

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: P333183-935

Luminaire Tested: **S125DIP-S610D810U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333183-935
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-S610D810U935-4F0-1E-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: 4572.6 lumens
Efficiency: N/A
Efficacy: 119.1 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: General Diffuse

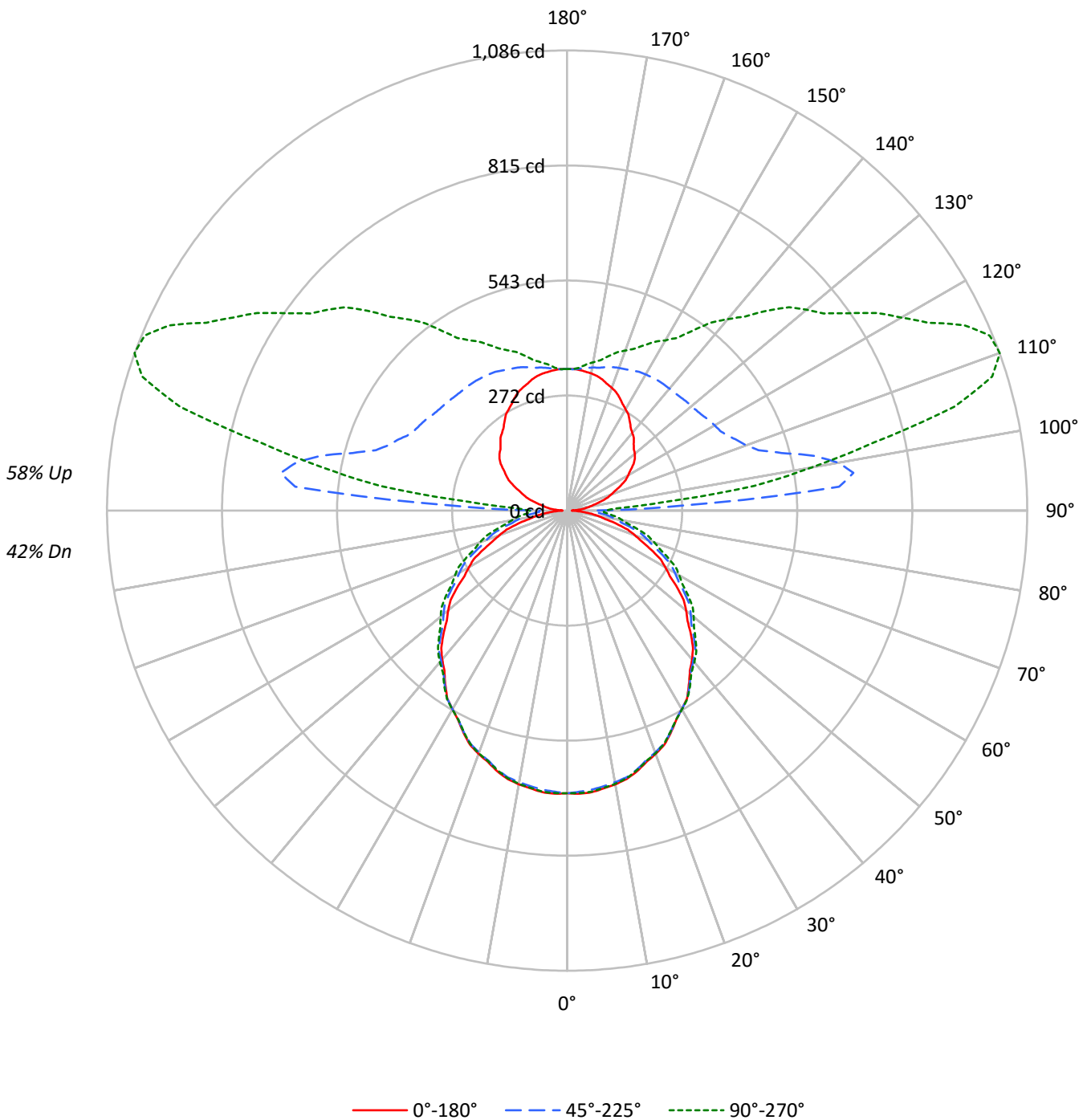
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4310	4310	4310
5°	4318	4229	4243
10°	4288	4154	4148
15°	4236	4064	4027
20°	4168	3952	3906
25°	4086	3833	3757
30°	3987	3701	3622
35°	3894	3580	3497
40°	3800	3452	3372
45°	3693	3344	3261
50°	3592	3225	3163
55°	3469	3114	3048
60°	3336	2986	2931
65°	3196	2854	2799
70°	3036	2672	2663
75°	2788	2496	2496
80°	2461	2284	2314
85°	2155	2142	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.4
10°-20°	179.1	3.9
20°-30°	266.4	5.8
30°-40°	315.5	6.9
40°-50°	326.2	7.1
50°-60°	300.5	6.6
60°-70°	242.9	5.3
70°-80°	162.7	3.6
80°-90°	86.2	1.9
90°-100°	289.4	6.3
100°-110°	555.2	12.1
110°-120°	511.7	11.2
120°-130°	409.0	8.9
130°-140°	323.4	7.1
140°-150°	240.8	5.3
150°-160°	168.7	3.7
160°-170°	99.4	2.2
170°-180°	32.3	0.7
0°-30°	508.6	11.1
0°-40°	824.1	18.0
0°-60°	1450.8	31.7
0°-90°	1942.7	42.5
90°-120°	1356.3	29.7
90°-150°	2329.5	50.9
90°-180°	2630.0	57.5
0°-180°	4572.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	667	666	661	666	666	63
15°	637	638	633	637	635	179
25°	579	581	577	579	576	266
35°	501	505	504	506	506	313
45°	413	420	423	428	428	318
55°	317	328	338	345	348	284
65°	218	234	249	259	262	217
75°	120	138	158	171	175	128
85°	36	58	80	94	100	38
90°	11	38	64	82	89	8
95°	31	91	644	332	225	30
105°	82	123	524	1010	946	86
115°	140	173	417	881	1035	138
125°	191	224	391	697	812	169
135°	222	267	378	577	667	172
145°	258	295	374	469	519	161
155°	294	316	365	412	430	135
165°	320	329	350	371	377	90
175°	333	333	336	340	339	32
180°	334	334	334	334	334	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	668.8	668.6	668.4	668.1	667.9	667.4	666.6	665.7	665.0	664.1	665.0
5°	667.3	666.9	666.7	666.4	666.1	665.5	664.4	663.4	662.4	661.3	662.5
7.5°	661.3	661.2	661.2	661.0	660.9	660.3	659.3	658.2	657.2	656.2	657.1
