

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: P333129

Luminaire Tested: **S125DIP-S375D590U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333129
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-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3583.4 lumens
Efficiency: N/A
Efficacy: 140.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

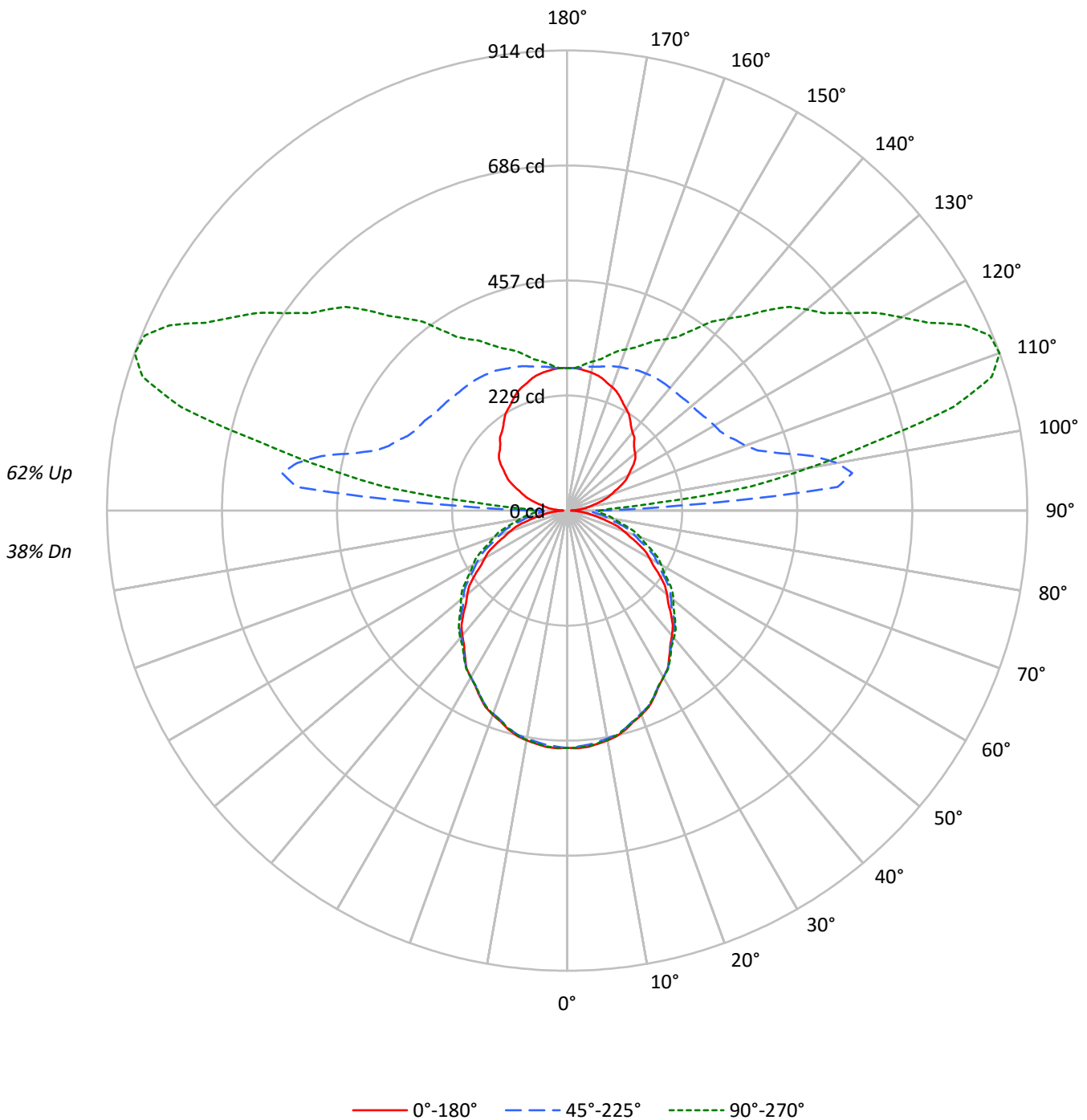
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	95	90	86	82	86	82	78	75	66	64	62	52	51	49	39	38	37	31
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	34	32	31	26
3	78	69	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21
4	71	61	53	47	64	55	48	43	45	40	36	36	32	29	27	24	22	18
5	65	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	51	39	32	26	47	36	29	24	30	24	21	24	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	25	21	40	30	24	19	25	20	16	20	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3044	3044	3044
5°	3051	2988	2998
10°	3028	2935	2930
15°	2993	2871	2845
20°	2945	2792	2759
25°	2886	2707	2654
30°	2816	2615	2559
35°	2751	2529	2470
40°	2685	2439	2382
45°	2609	2362	2304
50°	2537	2279	2234
55°	2450	2199	2154
60°	2356	2110	2070
65°	2259	2016	1977
70°	2147	1887	1882
75°	1968	1763	1763
80°	1736	1613	1635
85°	1520	1511	1594



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	1.2
10°-20°	126.5	3.5
20°-30°	188.2	5.3
30°-40°	222.9	6.2
40°-50°	230.5	6.4
50°-60°	212.3	5.9
60°-70°	171.6	4.8
70°-80°	114.9	3.2
80°-90°	61.2	1.7
90°-100°	238.5	6.7
100°-110°	465.5	13.0
110°-120°	430.3	12.0
120°-130°	344.7	9.6
130°-140°	273.2	7.6
140°-150°	203.9	5.7
150°-160°	142.9	4.0
160°-170°	84.3	2.4
170°-180°	27.4	0.8
0°-30°	359.3	10.0
0°-40°	582.2	16.2
0°-60°	1025.0	28.6
0°-90°	1372.7	38.3
90°-120°	1134.3	31.7
90°-150°	1956.1	54.6
90°-180°	2211.0	61.7
0°-180°	3583.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	471	471	471	471	471	
5°	471	470	467	471	470	45
15°	450	450	447	450	448	127
25°	409	410	408	409	407	188
35°	354	357	356	357	357	221
45°	292	297	299	302	303	225
55°	224	232	239	244	246	200
65°	154	165	176	183	185	153
75°	85	97	112	121	123	90
85°	25	41	57	67	71	27
90°	8	27	47	60	65	6
95°	25	74	539	273	181	25
105°	69	102	439	849	794	72
115°	118	145	350	742	871	116
125°	162	189	329	587	684	143
135°	188	226	320	487	563	146
145°	218	250	317	397	439	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°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	472.5	472.3	472.2	472.0	471.9	471.5	470.9	470.3	469.8	469.2	469.8
