

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: P334462

Luminaire Tested: **S122IP-S725U930-4F0-1E-UDD-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334462  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122IP-S725U930-4F0-1E-UDD-4  
Description: DEFINE 2 INDIRECT LED LUMINAIRE, BATWING OPTIC  
PENDANT MOUNT, 725 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

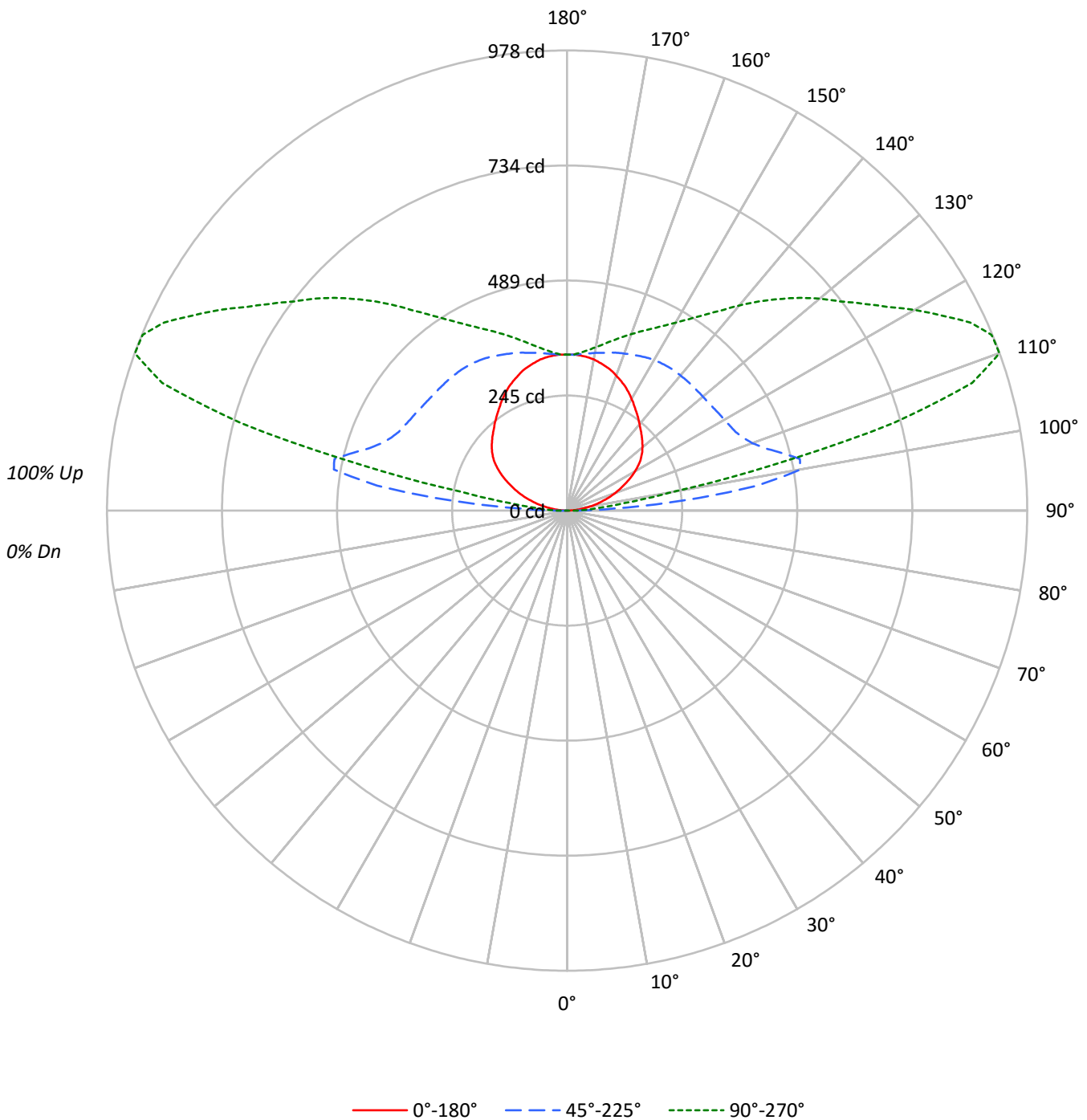
Lumens per Lamp: N/A  
Luminaire Lumens: 2310.0 lumens  
Efficiency: N/A  
Efficacy: 87.5 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 26.4  
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	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8	0
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7	0
3	72	63	56	51	61	54	49	44	37	34	31	21	20	18	7	6	6	0
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4	0
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	3	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

