

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: P333494-927

Luminaire Tested: **S125RDIP-S375D365U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333494-927
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: S125RDIP-S375D365U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2149.9 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

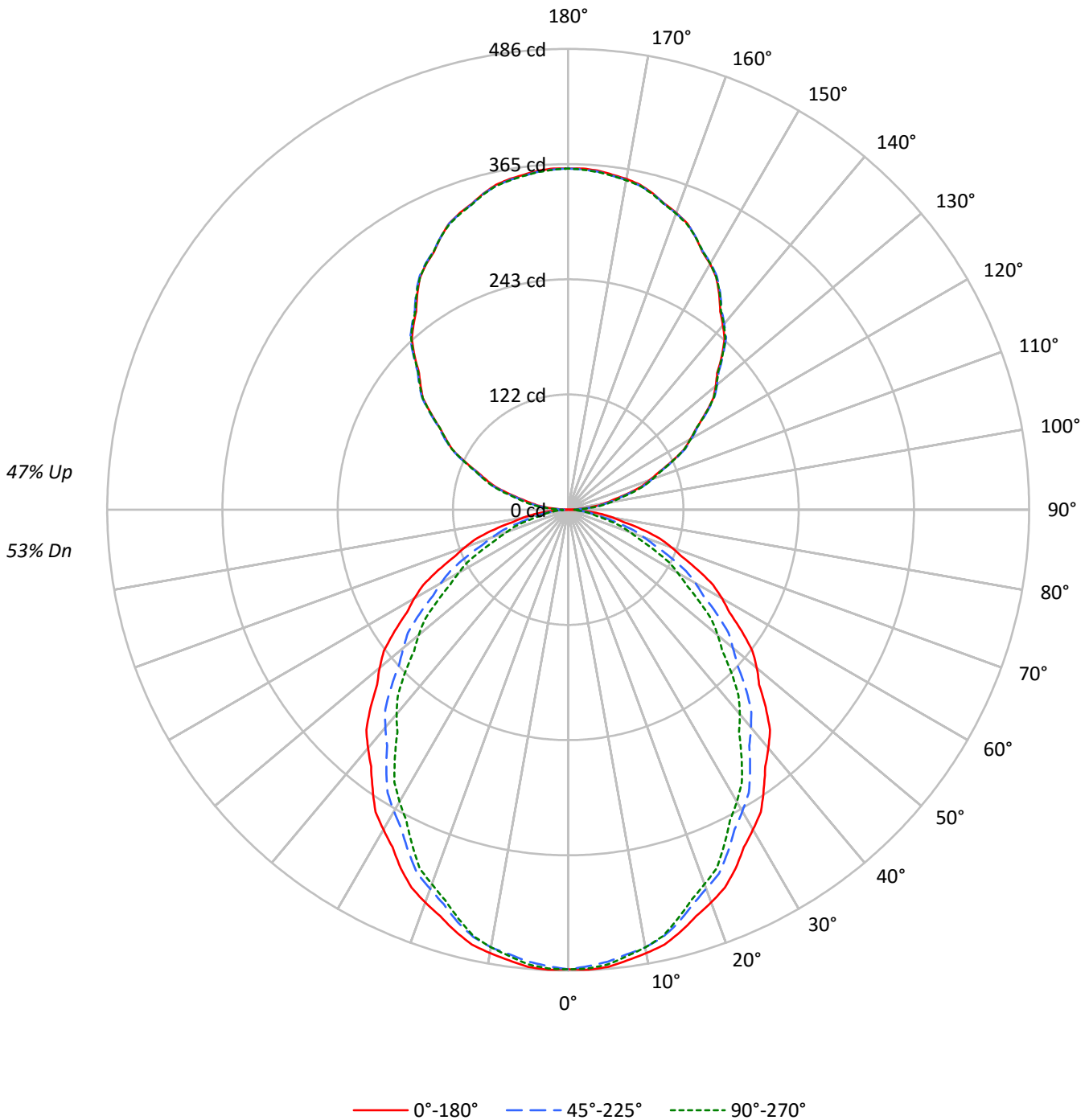
Input Watts (W): 20.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53
1	99	95	91	87	91	88	84	81	75	73	70	63	62	60	53	52	50	45
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43	38
3	82	73	66	60	76	68	62	56	58	54	50	50	46	43	41	39	37	33
4	75	65	57	51	70	60	53	48	52	47	42	44	40	37	37	34	32	28
5	69	58	50	44	64	54	47	41	47	41	37	40	36	32	34	30	28	25
6	64	52	44	38	59	49	41	36	42	36	32	36	32	28	31	27	25	22
7	59	47	39	33	55	44	37	32	38	33	28	33	28	25	28	25	22	19
8	55	43	35	30	51	40	33	28	35	29	25	30	26	22	26	22	20	17
9	51	39	32	26	47	37	30	25	32	27	23	28	23	20	24	20	18	16
10	48	36	29	24	44	34	27	23	30	24	21	26	21	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3130	3130	3130
5°	3138	3102	3121
10°	3114	3074	3074
15°	3077	3011	2986
20°	3030	2924	2889
25°	2974	2838	2776
30°	2905	2738	2651
35°	2834	2636	2511
40°	2769	2528	2373
45°	2689	2408	2223
50°	2608	2277	2067
55°	2514	2152	1901
60°	2421	2001	1721
65°	2311	1825	1516
70°	2185	1603	1307
75°	2011	1352	1088
80°	1770	1060	915
85°	1489	867	815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.6	2.1
10°-20°	127.4	5.9
20°-30°	184.7	8.6
30°-40°	210.5	9.8
40°-50°	205.2	9.5
50°-60°	172.7	8.0
60°-70°	121.1	5.6
70°-80°	62.2	2.9
80°-90°	16.5	0.8
90°-100°	24.1	1.1
100°-110°	71.2	3.3
110°-120°	120.5	5.6
120°-130°	158.6	7.4
130°-140°	177.7	8.3
140°-150°	174.2	8.1
150°-160°	146.3	6.8
160°-170°	97.3	4.5
170°-180°	34.0	1.6
0°-30°	357.7	16.6
0°-40°	568.2	26.4
0°-60°	946.1	44.0
0°-90°	1145.9	53.3
90°-120°	215.8	10.0
90°-150°	726.3	33.8
90°-180°	1004.0	46.7
0°-180°	2149.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	485	485	485	485	485	
5°	484	482	478	482	481	46
15°	460	458	450	450	447	130
25°	417	411	398	394	390	192
35°	360	350	334	324	318	225
45°	294	283	264	249	243	227
55°	223	211	191	175	169	200
65°	151	138	119	105	99	150
75°	81	69	54	46	44	85
85°	20	14	12	11	11	23
90°	0	3	4	6	7	2
95°	18	19	22	23	24	19
