

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: P333507-930

Luminaire Tested: **S125RDIP-S375D810U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333507-930  
REPORT 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: S125RDIP-S375D810U930-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3551.5 lumens  
Efficiency: N/A  
Efficacy: 113.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

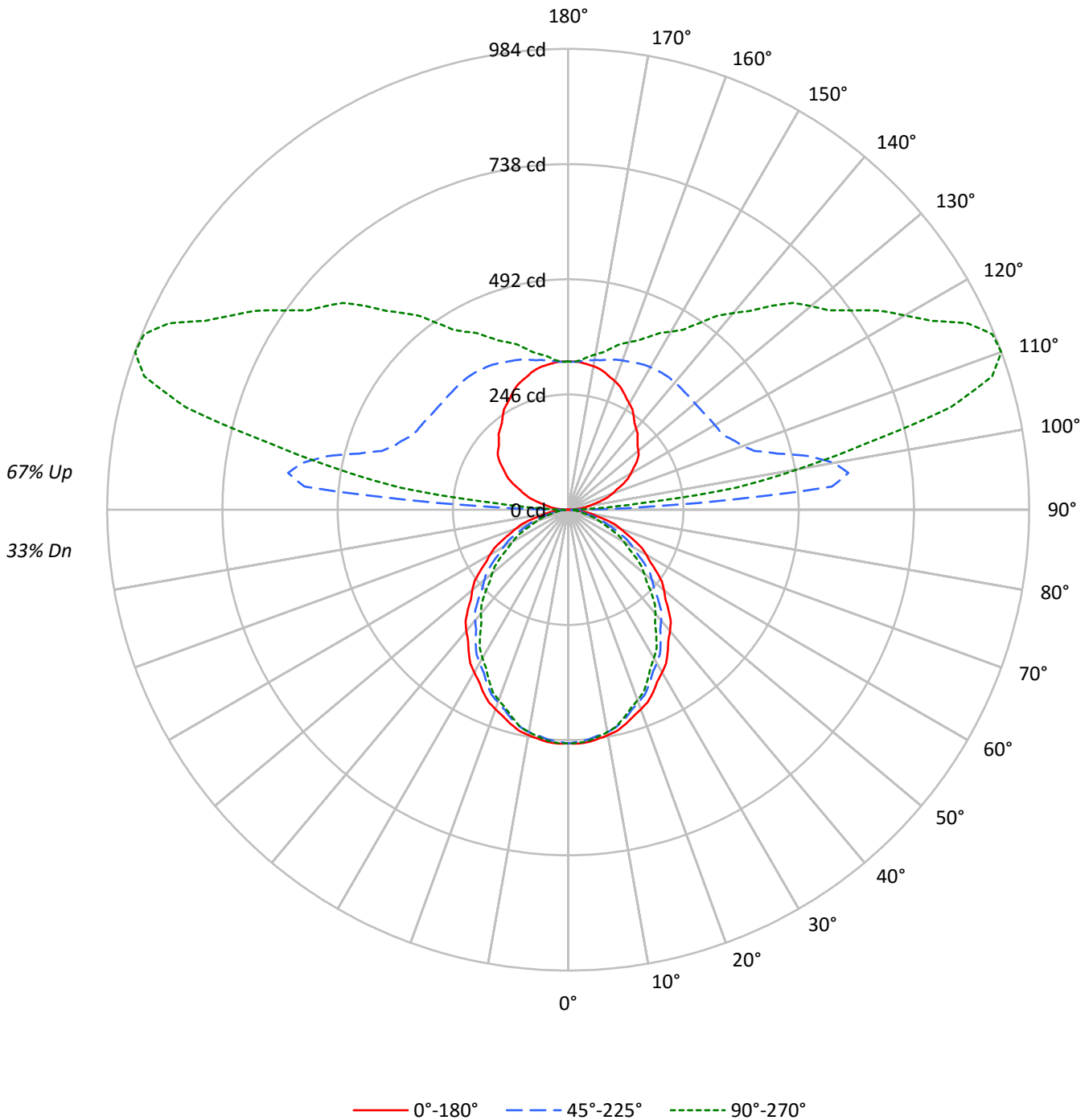
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	36	35	35	28
2	86	79	73	68	77	71	66	62	57	54	51	44	42	40	32	31	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	27	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	32	29	25	23	22	18
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	19	17	14
7	56	44	36	31	50	40	33	29	33	28	24	26	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	18	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12	10
10	45	33	26	22	41	30	24	20	25	20	17	20	16	14	15	13	11	9

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3222	3222	3222
5°	3229	3192	3212
10°	3205	3163	3163
15°	3167	3099	3074
20°	3118	3009	2973
25°	3061	2921	2857
30°	2990	2818	2729
35°	2917	2713	2584
40°	2850	2602	2443
45°	2767	2478	2288
50°	2685	2344	2127
55°	2587	2215	1956
60°	2492	2059	1771
65°	2378	1878	1560
70°	2247	1650	1344
75°	2069	1392	1118
80°	1822	1093	941
85°	1534	897	837



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.9	1.3
10°-20°	131.1	3.7
20°-30°	190.1	5.4
30°-40°	216.7	6.1
40°-50°	211.2	5.9
50°-60°	177.8	5.0
60°-70°	124.6	3.5
70°-80°	64.1	1.8
80°-90°	17.9	0.5
90°-100°	229.2	6.5
100°-110°	492.7	13.9
110°-120°	462.4	13.0
120°-130°	374.7	10.6
130°-140°	300.7	8.5
140°-150°	226.9	6.4
150°-160°	159.7	4.5
160°-170°	94.2	2.7
170°-180°	30.6	0.9
0°-30°	368.1	10.4
0°-40°	584.8	16.5
0°-60°	973.7	27.4
0°-90°	1180.3	33.2
90°-120°	1184.3	33.3
90°-150°	2086.6	58.8
90°-180°	2371.0	66.8
0°-180°	3551.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	499	499	499	499	499	
5°	498	496	492	496	496	47
15°	474	471	464	463	460	133
25°	430	423	410	405	401	198
35°	370	361	344	333	328	232
45°	303	292	271	257	250	234
55°	230	217	197	180	174	206
65°	156	142	123	108	102	154
75°	83	71	56	48	45	88
85°	21	14	12	12	11	23
90°	1	6	10	13	15	2
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	158