5°	471.4	471.2	471.0	470.8	470.6	470.1	469.4	468.7	468.0	467.2	468.1
7.5°	467.2	467.2	467.1	467.0	466.9	466.5	465.8	465.0	464.3	463.5	464.3
10°	463.5	463.5	463.5	463.5	463.5	463.1	462.3	461.5	460.7	459.8	460.6
12.5°	458.4	458.5	458.5	458.6	458.7	458.4	457.8	457.1	456.4	455.8	456.3
15°	450.1	450.2	450.3	450.5	450.6	450.2	449.5	448.8	448.1	447.4	448.0
17.5°	439.4	439.6	439.8	440.0	440.2	440.0	439.3	438.5	437.8	437.1	437.6
20°	431.7	431.9	432.1	432.3	432.5	432.2	431.5	430.8	430.1	429.3	429.7
22.5°	422.8	423.2	423.5	423.9	424.3	424.0	423.2	422.4	421.6	420.8	421.2
25°	409.0	409.3	409.6	409.9	410.2	410.1	409.5	408.9	408.2	407.6	408.0
27.5°	393.7	394.1	394.6	395.0	395.5	395.4	394.7	394.0	393.3	392.6	392.8
30°	382.2	382.8	383.4	384.1	384.7	384.7	384.1	383.4	382.8	382.2	382.4
32.5°	371.9	372.4	372.9	373.5	374.0	374.0	373.6	373.1	372.7	372.2	372.4
35°	354.0	354.7	355.5	356.2	356.9	357.1	356.8	356.5	356.2	355.9	356.2
37.5°	336.2	336.8	337.5	338.1	338.8	339.1	339.0	338.9	338.8	338.7	339.1
40°	324.0	324.8	325.6	326.4	327.3	327.6	327.5	327.4	327.3	327.2	327.6
42.5°	310.7	311.7	312.8	313.9	314.9	315.6	315.8	316.0	316.3	316.5	317.0
45°	291.6	292.8	293.9	295.0	296.1	297.0	297.5	298.0	298.5	299.0	299.7
47.5°	272.1	273.2	274.2	275.3	276.3	277.3	278.2	279.0	279.9	280.8	281.9
50°	258.8	259.9	261.1	262.2	263.3	264.5	265.6	266.7	267.8	269.0	270.1
52.5°	244.8	246.1	247.5	248.9	250.3	251.6	253.0	254.4	255.8	257.1	258.4
55°	224.1	225.8	227.4	229.1	230.7	232.4	234.0	235.6	237.3	238.9	240.1
57.5°	203.1	205.0	207.0	209.0	211.0	212.9	214.8	216.7	218.6	220.4	221.7
60°	189.0	191.1	193.1	195.2	197.2	199.3	201.3	203.4	205.5	207.5	209.0
62.5°	175.3	177.4	179.5	181.5	183.6	185.7	187.9	190.1	192.4	194.6	196.3
65°	154.4	156.7	159.1	161.4	163.8	166.2	168.7	171.2	173.6	176.1	177.6
67.5°	134.6	136.9	139.1	141.4	143.7	146.1	148.6	151.1	153.6	156.1	158.0
70°	120.2	122.5	124.9	127.2	129.6	132.1	134.8	137.5	140.1	142.8	144.8
72.5°	106.1	108.6	111.0	113.4	115.9	118.6	121.5	124.4	127.3	130.2	132.4
75°	85.0	87.7	90.4	93.0	95.7	98.7	102.0	105.3	108.6	111.8	113.9
77.5°	64.8	67.9	71.0	74.0	77.1	80.2	83.4	86.6	89.7	92.9	95.2
80°	52.2	55.3	58.4	61.5	64.5	67.8	71.3	74.8	78.3	81.8	84.1
82.5°	40.8	44.0	47.3	50.5	53.7	57.2	60.7	64.3	67.9	71.4	73.6
85°	25.4	28.8	32.2	35.6	39.0	42.5	46.1	49.7	53.3	56.8	59.1
87.5°	14.5	17.9	21.4	25.0	28.5	32.1	35.7	39.4	43.0	46.7	49.2
90°	8.0	11.8	16.2	20.7	25.1	29.6	33.7	38.3	42.4	47.0	50.0
92.5°	13.6	18.1	26.0	36.1	48.9	68.9	103.6	159.4	219.7	220.3	187.6
95°	24.8	28.1	35.3	44.3	59.5	88.2	152.7	281.7	442.7	539.1	530.6
