

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: P333182-935

Luminaire Tested: **S125DIP-S610D810U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333182-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
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-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4482.7 lumens
Efficiency: N/A
Efficacy: 116.7 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

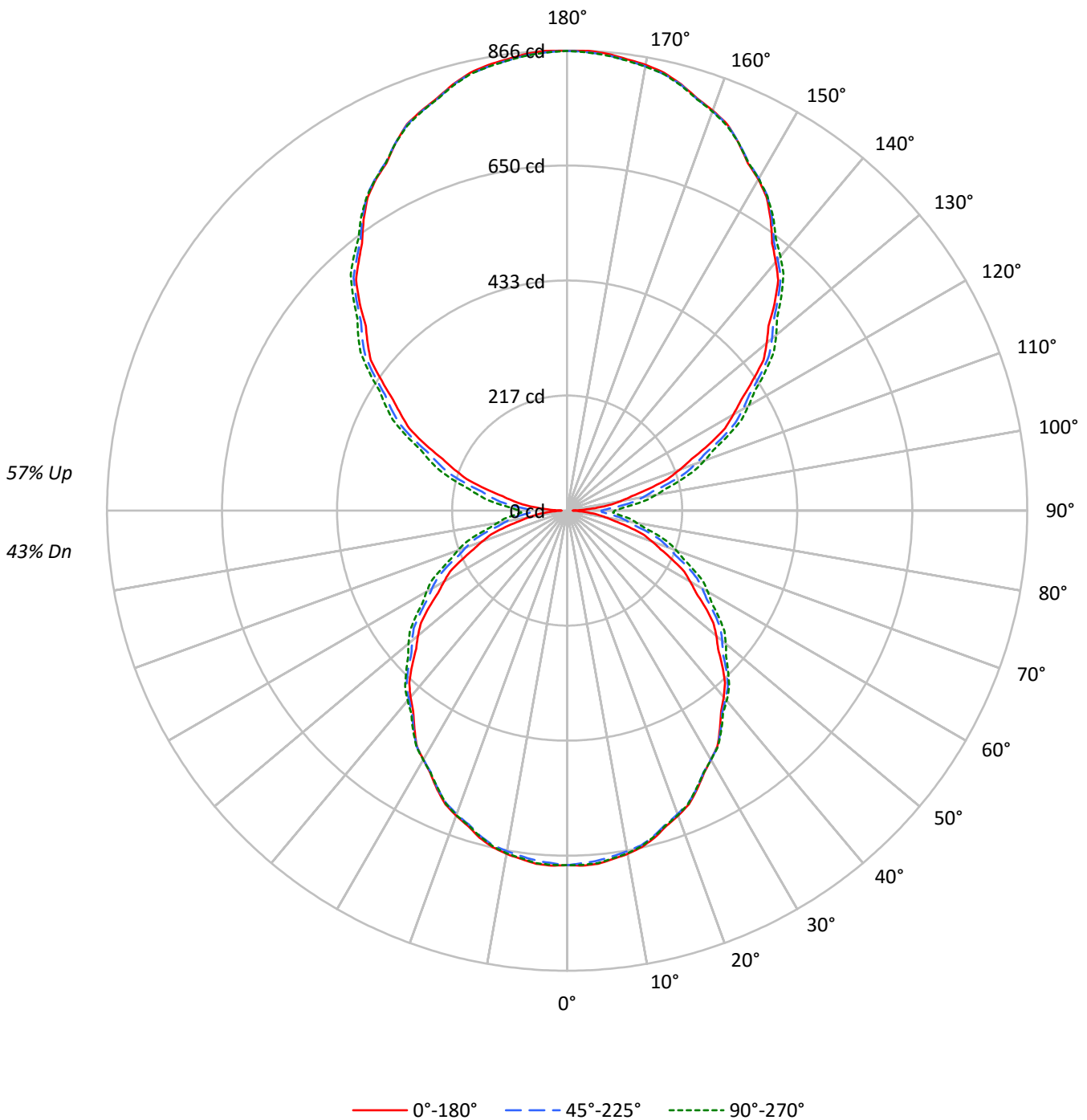
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	43
1	96	91	87	83	87	83	80	77	69	66	64	55	54	52	43	42	41	35
2	87	79	73	67	79	72	67	62	60	56	52	48	45	43	38	36	34	29
3	79	69	62	56	72	64	57	52	53	48	44	42	39	36	33	31	29	24
4	72	61	53	47	66	56	49	44	47	41	37	38	34	31	29	27	24	21
5	66	54	46	40	60	50	43	37	42	36	32	34	30	26	26	24	21	18
6	61	49	40	35	55	45	38	32	37	32	28	30	26	23	24	21	19	16
7	56	44	36	30	51	40	33	28	34	28	24	28	23	20	22	19	16	14
8	52	40	32	27	47	37	30	25	31	25	21	25	21	18	20	17	15	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	15	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	4.0
20°-30°	266.4	5.9
30°-40°	315.5	7.0
40°-50°	326.2	7.3
50°-60°	300.5	6.7
60°-70°	242.9	5.4
70°-80°	162.7	3.6
80°-90°	86.3	1.9
90°-100°	105.3	2.3
100°-110°	206.0	4.6
110°-120°	313.2	7.0
120°-130°	394.7	8.8
130°-140°	433.2	9.7
140°-150°	420.1	9.4
150°-160°	351.8	7.8
160°-170°	233.9	5.2
170°-180°	81.8	1.8
0°-30°	508.6	11.3
0°-40°	824.1	18.4
0°-60°	1450.8	32.4
0°-90°	1942.7	43.3
90°-120°	624.5	13.9
90°-150°	1872.5	41.8
90°-180°	2540.0	56.7
0°-180°	4482.7	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°	52	71	100	118	125	53
105°	159	174	197	213	221	170
115°	294	302	320	330	334	291
125°	426	430	443	452	455	381
135°	552	556	561	569	570	425
145°	668	670	672	675	676	417
155°	763	763	764	766	763	351
165°	830	829	830	832	828	234
175°	863	861	860	864	860	82
180°	865	865	865	865	865	



