

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: P334457

Luminaire Tested: **S122IP-S725U927-4F0-1E-UDD-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334457  
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-S725U927-4F0-1E-UDD-4  
Description: DEFINE 2 INDIRECT LED LUMINAIRE, BATWING OPTIC  
PENDANT MOUNT, 725 LUMENS PER FOOT  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

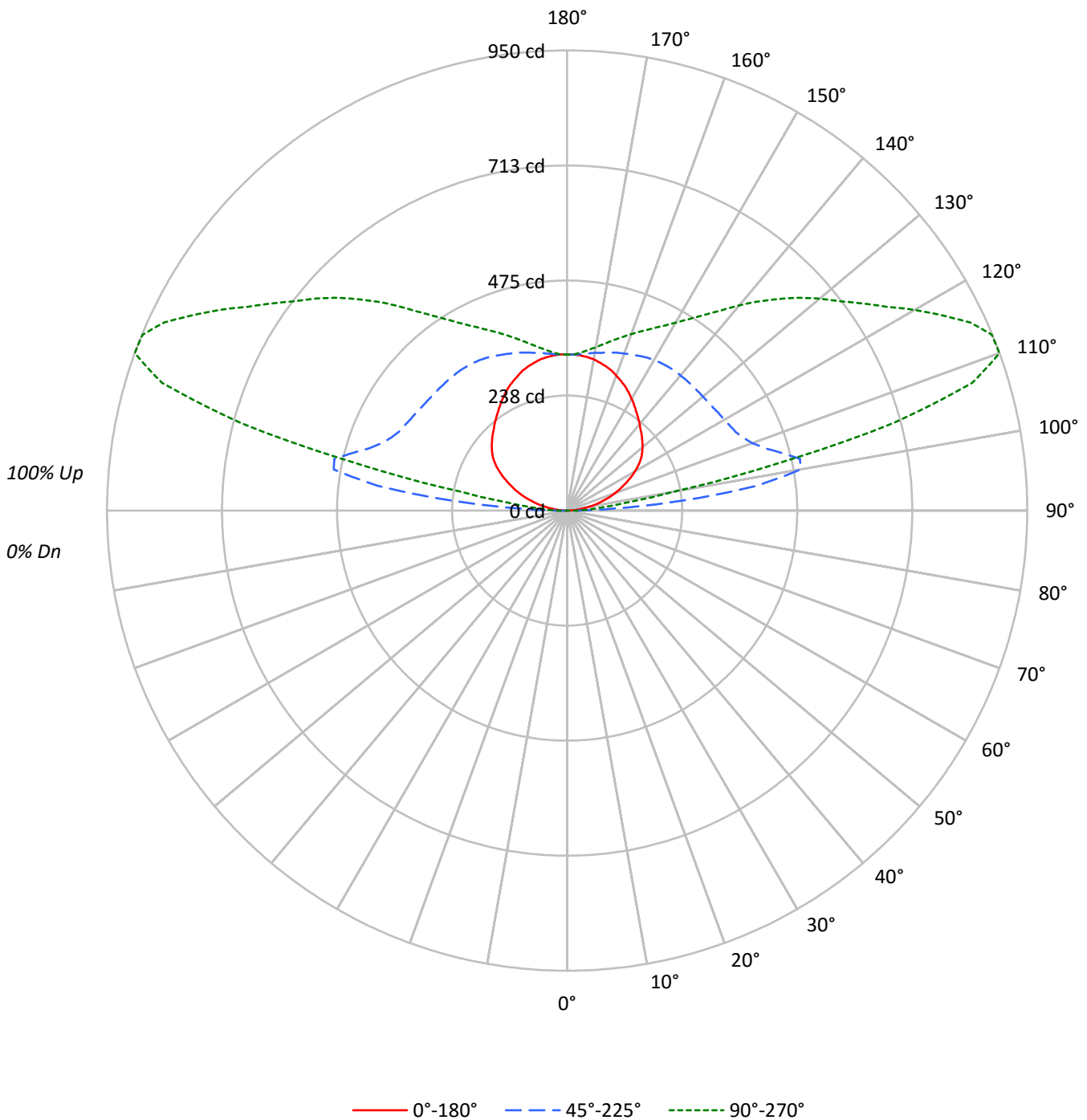
Lumens per Lamp: N/A  
Luminaire Lumens: 2244.6 lumens  
Efficiency: N/A  
Efficacy: 85.0 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Indirect

