

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: P332542-940

Luminaire Tested: **SA4XXDIP-C575D365U940-4F0-1E-UDD-F1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332542-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C575D365U940-4F0-1E-UDD-F1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

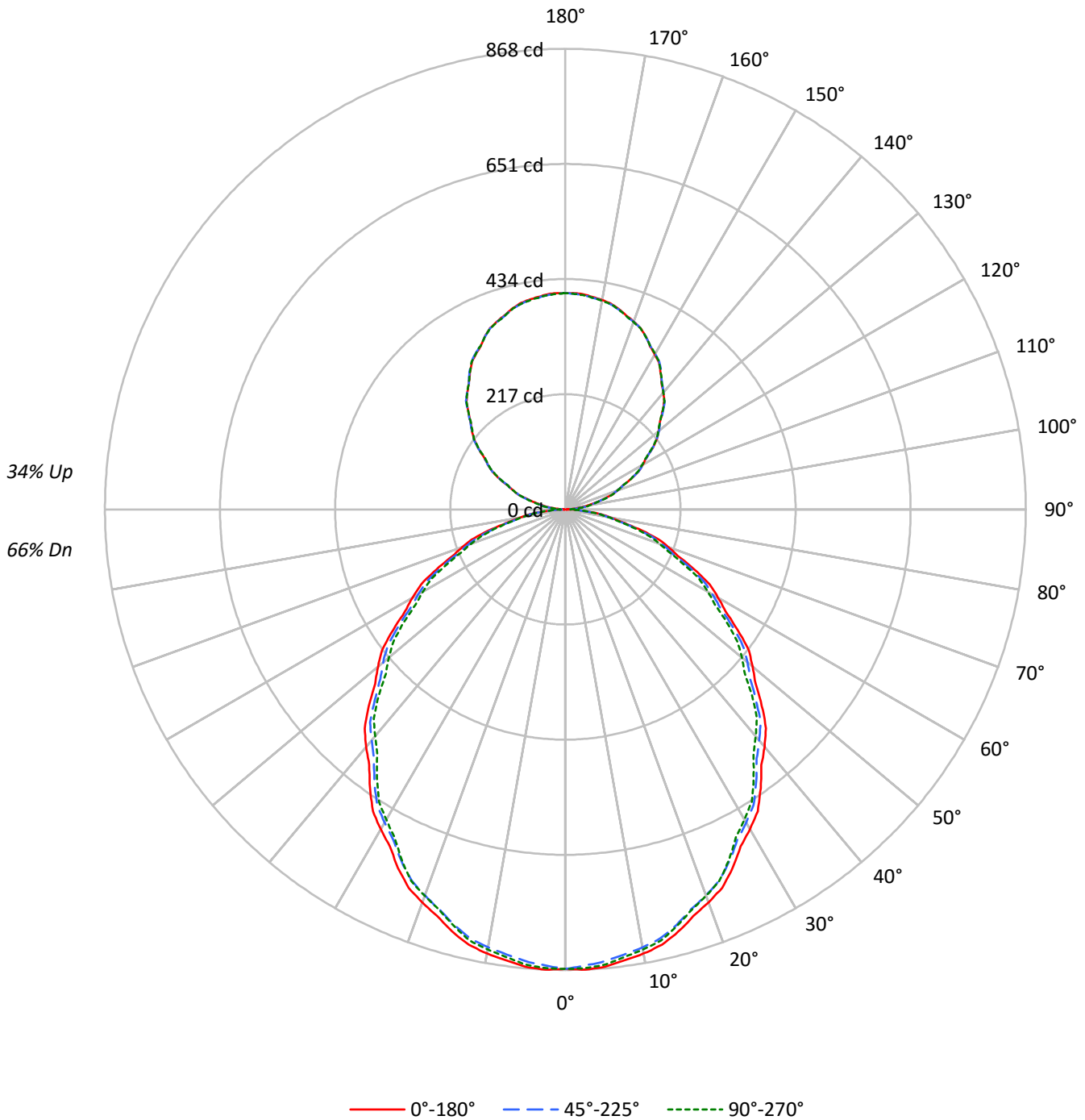
Lumens per Lamp: N/A
Luminaire Lumens: 3353.8 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 27.5
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	0
RCR																		
0	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	78	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	70	71	67	63	63	59	57	55	53	50	47
3	84	74	67	61	79	70	64	58	63	57	53	56	51	48	49	46	43	40
4	77	66	58	52	72	62	55	49	56	50	45	50	45	41	44	40	37	34
5	71	59	50	44	66	56	48	43	50	44	39	45	40	36	39	35	32	29
6	65	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	28	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	41	34	29	37	31	27	34	29	25	30	26	23	21
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6990	6990	6990
5°	7012	6928	6978
10°	6968	6871	6906
15°	6884	6774	6791
20°	6772	6653	6659
25°	6644	6515	6495
30°	6488	6352	6293
35°	6326	6182	6099
40°	6157	5989	5879
45°	5981	5799	5688
50°	5786	5630	5456
55°	5576	5410	5234
60°	5365	5165	5007
65°	5129	4932	4732
70°	4865	4617	4440
75°	4457	4242	4133
80°	3966	3808	3710
85°	3473	3344	3279



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.6	2.4
10°-20°	229.8	6.9
20°-30°	338.2	10.1
30°-40°	393.2	11.7
40°-50°	393.2	11.7
50°-60°	343.9	10.3
60°-70°	255.4	7.6
70°-80°	145.1	4.3
80°-90°	43.1	1.3
90°-100°	26.9	0.8
100°-110°	79.6	2.4
110°-120°	135.1	4.0
120°-130°	178.2	5.3
130°-140°	200.1	6.0
140°-150°	196.6	5.9
150°-160°	165.4	4.9
160°-170°	110.0	3.3
170°-180°	38.5	1.1
0°-30°	649.5	19.4
0°-40°	1042.7	31.1
0°-60°	1779.8	53.1
0°-90°	2223.4	66.3
90°-120°	241.6	7.2
90°-150°	816.5	24.3
90°-180°	1130.0	33.7
0°-180°	3353.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	865	862	855	862	861	82
15°	824	820	810	814	812	232
25°	746	741	731	732	729	343
35°	642	637	627	622	619	401
45°	524	519	508	501	498	404
55°	396	394	384	376	372	355
65°	268	265	258	251	248	266
75°	143	139	136	133	132	152
85°	38	37	36	36	35	41
90°	1	4	7	9	10	3
95°	19	22	24	25	25	21
105°	73	74	75	76	77	78
115°	137	137	137	136	136	135
