

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1007764

Luminaire Tested: S124IP-B810UB40-4F0-XX-W2A-4

Issue Date: 5/5/2025

Test Information

Test Method: LM-79-2019
Report Number: P1007764
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124IP-B810UB40-4F0-XX-W2A-4
Description: Define 4 Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

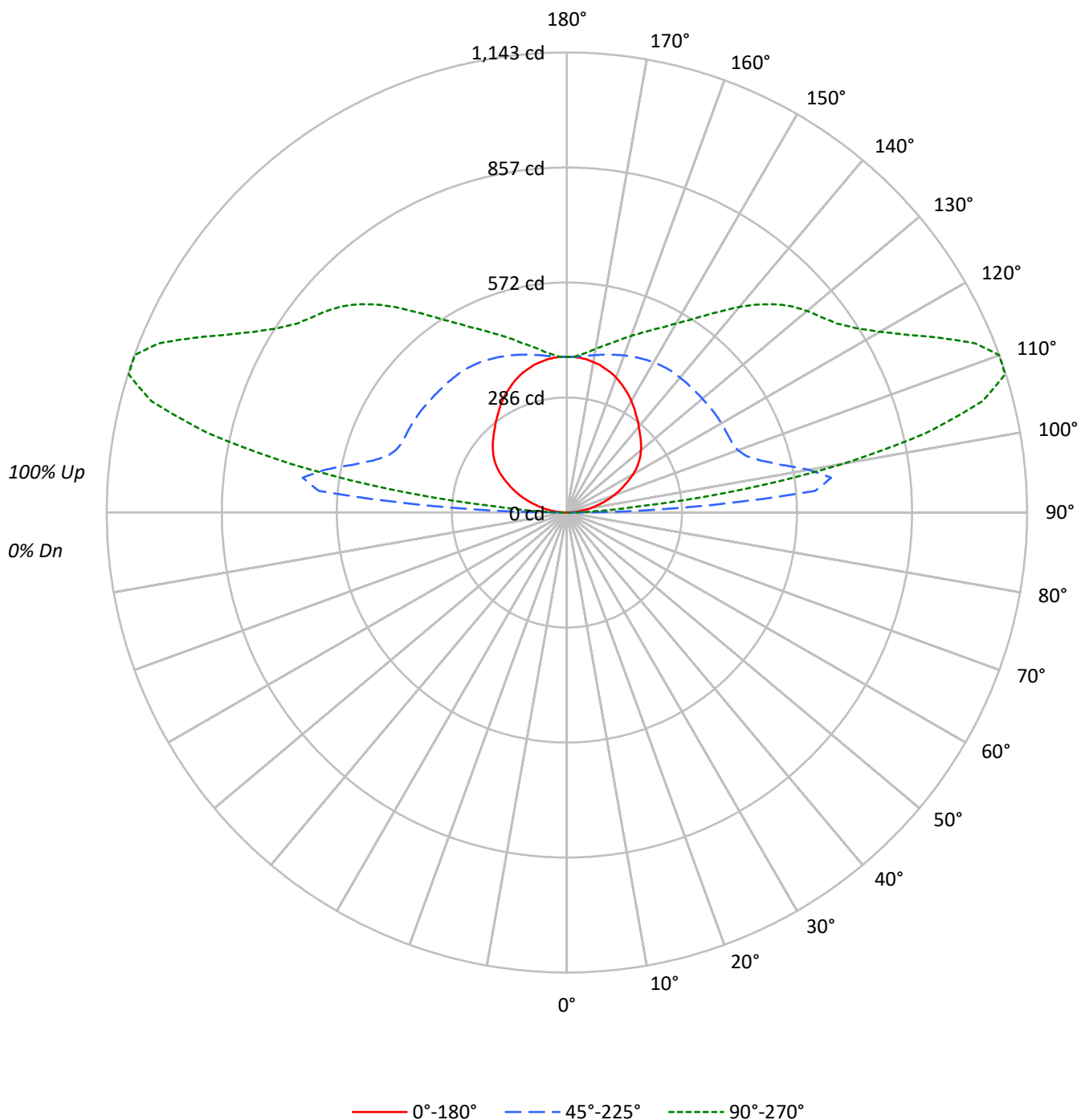
Lumens per Lamp: N/A
Luminaire Lumens: 2816.0 lumens
Efficiency: N/A
Efficacy: 133.5 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Indirect

