

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: P333132

Luminaire Tested: **S125DIP-S375D590U835-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333132
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-S375D590U835-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3643.4 lumens
Efficiency: N/A
Efficacy: 142.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

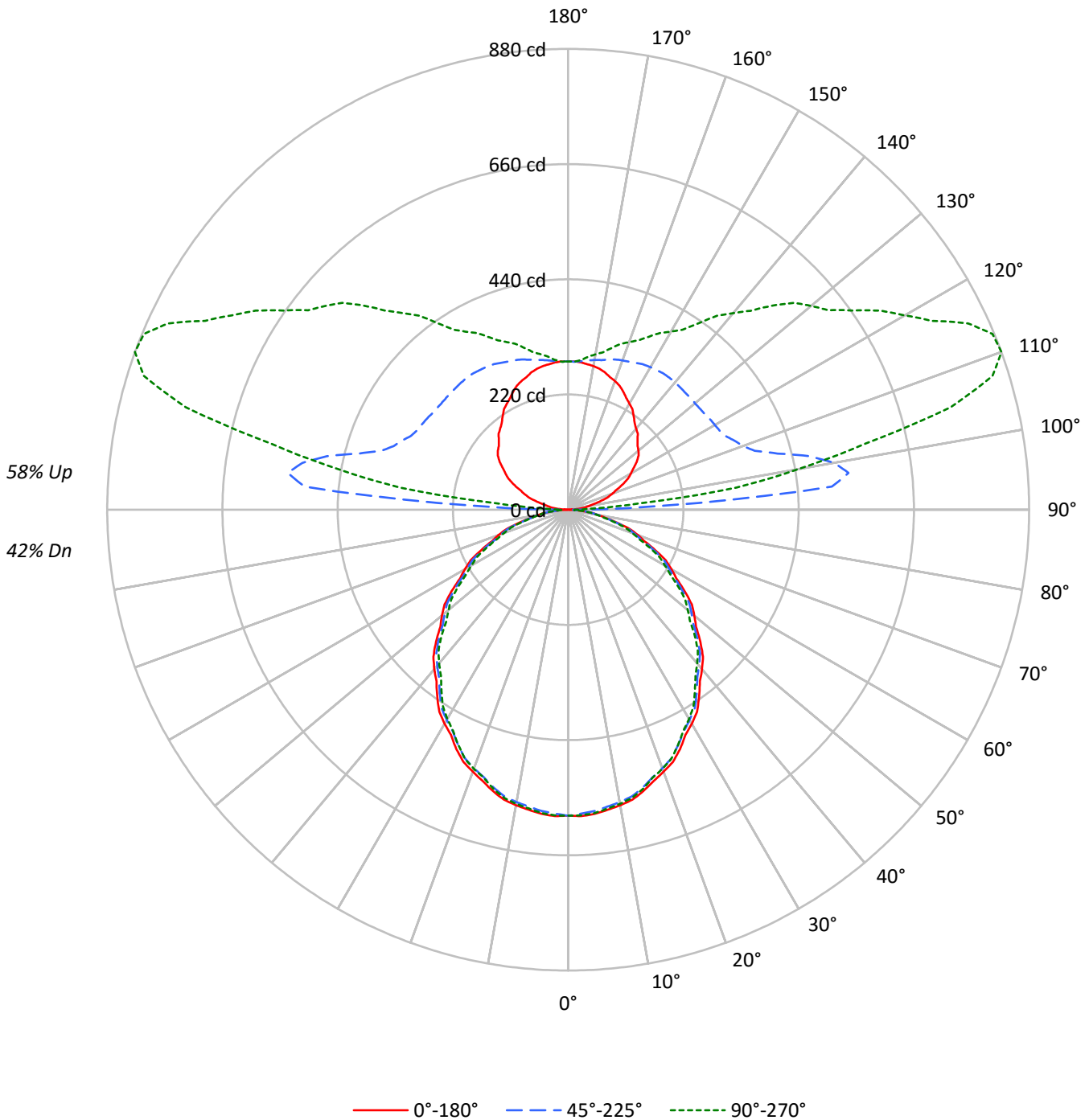
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42
1	96	92	88	84	87	84	80	77	69	67	64	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	63	60	57	53	49	46	44	38	36	34	29
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	54	48	66	57	50	45	47	42	38	38	34	32	30	27	25	21
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	18
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	21	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	28	48	37	30	26	31	26	22	26	22	19	20	17	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3773	3773	3773
5°	3781	3745	3769
10°	3758	3719	3740
15°	3718	3674	3689
20°	3659	3612	3618
25°	3596	3537	3534
30°	3519	3457	3439
35°	3436	3370	3323
40°	3351	3277	3230
45°	3259	3191	3128
50°	3158	3088	2995
55°	3059	2971	2888
60°	2942	2853	2753
65°	2804	2713	2621
70°	2670	2549	2460
75°	2433	2353	2271
80°	2165	2131	2079
85°	1882	1919	1815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	1.5
10°-20°	155.6	4.3
20°-30°	229.7	6.3
30°-40°	268.1	7.4
40°-50°	269.2	7.4
50°-60°	236.3	6.5
60°-70°	176.1	4.8
70°-80°	100.7	2.8
80°-90°	30.9	0.8
90°-100°	205.1	5.6
100°-110°	440.9	12.1
110°-120°	413.8	11.4
120°-130°	335.3	9.2
130°-140°	269.1	7.4
140°-150°	203.1	5.6
150°-160°	142.9	3.9
160°-170°	84.3	2.3
170°-180°	27.4	0.8
0°-30°	440.4	12.1
0°-40°	708.5	19.4
0°-60°	1214.0	33.3
0°-90°	1521.7	41.8
90°-120°	1059.7	29.1
90°-150°	1867.2	51.2
90°-180°	2122.0	58.2
0°-180°	3643.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	583	582	578	582	581	55
15°	556	554	550	552	552	157
25°	505	502	496	497	496	232
35°	436	434	428	425	422	272
45°	357	355	349	344	342	275
55°	272	270	264	260	256	243
65°	184	182	178	173	172	182
75°	98	96	94	93	91	104
85°	25	26	26	25	24	28
90°	1	5	9	12	13	3
95°	19	56	505	229	134	20
105°	64	90	414	814	756	68
115°	115	139	332	716	842	113
125°	160	187	318	569	663	142
135°	187	225	316	477	551	145