125°	200	200	200	199	198	178
135°	258	260	260	259	258	200
145°	314	315	315	315	314	196
155°	359	359	359	360	359	165
165°	391	390	390	391	390	110
175°	407	405	405	407	405	39
180°	407	407	407	407	407	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	865.9	865.9	865.9	865.9	865.9	865.9	865.9	865.9	865.9	865.9	865.9
2.5°	868.2	867.8	867.5	867.1	866.7	865.9	864.5	863.2	861.7	860.4	861.7
5°	865.3	864.7	864.1	863.4	862.8	861.7	860.0	858.3	856.6	854.9	856.6
7.5°	857.2	856.6	856.0	855.4	854.8	853.5	851.7	849.8	847.8	846.0	847.4
10°	850.0	849.4	848.8	848.2	847.6	846.2	844.3	842.2	840.3	838.2	839.5
12.5°	840.6	840.0	839.4	838.7	838.1	836.8	834.6	832.5	830.4	828.2	829.6
15°	823.7	823.0	822.4	821.8	821.2	819.7	817.4	815.1	812.8	810.5	811.4
17.5°	803.3	802.5	801.7	800.9	800.1	798.7	796.5	794.3	792.1	790.0	790.5
20°	788.3	787.5	786.8	786.0	785.2	783.6	781.3	779.0	776.7	774.4	774.8
22.5°	772.1	771.2	770.2	769.1	768.1	766.4	764.1	761.8	759.5	757.2	758.0
25°	745.9	744.8	743.8	742.7	741.6	740.0	737.8	735.7	733.5	731.4	731.6
27.5°	716.0	714.9	713.7	712.7	711.5	710.0	707.9	706.0	703.9	702.0	701.6
30°	696.0	694.7	693.5	692.2	691.1	689.4	687.4	685.4	683.4	681.4	680.8
32.5°	674.8	673.8	672.6	671.5	670.5	668.8	666.7	664.6	662.5	660.3	659.6
35°	641.9	640.8	639.7	638.6	637.6	635.9	633.7	631.6	629.5	627.3	626.2
37.5°	607.0	606.0	605.0	604.0	603.1	601.5	599.1	596.8	594.5	592.2	591.0
40°	584.2	583.0	581.8	580.6	579.3	577.6	575.2	572.9	570.6	568.3	566.8
42.5°	559.8	559.1	558.4	557.6	556.9	555.2	552.7	550.1	547.5	545.0	543.2
45°	523.9	522.8	521.7	520.7	519.6	517.8	515.3	512.8	510.4	507.9	506.2
47.5°	486.2	485.5	484.8	484.0	483.3	481.8	479.6	477.2	474.9	472.7	470.7
50°	460.7	460.1	459.5	458.9	458.3	456.9	454.8	452.5	450.4	448.3	446.1
52.5°	435.8	435.1	434.3	433.5	432.8	431.3	429.0	426.8	424.5	422.1	420.3
55°	396.2	395.7	395.3	394.8	394.4	393.1	390.9	388.7	386.6	384.4	382.5
57.5°	358.5	357.9	357.4	356.9	356.3	355.1	352.9	350.8	348.7	346.5	344.7
60°	332.3	331.6	330.8	330.0	329.3	327.9	325.9	323.9	321.9	319.9	318.5
62.5°	306.8	306.2	305.5	304.9	304.3	302.8	300.8	298.6	296.5	294.4	293.1
65°	268.5	267.8	267.0	266.3	265.5	264.3	262.8	261.2	259.7	258.2	256.5
67.5°	230.0	229.3	228.5	227.8	227.1	226.0	224.5	223.1	221.6	220.1	218.6
70°	206.1	205.0	203.9	202.9	201.8	200.6	199.4	198.1	196.9	195.6	194.5