**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



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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°	2.1	0.1
90°-100°	129.2	5.6
100°-110°	455.0	19.7
110°-120°	477.8	20.7
120°-130°	393.1	17.0
130°-140°	315.8	13.7
140°-150°	238.5	10.3
150°-160°	167.7	7.3
160°-170°	98.7	4.3
170°-180°	32.1	1.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.1	0.1
90°-120°	1062.0	46.0
90°-150°	2009.4	87.0
90°-180°	2308.0	99.9
0°-180°	2310.0	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	9	22	21	21	1
95°	22	55	250	94	73	23
105°	78	117	472	844	718	83
115°	137	173	395	815	945	136
125°	191	226	380	661	767	170
135°	224	268	375	555	635	173
145°	256	294	374	464	507	161
155°	291	314	363	410	426	134
165°	317	327	347	368	374	90
175°	331	331	334	338	337	31
180°	331	331	331	331	331	



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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°	0.6	2.5	5.1	6.4	7.6	9.6	12.7	17.2	21.0	21.7	21.0
92.5°	9.6	13.4	18.5	21.7	26.8	33.8	51.0	75.2	96.9	98.1	82.2
95°	22.3	24.9	31.2	37.0	47.2	62.5	91.8	147.2	221.2	249.8	218.6
97.5°	33.1	37.0	44.0	52.3	63.7	80.9	118.5	195.7	314.8	407.2	410.4
100°	49.1	51.0	56.7	66.9	79.7	97.5	131.3	209.0	346.7	503.5	595.3
102.5°	63.7	65.0	70.7	80.9	94.3	112.2	142.8	209.7	334.6	506.7	664.1
105°	77.8	80.3	84.8	94.3	108.3	126.2	156.1	212.9	318.0	472.3	641.8
107.5°	93.0	95.0	99.4	108.3	122.4	140.2	169.5	219.9	309.1	440.4	594.6
110°	108.3	110.9	114.7	123.0	136.4	154.9	182.9	228.8	306.6	418.7	550.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	122.4	124.9	129.4	137.0	149.8	168.9	195.7	238.4	307.2	404.7	520.1
115°	137.0	140.2	144.0	151.7	164.4	181.6	209.0	247.9	309.7	395.1	495.8
117.5°	152.3	154.9	158.7	165.7	177.8	195.7	221.2	258.1	313.6	390.0	479.3
120°	166.3	168.9	172.7	178.4	191.2	209.0	233.9	268.3	317.4	385.6	466.5
122.5°	179.7	181.6	185.5	191.8	204.6	223.1	246.0	277.2	321.8	383.0	455.7
125°	191.2	193.1	196.9	204.6	217.3	235.2	258.1	286.8	326.3	379.8	445.5
127.5°	200.8	203.3	208.4	216.7	228.8	247.3	269.6	295.7	330.8	377.9	435.9
130°	209.0	211.6	218.0	226.9	239.6	257.5	279.8	304.0	335.9	376.7	426.4
132.5°	216.7	219.9	226.9	236.4	249.8	267.7	288.7	312.3	341.0	376.0	418.7
135°	224.3	226.9	234.5	244.1	258.8	276.6	297.0	319.3	344.8	375.4	411.7
137.5°	231.3	234.5	242.2	252.4	267.0	283.6	304.0	325.0	348.6	375.4	406.6
140°	239.6	242.2	249.8	260.0	274.0	290.6	309.7	329.5	351.2	374.7	402.1
142.5°	247.9	249.8	256.8	267.0	280.4	295.7	314.2	333.3	353.1	374.7	397.7
145°	256.2	258.8	265.1	274.7	287.4	301.5	318.7	336.5	354.4	373.5	393.9
147.5°	265.1	267.0	273.4	282.3	293.2	305.9	322.5	338.4	355.0	371.6	390.0
150°	274.0	276.0	281.1	289.3	298.9	310.4	325.0	339.7	354.4	369.6	384.9
152.5°	283.0	283.6	288.7	295.7	304.6	314.8	327.6	340.3	353.1	366.5	380.5
155°	291.3	291.9	295.7	302.7	309.7	319.3	330.1	341.0	351.8	362.6	374.7
157.5°	298.3	298.9	302.1	308.5	314.2	322.5	332.0	341.0	349.3	358.8	369.6
160°	305.3	305.9	308.5	313.6	318.7	325.7	333.3	341.0	347.3	355.0	363.9
162.5°	312.3	311.6	314.2	318.0	322.5	327.6	334.0	340.3	345.4	351.8	358.8
165°	317.4	316.7	318.0	321.8	325.0	328.9	334.6	339.1	342.9	347.3	353.1
167.5°	321.8	321.2	322.5	325.0	327.6	330.1	334.6	338.4	340.3	343.5	347.3
170°	326.3	325.0	325.7	327.6	328.9	330.8	334.0	337.1	338.4	340.3	342.9
172.5°	328.9	328.2	327.6	329.5	330.1	331.4	333.3	335.2	335.9	336.5	338.4
175°	330.8	330.1	329.5	330.8	330.8	331.4	332.7	334.0	333.3	334.0	334.6
177.5°	332.0	330.8	330.1	331.4	331.4	331.4	332.0	333.3	332.0	331.4	332.0
180°	331.4	331.4	331.4	331.4	331.4	331.4	331.4	331.4	331.4	331.4	331.4