10°	656.2	656.2	656.2	656.2	656.2	655.6	654.4	653.2	652.0	650.9	651.9
12.5°	648.8	648.9	649.0	649.2	649.3	648.8	647.9	647.0	646.1	645.1	645.9
15°	637.1	637.3	637.5	637.6	637.7	637.3	636.3	635.2	634.3	633.3	634.1
17.5°	622.0	622.2	622.6	622.8	623.2	622.8	621.8	620.8	619.7	618.7	619.4
20°	611.0	611.3	611.6	611.9	612.2	611.8	610.8	609.8	608.7	607.7	608.1
22.5°	598.5	599.0	599.5	600.0	600.5	600.2	599.1	598.0	596.8	595.7	596.2
25°	578.9	579.4	579.8	580.2	580.7	580.5	579.6	578.8	577.8	577.0	577.6
27.5°	557.2	557.8	558.5	559.1	559.8	559.6	558.6	557.7	556.6	555.7	556.0
30°	541.0	541.9	542.8	543.6	544.5	544.5	543.6	542.8	541.9	541.0	541.3
32.5°	526.3	527.1	527.9	528.7	529.3	529.4	528.8	528.1	527.5	526.8	527.2
35°	501.1	502.1	503.2	504.1	505.1	505.5	505.1	504.5	504.1	503.7	504.1
37.5°	475.9	476.8	477.7	478.6	479.6	479.9	479.8	479.7	479.5	479.4	479.9
40°	458.6	459.8	460.9	462.1	463.2	463.7	463.6	463.5	463.3	463.1	463.7
42.5°	439.7	441.3	442.7	444.3	445.8	446.7	447.0	447.4	447.6	448.0	448.7
45°	412.8	414.4	415.9	417.6	419.2	420.3	421.1	421.8	422.5	423.3	424.3
47.5°	385.2	386.7	388.1	389.6	391.2	392.4	393.7	394.9	396.2	397.4	399.0
50°	366.4	367.9	369.5	371.2	372.7	374.4	375.9	377.5	379.1	380.7	382.4
52.5°	346.5	348.4	350.3	352.3	354.2	356.2	358.2	360.1	362.1	363.9	365.7
55°	317.3	319.6	321.9	324.3	326.6	328.9	331.2	333.6	335.9	338.2	339.8
57.5°	287.5	290.2	293.0	295.8	298.6	301.4	304.0	306.7	309.4	312.0	313.8
60°	267.6	270.4	273.4	276.3	279.2	282.1	285.0	287.9	290.8	293.7	295.9
62.5°	248.2	251.1	254.0	256.9	259.8	262.9	266.0	269.1	272.2	275.4	277.8
65°	218.5	221.9	225.2	228.5	231.9	235.3	238.8	242.3	245.7	249.3	251.4
67.5°	190.5	193.7	196.9	200.2	203.4	206.8	210.3	213.9	217.4	221.0	223.6
70°	170.0	173.4	176.8	180.1	183.5	187.0	190.8	194.6	198.4	202.2	204.9
72.5°	150.2	153.7	157.1	160.6	164.0	167.8	171.9	176.1	180.2	184.3	187.4
75°	120.4	124.2	127.9	131.7	135.5	139.7	144.4	149.0	153.7	158.3	161.2
77.5°	91.7	96.1	100.5	104.8	109.2	113.6	118.0	122.5	127.0	131.5	134.7
80°	74.0	78.3	82.7	87.0	91.4	96.0	101.0	105.9	110.8	115.8	119.0
82.5°	57.7	62.3	66.9	71.5	76.1	80.9	85.9	91.0	96.1	101.2	104.2
85°	36.0	40.8	45.5	50.4	55.2	60.1	65.2	70.3	75.3	80.5	83.7