135°	209	252	353	533	616	162
145°	244	279	354	441	486	153
155°	278	299	346	390	407	128
165°	304	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°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	499.8	499.6	499.4	499.2	499.0	498.6	497.9	497.2	496.5	495.9	496.5
5°	498.1	497.8	497.5	497.1	496.8	496.2	495.2	494.3	493.4	492.4	493.3
7.5°	493.3	492.9	492.6	492.3	492.0	491.2	490.2	489.0	488.0	486.8	487.4
10°	488.7	488.4	488.2	488.0	487.7	487.0	485.8	484.6	483.5	482.3	482.6
12.5°	483.6	483.2	483.0	482.7	482.3	481.4	479.8	478.3	476.6	475.1	475.2
15°	473.6	473.1	472.6	472.1	471.7	470.5	468.7	467.0	465.2	463.5	463.4
17.5°	462.4	461.6	460.9	460.1	459.3	457.9	455.6	453.4	451.2	449.0	448.6
20°	453.6	452.8	452.0	451.2	450.3	448.6	445.9	443.2	440.5	437.8	437.4
22.5°	444.0	443.2	442.4	441.5	440.7	438.9	436.0	433.3	430.4	427.6	426.8
25°	429.6	428.3	427.1	425.7	424.5	422.3	419.2	416.1	413.0	409.9	408.9
27.5°	412.9	411.5	409.9	408.4	406.8	404.5	401.1	397.8	394.5	391.2	389.6
30°	400.9	399.3	397.7	396.2	394.5	392.0	388.5	385.0	381.5	377.9	376.0
32.5°	389.1	387.3	385.5	383.6	381.7	379.0	375.4	371.9	368.3	364.7	362.6
35°	370.0	368.0	366.0	363.9	362.0	359.1	355.3	351.6	347.8	344.1	341.6
37.5°	351.2	348.8	346.3	343.9	341.4	338.3	334.4	330.5	326.7	322.8	319.8
40°	338.0	335.5	333.0	330.4	327.9	324.7	320.7	316.7	312.6	308.6	305.4
42.5°	324.1	321.6	318.9	316.4	313.8	310.5	306.3	302.1	298.0	293.8	290.8
45°	303.0	300.5	298.1	295.6	293.3	289.7	285.1	280.5	275.9	271.3	267.9
47.5°	281.0	278.4	275.9	273.3	270.8	267.2	262.5	257.9	253.2	248.6	245.2
50°	267.2	264.4	261.6	258.9	256.1	252.3	247.5	242.8	238.0	233.3	229.8
52.5°	252.1	249.2	246.4	243.6	240.8	237.1	232.6	228.0	223.6	219.1	215.3
55°	229.8	227.1	224.5	221.8	219.2	215.5	210.8	206.0	201.4	196.7	192.9
57.5°	207.4	204.6	201.6	198.8	195.9	192.2	187.7	183.2	178.7	174.1	170.5
60°	192.9	190.0	187.0	184.1	181.2	177.5	172.9	168.4	163.9	159.4	155.7
62.5°	177.6	174.7	171.9	169.2	166.3	162.7	158.1	153.5	148.9	144.3	140.9
65°	155.6	152.8	149.9	147.1	144.2	140.6	136.2	131.8	127.3	122.9	119.5
67.5°	133.9	131.0	128.2	125.3	122.5	118.9	114.6	110.4	106.2	101.9	98.8
70°	119.0	116.3	113.4	110.6	107.7	104.2	100.0	95.8	91.6	87.4	84.8
72.5°	104.6	101.8	99.1	96.3	93.5	90.1	86.2	82.3	78.4	74.4	72.1
