.4	418.4	418.4	418.4
152.5°	428.8	429.0	429.1	429.1	428.9	428.6	428.3	428.0
155°	443.6	443.9	444.3	444.3	443.8	443.4	443.0	442.6
157.5°	456.5	456.8	457.2	457.1	456.5	455.9	455.4	454.8
160°	464.3	464.7	465.0	464.9	464.5	464.1	463.6	463.2
162.5°	471.7	472.0	472.4	472.4	471.9	471.4	470.9	470.4
165°	481.5	481.8	482.2	482.1	481.6	481.0	480.5	480.0
167.5°	488.8	489.3	489.8	489.8	489.2	488.7	488.2	487.7
170°	493.1	493.6	494.2	494.1	493.5	492.9	492.3	491.7
172.5°	496.3	496.8	497.3	497.3	496.7	496.2	495.7	495.2
175°	499.7	500.3	500.8	500.8	500.2	499.6	498.9	498.3
177.5°	501.4	501.8	502.2	502.1	501.7	501.2	500.7	500.2
180°	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4

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