72.5°	180.6	179.5	178.4	177.3	176.2	175.2	174.2	173.3	172.3	171.2	170.2
75°	142.9	142.1	141.4	140.6	139.8	139.1	138.3	137.5	136.8	136.0	135.4
77.5°	107.0	106.6	106.3	106.0	105.7	105.1	104.4	103.8	103.1	102.5	102.2
80°	85.3	84.9	84.4	84.0	83.5	83.1	82.8	82.5	82.2	81.9	81.6
82.5°	64.3	64.0	63.8	63.6	63.4	63.2	63.2	63.1	63.0	63.0	62.8
85°	37.5	37.5	37.5	37.5	37.5	37.3	37.0	36.7	36.4	36.1	36.1
87.5°	14.6	14.6	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.8
90°	1.0	1.7	2.5	3.3	4.0	4.7	5.3	5.8	6.3	7.0	7.3
92.5°	6.8	7.7	8.5	9.4	10.3	10.9	11.3	11.7	12.1	12.5	12.8
95°	18.9	19.5	20.2	20.8	21.4	22.0	22.5	23.0	23.5	24.0	24.2
97.5°	33.0	33.5	34.1	34.5	35.0	35.6	36.1	36.7	37.3	37.9	38.2
100°	44.1	44.4	44.7	44.9	45.2	45.7	46.3	47.0	47.6	48.2	48.3
102.5°	55.7	55.8	55.9	56.1	56.2	56.5	57.1	57.7	58.2	58.8	59.0
105°	73.4	73.5	73.6	73.7	73.7	73.8	74.2	74.5	74.7	75.0	75.2
107.5°	92.0	92.1	92.2	92.3	92.4	92.4	92.5	92.5	92.6	92.6	92.7
110°	104.6	104.8	104.9	105.0	105.1	105.2	105.1	105.0	105.0	105.0	104.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	117.7	117.7	117.8	117.8	117.8	117.8	117.6	117.5	117.4	117.3	117.3
115°	137.4	137.4	137.4	137.4	137.4	137.3	137.1	137.1	136.9	136.8	136.7
117.5°	155.9	156.0	156.0	156.0	156.1	156.1	156.0	156.0	155.8	155.7	155.5
120°	168.3	168.5	168.8	169.1	169.4	169.4	169.2	169.0	168.8	168.6	168.3
122.5°	181.1	181.2	181.4	181.5	181.6	181.6	181.5	181.4	181.3	181.2	180.9
125°	200.1	200.1	200.1	200.1	200.1	200.0	200.0	199.9	199.8	199.7	199.7
127.5°	217.3	217.5	217.8	217.9	218.1	218.2	218.1	217.9	217.8	217.8	217.6
130°	229.4	229.6	229.8	230.1	230.2	230.3	230.3	230.3	230.3	230.3	230.2
132.5°	241.7	241.9	242.0	242.2	242.4	242.4	242.4	242.3	242.3	242.2	242.0
135°	258.1	258.5	258.9	259.3	259.8	259.9	259.9	259.9	259.9	259.9	259.8
137.5°	275.8	276.1	276.3	276.4	276.6	276.8	276.9	277.0	277.1	277.2	277.1
140°	287.7	287.8	287.9	288.1	288.3	288.3	288.3	288.3	288.3	288.3	288.3
142.5°	298.5	298.6	298.8	298.9	299.1	299.2	299.1	299.0	299.0	298.9	298.9
145°	313.5	313.8	314.1	314.3	314.7	314.9	314.9	315.0	315.0	315.1	315.0
147.5°	328.4	328.8	329.0	329.4	329.8	329.8	329.8	329.8	329.8	329.7	329.6
150°	337.5	337.8	338.0	338.3	338.6	338.8	338.8	338.8	338.8	338.8	338.8
152.5°	346.1	346.3	346.3	346.5	346.7	346.8	346.9	347.0	347.0	347.1	347.2
155°	359.2	359.2	359.2	359.2	359.2	359.2	359.1	359.0	359.0	358.9	359.2
