

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: P333183-927

Luminaire Tested: **S125DIP-S610D810U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333183-927  
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: S125DIP-S610D810U927-4F0-1E-UDD-D4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4207.2 lumens  
Efficiency: N/A  
Efficacy: 109.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

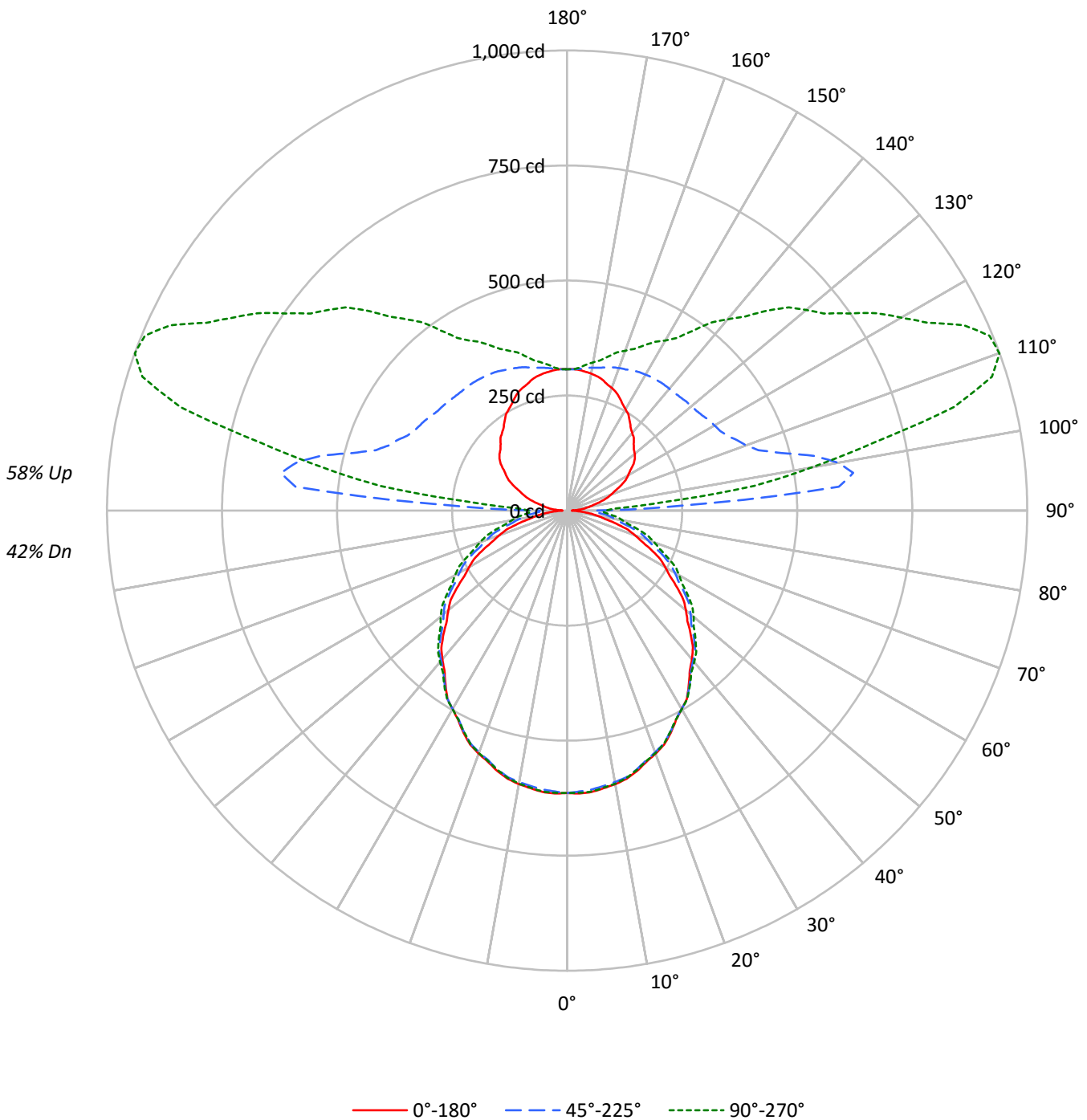
Input Watts (W): 38.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	95	91	87	83	87	83	80	76	68	66	64	55	53	52	42	41	40	34
2	87	79	73	67	79	72	67	62	60	56	52	48	45	43	37	35	33	28
3	79	69	62	56	72	63	57	52	52	47	44	42	39	36	33	30	28	24
4	72	61	53	47	65	56	49	44	46	41	37	37	33	30	29	26	24	20
5	66	54	46	40	60	50	43	37	41	36	32	33	29	26	26	23	21	17
6	61	49	40	35	55	45	37	32	37	32	27	30	26	23	24	21	18	15
7	56	44	36	30	51	40	33	28	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	21	25	21	18	20	17	14	12
9	48	36	29	24	44	33	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	14	17	14	12	10

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

	0°	45°	90°
0°	3965	3965	3965
5°	3973	3892	3904
10°	3945	3822	3817
15°	3898	3740	3705
20°	3834	3636	3593
25°	3759	3526	3457
30°	3667	3405	3332
35°	3583	3293	3217
40°	3496	3176	3103
45°	3398	3076	3001
50°	3305	2967	2910
55°	3192	2865	2804
60°	3069	2747	2697
65°	2942	2625	2574
70°	2795	2458	2451
75°	2563	2297	2296
80°	2262	2101	2129
85°	1981	1972	2077



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	1.4
10°-20°	164.8	3.9
20°-30°	245.1	5.8
30°-40°	290.3	6.9
40°-50°	300.2	7.1
50°-60°	276.5	6.6
60°-70°	223.5	5.3
70°-80°	149.7	3.6
80°-90°	79.3	1.9
90°-100°	266.2	6.3
100°-110°	510.8	12.1
110°-120°	470.8	11.2
120°-130°	376.3	8.9
130°-140°	297.5	7.1
140°-150°	221.6	5.3
150°-160°	155.2	3.7
160°-170°	91.5	2.2
170°-180°	29.8	0.7
0°-30°	467.9	11.1
0°-40°	758.2	18.0
0°-60°	1334.9	31.7
0°-90°	1787.4	42.5
90°-120°	1247.9	29.7
90°-150°	2143.3	50.9
90°-180°	2420.0	57.5
0°-180°	4207.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	614	613	608	613	613	58
15°	586	587	583	586	584	165
25°	533	534	531	533	530	245
35°	461	465	463	465	465	288
45°	380	386	389	393	394	293
55°	292	302	311	318	320	261
65°	201	215	229	238	241	199
75°	111	127	146	157	161	117
85°	33	53	74	87	92	35
90°	10	35	59	76	82	8
95°	28	84	593	306	207	28
