

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: P333181-935

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333181-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
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-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4858.0 lumens
Efficiency: N/A
Efficacy: 126.5 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

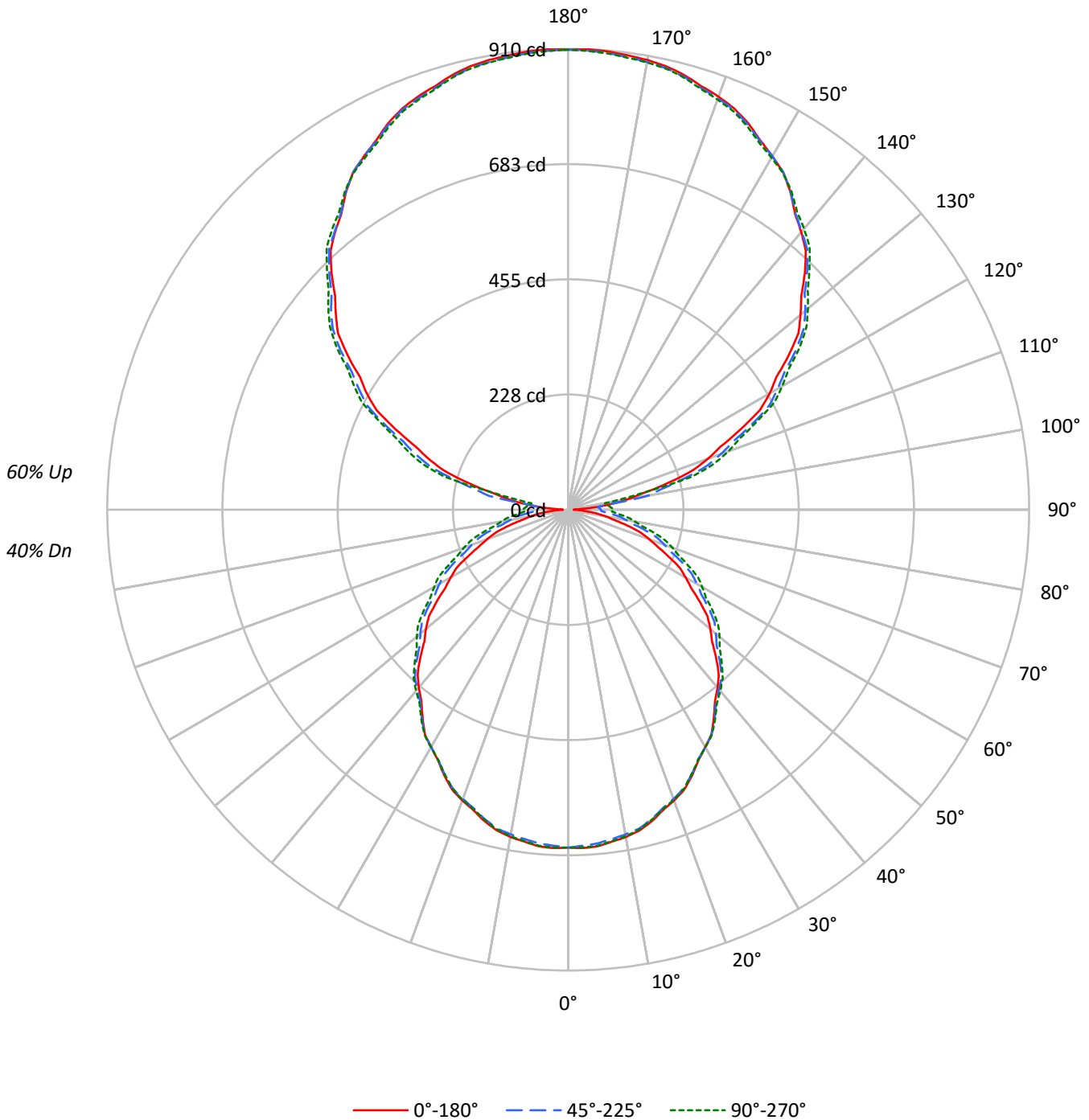
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	95	90	86	83	86	82	79	76	67	65	63	53	52	50	41	39	38	32
2	86	79	72	67	78	72	66	62	59	55	51	46	44	41	35	33	32	27
3	78	69	61	56	71	63	56	51	51	47	43	41	38	35	31	29	27	22
4	72	61	53	47	65	55	49	43	46	40	36	36	33	30	28	25	23	19
5	66	54	46	40	59	49	42	37	41	35	31	32	29	25	25	22	20	16
6	60	48	40	34	55	44	37	32	36	31	27	29	25	22	22	20	17	14
7	56	43	36	30	51	40	33	28	33	28	24	27	23	20	20	18	15	13
8	52	39	32	26	47	36	29	25	30	25	21	24	20	17	19	16	14	11
9	48	36	28	23	44	33	26	22	27	22	19	22	18	15	17	14	12	10
10	45	33	26	21	41	30	24	19	25	20	17	21	17	14	16	13	11	9