Input Watts (W): 21.1
Input Voltage (V):
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: 24 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	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7
3	72	63	56	51	61	54	49	44	37	34	31	21	20	18	7	6	6
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	3
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	0	0	0
5°	0	0	0
10°	0	0	0
15°	0	0	0
20°	0	0	0
25°	0	0	0
30°	0	0	0
35°	0	0	0
40°	0	0	0
45°	0	0	0
50°	0	0	0
55°	0	0	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 0°
Luminance: 0 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	1.5	0.1
90°-100°	280.1	9.9
100°-110°	584.7	20.8
110°-120°	519.8	18.5
120°-130°	437.5	15.5
130°-140°	365.0	13.0
140°-150°	278.7	9.9
150°-160°	195.9	7.0
160°-170°	115.2	4.1
170°-180°	37.5	1.3
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.5	0.1
90°-120°	1384.5	49.2
90°-150°	2465.8	87.6
90°-180°	2814.0	99.9
0°-180°	2816.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	0	0	0	0	0	
5°	0	0	0	0	0	0
15°	0	0	0	0	0	0
25°	0	0	0	0	0	0
35°	0	0	0	0	0	0
45°	0	0	0	0	0	0
55°	0	0	0	0	0	0
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	1	6	14	15	16	2
95°	25	79	619	306	185	27
105°	89	129	498	1072	1068	95
115°	156	196	444	853	1026	155
125°	218	259	442	726	818	194
135°	259	308	438	645	732	200
145°	298	342	436	544	598	187
155°	339	366	424	480	500	157
165°	370	381	406	430	436	104
175°	386	386	390	395	393	37
180°	386	386	386	386	386	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.8	2.3	4.6	5.3	6.1	6.1	10.6	10.6	12.1	13.7	12.9
92.5°	10.6	15.2	23.5	34.9	48.6	68.3	115.4	189.0	260.4	297.6	247.5
95°	25.1	27.3	34.9	44.8	63.0	94.9	160.9	285.5	466.9	618.7	636.2
97.5°	41.8	41.8	48.6	57.7	73.6	101.0	153.4	260.4	447.2	662.0	797.9
100°	57.7	57.7	63.0	72.1	86.5	110.8	155.6	241.4	396.3	610.4	804.7
102.5°	72.9	74.4	79.0	87.3	101.0	123.7	163.2	236.1	362.1	545.9	747.8
105°	88.8	91.1	94.9	104.0	117.7	139.7	176.1	239.1	345.4	498.0	676.4
107.5°	106.3	107.8	111.6	121.5	134.4	156.4	189.8	248.3	340.9	466.9	618.0
110°	123.7	125.3	129.1	138.2	151.8	172.3	205.7	258.9	342.4	452.5	576.2

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	140.5	142.0	146.5	154.9	168.5	189.0	220.9	270.3	347.0	445.6	552.7
115°	156.4	158.7	164.0	171.6	186.0	206.5	236.9	282.4	353.0	444.1	539.8
117.5°	173.1	175.4	179.9	188.3	201.9	223.2	252.1	294.6	359.1	443.4	533.0
120°	189.8	191.3	196.6	205.0	217.9	239.1	268.0	307.5	365.9	443.4	527.6
122.5°	205.0	206.5	211.8	219.4	233.8	254.3	283.2	319.6	372.8	442.6	521.6
125°	217.9	220.9	225.5	233.8	248.3	269.5	296.8	331.8	379.6	441.9	514.7
127.5°	230.0	232.3	237.6	246.7	261.9	283.2	309.8	342.4	384.9	440.3	505.6
130°	239.9	242.9	249.0	260.4	274.8	296.8	322.7	352.3	391.0	439.6	497.3
132.5°	249.8	252.1	260.4	271.0	287.0	307.5	333.3	362.1	396.3	438.8	489.7
135°	258.9	261.9	269.5	282.4	298.4	318.1	343.2	370.5	401.6	438.1	482.1
137.5°	268.0	271.0	279.4	291.5	308.2	327.2	350.7	376.6	404.7	438.1	475.3
140°	277.9	280.1	288.5	301.4	317.3	335.6	358.3	382.6	408.4	437.3	469.9
142.5°	288.5	290.8	298.4	310.5	325.7	343.2	365.2	387.2	411.5	437.3	465.4
145°	298.4	300.6	308.2	318.9	333.3	350.0	369.7	390.2	412.2	435.8	460.1
147.5°	309.8	310.5	317.3	328.7	340.9	356.1	375.0	393.3	413.0	433.5	455.5
150°	320.4	321.1	327.2	336.3	347.7	362.1	378.8	395.5	413.0	431.2	450.2
152.5°	330.3	330.3	336.3	344.7	354.5	367.5	381.9	397.1	411.5	427.4	444.1
155°	339.4	340.1	344.7	352.3	360.6	372.0	384.9	397.8	410.0	423.6	438.1
157.5°	348.5	348.5	353.0	359.1	366.7	375.8	387.2	397.8	408.4	419.8	432.0
160°	356.8	356.8	359.9	365.2	371.2	379.6	388.7	397.8	406.2	415.3	425.2
162.5°	364.4	363.7	365.9	370.5	375.8	381.9	390.2	397.8	403.9	410.7	419.1
165°	369.7	369.7	371.2	375.0	378.8	383.4	390.2	396.3	400.9	406.2	412.2
167.5°	375.8	375.0	375.8	378.8	381.1	384.9	390.2	394.8	397.8	401.6	406.2
170°	379.6	378.8	379.6	381.9	383.4	385.7	389.5	393.3	394.8	397.1	400.1
172.5°	383.4	382.6	382.6	384.2	384.9	386.4	388.7	391.7	391.7	392.5	394.8
175°	385.7	384.9	384.9	385.7	386.4	386.4	388.0	390.2	389.5	389.5	391.0
177.5°	387.2	386.4	385.7	386.4	386.4	386.4	387.2	388.7	387.2	387.2	388.0
180°	386.4	386.4	386.4	386.4	386.4	386.4	386.4	386.4	386.4	386.4	386.4