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°	125.5	5.6
100°-110°	442.1	19.7
110°-120°	464.3	20.7
120°-130°	382.0	17.0
130°-140°	306.8	13.7
140°-150°	231.8	10.3
150°-160°	162.9	7.3
160°-170°	95.9	4.3
170°-180°	31.2	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°	1031.9	46.0
90°-150°	1952.4	87.0
90°-180°	2242.0	99.9
0°-180°	2244.6	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	8	21	20	20	1
95°	22	53	243	92	71	22
105°	76	114	459	820	698	80
115°	133	168	384	792	918	132
125°	186	220	369	642	745	165
135°	218	260	365	539	617	168
145°	249	286	363	450	493	156
155°	283	306	352	398	414	130
165°	308	318	338	358	364	87
175°	321	322	324	328	328	31
180°	322	322	322	322	322	



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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	5.0	6.2	7.4	9.3	12.4	16.7	20.4	21.1	20.4
92.5°	9.3	13.0	18.0	21.1	26.0	32.8	49.5	73.1	94.1	95.4	79.9
95°	21.7	24.2	30.3	35.9	45.8	60.7	89.2	143.0	214.9	242.7	212.4
97.5°	32.2	35.9	42.7	50.8	61.9	78.6	115.2	190.1	305.9	395.7	398.8
100°	47.7	49.5	55.1	65.0	77.4	94.7	127.6	203.1	336.9	489.2	578.4
102.5°	61.9	63.2	68.7	78.6	91.6	109.0	138.7	203.7	325.1	492.3	645.3
105°	75.5	78.0	82.4	91.6	105.3	122.6	151.7	206.8	309.0	458.9	623.6
107.5°	90.4	92.3	96.6	105.3	118.9	136.2	164.7	213.6	300.3	427.9	577.8
110°	105.3	107.7	111.5	119.5	132.5	150.5	177.7	222.3	297.9	406.8	535.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	118.9	121.4	125.7	133.1	145.5	164.1	190.1	231.6	298.5	393.2	505.3
115°	133.1	136.2	140.0	147.4	159.8	176.5	203.1	240.9	301.0	383.9	481.8
117.5°	148.0	150.5	154.2	161.0	172.8	190.1	214.9	250.8	304.7	379.0	465.7
120°	161.6	164.1	167.8	173.4	185.8	203.1	227.3	260.7	308.4	374.6	453.3
122.5°	174.6	176.5	180.2	186.4	198.8	216.7	239.0	269.4	312.7	372.2	442.8
125°	185.8	187.6	191.3	198.8	211.2	228.5	250.8	278.7	317.1	369.1	432.9
127.5°	195.1	197.5	202.5	210.5	222.3	240.3	261.9	287.3	321.4	367.2	423.6
130°	203.1	205.6	211.8	220.5	232.8	250.2	271.9	295.4	326.3	366.0	414.3
132.5°	210.5	213.6	220.5	229.7	242.7	260.1	280.5	303.4	331.3	365.4	406.8
135°	218.0	220.5	227.9	237.2	251.4	268.8	288.6	310.2	335.0	364.7	400.0
137.5°	224.8	227.9	235.3	245.2	259.5	275.6	295.4	315.8	338.7	364.7	395.1
140°	232.8	235.3	242.7	252.7	266.3	282.4	301.0	320.2	341.2	364.1	390.7
142.5°	240.9	242.7	249.6	259.5	272.5	287.3	305.3	323.9	343.1	364.1	386.4
145°	248.9	251.4	257.6	266.9	279.3	292.9	309.6	327.0	344.3	362.9	382.7
147.5°	257.6	259.5	265.7	274.3	284.9	297.2	313.3	328.8	344.9	361.0	379.0
150°	266.3	268.1	273.1	281.1	290.4	301.6	315.8	330.1	344.3	359.2	374.0
152.5°	274.9	275.6	280.5	287.3	296.0	305.9	318.3	330.7	343.1	356.1	369.7
155°	283.0	283.6	287.3	294.1	301.0	310.2	320.8	331.3	341.8	352.4	364.1
157.5°	289.8	290.4	293.5	299.7	305.3	313.3	322.6	331.3	339.3	348.6	359.2
160°	296.6	297.2	299.7	304.7	309.6	316.4	323.9	331.3	337.5	344.9	353.6
162.5°	303.4	302.8	305.3	309.0	313.3	318.3	324.5	330.7	335.6	341.8	348.6
165°	308.4	307.8	309.0	312.7	315.8	319.5	325.1	329.4	333.2	337.5	343.1
167.5°	312.7	312.1	313.3	315.8	318.3	320.8	325.1	328.8	330.7	333.8	337.5
170°	317.1	315.8	316.4	318.3	319.5	321.4	324.5	327.6	328.8	330.7	333.2
172.5°	319.5	318.9	318.3	320.2	320.8	322.0	323.9	325.7	326.3	327.0	328.8
175°	321.4	320.8	320.2	321.4	321.4	322.0	323.2	324.5	323.9	324.5	325.1
177.5°	322.6	321.4	320.8	322.0	322.0	322.0	322.6	323.9	322.6	322.0	322.6
180°	322.0	322.0	322.0	322.0	322.0	322.0	322.0	322.0	322.0	322.0	322.0