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	1.3
10°-20°	179.1	3.7
20°-30°	266.4	5.5
30°-40°	315.5	6.5
40°-50°	326.2	6.7
50°-60°	300.5	6.2
60°-70°	242.9	5.0
70°-80°	162.7	3.3
80°-90°	86.3	1.8
90°-100°	80.3	1.7
100°-110°	238.3	4.9
110°-120°	392.4	8.1
120°-130°	486.8	10.0
130°-140°	515.1	10.6
140°-150°	479.2	9.9
150°-160°	386.7	8.0
160°-170°	250.1	5.1
170°-180°	86.3	1.8
0°-30°	508.6	10.5
0°-40°	824.1	17.0
0°-60°	1450.8	29.9
0°-90°	1942.7	40.0
90°-120°	711.0	14.6
90°-150°	2192.2	45.1
90°-180°	2915.0	60.0
0°-180°	4858.0	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	90	9
95°	47	61	58	76	81	56
105°	204	217	237	249	254	216
115°	376	384	401	410	410	372
125°	531	536	548	556	557	474
135°	660	664	667	674	674	509
145°	765	766	766	769	768	478
155°	842	838	839	841	836	388
165°	888	884	885	888	883	251
175°	908	905	905	910	904	86
180°	908	908	908	908	908	



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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	25.4	30.3	35.2	40.1	45.1	50.3	55.4	60.6	65.8	69.2
90°	11.1	17.0	22.8	28.7	34.5	40.5	46.4	52.4	58.5	64.4	68.5
92.5°	19.8	23.2	26.7	30.2	33.7	38.4	44.3	50.4	56.3	62.3	66.3
95°	46.9	50.2	53.6	56.9	60.2	61.5	60.8	60.0	59.2	58.5	62.5
97.5°	87.8	92.0	96.3	100.5	104.7	103.6	97.0	90.6	84.1	77.6	76.5
100°	119.7	123.1	126.7	130.2	133.6	138.0	143.3	148.5	153.8	159.0	139.8
102.5°	152.0	155.4	158.8	162.1	165.6	169.7	174.6	179.4	184.3	189.2	188.0
105°	203.9	206.8	209.7	212.6	215.5	219.2	223.5	227.9	232.3	236.6	239.5
107.5°	257.7	259.7	261.7	263.6	265.6	268.9	273.4	277.8	282.3	286.8	289.7
110°	292.7	294.5	296.3	298.0	299.7	302.8	307.2	311.5	315.9	320.3	322.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	326.1	328.0	329.7	331.4	333.2	336.1	340.3	344.4	348.5	352.7	354.7
115°	375.6	377.4	379.1	380.9	382.7	385.6	389.4	393.4	397.3	401.2	403.3
117.5°	426.8	427.4	428.1	428.7	429.4	431.8	435.9	440.1	444.2	448.3	450.0
120°	459.1	459.4	459.7	459.9	460.3	462.3	466.1	469.9	473.7	477.5	479.7
122.5°	487.2	487.9	488.7	489.5	490.3	492.3	495.8	499.2	502.7	506.1	508.2
125°	531.2	532.1	533.0	533.9	534.8	536.7	539.6	542.5	545.4	548.4	550.1
127.5°	572.7	573.3	573.9	574.5	575.1	576.5	578.9	581.2	583.4	585.7	587.5
130°	598.6	599.2	599.8	600.4	601.0	602.4	604.5	606.7	608.9	611.1	612.7
132.5°	623.9	624.7	625.5	626.4	627.2	628.3	629.5	630.8	632.0	633.3	635.2
135°	660.5	661.2	662.0	662.8	663.5	664.3	665.0	665.7	666.4	667.1	668.7
137.5°	694.1	694.8	695.5	696.2	696.8	697.2	697.5	697.8	697.9	698.2	699.9
140°	715.7	716.0	716.4	716.6	717.0	717.1	717.0	717.0	717.0	717.0	718.9
142.5°	735.6	735.7	735.8	735.9	735.9	736.1	736.3	736.6	736.8	737.0	738.5
145°	764.9	765.1	765.2	765.3	765.5	765.6	765.6	765.6	765.6	765.6	766.5
147.5°	789.8	789.8	789.7	789.6	789.6	789.6	789.8	790.0	790.2	790.4	790.7
150°	806.0	805.7	805.4	805.1	804.8	804.8	805.1	805.4	805.7	806.0	806.3
152.5°	821.7	821.0	820.3	819.7	819.0	818.8	819.1	819.4	819.7	820.0	820.3
155°	841.7	840.8	839.9	839.0	838.1	837.8	838.1	838.4	838.7	839.0	839.4
157.5°	857.1	856.6	856.1	855.6	855.0	854.7	854.8	854.8	854.8	854.9	855.3
160°	868.0	867.0	866.2	865.2	864.4	864.0	864.1	864.3	864.4	864.5	865.1
162.5°	876.6	875.6	874.8	873.8	873.0	872.6	872.7	872.9	873.1	873.2	874.0
165°	888.1	887.3	886.3	885.5	884.5	884.2	884.3	884.5	884.6	884.8	885.7
167.5°	896.7	895.9	894.9	894.0	893.0	892.7	892.8	892.9	893.1	893.3	894.3
170°	901.6	900.5	899.5	898.5	897.4	897.0	897.1	897.2	897.4	897.6	898.8
172.5°	904.8	903.8	902.8	901.7	900.6	900.3	900.5	900.8	901.0	901.3	902.4
175°	908.4	907.4	906.5	905.7	904.7	904.4	904.5	904.7	904.8	905.0	906.2
177.5°	910.0	909.2	908.5	907.8	907.1	906.8	906.9	907.0	907.1	907.2	908.1
180°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4