145°	218	250	317	395	435	137
155°	249	268	309	349	364	114
165°	272	279	297	315	319	76
175°	282	282	285	288	287	27
180°	283	283	283	283	283	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	585.6	585.4	585.2	584.9	584.7	584.1	583.3	582.5	581.7	580.8	581.7
5°	583.2	583.0	582.8	582.6	582.4	581.8	580.8	579.8	578.7	577.7	578.6
7.5°	577.9	577.7	577.5	577.3	577.1	576.4	575.3	574.1	573.0	571.9	572.8
10°	573.1	572.9	572.7	572.5	572.3	571.6	570.5	569.3	568.2	567.1	567.9
12.5°	567.2	566.8	566.4	566.1	565.7	565.0	563.9	562.9	561.8	560.8	561.4
15°	556.0	555.7	555.4	555.1	554.7	554.0	552.9	551.8	550.6	549.5	550.0
17.5°	543.1	542.7	542.2	541.8	541.3	540.5	539.3	538.2	537.0	535.8	536.5
20°	532.4	532.2	532.0	531.8	531.6	530.8	529.5	528.1	526.8	525.5	526.2
22.5°	521.7	521.3	520.9	520.6	520.2	519.4	518.1	516.9	515.6	514.4	514.9
25°	504.7	504.2	503.6	503.1	502.6	501.7	500.4	499.0	497.7	496.4	496.6
27.5°	484.8	484.5	484.2	483.9	483.6	482.7	481.4	480.0	478.6	477.2	477.3
30°	471.9	471.6	471.2	470.9	470.6	469.7	468.2	466.6	465.1	463.5	463.3
32.5°	457.8	457.3	456.9	456.4	455.9	455.0	453.6	452.2	450.9	449.5	449.1
35°	435.8	435.4	435.0	434.6	434.2	433.2	431.8	430.4	428.9	427.5	427.0
37.5°	413.0	412.5	412.0	411.4	410.9	410.0	408.6	407.3	405.9	404.6	403.8
40°	397.5	396.9	396.4	395.9	395.4	394.4	393.0	391.6	390.1	388.7	387.8
42.5°	380.8	380.4	380.0	379.5	379.1	378.2	376.7	375.3	373.8	372.4	371.6
45°	356.8	356.4	356.0	355.6	355.1	354.3	353.1	351.9	350.6	349.4	348.2
47.5°	330.9	330.9	330.9	331.0	331.0	330.3	328.8	327.3	325.8	324.3	323.1
50°	314.3	314.0	313.7	313.3	313.0	312.3	311.0	309.8	308.6	307.3	306.0
52.5°	297.3	297.0	296.8	296.6	296.4	295.6	294.3	293.0	291.6	290.3	289.2
55°	271.7	271.4	271.1	270.8	270.5	269.6	268.2	266.8	265.3	263.9	263.0
57.5°	244.9	244.7	244.5	244.4	244.2	243.5	242.3	241.1	239.9	238.7	237.5
60°	227.8	227.4	227.0	226.6	226.2	225.4	224.3	223.2	222.0	220.9	219.9
62.5°	210.1	209.8	209.4	209.1	208.8	208.1	207.2	206.2	205.2	204.3	203.2
65°	183.5	183.3	183.1	182.9	182.7	182.0	180.9	179.7	178.6	177.5	176.5
67.5°	157.7	157.3	156.8	156.4	156.0	155.3	154.5	153.6	152.8	152.0	151.2
70°	141.4	140.9	140.4	139.9	139.4	138.6	137.7	136.8	135.9	135.0	134.3
72.5°	123.7	123.3	123.0	122.6	122.3	121.8	121.2	120.6	120.0	119.4	118.7
75°	97.5	97.3	97.1	96.9	96.7	96.3	95.8	95.3	94.8	94.3	94.0
