

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: P334987

Luminaire Tested: **S125IP-S810U930-4F0-1E-UDD-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334987  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125IP-S810U930-4F0-1E-UDD-4  
Description: DEFINE 5 INDIRECT LED LUMINAIRE, BATWING OPTIC  
PENDANT MOUNT, 810 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

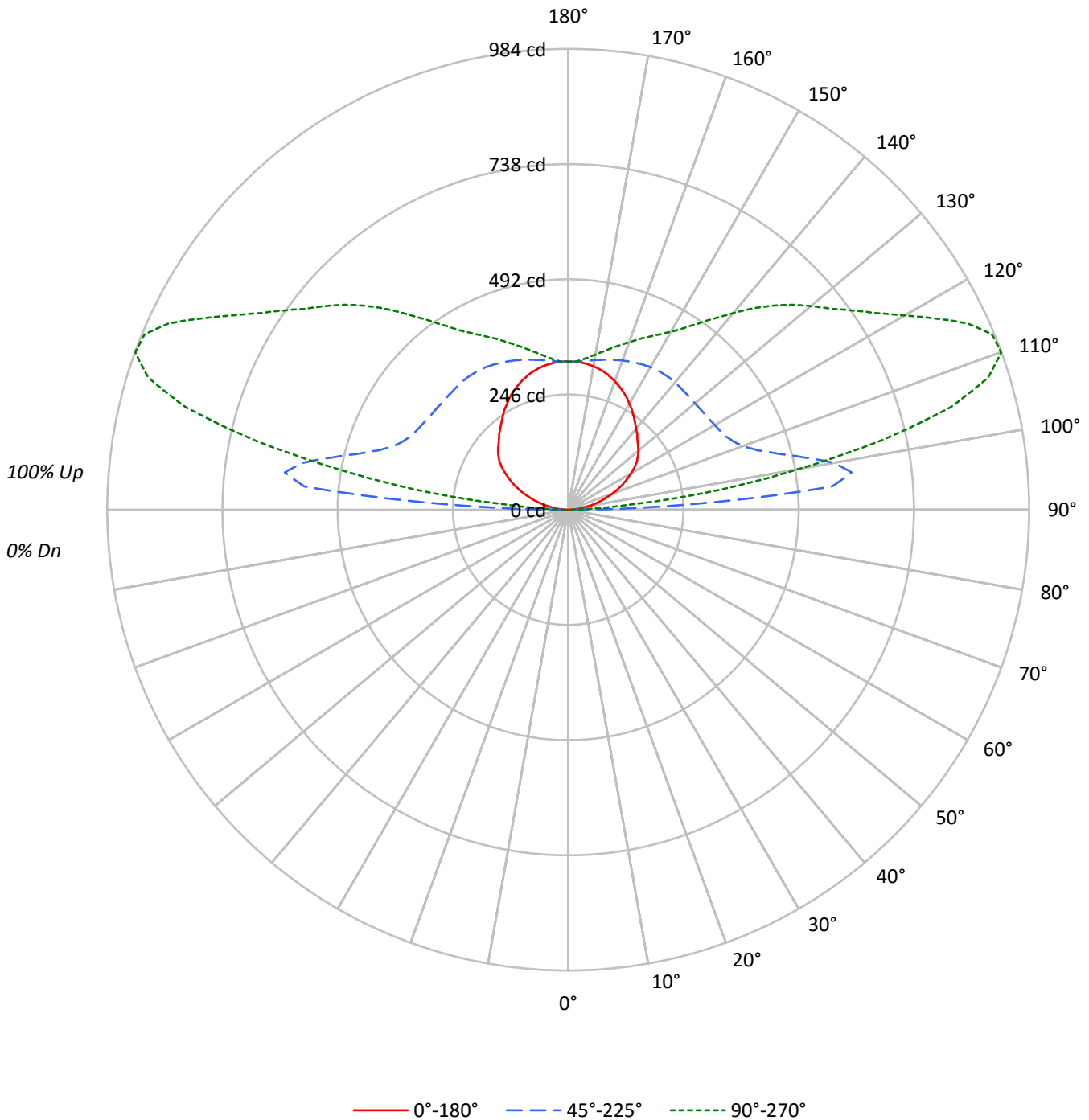
Lumens per Lamp: N/A  
Luminaire Lumens: 2376.1 lumens  
Efficiency: N/A  
Efficacy: 90.0 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Indirect