97.5°	36.7	39.8	45.4	54.1	67.8	89.1	132.9	228.2	396.3	571.2	659.3
100°	45.0	48.3	52.7	61.2	74.2	94.0	130.4	207.8	354.9	544.7	689.4
102.5°	54.2	56.9	60.7	69.4	81.4	100.6	133.3	198.8	323.3	499.8	668.7
105°	68.6	70.3	74.8	82.1	92.9	111.2	139.4	193.2	291.6	439.0	604.7
107.5°	82.7	85.2	89.3	95.4	106.3	122.8	150.1	196.5	277.2	396.7	540.0
110°	92.8	95.2	98.7	105.0	114.8	131.7	158.0	200.2	272.1	376.5	502.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	103.3	105.4	108.2	114.3	123.9	140.2	165.4	205.3	270.7	364.1	474.8
115°	118.0	119.9	122.3	128.1	137.4	153.4	177.1	212.9	270.3	350.0	443.7
117.5°	131.2	133.4	135.7	141.3	151.5	166.8	189.3	221.9	272.0	342.0	424.2
120°	140.4	142.4	145.0	150.4	160.4	176.0	198.3	228.1	274.4	337.8	413.1
122.5°	149.6	151.0	152.9	158.2	169.0	184.4	206.7	235.0	276.2	334.0	403.3
125°	161.6	162.6	165.4	170.4	181.1	196.9	217.8	244.4	279.5	328.9	389.9
127.5°	170.6	172.2	175.7	182.1	193.6	209.2	229.0	253.3	283.8	325.4	377.4
130°	176.5	178.1	182.6	189.9	201.8	217.3	236.4	259.5	286.6	323.4	369.3
132.5°	180.7	182.8	188.3	196.6	209.0	224.4	243.2	264.6	289.6	321.9	362.4
135°	188.0	190.2	196.9	206.0	217.8	233.6	252.0	271.5	293.3	319.7	353.6
137.5°	197.3	198.9	205.2	214.3	225.9	241.9	258.4	276.7	297.2	318.7	346.0
140°	202.4	204.1	211.0	220.1	230.9	246.4	263.0	280.2	298.6	318.1	342.0
142.5°	208.8	210.0	216.3	225.3	235.6	250.1	265.7	281.9	299.3	317.8	338.8
145°	218.4	219.4	225.0	232.9	243.1	256.1	271.0	285.2	300.6	317.2	334.8
147.5°	227.9	228.6	233.5	240.9	249.8	261.4	274.4	287.3	301.2	315.7	330.9
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°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	470.3	470.9	471.5	471.7	471.6	471.6	471.5	471.4
5°	468.9	469.7	470.5	470.9	470.8	470.7	470.6	470.5
7.5°	465.0	465.7	466.4	466.7	466.6	466.5	466.4	466.3
10°	461.3	462.0	462.7	463.0	462.9	462.8	462.7	462.6
12.5°	456.9	457.4	458.0	458.1	457.9	457.6	457.3	457.1
15°	448.6	449.2	449.8	449.9	449.5	449.1	448.7	448.3
17.5°	438.1	438.5	439.0	439.1	438.9	438.6	438.4	438.1
20°	430.0	430.3	430.6	430.7	430.7	430.7	430.7	430.7
22.5°	421.6	422.0	422.4	422.5	422.2	422.0	421.7	421.5
25°	408.4	408.9	409.3	409.2	408.7	408.2	407.7	407.2
27.5°	393.1	393.4	393.7	393.8	393.6	393.4	393.2	393.0
30°	382.6	382.8	383.0	383.1	383.0	382.9	382.8	382.7
32.5°	372.6	372.8	373.0	373.1	373.0	372.9	372.8	372.7
35°	356.5	356.8	357.1	357.2	357.2	357.2	357.2	357.2
37.5°	339.5	339.9	340.3	340.5	340.5	340.4	340.4	340.3
40°	328.0	328.4	328.9	329.2	329.4	329.6	329.8	330.0