87.5°	20.6	25.3	30.2	35.2	40.1	45.2	50.2	55.4	60.5	65.8	69.2
90°	11.1	16.4	22.5	28.5	34.4	40.6	46.2	52.5	58.1	64.4	68.4
92.5°	17.7	23.7	33.7	46.3	62.2	86.5	128.4	195.0	267.0	268.6	230.5
95°	30.7	35.2	44.3	55.5	74.1	108.7	185.7	338.8	529.5	644.2	634.6
97.5°	44.6	48.8	56.0	66.8	83.5	109.4	161.9	275.2	474.3	681.5	786.0
100°	54.3	58.7	64.5	74.9	90.7	114.9	158.5	250.7	425.0	649.8	821.1
102.5°	65.1	68.7	73.7	84.5	99.0	122.3	161.6	239.7	387.4	596.5	796.3
105°	82.0	84.3	90.0	99.0	112.1	134.3	168.3	232.6	349.4	524.1	720.1
107.5°	98.4	101.8	106.9	114.4	127.6	147.7	180.5	236.0	331.8	473.6	643.3
110°	110.3	113.4	117.8	125.6	137.4	157.8	189.5	240.0	325.5	449.4	599.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	122.7	125.4	129.0	136.4	147.9	167.6	198.0	245.7	323.6	434.5	565.6
115°	139.9	142.2	145.3	152.4	163.5	182.7	211.5	254.3	322.6	417.3	528.3
117.5°	155.4	158.1	160.9	167.6	179.8	198.2	225.3	264.4	324.2	407.3	504.7
120°	166.2	168.7	171.8	178.2	190.1	208.9	235.7	271.5	326.6	402.0	491.3
122.5°	176.9	178.7	181.0	187.3	200.0	218.5	245.3	279.3	328.4	397.2	479.4
125°	191.1	192.3	195.5	201.5	214.1	233.0	258.1	290.0	331.9	390.7	463.0
127.5°	201.6	203.5	207.7	215.2	228.7	247.3	271.0	300.1	336.6	386.1	447.7
130°	208.6	210.5	215.8	224.4	238.3	256.8	279.7	307.3	339.7	383.4	438.0
132.5°	213.5	216.0	222.5	232.3	246.9	265.2	287.7	313.1	342.9	381.3	429.4
135°	222.1	224.6	232.6	243.2	257.2	275.9	297.7	321.0	346.9	378.2	418.4
137.5°	233.1	235.0	242.4	253.0	266.7	285.7	305.1	326.9	351.1	376.7	409.1
140°	239.0	241.0	249.1	259.8	272.6	290.8	310.6	330.9	352.6	375.7	404.2
142.5°	246.5	247.9	255.3	266.0	278.1	295.2	313.7	332.8	353.3	375.1	400.2
145°	257.8	259.0	265.6	274.9	286.9	302.3	319.8	336.6	354.8	374.3	395.2
147.5°	269.0	269.8	275.6	284.4	294.9	308.5	323.8	339.1	355.4	372.6	390.5
150°	276.0	277.3	282.1	290.8	300.2	311.7	326.5	340.6	355.4	370.9	387.1
152.5°	283.5	284.4	288.5	296.2	305.1	315.5	329.2	341.7	354.9	368.8	383.3
155°	293.5	293.5	297.6	304.3	311.0	320.5	331.9	342.7	353.4	364.9	377.0
157.5°	302.4	302.3	305.5	311.3	317.2	324.3	334.2	343.4	351.7	360.8	371.1
160°	308.3	307.6	310.4	315.0	320.5	326.5	335.3	343.4	350.1	358.2	366.3
162.5°	313.1	312.5	315.2	319.3	323.6	328.6	336.3	342.8	348.4	354.9	361.9