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CATALOG NUMBER: S124IP-B810UB40-4F0-XX-W2A-4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	13.7	14.4	15.2	15.2	15.9	16.7	15.9	15.9
92.5°	183.0	136.7	107.8	88.8	77.4	72.1	69.1	69.1
95°	562.6	444.9	343.2	269.5	232.3	208.8	195.1	185.2
97.5°	810.1	751.6	668.1	583.1	531.4	485.9	463.1	444.9
100°	915.6	930.8	893.6	837.4	771.3	725.0	702.3	696.2
102.5°	910.3	1000.6	1023.4	1008.2	974.1	943.7	919.4	914.8
105°	850.3	981.6	1056.8	1087.9	1089.4	1083.4	1072.7	1068.2
107.5°	776.7	918.6	1023.4	1087.2	1120.6	1134.2	1140.3	1141.1
110°	711.4	842.7	952.8	1036.3	1090.2	1122.1	1135.8	1142.6

TEST NUMBER: P1007764

CATALOG NUMBER: S124IP-B810UB40-4F0-XX-W2A-4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	663.5	775.9	878.4	961.9	1024.9	1065.2	1085.7	1097.8
115°	634.7	728.1	816.9	889.8	949.8	995.3	1019.6	1025.7
117.5°	618.0	696.9	769.1	832.8	886.0	925.5	951.3	955.1
120°	607.4	678.0	738.7	792.6	835.9	869.3	889.0	897.4
122.5°	598.2	665.8	719.7	765.3	800.2	827.5	843.5	851.8
125°	587.6	652.9	705.3	747.1	777.4	799.4	813.9	818.4
127.5°	575.5	638.5	690.9	730.3	760.7	780.5	792.6	797.2
130°	560.3	620.3	671.9	712.1	743.3	762.2	774.4	778.9
132.5°	544.3	599.8	649.9	690.1	720.5	742.5	753.9	758.4
135°	529.9	579.3	625.6	663.5	693.9	715.2	727.3	731.9
137.5°	516.3	559.5	599.8	634.7	663.5	685.6	695.4	700.7
140°	504.9	540.5	574.7	606.6	633.2	649.9	660.5	666.6
142.5°	494.2	524.6	552.7	579.3	602.0	617.2	626.3	630.1
145°	484.4	510.2	533.0	554.2	573.2	586.1	593.7	597.5
147.5°	476.0	497.3	516.3	533.7	548.1	559.5	565.6	567.1
150°	468.4	485.9	501.1	514.7	526.9	536.8	541.3	542.1
152.5°	460.1	474.5	488.2	498.8	508.7	516.3	518.5	519.3
155°	451.7	463.9	475.3	484.4	492.0	498.0	500.3	500.3
157.5°	442.6	453.2	463.1	470.7	476.8	481.3	482.8	482.8
160°	434.3	442.6	451.0	457.0	461.6	466.1	466.9	466.9
162.5°	425.9	432.7	438.8	444.1	447.2	451.7	452.5	451.7
165°	418.3	422.9	428.2	432.0	435.0	438.1	437.3	436.5
167.5°	410.7	414.5	419.1	421.4	422.9	425.2	425.2	424.4
170°	403.9	406.2	409.2	411.5	413.0	413.8	413.0	413.0
172.5°	397.8	399.3	400.9	402.4	403.1	403.9	403.1	401.6
175°	392.5	393.3	394.8	394.8	394.8	396.3	394.8	393.3
177.5°	388.7	389.5	389.5	390.2	389.5	390.2	388.7	387.2
180°	386.4	386.4	386.4	386.4	386.4	386.4	386.4	386.4

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