105°	64	65	67	69	70	68
115°	121	122	122	122	122	119
125°	176	178	178	178	177	158
135°	229	231	231	231	230	176
145°	278	279	279	279	279	173
155°	318	318	318	319	318	146
165°	345	345	345	346	344	97
175°	359	358	358	359	358	34
180°	360	360	360	360	360	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7
2.5°	485.6	485.4	485.2	485.1	484.8	484.4	483.8	483.1	482.4	481.8	482.4
5°	484.0	483.7	483.4	483.0	482.7	482.1	481.2	480.3	479.4	478.5	479.3
7.5°	479.3	479.0	478.6	478.3	478.0	477.3	476.3	475.2	474.1	473.0	473.6
10°	474.8	474.6	474.4	474.1	473.9	473.2	472.1	470.9	469.8	468.7	468.9
12.5°	469.8	469.5	469.3	469.0	468.7	467.7	466.2	464.7	463.1	461.6	461.8
15°	460.2	459.7	459.2	458.8	458.3	457.2	455.4	453.8	452.0	450.4	450.3
17.5°	449.3	448.5	447.8	447.0	446.3	444.9	442.7	440.5	438.4	436.3	435.9
20°	440.8	440.0	439.2	438.4	437.5	435.9	433.2	430.6	428.0	425.4	425.0
22.5°	431.4	430.6	429.8	429.0	428.2	426.4	423.7	421.0	418.2	415.5	414.7
25°	417.4	416.1	414.9	413.7	412.5	410.4	407.3	404.3	401.3	398.3	397.3
27.5°	401.2	399.8	398.3	396.8	395.3	393.0	389.8	386.5	383.3	380.1	378.6
30°	389.5	388.0	386.4	384.9	383.3	380.9	377.5	374.1	370.7	367.2	365.4
32.5°	378.1	376.3	374.5	372.7	370.9	368.3	364.8	361.3	357.8	354.3	352.3
35°	359.5	357.6	355.6	353.6	351.7	348.9	345.2	341.6	337.9	334.3	331.9
37.5°	341.3	338.9	336.5	334.1	331.8	328.7	325.0	321.2	317.4	313.6	310.8
40°	328.4	326.0	323.5	321.1	318.6	315.4	311.6	307.7	303.7	299.8	296.8
42.5°	314.9	312.4	309.9	307.4	304.9	301.7	297.6	293.6	289.5	285.5	282.6
45°	294.4	292.0	289.6	287.2	284.9	281.5	277.0	272.6	268.1	263.6	260.3
47.5°	273.1	270.5	268.1	265.5	263.1	259.6	255.1	250.6	246.1	241.5	238.2
50°	259.6	256.9	254.2	251.5	248.8	245.2	240.5	235.9	231.2	226.6	223.2
52.5°	244.9	242.2	239.4	236.7	233.9	230.4	226.0	221.6	217.2	212.9	209.2
55°	223.3	220.7	218.1	215.6	212.9	209.4	204.8	200.2	195.7	191.1	187.4
57.5°	201.5	198.8	195.9	193.1	190.4	186.8	182.4	178.0	173.6	169.2	165.6
60°	187.4	184.6	181.7	178.9	176.0	172.5	168.0	163.7	159.2	154.9	151.3
62.5°	172.5	169.8	167.1	164.4	161.6	158.0	153.6	149.2	144.7	140.2	136.9
65°	151.2	148.5	145.7	142.9	140.1	136.6	132.3	128.0	123.7	119.4	116.1
67.5°	130.1	127.3	124.5	121.8	119.0	115.5	111.4	107.3	103.1	99.0	96.0
70°	115.7	113.0	110.2	107.4	104.6	101.2	97.1	93.1	89.0	84.9	82.4