75°	82.9	80.4	77.9	75.3	72.9	69.9	66.3	62.8	59.3	55.8	53.9
77.5°	61.3	59.4	57.3	55.3	53.3	50.9	48.1	45.2	42.5	39.6	38.3
80°	49.0	47.0	45.0	43.0	40.9	38.8	36.4	34.1	31.7	29.4	28.6
82.5°	36.9	35.1	33.3	31.5	29.7	28.0	26.4	24.8	23.2	21.5	21.2
85°	20.7	19.2	17.7	16.2	14.7	13.7	13.3	12.9	12.5	12.1	12.0
87.5°	7.1	6.7	6.5	6.3	6.1	6.0	6.1	6.3	6.4	6.5	6.7
90°	0.7	1.3	2.5	3.8	5.1	6.4	7.0	8.3	8.9	10.2	10.8
92.5°	7.7	9.5	14.8	22.7	33.7	52.3	87.1	145.4	208.8	205.5	166.4
95°	21.0	21.7	26.7	33.8	47.8	76.5	144.7	284.9	460.9	564.8	552.7
97.5°	34.9	35.7	39.3	46.3	58.9	79.6	124.7	227.5	411.6	603.2	699.3
100°	44.6	45.9	48.4	55.4	67.6	86.7	123.7	206.5	367.2	575.7	735.0
102.5°	55.4	56.1	58.1	65.6	76.7	95.4	128.2	197.9	333.5	527.2	713.6
105°	72.1	72.1	75.3	81.6	91.8	109.7	137.7	194.4	300.9	462.2	645.1
107.5°	88.4	89.6	92.7	97.9	108.5	124.6	151.7	200.3	287.1	417.4	575.3
110°	100.1	101.3	103.9	109.7	119.2	135.7	161.9	205.9	283.1	396.5	535.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	111.8	113.1	115.1	120.8	130.4	146.5	171.6	213.0	283.1	384.3	505.9
115°	128.7	130.0	132.0	137.7	147.2	163.2	186.8	223.7	284.9	371.0	473.6
117.5°	144.1	146.0	148.1	153.8	164.6	180.0	202.4	236.0	289.2	364.5	454.4
120°	154.3	156.2	158.7	164.4	175.3	191.3	213.5	244.2	293.3	361.4	443.7
122.5°	165.0	166.4	168.4	174.1	186.1	201.9	224.3	253.3	296.8	358.9	434.5
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°	189.1	191.0	195.1	202.4	215.2	231.8	252.1	277.3	309.6	354.2	410.5
130°	195.7	197.6	202.7	211.0	224.4	241.0	260.7	284.9	313.6	353.2	402.9
132.5°	200.8	203.3	209.4	218.7	232.5	249.2	268.9	291.6	318.2	353.2	396.8
135°	209.1	211.7	219.3	229.5	242.9	260.1	279.9	300.9	324.5	353.2	389.5
137.5°	219.6	221.4	228.6	238.8	251.9	269.6	287.6	307.8	330.2	353.9	383.0
140°	225.7	227.6	235.2	245.4	257.6	274.8	293.3	312.3	332.7	354.4	379.9
142.5°	232.8	234.2	241.3	251.5	263.2	279.3	296.8	315.0	334.3	355.0	377.4
145°	243.5	244.8	251.2	260.1	271.6	286.3	302.8	318.7	336.0	354.4	373.6
147.5°	254.7	255.5	261.0	269.3	279.2	292.1	306.6	321.1	336.6	352.8	369.6
150°	261.4	262.6	267.1	275.4	284.3	295.1	309.2	322.5	336.6	351.2	366.6
152.5°	268.5	269.3	273.2	280.5	288.9	298.7	311.7	323.6	336.1	349.2	363.0
155°	277.9	277.9	281.8	288.1	294.5	303.5	314.3	324.5	334.7	345.5	357.0
157.5°	286.3	286.3	289.3	294.7	300.4	307.1	316.4	325.1	333.0	341.7	351.4