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°	1.3	0.1
90°-100°	230.0	9.7
100°-110°	496.0	20.9
110°-120°	462.4	19.5
120°-130°	374.5	15.8
130°-140°	300.7	12.7
140°-150°	226.8	9.5
150°-160°	159.7	6.7
160°-170°	94.1	4.0
170°-180°	30.6	1.3
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.3	0.1
90°-120°	1188.4	50.0
90°-150°	2090.4	88.0
90°-180°	2375.0	100.0
0°-180°	2376.1	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	10	13	15	1
95°	21	62	565	256	150	22
105°	72	101	462	910	845	76
115°	129	155	371	800	941	127
125°	178	209	356	636	741	159
135°	209	252	353	533	616	162
145°	244	279	354	441	486	153
155°	278	299	346	390	407	128
165°	303	312	332	352	357	85
175°	316	316	318	322	321	30
180°	316	316	316	316	316	



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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	1.3	2.5	3.8	5.1	6.4	7.0	8.3	8.9	10.2	10.8
92.5°	9.6	11.5	17.8	27.4	40.8	63.7	107.1	179.8	258.8	254.4	205.3
95°	21.0	21.7	26.8	33.8	47.8	76.5	144.7	285.0	460.9	564.8	552.7
97.5°	32.5	33.1	37.0	44.0	56.7	77.8	124.9	232.7	422.6	610.1	690.4
100°	44.6	45.9	48.4	55.5	67.6	86.7	123.7	206.5	367.2	575.6	735.0
102.5°	58.0	58.6	60.6	68.2	79.0	97.5	129.4	195.7	325.1	515.1	708.2
105°	72.0	72.0	75.2	81.6	91.8	109.6	137.7	194.4	300.9	462.2	645.1
107.5°	85.4	86.7	89.9	95.0	105.8	121.8	149.2	198.9	288.1	422.6	585.2
110°	100.1	101.4	103.9	109.6	119.2	135.8	161.9	205.9	283.0	396.5	535.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	114.7	116.0	117.9	123.7	133.2	149.2	174.0	214.8	283.0	381.2	498.5
115°	128.8	130.0	132.0	137.7	147.3	163.2	186.8	223.8	285.0	371.0	473.6
117.5°	141.5	143.4	145.3	151.1	161.9	177.2	199.5	234.0	288.1	365.3	457.1
120°	154.3	156.2	158.7	164.5	175.3	191.2	213.6	244.2	293.2	361.4	443.7
122.5°	167.7	168.9	170.8	176.6	188.7	204.6	226.9	255.6	297.7	358.3	432.2
125°	178.5	179.8	183.0	188.7	200.8	217.4	238.4	265.8	302.8	355.7	422.0
127.5°	187.4	189.3	193.2	200.2	212.9	229.5	249.9	275.4	308.5	354.4	412.4
130°	195.7	197.6	202.7	211.0	224.4	241.0	260.7	285.0	313.6	353.2	402.9
132.5°	202.1	204.6	211.0	220.6	234.6	251.2	270.9	293.2	319.4	353.2	395.2
135°	209.1	211.6	219.3	229.5	242.9	260.1	279.9	300.9	324.5	353.2	389.5
137.5°	218.0	219.9	226.9	237.1	250.5	268.4	286.2	306.6	329.6	353.8	383.8
140°	225.7	227.6	235.2	245.4	257.5	274.8	293.2	312.4	332.8	354.4	379.9
142.5°	234.6	235.9	242.9	253.1	264.6	280.5	297.7	315.6	334.7	355.1	376.7
145°	243.5	244.8	251.2	260.1	271.6	286.2	302.8	318.7	336.0	354.4	373.6
147.5°	253.1	253.7	259.5	267.7	277.9	291.3	306.0	320.7	336.6	353.2	370.4
150°	261.4	262.6	267.1	275.4	284.3	295.2	309.2	322.6	336.6	351.3	366.5
152.5°	270.3	270.9	274.8	281.8	290.1	299.6	312.4	323.8	336.0	348.7	362.1
155°	277.9	277.9	281.8	288.1	294.5	303.4	314.3	324.5	334.7	345.5	357.0
157.5°	285.0	285.0	288.1	293.9	299.6	306.6	316.2	325.1	333.4	342.3	352.5
160°	292.0	291.3	293.9	298.3	303.4	309.2	317.5	325.1	331.5	339.1	346.8
162.5°	297.7	297.1	299.6	303.4	307.3	311.7	318.7	324.5	329.6	335.3	341.7
165°	303.4	302.2	304.1	307.3	309.8	313.6	318.7	323.8	327.7	331.5	336.6
167.5°	307.3	306.6	307.9	309.8	311.7	314.3	318.7	322.6	324.5	327.7	331.5
170°	311.1	310.5	311.1	312.4	313.6	315.6	318.7	321.3	322.6	324.5	327.0
172.5°	313.6	312.4	313.0	314.3	314.9	315.6	318.1	320.0	320.0	320.7	322.6
175°	315.6	314.3	314.9	315.6	315.6	315.6	317.5	318.7	318.1	318.1	318.7
177.5°	316.8	315.6	315.6	316.2	315.6	315.6	316.8	317.5	316.2	316.2	316.8
180°	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2