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**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°	20.4	19.1	20.4	21.0	21.0	21.0	21.0	21.0
92.5°	64.4	54.8	47.8	42.7	42.1	39.5	40.2	38.9
95°	167.0	128.1	101.3	87.3	79.0	73.9	72.0	72.7
97.5°	341.6	272.8	208.4	170.2	145.3	132.6	125.6	121.7
100°	581.9	502.8	415.5	338.4	285.5	258.1	239.6	228.2
102.5°	739.3	736.7	678.7	595.9	537.3	485.6	461.4	444.8
105°	774.3	846.4	854.6	833.6	794.1	754.6	727.2	718.3
107.5°	736.7	843.8	906.3	931.8	931.1	925.4	917.1	902.4
110°	685.1	799.2	880.8	933.0	960.4	972.6	978.3	977.6





TEST NUMBER: P334462

CATALOG NUMBER: S122IP-S725U930-4F0-1E-UDD-4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	638.0	746.3	834.9	896.7	937.5	959.8	971.9	976.4
115°	601.0	699.1	782.6	848.3	893.5	922.8	939.4	945.1
117.5°	570.4	658.4	736.1	798.6	845.1	876.3	893.5	898.0
120°	548.7	627.8	695.3	753.3	797.9	827.9	846.4	852.7
122.5°	531.5	602.3	665.4	716.3	755.2	784.5	800.5	805.6
125°	515.0	580.6	636.7	684.5	721.4	745.7	761.6	766.7
127.5°	498.4	558.9	612.5	657.1	689.6	712.5	726.5	730.4
130°	482.5	537.3	587.6	629.7	660.9	682.6	695.3	700.4
132.5°	467.2	516.9	562.1	601.0	631.6	653.3	664.7	669.2
135°	453.1	495.2	537.3	573.0	600.4	621.4	632.9	635.4
137.5°	441.7	478.0	512.4	544.3	570.4	588.9	599.1	602.9
140°	430.8	461.4	490.7	518.8	539.2	555.7	565.3	569.1
142.5°	421.9	446.8	471.0	493.3	512.4	527.1	535.3	535.3
145°	413.6	434.7	454.4	472.9	488.2	499.0	505.4	507.3
147.5°	407.2	424.5	440.4	454.4	467.8	476.7	481.2	482.5
150°	400.2	414.3	427.6	439.1	448.7	456.3	460.1	460.8
152.5°	393.2	406.0	416.8	426.4	433.4	439.8	442.3	442.3
155°	386.9	397.1	406.6	413.6	420.6	425.1	427.6	426.4
157.5°	379.2	388.1	396.4	402.1	407.2	411.1	412.3	412.3
160°	372.2	379.2	386.2	390.7	395.1	398.3	399.0	399.0
162.5°	365.2	370.9	376.7	379.8	384.3	386.2	386.9	386.2
165°	358.2	362.6	367.1	369.6	372.2	374.7	374.7	374.1
167.5°	351.2	355.0	358.2	360.7	362.0	363.3	363.3	362.6
170°	346.1	348.0	350.5	351.8	352.4	354.4	353.7	352.4
172.5°	340.3	341.6	343.5	344.2	344.8	345.4	344.8	344.2
175°	336.5	337.1	337.8	338.4	338.4	339.1	338.4	337.1
177.5°	333.3	333.3	334.0	334.0	334.0	334.0	333.3	332.0
180°	331.4	331.4	331.4	331.4	331.4	331.4	331.4	331.4

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