160°	292.0	291.3	293.9	298.3	303.5	309.2	317.5	325.1	331.5	339.2	346.8
162.5°	296.5	296.0	298.5	302.4	306.5	311.2	318.5	324.6	330.0	336.1	342.7
165°	303.5	302.1	304.1	307.3	309.8	313.6	318.7	323.8	327.7	331.5	336.6
167.5°	308.0	307.4	308.5	310.3	312.1	314.5	318.7	322.3	324.1	327.0	330.6
170°	311.1	310.5	311.1	312.3	313.6	315.5	318.7	321.3	322.5	324.5	327.0
172.5°	313.2	312.0	312.6	313.9	314.6	315.5	318.2	320.2	320.5	321.4	323.4
175°	315.5	314.3	315.0	315.5	315.5	315.5	317.5	318.7	318.1	318.1	318.7
177.5°	316.7	315.7	315.7	316.2	315.7	315.7	316.7	317.2	316.2	316.2	316.7
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°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	497.2	497.9	498.6	498.9	498.8	498.7	498.6	498.6
5°	494.2	495.0	495.8	496.2	496.0	495.8	495.6	495.5
7.5°	488.0	488.6	489.2	489.3	489.2	489.0	488.9	488.6
10°	482.8	483.1	483.3	483.3	483.1	482.8	482.6	482.3
12.5°	475.4	475.6	475.8	475.7	475.3	474.9	474.6	474.2
15°	463.3	463.2	463.1	462.7	461.9	461.2	460.5	459.7
17.5°	448.2	447.8	447.4	446.8	446.2	445.6	444.9	444.3
20°	437.0	436.6	436.2	435.6	434.8	434.1	433.3	432.6
22.5°	425.9	425.1	424.3	423.5	423.0	422.3	421.8	421.1
25°	407.8	406.7	405.6	404.6	403.7	402.8	401.9	400.9
27.5°	388.2	386.6	385.1	383.9	383.0	382.1	381.2	380.3
30°	374.1	372.2	370.2	368.9	368.1	367.4	366.6	365.9
32.5°	360.4	358.3	356.1	354.7	353.7	352.7	351.7	350.8
35°	339.2	336.7	334.3	332.5	331.3	330.2	329.0	327.8
37.5°	316.9	314.1	311.1	309.1	307.9	306.8	305.7	304.5
40°	302.2	299.1	295.9	293.8	292.8	291.8	290.7	289.8
42.5°	287.7	284.7	281.6	279.4	277.9	276.4	274.9	273.5
45°	264.6	261.2	257.9	255.6	254.4	253.1	251.8	250.5
47.5°	241.7	238.2	234.8	232.4	231.0	229.6	228.2	226.8
50°	226.2	222.7	219.2	216.8	215.6	214.3	213.0	211.7
52.5°	211.5	207.7	203.9	201.4	200.2	198.9	197.6	196.4
55°	189.1	185.4	181.6	179.0	177.7	176.3	175.0	173.7
57.5°	166.8	163.1	159.4	156.9	155.8	154.6	153.4	152.2
60°	152.1	148.3	144.6	142.2	140.9	139.7	138.4	137.1
62.5°	137.5	134.0	130.6	128.3	127.0	125.8	124.6	123.3
65°	116.1	112.8	109.4	107.1	105.9	104.6	103.4	102.1
67.5°	95.7	92.7	89.6	87.6	86.6	85.6	84.5	83.6
70°	82.3	79.7	77.0	75.3	74.2	73.2	72.2	71.2
72.5°	69.6	67.3	64.9	63.3	62.7	62.0	61.3	60.7
75°	52.1	50.2	48.4	47.2	46.6	46.0	45.4	44.8