105°	75	113	482	929	870	80
115°	129	159	384	811	952	127
125°	176	206	360	641	747	156
135°	204	245	348	530	614	159
145°	237	271	344	432	477	149
155°	270	290	336	379	396	124
165°	295	303	322	342	347	83
175°	307	307	309	313	312	29
180°	307	307	307	307	307	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	615.4	615.1	615.0	614.7	614.5	614.0	613.3	612.5	611.8	611.0	611.8
5°	613.9	613.6	613.4	613.1	612.8	612.3	611.3	610.4	609.4	608.5	609.6
7.5°	608.5	608.4	608.3	608.2	608.1	607.5	606.6	605.6	604.7	603.7	604.6
10°	603.7	603.7	603.7	603.7	603.7	603.2	602.1	601.0	599.9	598.9	599.8
12.5°	597.0	597.1	597.1	597.3	597.4	597.0	596.1	595.3	594.5	593.6	594.3
15°	586.2	586.4	586.5	586.6	586.8	586.4	585.4	584.5	583.6	582.7	583.4
17.5°	572.3	572.5	572.8	573.1	573.4	573.0	572.1	571.2	570.2	569.3	569.9
20°	562.1	562.4	562.7	563.0	563.2	562.9	562.0	561.0	560.1	559.1	559.5
22.5°	550.6	551.1	551.6	552.1	552.5	552.2	551.2	550.2	549.1	548.1	548.6
25°	532.7	533.1	533.5	533.9	534.2	534.1	533.3	532.5	531.6	530.8	531.4
27.5°	512.7	513.3	513.9	514.4	515.1	514.9	514.0	513.1	512.1	511.3	511.6
30°	497.7	498.6	499.4	500.2	501.0	501.0	500.2	499.4	498.6	497.7	498.0
32.5°	484.3	485.0	485.7	486.4	487.0	487.1	486.6	485.9	485.4	484.7	485.1
35°	461.1	462.0	463.0	463.8	464.8	465.1	464.7	464.2	463.8	463.4	463.8
37.5°	437.8	438.7	439.5	440.4	441.2	441.6	441.5	441.3	441.2	441.1	441.6
40°	421.9	423.0	424.1	425.2	426.2	426.7	426.5	426.4	426.3	426.1	426.7
42.5°	404.6	406.0	407.3	408.8	410.2	411.0	411.3	411.6	411.9	412.2	412.8
45°	379.8	381.3	382.7	384.2	385.7	386.7	387.5	388.1	388.7	389.4	390.4
47.5°	354.4	355.8	357.1	358.5	359.9	361.1	362.3	363.4	364.6	365.7	367.1
50°	337.1	338.5	340.0	341.5	342.9	344.4	345.9	347.4	348.8	350.3	351.8
52.5°	318.8	320.5	322.3	324.2	325.9	327.7	329.5	331.3	333.1	334.9	336.4
55°	291.9	294.1	296.2	298.3	300.5	302.6	304.8	306.9	309.0	311.2	312.7
57.5°	264.5	267.0	269.6	272.2	274.7	277.3	279.7	282.2	284.6	287.1	288.8
60°	246.2	248.8	251.5	254.2	256.9	259.5	262.2	264.9	267.6	270.2	272.3
62.5°	228.4	231.0	233.7	236.4	239.1	241.9	244.7	247.6	250.5	253.4	255.6
65°	201.1	204.1	207.2	210.2	213.3	216.5	219.7	222.9	226.1	229.3	231.3
67.5°	175.3	178.2	181.2	184.2	187.1	190.3	193.5	196.8	200.0	203.4	205.7
70°	156.5	159.5	162.6	165.7	168.8	172.1	175.5	179.0	182.5	186.0	188.5