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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°	25.7	30.8	36.0	41.2	46.2	52.0	58.4	64.7	71.0	77.4	81.6
95°	52.3	56.3	60.4	64.5	68.6	73.9	80.2	86.7	93.2	99.6	103.8
97.5°	80.4	83.9	87.5	91.0	94.5	99.7	106.5	113.4	120.2	127.0	131.0
100°	101.4	104.5	107.5	110.6	113.7	118.5	125.1	131.6	138.3	144.9	149.3
102.5°	124.1	127.5	131.0	134.3	137.8	142.2	147.7	153.3	158.8	164.4	168.8
105°	159.4	162.5	165.6	168.6	171.7	175.8	181.2	186.4	191.7	196.9	200.7
107.5°	198.5	201.2	203.9	206.6	209.4	213.2	218.0	222.9	227.8	232.6	236.0
110°	225.4	227.9	230.4	232.9	235.4	238.9	243.4	247.9	252.4	256.9	260.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	253.4	255.2	257.0	258.7	260.5	263.7	268.2	272.8	277.2	281.8	284.6
115°	294.1	295.8	297.3	298.9	300.6	303.4	307.5	311.6	315.6	319.7	322.2
117.5°	334.9	335.9	336.8	337.8	338.6	341.0	344.9	348.8	352.6	356.5	359.0
120°	360.8	362.0	363.2	364.3	365.5	367.8	371.3	374.8	378.3	381.9	384.3
122.5°	388.2	388.7	389.2	389.7	390.1	392.2	395.8	399.4	403.0	406.7	408.9
125°	426.1	426.9	427.6	428.3	429.1	431.0	434.0	437.1	440.1	443.2	445.3
127.5°	465.8	466.2	466.6	466.9	467.3	468.7	471.3	473.9	476.5	479.0	481.0
130°	490.1	490.7	491.3	491.9	492.5	494.0	496.3	498.6	500.9	503.3	505.1
132.5°	513.8	515.0	516.2	517.4	518.6	520.0	521.4	523.0	524.4	526.0	527.9
135°	552.1	552.8	553.5	554.3	555.1	556.0	557.2	558.4	559.5	560.7	562.6
137.5°	588.0	588.8	589.5	590.2	591.0	591.8	592.6	593.4	594.3	595.1	597.0
140°	610.6	611.4	612.1	612.9	613.6	614.3	614.9	615.4	616.0	616.6	618.5
142.5°	633.8	634.3	634.8	635.3	635.8	636.4	637.0	637.6	638.2	638.8	640.3
145°	667.9	668.3	668.7	669.3	669.7	670.1	670.5	671.0	671.5	671.9	672.6
147.5°	698.7	699.0	699.4	699.7	700.0	700.3	700.8	701.1	701.5	701.8	702.4
150°	719.7	719.5	719.5	719.3	719.1	719.4	720.0	720.6	721.2	721.8	721.8
152.5°	736.9	737.2	737.4	737.6	737.8	738.0	738.2	738.5	738.7	739.0	739.3
155°	763.4	763.4	763.4	763.4	763.4	763.5	763.7	763.9	764.0	764.1	764.7
157.5°	787.2	786.9	786.5	786.2	785.8	785.7	785.9	786.1	786.2	786.4	787.0
160°	801.2	800.7	800.3	799.9	799.4	799.3	799.4	799.5	799.7	799.9	800.5
162.5°	813.6	813.2	812.9	812.6	812.3	812.1	812.1	812.2	812.2	812.3	813.0
165°	830.2	829.8	829.6	829.2	829.0	828.9	829.0	829.1	829.3	829.5	830.1
167.5°	844.1	843.5	842.9	842.3	841.7	841.5	841.5	841.5	841.5	841.5	842.3
170°	851.7	851.1	850.5	849.9	849.3	848.9	848.9	848.9	848.9	848.9	849.9
172.5°	857.0	856.4	855.8	855.2	854.6	854.4	854.4	854.4	854.4	854.4	855.2
175°	863.2	862.5	861.9	861.3	860.7	860.4	860.4	860.4	860.4	860.4	861.3
177.5°	866.3	865.7	865.3	864.8	864.3	864.0	863.9	863.8	863.7	863.5	864.3
180°	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1