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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°	72.8	76.2	79.7	82.1	83.1	84.2	85.3	86.4
90°	72.6	76.7	80.8	83.6	85.1	86.5	88.0	89.5
92.5°	70.3	74.2	78.3	80.8	82.1	83.3	84.5	85.8
95°	66.4	70.3	74.3	76.8	77.8	78.9	79.8	80.8
97.5°	75.3	74.1	72.9	72.8	73.9	74.8	75.9	76.8
100°	120.5	101.3	82.1	72.6	72.8	73.1	73.4	73.7
102.5°	186.7	185.4	184.1	178.8	169.5	160.2	150.9	141.6
105°	242.5	245.4	248.2	250.1	251.0	251.9	252.8	253.7
107.5°	292.7	295.6	298.4	300.1	300.6	301.0	301.5	302.0
110°	324.9	327.2	329.5	331.3	332.4	333.6	334.8	336.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	356.8	358.9	360.9	362.4	363.3	364.0	364.8	365.7
115°	405.3	407.3	409.3	410.3	410.3	410.3	410.3	410.2
117.5°	451.7	453.4	455.1	456.2	456.8	457.4	458.1	458.7
120°	481.8	484.0	486.2	487.3	487.4	487.6	487.7	487.8
122.5°	510.2	512.3	514.3	515.3	515.3	515.3	515.4	515.4
125°	551.8	553.5	555.3	556.2	556.6	556.8	557.1	557.3
127.5°	589.4	591.2	593.0	593.8	593.5	593.2	593.0	592.7
130°	614.2	615.9	617.4	618.2	618.2	618.2	618.1	618.1
132.5°	637.1	639.0	641.0	642.0	641.8	641.6	641.5	641.4
135°	670.3	671.9	673.5	674.2	674.0	673.8	673.6	673.5
137.5°	701.7	703.5	705.2	706.0	705.8	705.7	705.5	705.2
140°	720.8	722.7	724.7	725.5	725.1	724.8	724.5	724.2
142.5°	739.9	741.3	742.7	743.3	743.0	742.7	742.4	742.0
145°	767.3	768.2	769.1	769.4	769.0	768.7	768.4	768.1
147.5°	791.2	791.6	792.0	791.8	791.0	790.2	789.4	788.6
150°	806.6	806.9	807.2	806.8	805.7	804.7	803.7	802.6
152.5°	820.6	820.9	821.2	820.8	819.8	818.7	817.7	816.7
155°	839.9	840.3	840.8	840.4	839.2	838.0	836.8	835.6
157.5°	855.8	856.4	856.8	856.4	855.2	854.0	852.8	851.6
160°	865.7	866.3	866.9	866.7	865.5	864.3	863.1	861.9
162.5°	874.9	875.7	876.5	876.3	874.9	873.7	872.4	871.1
165°	886.6	887.4	888.4	888.2	887.0	885.8	884.6	883.4
167.5°	895.4	896.5	897.6	897.4	896.0	894.8	893.4	892.1
170°	899.9	901.1	902.3	902.2	901.0	899.6	898.2	896.9
172.5°	903.4	904.6	905.7	905.5	904.1	902.8	901.5	900.1
175°	907.3	908.5	909.7	909.6	908.4	907.0	905.7	904.3
177.5°	909.0	909.7	910.6	910.6	909.6	908.6	907.7	906.7
180°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4

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