

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: P333164-935

Luminaire Tested: **S125DIP-S610D365U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333164-935
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-S610D365U935-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3158.7 lumens
Efficiency: N/A
Efficacy: 114.9 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-Direct

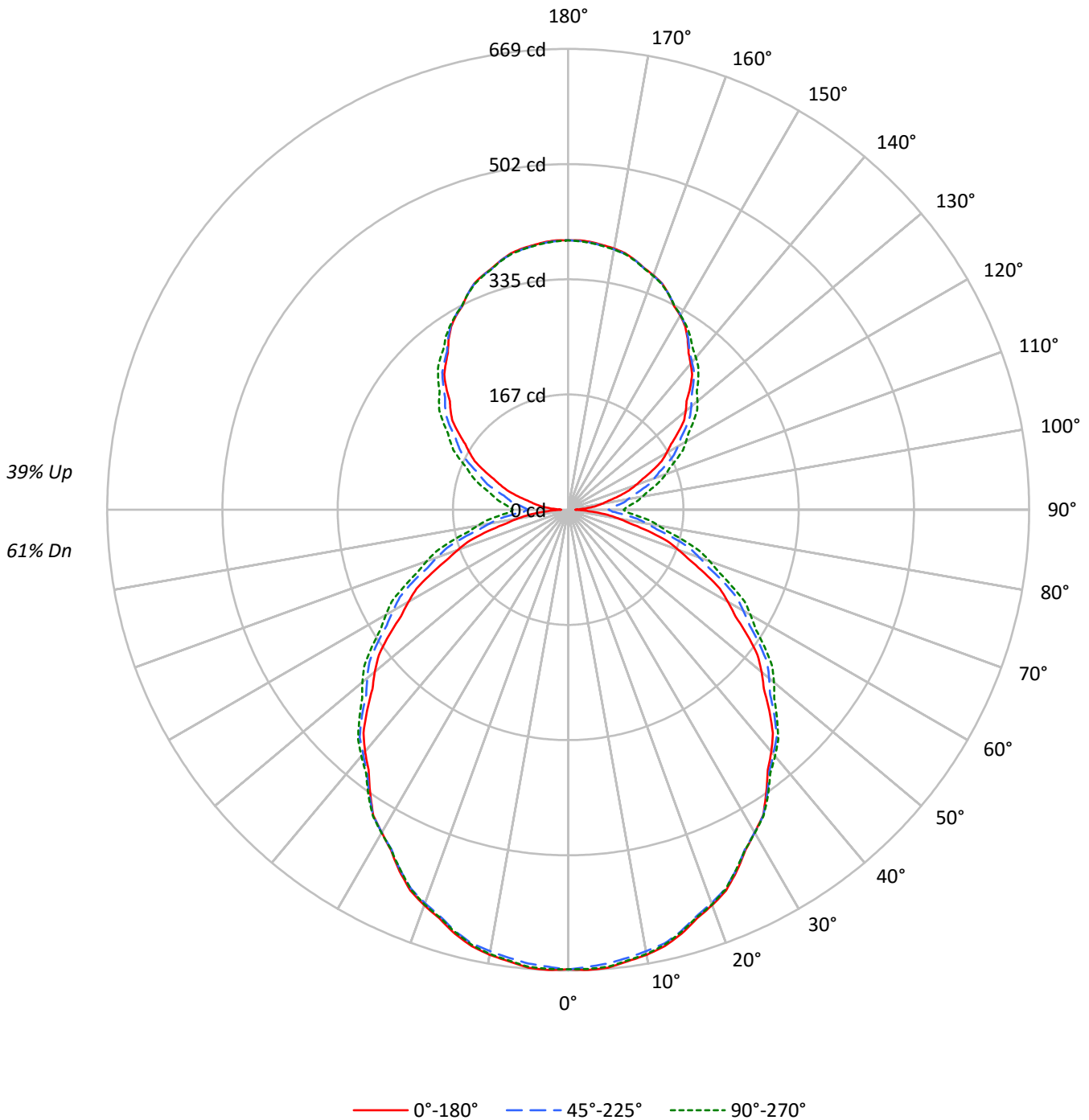
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	99	95	90	86	93	89	85	81	77	74	72	67	65	63	57	56	54
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	47	45
3	82	72	64	58	76	67	60	55	59	54	49	51	47	43	44	41	38
4	75	64	55	49	70	60	52	46	52	46	42	46	41	37	39	36	33
5	69	57	48	42	64	53	45	40	47	41	36	41	36	32	35	31	28
6	63	51	42	36	59	48	40	34	42	36	31	37	32	28	32	28	25
7	59	46	37	32	55	43	36	30	38	32	27	34	28	25	29	25	22
8	54	42	34	28	51	39	32	27	35	29	24	31	26	22	27	23	20
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	25	21	18
10	47	35	27	22	44	33	26	22	29	24	20	26	21	18	23	19	16