77.5°	73.4	73.3	73.2	73.1	73.1	72.9	72.6	72.3	72.0	71.7	71.5
80°	58.2	58.2	58.2	58.2	58.2	58.1	57.9	57.7	57.5	57.3	57.2
82.5°	44.9	44.8	44.6	44.4	44.3	44.2	44.1	44.1	44.0	44.0	43.8
85°	25.4	25.5	25.6	25.7	25.8	25.9	25.9	25.9	25.9	25.9	25.8
87.5°	10.1	10.2	10.4	10.7	10.9	11.1	11.1	11.3	11.3	11.4	11.6
90°	0.6	1.1	2.3	3.4	4.6	5.7	6.3	7.4	8.0	9.1	9.7
92.5°	7.0	8.4	13.2	20.3	30.1	46.8	77.9	130.2	186.9	183.9	148.9
95°	18.8	19.4	24.0	30.2	42.8	68.5	129.5	255.0	412.4	505.4	494.6
97.5°	31.3	31.9	35.1	41.4	52.7	71.2	111.6	203.5	368.3	539.7	625.8
100°	39.9	41.1	43.4	49.6	60.5	77.6	110.7	184.8	328.6	515.1	657.7
102.5°	49.5	50.2	52.0	58.8	68.7	85.3	114.8	177.1	298.4	471.7	638.5
105°	64.5	64.5	67.3	73.0	82.1	98.1	123.2	174.0	269.2	413.6	577.3
107.5°	79.1	80.2	82.9	87.6	97.1	111.5	135.8	179.2	256.9	373.5	514.8
110°	89.6	90.7	93.0	98.1	106.7	121.5	144.9	184.2	253.3	354.8	479.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	100.1	101.2	103.0	108.2	116.7	131.1	153.6	190.6	253.3	343.9	452.7
115°	115.2	116.4	118.1	123.2	131.8	146.0	167.1	200.2	255.0	332.0	423.8
117.5°	128.9	130.6	132.5	137.6	147.3	161.1	181.1	211.2	258.7	326.2	406.6
120°	138.0	139.8	142.0	147.2	156.9	171.1	191.1	218.5	262.4	323.4	397.0
122.5°	147.6	148.9	150.7	155.8	166.5	180.7	200.7	226.7	265.6	321.2	388.8
125°	159.7	160.9	163.7	168.8	179.7	194.5	213.3	237.9	271.0	318.3	377.6
127.5°	169.2	170.9	174.6	181.1	192.6	207.4	225.5	248.1	277.0	316.9	367.4
130°	175.1	176.8	181.4	188.8	200.8	215.6	233.3	255.0	280.7	316.0	360.5
132.5°	179.7	181.9	187.3	195.7	208.1	222.9	240.6	260.9	284.8	316.0	355.0
135°	187.1	189.4	196.2	205.4	217.3	232.7	250.4	269.2	290.3	316.0	348.5
137.5°	196.5	198.2	204.6	213.7	225.4	241.3	257.4	275.4	295.5	316.7	342.7
140°	201.9	203.6	210.5	219.6	230.5	245.9	262.4	279.5	297.8	317.2	340.0
142.5°	208.3	209.6	216.0	225.1	235.5	250.0	265.6	281.8	299.1	317.6	337.7
145°	217.9	219.0	224.7	232.7	243.0	256.1	271.0	285.2	300.6	317.2	334.3
147.5°	227.9	228.6	233.5	240.9	249.8	261.4	274.4	287.3	301.2	315.7	330.7
150°	233.9	235.0	239.0	246.4	254.4	264.1	276.7	288.6	301.2	314.3	328.0
152.5°	240.3	240.9	244.5	251.0	258.5	267.3	278.9	289.5	300.7	312.5	324.8
155°	248.7	248.7	252.1	257.8	263.5	271.5	281.2	290.3	299.5	309.2	319.4