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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°	19.8	18.6	19.8	20.4	20.4	20.4	20.4	20.4
92.5°	62.5	53.3	46.4	41.5	40.9	38.4	39.0	37.8
95°	162.2	124.5	98.5	84.8	76.8	71.8	70.0	70.6
97.5°	331.9	265.0	202.5	165.3	141.2	128.8	122.0	118.3
100°	565.4	488.6	403.8	328.8	277.4	250.8	232.8	221.7
102.5°	718.3	715.9	659.5	579.0	522.0	471.9	448.3	432.2
105°	752.4	822.4	830.4	810.0	771.6	733.2	706.6	697.9
107.5°	715.9	819.9	880.6	905.3	904.7	899.2	891.1	876.9
110°	665.7	776.5	855.8	906.6	933.2	945.0	950.5	949.9





TEST NUMBER: P334457

CATALOG NUMBER: S122IP-S725U927-4F0-1E-UDD-4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	619.9	725.1	811.2	871.3	910.9	932.6	944.4	948.7
115°	584.0	679.3	760.4	824.2	868.2	896.7	912.8	918.3
117.5°	554.2	639.7	715.2	775.9	821.1	851.5	868.2	872.5
120°	533.2	610.0	675.6	732.0	775.3	804.4	822.4	828.6
122.5°	516.5	585.2	646.5	696.0	733.8	762.3	777.8	782.7
125°	500.4	564.1	618.6	665.1	701.0	724.5	740.0	745.0
127.5°	484.3	543.1	595.1	638.4	670.0	692.3	705.9	709.7
130°	468.8	522.0	570.9	611.8	642.2	663.2	675.6	680.6
132.5°	453.9	502.2	546.2	584.0	613.7	634.7	645.9	650.2
135°	440.3	481.2	522.0	556.7	583.3	603.8	614.9	617.4
137.5°	429.1	464.4	497.9	528.8	554.2	572.2	582.1	585.8
140°	418.6	448.3	476.8	504.1	523.9	540.0	549.3	553.0
142.5°	409.9	434.1	457.6	479.3	497.9	512.1	520.2	520.2
145°	401.9	422.3	441.5	459.5	474.3	484.9	491.1	492.9
147.5°	395.7	412.4	427.9	441.5	454.5	463.2	467.5	468.8
150°	388.9	402.5	415.5	426.7	436.0	443.4	447.1	447.7
152.5°	382.1	394.5	405.0	414.3	421.1	427.3	429.8	429.8
155°	375.9	385.8	395.1	401.9	408.7	413.0	415.5	414.3
157.5°	368.5	377.1	385.2	390.7	395.7	399.4	400.7	400.7
160°	361.6	368.5	375.3	379.6	383.9	387.0	387.7	387.7
162.5°	354.8	360.4	366.0	369.1	373.4	375.3	375.9	375.3
165°	348.0	352.4	356.7	359.2	361.6	364.1	364.1	363.5
167.5°	341.2	344.9	348.0	350.5	351.7	353.0	353.0	352.4
170°	336.3	338.1	340.6	341.8	342.4	344.3	343.7	342.4
172.5°	330.7	331.9	333.8	334.4	335.0	335.6	335.0	334.4
175°	327.0	327.6	328.2	328.8	328.8	329.4	328.8	327.6
177.5°	323.9	323.9	324.5	324.5	324.5	324.5	323.9	322.6
180°	322.0	322.0	322.0	322.0	322.0	322.0	322.0	322.0

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