157.5°	370.3	370.1	370.1	370.0	369.8	369.7	369.7	369.7	369.7	369.7	369.9
160°	376.8	376.7	376.7	376.7	376.6	376.5	376.5	376.4	376.3	376.2	376.5
162.5°	382.9	382.7	382.5	382.4	382.2	382.1	382.0	381.9	381.8	381.7	382.2
165°	391.0	390.8	390.7	390.4	390.2	390.0	389.9	389.8	389.6	389.5	389.9
167.5°	397.3	397.0	396.7	396.4	396.1	395.9	396.0	396.0	396.0	396.0	396.5
170°	400.8	400.5	400.1	399.8	399.4	399.3	399.3	399.4	399.5	399.6	399.9
172.5°	403.3	403.1	402.7	402.4	402.2	402.0	402.0	402.1	402.1	402.1	402.5
175°	406.8	406.4	406.1	405.7	405.4	405.2	405.1	405.0	405.0	404.9	405.4
177.5°	408.0	407.7	407.3	407.1	406.8	406.7	406.7	406.7	406.7	406.7	407.1
180°	407.4	407.4	407.4	407.4	407.4	407.4	407.4	407.4	407.4	407.4	407.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	865.9	865.9	865.9	865.9	865.9	865.9	865.9	865.9
2.5°	862.9	864.2	865.4	865.9	865.8	865.7	865.6	865.4
5°	858.3	860.0	861.7	862.4	862.0	861.7	861.4	861.1
7.5°	848.7	850.1	851.4	852.0	851.9	851.7	851.5	851.2
10°	840.7	842.0	843.2	843.6	843.3	843.0	842.7	842.4
12.5°	831.0	832.3	833.7	834.1	833.7	833.2	832.9	832.4
15°	812.3	813.2	814.1	814.4	814.0	813.5	813.0	812.5
17.5°	791.1	791.7	792.3	792.4	792.1	791.8	791.5	791.2
20°	775.3	775.8	776.2	776.3	776.0	775.7	775.4	775.1
22.5°	758.8	759.6	760.5	760.6	760.1	759.6	759.0	758.4
25°	731.6	731.8	732.0	731.7	731.1	730.5	729.9	729.2
27.5°	701.2	700.8	700.4	699.9	699.1	698.4	697.6	696.8
30°	680.2	679.6	678.9	678.2	677.4	676.7	675.9	675.1
32.5°	658.8	658.1	657.4	656.6	655.9	655.1	654.2	653.5
35°	625.1	624.0	622.9	622.1	621.3	620.5	619.7	618.9
37.5°	589.9	588.6	587.5	586.4	585.4	584.3	583.4	582.3
40°	565.3	563.7	562.1	561.0	560.2	559.5	558.7	557.9
42.5°	541.4	539.6	537.8	536.6	536.2	535.7	535.1	534.6
45°	504.5	502.8	501.1	500.1	499.6	499.2	498.6	498.2
47.5°	468.9	466.9	465.0	463.5	462.4	461.1	459.9	458.8
50°	443.9	441.8	439.6	438.1	437.1	436.2	435.3	434.4
52.5°	418.3	416.4	414.6	413.0	411.8	410.6	409.5	408.3
55°	380.8	378.9	377.0	375.6	374.7	373.8	372.8	371.9
57.5°	343.0	341.3	339.5	338.1	337.2	336.4	335.5	334.6
60°	317.1	315.8	314.3	313.3	312.5	311.7	310.9	310.1
62.5°	291.9	290.5	289.3	288.3	287.5	286.8	286.0	285.2
65°	255.0	253.5	252.0	250.8	250.0	249.2	248.5	247.7
67.5°	217.1	215.7	214.2	213.3	213.1	212.9	212.7	212.5
70°	193.2	192.0	190.7	189.9	189.4	189.0	188.5	188.1
72.5°	169.2	168.3	167.3	166.6	166.1	165.7	165.2	164.7