77.5°	37.1	35.8	34.5	33.6	33.2	32.8	32.3	31.9
80°	27.9	27.1	26.4	25.9	25.8	25.6	25.4	25.3
82.5°	20.9	20.5	20.1	19.9	19.8	19.7	19.6	19.5
85°	11.9	11.8	11.7	11.7	11.6	11.5	11.4	11.3
87.5°	6.8	6.9	7.1	7.3	7.3	7.2	7.3	7.2
90°	11.5	12.1	12.7	14.0	14.0	14.0	14.7	14.7
92.5°	113.0	82.0	61.7	52.3	44.1	42.6	41.7	40.7
95°	458.4	361.4	283.1	229.5	184.3	165.1	160.0	149.8
97.5°	682.7	614.7	538.3	463.8	424.4	388.7	370.2	362.1
100°	784.1	752.8	687.2	620.9	576.9	531.0	507.4	497.3
102.5°	818.2	837.6	806.0	761.2	714.1	681.4	655.8	648.2
105°	798.1	885.5	913.5	906.5	886.1	865.0	852.3	844.7
107.5°	726.2	842.8	914.8	948.0	958.4	958.2	954.1	948.9
110°	673.2	794.3	884.2	938.3	967.0	979.2	983.7	983.7





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	631.4	746.3	837.2	901.2	943.1	963.8	974.9	979.6
115°	578.9	677.7	765.0	834.5	884.2	914.8	932.6	940.9
117.5°	544.9	630.1	705.3	769.1	818.8	850.4	868.1	873.2
120°	526.5	603.1	673.2	729.3	776.4	807.1	824.3	829.3
122.5°	512.8	583.7	646.1	698.7	740.8	768.8	786.0	790.6
125°	492.8	557.8	613.3	659.2	694.9	721.0	735.0	741.4
127.5°	472.4	533.0	584.8	627.8	660.1	683.2	696.5	699.3
130°	459.6	515.8	565.4	606.9	638.8	659.8	672.5	676.4
132.5°	446.9	499.4	544.5	584.4	616.3	637.3	649.1	653.4
135°	430.3	474.3	515.1	551.4	579.4	600.5	612.0	615.8
137.5°	416.3	451.8	485.8	516.6	541.8	560.8	571.4	575.7
140°	408.6	438.5	467.9	494.6	518.3	534.8	544.4	547.6
142.5°	402.0	427.4	452.6	475.8	495.9	509.9	518.9	521.5
145°	393.3	413.1	432.8	450.0	465.4	476.2	483.2	485.8
147.5°	385.1	401.2	416.4	429.4	441.5	450.2	454.3	455.4
150°	380.6	394.6	406.7	418.2	427.8	435.4	438.0	438.5
152.5°	375.4	388.0	399.1	408.0	416.0	422.2	424.7	425.3
155°	367.9	378.1	386.9	394.0	400.3	404.8	406.7	407.3
157.5°	360.2	368.6	375.4	381.0	386.0	389.6	391.4	391.3
160°	355.1	361.4	367.9	372.3	376.7	379.9	381.2	380.6
162.5°	349.4	355.3	360.7	364.6	368.1	370.7	371.0	370.9
165°	341.7	346.2	350.0	353.2	355.7	357.0	357.0	357.0
167.5°	334.3	337.2	340.1	342.4	343.7	344.9	344.4	344.2
170°	330.2	332.2	334.0	335.3	336.6	337.2	337.2	336.6
172.5°	325.6	327.5	329.0	329.7	330.0	331.1	330.1	329.5
175°	320.7	320.7	322.0	322.0	322.0	322.5	321.3	320.7
177.5°	317.2	317.7	317.7	317.7	317.2	317.7	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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