72.5°	138.2	141.4	144.6	147.7	150.9	154.4	158.2	162.0	165.8	169.6	172.4
75°	110.7	114.2	117.7	121.2	124.7	128.6	132.8	137.1	141.4	145.7	148.3
77.5°	84.4	88.4	92.4	96.4	100.4	104.5	108.6	112.7	116.8	121.0	123.9
80°	68.0	72.0	76.0	80.1	84.1	88.3	92.9	97.4	102.0	106.5	109.5
82.5°	53.1	57.3	61.6	65.8	70.0	74.5	79.1	83.7	88.4	93.1	95.9
85°	33.1	37.5	41.9	46.3	50.8	55.3	60.0	64.6	69.3	74.1	77.0
87.5°	18.9	23.3	27.8	32.4	36.9	41.6	46.2	51.0	55.7	60.5	63.7
90°	10.2	15.1	20.7	26.2	31.7	37.4	42.5	48.3	53.5	59.3	63.0
92.5°	16.2	21.8	31.0	42.6	57.2	79.6	118.1	179.4	245.7	247.2	212.1
95°	28.3	32.4	40.8	51.1	68.2	100.1	170.9	311.7	487.2	592.7	583.9
97.5°	41.0	44.9	51.5	61.5	76.8	100.7	148.9	253.2	436.4	627.0	723.2
100°	50.0	54.0	59.3	68.9	83.5	105.7	145.8	230.7	391.0	597.9	755.5
102.5°	59.9	63.2	67.8	77.7	91.1	112.6	148.7	220.5	356.5	548.8	732.7
105°	75.4	77.6	82.8	91.1	103.1	123.6	154.9	214.0	321.5	482.2	662.6
107.5°	90.5	93.6	98.4	105.3	117.4	135.9	166.0	217.1	305.3	435.8	591.8
110°	101.5	104.3	108.4	115.6	126.4	145.2	174.4	220.9	299.5	413.5	551.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	112.9	115.3	118.7	125.5	136.1	154.2	182.2	226.1	297.7	399.7	520.4
115°	128.7	130.9	133.7	140.2	150.4	168.1	194.6	233.9	296.8	384.0	486.1
117.5°	143.0	145.4	148.1	154.2	165.4	182.4	207.3	243.3	298.3	374.8	464.4
120°	152.9	155.2	158.0	164.0	174.9	192.2	216.9	249.8	300.5	369.9	452.0
122.5°	162.8	164.4	166.5	172.3	184.0	201.1	225.7	257.0	302.1	365.4	441.1
125°	175.9	177.0	179.9	185.4	197.0	214.4	237.5	266.8	305.4	359.5	426.0
127.5°	185.5	187.3	191.1	198.0	210.4	227.5	249.4	276.2	309.7	355.2	411.9
130°	191.9	193.7	198.5	206.4	219.3	236.3	257.4	282.7	312.5	352.8	403.0
132.5°	196.5	198.8	204.7	213.7	227.2	244.0	264.7	288.1	315.4	350.9	395.1
135°	204.4	206.7	214.0	223.8	236.6	253.8	273.9	295.3	319.2	347.9	385.0
137.5°	214.4	216.2	223.0	232.8	245.4	262.8	280.7	300.8	323.1	346.6	376.4
140°	219.9	221.7	229.2	239.1	250.8	267.6	285.7	304.4	324.4	345.6	371.9
142.5°	226.8	228.1	234.9	244.7	255.9	271.6	288.6	306.2	325.0	345.2	368.2
145°	237.2	238.3	244.4	252.9	264.0	278.1	294.2	309.7	326.5	344.4	363.6
147.5°	247.5	248.3	253.6	261.7	271.3	283.8	297.9	312.0	327.0	342.8	359.3
150°	254.0	255.2	259.5	267.6	276.2	286.8	300.4	313.4	327.0	341.3	356.2
152.5°	260.9	261.7	265.5	272.5	280.7	290.3	302.9	314.4	326.5	339.3	352.7
155°	270.1	270.1	273.8	280.0	286.1	294.9	305.4	315.3	325.2	335.7	346.9