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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°	85.8	90.1	94.3	97.0	98.4	99.7	101.1	102.5
95°	108.1	112.4	116.6	119.3	120.7	122.0	123.3	124.6
97.5°	135.1	139.1	143.2	145.8	147.0	148.1	149.3	150.5
100°	153.7	158.1	162.5	165.2	166.4	167.6	168.8	170.0
102.5°	173.1	177.5	181.9	184.8	186.1	187.4	188.6	189.9
105°	204.5	208.3	212.2	214.7	216.2	217.7	219.1	220.6
107.5°	239.4	242.6	246.0	248.1	248.9	249.8	250.7	251.6
110°	263.4	266.6	269.8	271.8	272.7	273.5	274.5	275.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	287.5	290.3	293.3	295.1	295.8	296.5	297.3	298.0
115°	324.7	327.1	329.6	331.2	331.9	332.6	333.4	334.1
117.5°	361.6	364.2	366.8	368.3	368.7	369.1	369.5	369.9
120°	386.8	389.3	391.7	393.0	393.4	393.6	393.9	394.2
122.5°	411.1	413.4	415.6	416.9	417.3	417.7	418.1	418.4
125°	447.3	449.4	451.3	452.6	453.2	453.8	454.3	455.0
127.5°	483.0	485.0	487.0	488.3	488.9	489.4	489.9	490.4
130°	507.0	508.9	510.8	512.0	512.4	512.8	513.2	513.7
132.5°	529.8	531.7	533.6	534.6	534.8	534.9	535.1	535.3
135°	564.5	566.4	568.3	569.2	569.4	569.5	569.6	569.7
137.5°	598.9	600.8	602.7	603.6	603.4	603.2	603.0	602.9
140°	620.4	622.3	624.2	625.2	625.0	624.8	624.7	624.5
142.5°	641.9	643.4	645.0	645.7	645.5	645.3	645.1	645.0
145°	673.4	674.1	674.9	675.3	675.4	675.5	675.6	675.8
147.5°	703.0	703.6	704.2	704.1	703.4	702.6	701.8	701.1
150°	721.8	721.8	721.8	721.7	721.5	721.3	721.2	721.1
152.5°	739.7	740.0	740.4	740.4	739.9	739.3	738.8	738.3
155°	765.3	765.9	766.5	766.5	765.7	765.0	764.2	763.4
157.5°	787.6	788.2	788.8	788.6	787.6	786.6	785.6	784.6
160°	801.1	801.6	802.2	802.2	801.4	800.6	799.9	799.2
162.5°	813.6	814.4	815.1	815.0	814.2	813.3	812.4	811.6
165°	830.7	831.3	831.8	831.7	830.8	829.9	829.0	828.1
167.5°	843.3	844.1	845.1	845.0	844.1	843.2	842.2	841.3
170°	850.8	851.7	852.6	852.5	851.4	850.4	849.4	848.3
172.5°	856.2	857.0	858.0	858.0	857.0	856.1	855.1	854.2
175°	862.2	863.2	864.0	863.9	862.9	861.9	860.8	859.8
177.5°	865.0	865.6	866.4	866.3	865.5	864.7	863.8	863.0
180°	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1

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