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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°	11.5	12.1	12.7	14.0	14.0	14.0	14.7	14.7
92.5°	138.3	99.4	73.9	61.8	51.6	49.7	48.4	47.2
95°	458.3	361.4	283.0	229.5	184.2	165.1	160.0	149.8
97.5°	657.2	580.1	501.1	424.6	386.3	353.2	336.0	328.3
100°	784.1	752.9	687.2	620.9	576.9	531.0	507.4	497.2
102.5°	826.8	858.7	835.7	796.2	748.4	719.1	692.9	685.9
105°	798.1	885.5	913.5	906.5	886.1	865.1	852.3	844.7
107.5°	739.5	854.9	922.4	950.5	956.2	953.0	946.7	940.3
110°	673.2	794.3	884.2	938.4	967.1	979.2	983.6	983.6





TEST NUMBER: P334987

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	620.9	734.4	825.5	891.8	937.1	960.0	972.8	978.5
115°	578.8	677.6	765.0	834.5	884.2	914.8	932.6	940.9
117.5°	549.5	636.8	713.3	779.0	829.4	861.2	879.1	884.2
120°	526.6	603.1	673.2	729.3	776.4	807.0	824.3	829.4
122.5°	509.3	578.8	639.4	691.0	731.8	759.2	776.4	780.9
125°	492.8	557.8	613.3	659.2	694.9	721.0	735.0	741.4
127.5°	475.6	537.4	589.7	633.0	665.5	689.1	702.5	705.1
130°	459.6	515.7	565.4	606.9	638.8	659.8	672.5	676.4
132.5°	443.7	495.3	539.3	578.8	610.7	631.7	643.2	647.7
135°	430.3	474.3	515.1	551.4	579.5	600.5	612.0	615.8
137.5°	418.2	455.2	490.2	522.1	547.6	567.4	578.2	582.7
140°	408.6	438.6	467.9	494.7	518.3	534.8	544.4	547.6
142.5°	400.3	424.6	448.8	471.1	490.2	503.6	512.5	515.1
145°	393.3	413.1	432.8	450.1	465.4	476.2	483.2	485.8
147.5°	386.3	402.9	418.8	432.2	445.0	453.9	458.3	459.6
150°	380.6	394.6	406.7	418.2	427.7	435.4	437.9	438.6
152.5°	374.2	386.3	397.1	405.4	413.1	418.8	421.4	422.0
155°	367.8	378.0	386.9	394.0	400.3	404.8	406.7	407.3
157.5°	361.4	370.4	377.4	383.1	388.2	392.0	394.0	394.0
160°	355.1	361.4	367.8	372.3	376.7	379.9	381.2	380.6
162.5°	348.1	353.8	358.9	362.7	365.9	368.5	368.5	368.5
165°	341.7	346.2	350.0	353.2	355.7	357.0	357.0	357.0
167.5°	335.3	338.5	341.7	344.2	345.5	346.8	346.2	346.2
170°	330.2	332.1	334.0	335.3	336.6	337.2	337.2	336.6
172.5°	324.5	326.4	327.7	328.3	328.3	329.6	328.3	327.7
175°	320.7	320.7	321.9	321.9	321.9	322.6	321.3	320.7
177.5°	317.5	318.1	318.1	318.1	317.5	318.1	316.2	316.2
180°	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2

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