157.5°	256.2	256.1	258.9	263.8	268.8	274.8	283.2	290.9	298.0	305.7	314.4
160°	261.3	260.7	263.0	267.0	271.5	276.7	284.1	290.9	296.6	303.5	310.3
162.5°	265.4	264.8	267.1	270.6	274.3	278.5	285.0	290.5	295.3	300.7	306.7
165°	271.5	270.4	272.1	274.9	277.2	280.7	285.2	289.8	293.2	296.6	301.2
167.5°	275.6	275.1	276.1	277.7	279.3	281.4	285.2	288.4	290.0	292.6	295.8
170°	278.4	277.8	278.4	279.5	280.7	282.4	285.2	287.5	288.6	290.3	292.6
172.5°	280.2	279.2	279.7	280.9	281.6	282.4	284.8	286.6	286.8	287.6	289.4
175°	282.4	281.2	281.8	282.4	282.4	282.4	284.1	285.2	284.6	284.6	285.2
177.5°	283.4	282.5	282.5	282.9	282.5	282.5	283.4	283.8	282.9	282.9	283.4
180°	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	582.5	583.3	584.1	584.5	584.4	584.3	584.3	584.2
5°	579.5	580.5	581.4	581.8	581.7	581.6	581.5	581.4
7.5°	573.7	574.6	575.5	575.9	575.8	575.7	575.6	575.5
10°	568.7	569.5	570.4	570.7	570.6	570.5	570.4	570.3
12.5°	562.1	562.8	563.4	563.7	563.7	563.7	563.7	563.6
15°	550.5	551.0	551.6	551.8	551.8	551.8	551.8	551.8
17.5°	537.1	537.7	538.4	538.4	537.9	537.4	536.9	536.4
20°	526.9	527.6	528.3	528.5	527.9	527.4	526.9	526.4
22.5°	515.3	515.8	516.3	516.3	516.0	515.6	515.3	514.9
25°	496.8	497.0	497.2	497.1	496.8	496.5	496.2	495.9
27.5°	477.3	477.3	477.4	477.3	476.9	476.6	476.3	476.0
30°	463.1	462.9	462.7	462.5	462.2	461.9	461.5	461.2
32.5°	448.8	448.4	448.0	447.6	447.0	446.4	445.9	445.3
35°	426.5	426.0	425.4	424.8	424.0	423.1	422.3	421.5
37.5°	403.1	402.3	401.5	400.9	400.4	400.0	399.5	399.0
40°	386.8	385.9	385.0	384.4	384.1	383.7	383.4	383.1
42.5°	370.7	369.9	369.0	368.4	367.9	367.4	367.0	366.5
45°	346.9	345.7	344.5	343.7	343.4	343.1	342.8	342.5
47.5°	321.8	320.6	319.3	318.3	317.6	316.9	316.2	315.5
50°	304.7	303.3	302.0	301.0	300.2	299.5	298.8	298.1
52.5°	288.0	286.8	285.6	284.7	283.9	283.1	282.3	281.5
55°	262.0	261.1	260.2	259.4	258.7	257.9	257.2	256.5
57.5°	236.3	235.1	233.9	233.1	232.7	232.3	231.9	231.5
60°	218.9	217.8	216.8	215.9	215.2	214.5	213.8	213.1
62.5°	202.1	200.9	199.8	199.0	198.5	197.9	197.3	196.8
65°	175.6	174.7	173.8	173.1	172.7	172.3	171.9	171.5
67.5°	150.4	149.6	148.8	148.3	148.1	147.8	147.6	147.3
70°	133.7	133.1	132.5	132.0	131.6	131.2	130.7	130.3
72.5°	118.0	117.3	116.6	116.1	115.7	115.3	114.8	114.4
75°	93.7	93.4	93.0	92.7	92.3	91.9	91.5	91.0
77.5°	71.4	71.2	71.0	70.8	70.5	70.2	69.9	69.6