75°	134.7	134.1	133.6	133.1	133.0	132.9	132.7	132.5
77.5°	102.0	101.8	101.7	101.4	100.9	100.6	100.1	99.8
80°	81.2	81.0	80.6	80.4	80.3	80.1	80.0	79.8
82.5°	62.6	62.4	62.2	62.1	62.0	61.8	61.6	61.4
85°	36.1	36.1	36.1	36.0	35.8	35.7	35.6	35.4
87.5°	14.9	15.0	15.1	15.1	15.2	15.2	15.2	15.2
90°	7.8	8.2	8.6	8.9	9.0	9.2	9.3	9.5
92.5°	13.0	13.2	13.5	13.6	13.7	13.8	13.9	14.0
95°	24.3	24.6	24.8	24.9	24.9	24.9	24.9	24.9
97.5°	38.3	38.6	38.9	39.0	39.0	39.0	39.0	39.0
100°	48.5	48.6	48.8	48.9	48.9	48.9	48.9	48.9
102.5°	59.2	59.4	59.6	59.7	59.7	59.8	59.8	59.9
105°	75.4	75.6	75.8	76.1	76.2	76.5	76.7	76.9
107.5°	93.0	93.2	93.4	93.5	93.5	93.5	93.5	93.4
110°	104.7	104.5	104.3	104.4	104.6	104.9	105.0	105.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	117.3	117.2	117.2	117.2	117.3	117.3	117.3	117.3
115°	136.6	136.5	136.4	136.4	136.3	136.3	136.2	136.2
117.5°	155.2	155.0	154.8	154.6	154.4	154.3	154.2	154.0
120°	167.9	167.6	167.2	167.1	167.2	167.4	167.5	167.6
122.5°	180.7	180.5	180.2	179.9	179.8	179.5	179.2	179.0
125°	199.5	199.4	199.2	199.0	198.9	198.8	198.7	198.5
127.5°	217.5	217.3	217.1	217.0	217.0	216.9	216.7	216.6
130°	230.1	229.9	229.8	229.5	229.3	229.0	228.7	228.5
132.5°	241.9	241.7	241.7	241.5	241.4	241.3	241.2	241.0
135°	259.7	259.6	259.4	259.2	259.0	258.8	258.6	258.4
137.5°	276.9	276.7	276.5	276.4	276.4	276.5	276.5	276.6
140°	288.2	288.1	288.0	287.9	287.9	287.8	287.8	287.7
142.5°	298.9	298.9	298.8	298.8	298.8	298.8	298.8	298.8
145°	315.0	314.9	314.9	314.7	314.5	314.2	314.1	313.9
147.5°	329.6	329.5	329.4	329.4	329.3	329.2	329.1	329.1
150°	338.8	338.8	338.8	338.7	338.7	338.6	338.5	338.4
152.5°	347.4	347.6	347.8	347.7	347.5	347.3	347.1	347.0
155°	359.4	359.7	360.0	360.0	359.7	359.4	359.2	358.9
157.5°	370.1	370.3	370.5	370.5	370.2	370.1	369.8	369.5
160°	376.7	376.8	377.1	377.0	376.7	376.3	375.9	375.6
162.5°	382.5	382.9	383.3	383.3	383.0	382.6	382.3	381.9
165°	390.3	390.7	391.1	391.2	390.9	390.7	390.4	390.1
167.5°	396.9	397.3	397.7	397.7	397.3	396.8	396.4	395.9
170°	400.4	400.8	401.3	401.2	400.7	400.2	399.8	399.2
172.5°	403.1	403.5	403.9	403.9	403.5	403.0	402.5	402.0
175°	405.9	406.4	406.9	406.9	406.4	405.9	405.4	404.9
177.5°	407.4	407.9	408.2	408.2	407.8	407.3	406.9	406.4
180°	407.4	407.4	407.4	407.4	407.4	407.4	407.4	407.4

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