42.5°	317.5	318.0	318.5	318.7	318.8	318.8	318.8	318.9
45°	300.5	301.2	301.9	302.3	302.4	302.5	302.6	302.7
47.5°	282.9	284.0	285.0	285.6	285.9	286.1	286.3	286.5
50°	271.2	272.4	273.5	274.2	274.5	274.8	275.1	275.4
52.5°	259.6	260.8	262.0	262.7	262.9	263.2	263.4	263.6
55°	241.2	242.3	243.5	244.2	244.6	245.0	245.5	245.9
57.5°	223.0	224.3	225.6	226.4	226.7	227.0	227.4	227.7
60°	210.6	212.1	213.7	214.6	214.9	215.2	215.5	215.8
62.5°	198.0	199.7	201.4	202.4	202.8	203.2	203.6	204.0
65°	179.2	180.7	182.2	183.2	183.6	184.0	184.5	184.9
67.5°	159.9	161.7	163.6	164.8	165.3	165.9	166.4	166.9
70°	146.7	148.7	150.6	151.9	152.5	153.1	153.7	154.4
72.5°	134.5	136.6	138.7	140.0	140.4	140.9	141.3	141.8
75°	116.0	118.0	120.1	121.3	121.9	122.4	122.9	123.4
77.5°	97.4	99.7	101.9	103.3	103.7	104.1	104.5	104.9
80°	86.3	88.6	90.8	92.2	92.6	93.0	93.4	93.8
82.5°	75.8	78.0	80.2	81.6	82.4	83.1	83.8	84.6
85°	61.4	63.6	65.9	67.4	68.2	69.1	69.9	70.7
87.5°	51.7	54.2	56.7	58.4	59.1	59.9	60.7	61.4
90°	52.9	55.8	58.8	61.4	62.2	62.9	64.2	64.9
92.5°	142.1	116.6	100.8	93.8	87.2	86.6	86.5	86.3
95°	448.4	363.9	296.0	249.6	209.8	193.4	189.6	181.2
97.5°	646.6	587.9	521.7	456.5	422.0	390.7	374.9	368.3
100°	735.5	709.7	653.1	595.2	556.4	516.0	495.5	487.0
102.5°	764.4	783.8	757.6	718.8	677.4	648.8	626.4	620.2
105°	743.7	823.9	851.1	846.2	828.6	810.5	799.8	793.7
107.5°	677.1	783.4	849.9	881.0	890.9	891.4	888.3	884.4
110°	628.0	738.3	820.7	870.5	896.9	908.5	913.2	913.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	588.9	693.7	776.9	835.4	873.6	892.9	903.6	908.4
115°	539.7	629.9	709.9	773.3	818.5	846.4	863.0	871.1
117.5°	506.9	584.9	653.9	712.2	757.4	786.4	802.9	808.2
120°	489.0	559.2	623.7	675.1	717.9	745.9	761.9	767.1
122.5°	475.0	540.1	597.7	645.8	684.1	709.8	725.8	730.6
125°	454.9	514.7	566.0	608.1	640.6	664.5	677.5	683.7
127.5°	434.2	490.1	537.9	577.4	607.0	628.2	640.7	643.8
130°	421.5	473.2	519.1	557.2	586.2	605.5	617.5	621.4
132.5°	408.7	457.1	498.9	535.6	564.5	583.8	594.7	599.0
135°	391.4	432.1	469.9	503.4	529.0	548.3	559.1	563.0
137.5°	376.9	410.0	441.5	470.0	492.9	510.4	520.3	524.4
140°	368.8	396.8	424.1	448.9	470.4	485.6	494.6	497.9
142.5°	361.8	385.5	409.1	430.5	448.8	461.8	470.3	473.1
145°	353.0	371.2	389.4	405.2	419.3	429.4	436.1	438.8
147.5°	345.0	359.5	373.3	385.1	396.1	404.0	407.9	409.1
150°	340.5	353.1	363.9	374.3	382.9	389.9	392.2	392.9
152.5°	336.0	347.2	357.1	365.1	372.3	377.8	380.1	380.7
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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