157.5°	278.2	278.1	281.1	286.4	291.8	298.4	307.4	315.9	323.6	332.0	341.4
160°	283.7	283.0	285.6	289.9	294.9	300.4	308.5	315.9	322.1	329.5	337.0
162.5°	288.1	287.6	290.0	293.8	297.8	302.4	309.4	315.4	320.6	326.5	333.0
165°	294.9	293.6	295.5	298.6	301.0	304.8	309.7	314.7	318.4	322.1	327.0
167.5°	299.3	298.7	299.8	301.5	303.2	305.6	309.7	313.1	314.9	317.7	321.2
170°	302.3	301.7	302.3	303.5	304.8	306.6	309.7	312.2	313.4	315.3	317.7
172.5°	304.3	303.2	303.7	305.0	305.7	306.6	309.2	311.2	311.4	312.3	314.3
175°	306.6	305.4	306.0	306.6	306.6	306.6	308.5	309.7	309.1	309.1	309.7
177.5°	307.7	306.7	306.7	307.2	306.7	306.7	307.7	308.2	307.2	307.2	307.7
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	612.5	613.3	614.0	614.3	614.3	614.2	614.0	613.9
5°	610.6	611.7	612.8	613.2	613.1	613.0	612.8	612.8
7.5°	605.5	606.5	607.4	607.8	607.7	607.6	607.4	607.3
10°	600.8	601.7	602.6	603.0	602.9	602.8	602.6	602.5
12.5°	595.0	595.7	596.5	596.7	596.3	596.0	595.6	595.2
15°	584.2	585.0	585.8	586.0	585.4	584.9	584.4	583.8
17.5°	570.5	571.1	571.7	571.9	571.6	571.2	570.9	570.6
20°	560.0	560.4	560.8	560.9	560.9	560.9	560.9	560.9
22.5°	549.1	549.6	550.1	550.2	549.9	549.5	549.2	548.9
25°	532.0	532.5	533.0	533.0	532.3	531.6	530.9	530.3
27.5°	512.0	512.4	512.8	512.8	512.5	512.3	512.1	511.8
30°	498.3	498.6	498.8	498.9	498.8	498.6	498.5	498.4
32.5°	485.3	485.5	485.8	485.9	485.8	485.6	485.5	485.4
35°	464.2	464.7	465.1	465.2	465.2	465.2	465.2	465.2
37.5°	442.1	442.7	443.2	443.5	443.4	443.3	443.3	443.2
40°	427.2	427.8	428.3	428.6	429.0	429.2	429.5	429.8
42.5°	413.4	414.1	414.7	415.1	415.2	415.2	415.3	415.3
45°	391.3	392.2	393.2	393.7	393.9	394.0	394.1	394.3
47.5°	368.4	369.8	371.1	372.0	372.3	372.6	372.9	373.2
50°	353.2	354.7	356.2	357.1	357.5	357.9	358.3	358.7
52.5°	338.0	339.6	341.2	342.1	342.5	342.7	343.0	343.3
55°	314.1	315.6	317.0	318.1	318.6	319.2	319.6	320.2
57.5°	290.5	292.2	293.8	294.9	295.3	295.7	296.1	296.5
60°	274.3	276.2	278.3	279.5	279.9	280.3	280.7	281.1
62.5°	257.9	260.1	262.3	263.6	264.1	264.7	265.1	265.7
65°	233.3	235.4	237.3	238.6	239.2	239.7	240.2	240.7
67.5°	208.2	210.6	213.0	214.6	215.3	216.0	216.7	217.4
70°	191.1	193.6	196.1	197.8	198.6	199.4	200.3	201.1
72.5°	175.2	177.8	180.6	182.3	182.9	183.5	184.1	184.7
75°	151.0	153.7	156.4	158.0	158.7	159.4	160.0	160.7