165°	320.5	319.1	321.2	324.5	327.2	331.2	336.6	342.0	346.0	350.1	355.4
167.5°	325.3	324.6	325.8	327.7	329.6	332.2	336.6	340.4	342.2	345.3	349.1
170°	328.6	327.9	328.6	329.8	331.2	333.2	336.6	339.3	340.6	342.7	345.3
172.5°	330.7	329.5	330.1	331.5	332.3	333.2	336.0	338.2	338.5	339.4	341.6
175°	333.2	331.9	332.6	333.2	333.2	333.2	335.3	336.6	336.0	336.0	336.6
177.5°	334.4	333.4	333.4	333.9	333.4	333.4	334.4	335.0	333.9	333.9	334.4
180°	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	665.7	666.6	667.4	667.7	667.6	667.5	667.4	667.3
5°	663.7	664.9	666.0	666.5	666.4	666.2	666.1	666.0
7.5°	658.1	659.2	660.2	660.6	660.5	660.4	660.2	660.0
10°	653.0	653.9	655.0	655.4	655.3	655.1	655.0	654.8
12.5°	646.7	647.5	648.3	648.5	648.1	647.7	647.4	647.0
15°	635.0	635.8	636.7	636.9	636.3	635.7	635.2	634.6
17.5°	620.1	620.7	621.4	621.6	621.2	620.9	620.5	620.2
20°	608.6	609.1	609.5	609.7	609.7	609.7	609.7	609.7
22.5°	596.8	597.4	597.9	598.0	597.6	597.3	596.9	596.6
25°	578.2	578.8	579.3	579.3	578.5	577.8	577.0	576.4
27.5°	556.5	556.9	557.3	557.3	557.1	556.8	556.6	556.3
30°	541.6	541.9	542.2	542.3	542.1	541.9	541.8	541.7
32.5°	527.4	527.7	528.1	528.1	528.0	527.8	527.7	527.5
35°	504.5	505.1	505.5	505.7	505.7	505.7	505.7	505.7
37.5°	480.5	481.1	481.7	482.0	481.9	481.8	481.8	481.7
40°	464.3	464.9	465.5	465.9	466.2	466.5	466.8	467.1
42.5°	449.4	450.0	450.7	451.2	451.3	451.3	451.3	451.4
45°	425.2	426.3	427.3	427.9	428.1	428.2	428.3	428.5
47.5°	400.5	401.9	403.4	404.3	404.7	404.9	405.3	405.6
50°	383.9	385.6	387.1	388.1	388.6	389.0	389.4	389.9
52.5°	367.4	369.1	370.8	371.9	372.2	372.5	372.8	373.2
55°	341.4	343.0	344.6	345.7	346.3	346.9	347.4	348.0
57.5°	315.7	317.5	319.3	320.5	321.0	321.4	321.8	322.3
60°	298.1	300.2	302.5	303.8	304.2	304.6	305.1	305.5
62.5°	280.3	282.7	285.1	286.5	287.1	287.7	288.2	288.8
65°	253.6	255.8	258.0	259.3	259.9	260.5	261.1	261.7
67.5°	226.3	228.9	231.5	233.2	234.0	234.8	235.6	236.3
70°	207.7	210.4	213.2	215.0	215.9	216.7	217.7	218.5
72.5°	190.4	193.3	196.3	198.1	198.8	199.4	200.1	200.7
75°	164.1	167.0	170.0	171.8	172.5	173.2	173.9	174.7
77.5°	137.8	141.1	144.3	146.2	146.7	147.3	147.9	148.5
80°	122.2	125.4	128.5	130.4	131.0	131.6	132.2	132.8
82.5°	107.3	110.4	113.5	115.5	116.6	117.6	118.6	119.7