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	2.0
10°-20°	179.1	5.7
20°-30°	266.4	8.4
30°-40°	315.5	10.0
40°-50°	326.2	10.3
50°-60°	300.5	9.5
60°-70°	242.9	7.7
70°-80°	162.7	5.2
80°-90°	85.2	2.7
90°-100°	73.5	2.3
100°-110°	112.2	3.6
110°-120°	154.4	4.9
120°-130°	185.7	5.9
130°-140°	199.0	6.3
140°-150°	190.5	6.0
150°-160°	159.0	5.0
160°-170°	105.7	3.3
170°-180°	37.0	1.2
0°-30°	508.6	16.1
0°-40°	824.1	26.1
0°-60°	1450.8	45.9
0°-90°	1941.7	61.5
90°-120°	340.2	10.8
90°-150°	915.4	29.0
90°-180°	1217.0	38.5
0°-180°	3158.7	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	34	58	74	81	8
95°	28	46	71	87	93	28
105°	75	88	109	123	129	80
115°	135	142	158	170	174	134
125°	194	196	209	218	221	174
135°	250	252	256	264	267	193
145°	302	303	304	307	309	189
155°	345	345	345	346	345	159
165°	375	375	375	376	374	106
175°	390	389	389	390	389	37
180°	391	391	391	391	391	



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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°	20.5	25.2	30.0	34.8	39.5	44.4	49.4	54.5	59.5	64.6	67.9
90°	10.8	15.9	21.2	26.3	31.5	36.9	42.3	47.7	53.1	58.5	62.2
92.5°	16.8	21.4	26.2	30.8	35.5	40.6	46.3	51.9	57.6	63.2	66.9
95°	28.3	32.2	36.1	40.0	43.9	48.7	54.3	59.9	65.6	71.2	74.8
97.5°	40.6	44.1	47.5	51.0	54.4	59.0	64.7	70.4	76.1	81.8	85.3
100°	49.8	52.9	55.9	59.0	62.0	66.3	71.8	77.4	82.9	88.4	92.1
102.5°	59.8	62.9	66.0	69.1	72.1	76.1	81.1	86.1	91.1	96.1	99.7
105°	75.3	77.9	80.6	83.3	85.9	89.6	94.5	99.2	103.9	108.7	112.0
107.5°	92.5	94.8	97.1	99.4	101.8	105.1	109.7	114.2	118.6	123.1	126.2
110°	104.4	106.5	108.6	110.6	112.7	115.9	120.2	124.4	128.7	133.0	136.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	117.1	118.6	120.2	121.7	123.4	126.2	130.4	134.7	138.9	143.1	145.9
115°	135.1	136.4	137.7	139.0	140.3	142.8	146.7	150.7	154.5	158.5	161.0
117.5°	153.2	153.9	154.7	155.6	156.4	158.6	162.3	166.0	169.7	173.4	175.9
120°	164.9	165.7	166.4	167.2	168.0	170.0	173.5	176.8	180.3	183.7	186.1
122.5°	177.0	177.3	177.6	178.0	178.3	180.1	183.6	187.0	190.4	193.8	196.0
125°	194.1	194.3	194.6	194.8	195.1	196.7	199.7	202.7	205.6	208.6	210.8
127.5°	211.6	211.7	211.8	211.9	212.0	213.3	215.7	218.2	220.7	223.1	225.2
130°	222.6	222.7	223.0	223.2	223.3	224.5	226.7	228.9	231.1	233.2	235.2
132.5°	233.0	233.6	234.1	234.6	235.1	236.2	237.7	239.3	240.8	242.4	244.3
135°	250.2	250.5	250.7	251.0	251.2	251.9	253.0	254.1	255.2	256.3	258.2
137.5°	266.4	266.7	267.0	267.3	267.5	267.9	268.6	269.2	269.9	270.5	272.3
140°	276.4	276.7	277.1	277.4	277.7	278.0	278.4	278.8	279.1	279.5	281.2
142.5°	286.8	287.0	287.1	287.3	287.5	287.7	288.0	288.3	288.6	288.9	290.3
145°	302.2	302.4	302.5	302.6	302.7	302.9	303.1	303.3	303.5	303.7	304.4
147.5°	315.8	316.0	316.1	316.2	316.4	316.6	316.8	316.9	317.0	317.2	317.6
150°	325.3	325.3	325.2	325.1	325.0	325.1	325.4	325.7	326.0	326.2	326.2
152.5°	333.1	333.2	333.3	333.4	333.5	333.6	333.7	333.8	333.9	334.0	334.2
155°	345.1	345.1	345.1	345.1	345.1	345.1	345.2	345.3	345.3	345.4	345.7
157.5°	355.8	355.7	355.5	355.3	355.2	355.2	355.2	355.3	355.3	355.4	355.7
160°	362.1	362.0	361.7	361.5	361.4	361.3	361.4	361.4	361.4	361.5	361.8
162.5°	367.7	367.6	367.5	367.3	367.1	367.0	367.0	367.1	367.1	367.1	367.5
165°	375.2	375.1	375.0	374.8	374.7	374.6	374.7	374.8	374.9	374.9	375.2
167.5°	381.5	381.3	381.0	380.7	380.5	380.3	380.3	380.3	380.3	380.3	380.7
170°	385.0	384.7	384.4	384.2	383.8	383.7	383.7	383.7	383.7	383.7	384.2
172.5°	387.4	387.1	386.8	386.6	386.3	386.2	386.2	386.2	386.2	386.2	386.6
175°	390.1	389.9	389.6	389.3	389.1	388.9	388.9	388.9	388.9	388.9	389.3
177.5°	391.5	391.3	391.1	390.9	390.6	390.5	390.5	390.5	390.4	390.3	390.6
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1