77.5°	126.8	129.8	132.8	134.5	135.0	135.5	136.1	136.7
80°	112.4	115.3	118.3	120.0	120.6	121.1	121.7	122.2
82.5°	98.7	101.6	104.4	106.3	107.3	108.2	109.2	110.1
85°	79.9	82.9	85.8	87.8	88.9	89.9	91.0	92.1
87.5°	66.9	70.1	73.3	75.6	76.4	77.4	78.5	79.4
90°	66.6	70.3	74.1	77.3	78.3	79.1	80.7	81.7
92.5°	163.1	136.0	119.3	112.0	105.0	104.5	104.6	104.5
95°	495.2	403.9	330.7	280.7	237.6	219.9	215.9	206.9
97.5°	709.8	646.6	575.2	504.7	467.3	433.6	416.5	409.5
100°	806.0	778.5	717.5	654.9	612.9	569.1	547.0	537.9
102.5°	837.1	858.5	830.6	788.7	743.8	712.9	688.8	682.1
105°	814.0	901.5	931.4	926.4	907.5	888.0	876.5	870.1
107.5°	741.2	857.0	929.6	963.7	974.6	975.3	972.0	967.9
110°	687.5	807.7	897.5	952.0	980.8	993.5	998.7	999.7





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	644.7	758.8	849.6	913.4	955.1	976.2	987.9	993.3
115°	590.7	689.1	776.4	845.5	894.6	925.2	943.3	952.1
117.5°	554.6	639.6	715.0	778.6	827.8	859.4	877.5	883.4
120°	534.8	611.4	681.8	737.9	784.5	815.1	832.6	838.4
122.5°	519.3	590.3	653.2	705.8	747.4	775.5	793.1	798.3
125°	496.9	562.2	618.3	664.2	699.7	725.7	740.0	746.9
127.5°	474.0	535.0	587.2	630.3	662.6	685.8	699.4	703.0
130°	459.9	516.3	566.6	608.1	639.7	660.8	673.8	678.3
132.5°	445.7	498.6	544.3	584.3	615.8	636.8	648.8	653.6
135°	426.4	470.9	512.2	548.7	576.7	597.8	609.6	614.0
137.5°	410.3	446.4	480.9	512.0	536.9	556.0	566.9	571.5
140°	401.2	431.7	461.8	488.8	512.2	528.9	538.7	542.3
142.5°	393.3	419.2	445.0	468.5	488.5	502.6	512.0	515.1
145°	383.5	403.4	423.3	440.6	456.0	467.1	474.4	477.4
147.5°	374.7	390.5	405.4	418.4	430.3	438.9	443.2	444.6
150°	369.8	383.4	395.1	406.4	415.8	423.4	426.0	426.7
152.5°	364.8	377.0	387.8	396.4	404.3	410.3	412.7	413.4
155°	357.4	367.3	376.0	382.8	389.0	393.3	395.1	395.8
157.5°	350.0	358.1	364.8	370.2	375.0	378.6	380.3	380.2
160°	345.0	351.2	357.4	361.7	366.1	369.2	370.4	369.8
162.5°	339.5	345.2	350.5	354.3	357.7	360.2	360.5	360.4
165°	332.0	336.4	340.1	343.2	345.6	346.9	346.9	346.9
167.5°	324.8	327.6	330.5	332.7	334.0	335.1	334.6	334.5
170°	320.8	322.7	324.6	325.8	327.0	327.6	327.6	327.0
172.5°	316.4	318.2	319.6	320.4	320.6	321.7	320.8	320.1
175°	311.6	311.6	312.8	312.8	312.8	313.4	312.2	311.6
177.5°	308.2	308.7	308.7	308.7	308.2	308.7	307.2	307.2
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2

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