85°	86.9	90.1	93.2	95.4	96.6	97.7	98.9	100.0
87.5°	72.7	76.2	79.6	82.1	83.1	84.1	85.3	86.3
90°	72.4	76.5	80.5	84.0	85.1	86.0	87.7	88.8
92.5°	177.3	147.8	129.7	121.7	114.2	113.6	113.7	113.6
95°	538.2	439.0	359.5	305.1	258.2	239.0	234.7	224.9
97.5°	771.5	702.7	625.2	548.5	507.9	471.2	452.7	445.1
100°	876.0	846.1	779.8	711.8	666.2	618.5	594.5	584.6
102.5°	909.8	933.1	902.8	857.2	808.4	774.8	748.6	741.4
105°	884.7	979.8	1012.3	1006.9	986.4	965.2	952.7	945.6
107.5°	805.6	931.4	1010.4	1047.4	1059.3	1060.0	1056.4	1052.0
110°	747.2	877.9	975.5	1034.7	1066.0	1079.8	1085.5	1086.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	700.7	824.8	923.4	992.7	1038.0	1061.0	1073.8	1079.6
115°	642.0	749.0	843.9	918.9	972.3	1005.6	1025.3	1034.8
117.5°	602.8	695.2	777.1	846.2	899.7	934.0	953.7	960.1
120°	581.3	664.5	741.1	802.0	852.6	885.9	904.9	911.2
122.5°	564.4	641.6	710.0	767.1	812.4	842.8	861.9	867.6
125°	540.1	611.1	672.0	721.9	760.4	788.8	804.3	811.8
127.5°	515.2	581.4	638.3	685.1	720.1	745.4	760.2	764.1
130°	499.9	561.2	615.8	660.9	695.3	718.2	732.4	737.2
132.5°	484.4	541.9	591.6	635.1	669.3	692.2	705.2	710.3
135°	463.4	511.8	556.7	596.4	626.8	649.7	662.5	667.4
137.5°	445.9	485.2	522.7	556.5	583.6	604.3	616.1	621.1
140°	436.0	469.2	501.9	531.2	556.7	574.8	585.5	589.4
142.5°	427.5	455.6	483.7	509.2	530.9	546.3	556.5	559.8
145°	416.8	438.4	460.0	478.9	495.6	507.6	515.6	518.8
147.5°	407.3	424.4	440.7	454.7	467.7	477.1	481.7	483.2
150°	401.9	416.7	429.5	441.7	451.9	460.2	463.0	463.8
152.5°	396.5	409.7	421.5	430.8	439.4	445.9	448.6	449.3
155°	388.5	399.2	408.6	416.0	422.8	427.5	429.5	430.2
157.5°	380.4	389.3	396.5	402.3	407.6	411.5	413.4	413.2
160°	375.0	381.7	388.5	393.1	397.9	401.2	402.6	401.9
162.5°	369.0	375.2	380.9	385.0	388.7	391.5	391.8	391.7
165°	360.8	365.6	369.6	373.0	375.7	377.0	377.0	377.0
167.5°	353.0	356.1	359.2	361.6	363.0	364.2	363.7	363.5
170°	348.7	350.8	352.8	354.1	355.4	356.1	356.1	355.4
172.5°	343.9	345.9	347.4	348.2	348.4	349.7	348.6	347.9
175°	338.6	338.6	340.0	340.0	340.0	340.6	339.3	338.6
177.5°	335.0	335.5	335.5	335.5	335.0	335.5	333.9	333.9
180°	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9

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