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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°	71.4	74.8	78.2	80.4	81.5	82.6	83.6	84.6
90°	65.9	69.6	73.3	75.7	76.9	78.1	79.4	80.6
92.5°	70.6	74.2	77.9	80.3	81.5	82.7	83.9	85.0
95°	78.5	82.2	85.8	88.3	89.5	90.6	91.8	92.9
97.5°	88.8	92.3	95.8	98.1	99.1	100.2	101.3	102.4
100°	95.7	99.4	103.1	105.4	106.4	107.5	108.4	109.4
102.5°	103.2	106.9	110.5	112.8	113.8	114.9	116.0	117.0
105°	115.4	118.6	122.0	124.2	125.4	126.7	127.9	129.2
107.5°	129.3	132.4	135.5	137.5	138.4	139.2	140.2	141.0
110°	139.0	141.9	144.8	146.8	147.7	148.7	149.6	150.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	148.5	151.3	154.0	155.8	156.8	157.6	158.5	159.5
115°	163.6	166.2	168.7	170.4	171.2	171.9	172.8	173.6
117.5°	178.4	181.0	183.5	185.1	185.8	186.5	187.3	188.0
120°	188.6	191.1	193.6	195.1	195.7	196.3	196.9	197.5
122.5°	198.4	200.7	202.9	204.5	205.1	205.8	206.4	207.1
125°	213.0	215.2	217.3	218.8	219.5	220.1	220.8	221.4
127.5°	227.3	229.4	231.4	232.8	233.6	234.3	235.0	235.7
130°	237.1	239.1	241.1	242.4	243.0	243.6	244.2	244.8
132.5°	246.2	248.2	250.2	251.4	251.8	252.3	252.6	253.0
135°	260.1	262.0	263.8	265.0	265.4	266.0	266.4	266.8
137.5°	274.1	276.0	277.8	278.8	279.0	279.2	279.5	279.7
140°	282.9	284.6	286.4	287.4	287.7	287.8	288.1	288.3
142.5°	291.8	293.3	294.6	295.5	295.8	296.0	296.3	296.4
145°	305.1	305.9	306.6	307.2	307.5	307.9	308.3	308.7
147.5°	318.0	318.4	318.8	318.9	318.7	318.5	318.3	318.1
150°	326.2	326.2	326.2	326.2	326.2	326.2	326.2	326.2
152.5°	334.3	334.5	334.7	334.7	334.4	334.2	334.0	333.8
155°	345.9	346.2	346.5	346.5	346.1	345.8	345.4	345.1
157.5°	355.9	356.3	356.5	356.5	356.0	355.5	355.1	354.6
160°	362.1	362.3	362.6	362.6	362.2	361.9	361.5	361.2
162.5°	367.7	368.1	368.4	368.4	368.0	367.6	367.2	366.8
165°	375.5	375.7	376.0	375.9	375.5	375.1	374.7	374.3
167.5°	381.2	381.5	381.9	381.9	381.5	381.1	380.6	380.3
170°	384.5	385.0	385.4	385.3	384.9	384.4	383.9	383.4
172.5°	387.0	387.4	387.8	387.8	387.4	386.9	386.5	386.1
175°	389.7	390.1	390.5	390.5	390.0	389.5	389.1	388.6
177.5°	391.0	391.3	391.6	391.6	391.2	390.8	390.5	390.0
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1

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