80°	57.1	57.0	56.9	56.7	56.5	56.3	56.1	55.9
82.5°	43.6	43.4	43.3	43.1	43.1	43.1	43.0	43.0
85°	25.7	25.6	25.5	25.3	25.1	24.9	24.7	24.5
87.5°	11.7	11.8	11.9	12.0	11.9	11.7	11.7	11.5
90°	10.3	10.8	11.4	12.5	12.5	12.5	13.1	13.1
92.5°	101.1	73.4	55.2	46.8	39.5	38.1	37.3	36.4
95°	410.1	323.4	253.3	205.4	164.9	147.7	143.2	134.1
97.5°	610.8	550.0	481.7	415.0	379.8	347.8	331.3	324.0
100°	701.6	673.7	614.9	555.6	516.2	475.2	454.1	444.9
102.5°	732.2	749.4	721.2	681.1	639.0	609.8	586.9	580.0
105°	714.2	792.3	817.4	811.1	792.9	774.1	762.7	755.8
107.5°	649.8	754.1	818.6	848.3	857.6	857.5	853.7	849.1
110°	602.4	710.8	791.2	839.7	865.3	876.2	880.2	880.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	565.0	667.9	749.2	806.4	843.9	862.5	872.4	876.5
115°	517.9	606.4	684.5	746.7	791.2	818.6	834.5	842.0
117.5°	487.6	563.8	631.1	688.2	732.7	761.0	776.8	781.4
120°	471.2	539.6	602.4	652.6	694.8	722.2	737.6	742.1
122.5°	458.9	522.3	578.2	625.2	662.8	687.9	703.3	707.4
125°	440.9	499.1	548.8	589.8	621.8	645.2	657.7	663.4
127.5°	422.7	477.0	523.3	561.8	590.7	611.4	623.2	625.8
130°	411.3	461.5	506.0	543.0	571.6	590.4	601.8	605.2
132.5°	399.9	446.9	487.3	523.0	551.5	570.3	580.8	584.7
135°	385.0	424.4	460.9	493.4	518.5	537.3	547.6	551.0
137.5°	372.5	404.3	434.7	462.3	484.7	501.9	511.3	515.1
140°	365.6	392.5	418.7	442.7	463.8	478.6	487.1	490.0
142.5°	359.7	382.4	405.0	425.8	443.7	456.2	464.3	466.7
145°	352.0	369.6	387.3	402.7	416.4	426.1	432.4	434.7
147.5°	344.7	359.0	372.6	384.2	395.1	402.8	406.5	407.5
150°	340.5	353.1	363.9	374.2	382.8	389.6	391.9	392.5
152.5°	336.0	347.2	357.1	365.1	372.3	377.7	380.0	380.6
155°	329.1	338.3	346.2	352.5	358.2	362.2	363.9	364.5
157.5°	322.3	329.8	336.0	340.9	345.3	348.6	350.2	350.1
160°	317.7	323.4	329.1	333.1	337.1	340.0	341.1	340.5
162.5°	312.7	318.0	322.7	326.3	329.4	331.8	332.0	331.9
165°	305.7	309.7	313.2	316.0	318.3	319.4	319.4	319.4
167.5°	299.1	301.8	304.4	306.4	307.6	308.6	308.1	308.0
170°	295.5	297.2	298.9	300.0	301.2	301.8	301.8	301.2
172.5°	291.4	293.1	294.3	295.0	295.3	296.3	295.4	294.8
175°	286.9	286.9	288.1	288.1	288.1	288.6	287.5	286.9
177.5°	283.8	284.3	284.3	284.3	283.8	284.3	282.9	282.9
180°	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9

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