72.5°	101.6	98.9	96.3	93.6	90.9	87.5	83.7	79.9	76.1	72.3	70.0
75°	80.6	78.1	75.7	73.2	70.8	67.9	64.4	61.0	57.6	54.2	52.4
77.5°	59.6	57.7	55.7	53.7	51.8	49.4	46.7	44.0	41.3	38.5	37.2
80°	47.6	45.6	43.7	41.7	39.8	37.7	35.4	33.1	30.8	28.5	27.8
82.5°	35.9	34.1	32.4	30.6	28.8	27.2	25.7	24.1	22.5	20.9	20.6
85°	20.1	18.7	17.2	15.8	14.3	13.3	12.9	12.5	12.1	11.7	11.6
87.5°	6.8	6.4	6.1	5.7	5.4	5.2	5.2	5.2	5.2	5.3	5.4
90°	0.3	0.8	1.3	1.7	2.3	2.8	3.2	3.6	4.0	4.5	4.8
92.5°	6.8	7.1	7.4	7.8	8.2	8.6	9.1	9.7	10.2	10.8	11.2
95°	18.2	18.3	18.5	18.5	18.7	19.1	19.7	20.3	20.9	21.5	22.0
97.5°	30.3	30.3	30.3	30.4	30.4	30.9	31.8	32.6	33.4	34.3	34.8
100°	39.2	39.2	39.2	39.2	39.2	39.6	40.4	41.2	42.1	42.9	43.4
102.5°	48.8	49.1	49.4	49.6	49.8	50.1	50.5	50.9	51.4	51.8	52.4
105°	63.8	64.2	64.5	64.8	65.1	65.4	65.8	66.1	66.5	66.9	67.3
107.5°	80.4	80.7	81.0	81.4	81.7	82.0	82.2	82.5	82.8	83.1	83.3
110°	91.8	92.1	92.4	92.8	93.1	93.3	93.5	93.7	93.9	94.1	94.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	103.5	103.6	103.8	103.9	104.1	104.3	104.6	104.8	105.0	105.3	105.4
115°	120.6	120.9	121.2	121.4	121.7	121.8	122.0	122.1	122.2	122.4	122.3
117.5°	137.9	138.0	138.2	138.2	138.4	138.5	138.6	138.7	138.8	138.9	138.9
120°	148.7	149.0	149.3	149.6	149.9	150.1	150.2	150.2	150.3	150.4	150.4
122.5°	160.3	160.4	160.6	160.7	160.7	160.9	161.1	161.2	161.4	161.5	161.5
125°	176.1	176.5	176.9	177.2	177.6	177.8	177.9	177.9	178.0	178.1	177.9
127.5°	192.9	193.1	193.4	193.5	193.8	193.9	194.0	194.1	194.2	194.2	194.2
130°	203.0	203.3	203.6	203.9	204.2	204.5	204.5	204.7	204.9	204.9	204.9
132.5°	213.1	213.6	214.1	214.6	215.1	215.4	215.3	215.3	215.3	215.2	215.2
135°	229.0	229.4	229.8	230.1	230.5	230.8	230.8	230.8	230.9	231.0	231.0
137.5°	244.1	244.4	244.8	245.1	245.5	245.7	245.9	246.0	246.1	246.3	246.4
140°	253.7	254.0	254.3	254.6	254.9	255.2	255.3	255.6	255.7	255.9	256.0
142.5°	263.3	263.6	263.8	264.1	264.4	264.6	264.8	265.1	265.3	265.5	265.6
145°	277.5	277.7	278.0	278.2	278.5	278.7	278.8	279.1	279.2	279.4	279.4
147.5°	290.6	290.7	290.8	291.0	291.1	291.3	291.4	291.6	291.7	291.8	292.0
150°	299.3	299.3	299.2	299.1	299.0	299.1	299.4	299.7	299.9	300.2	300.2
152.5°	306.5	306.6	306.7	306.7	306.8	306.9	307.0	307.1	307.2	307.3	307.4
155°	317.5	317.5	317.5	317.5	317.5	317.5	317.6	317.7	317.7	317.8	318.1
157.5°	327.3	327.3	327.1	326.9	326.9	326.8	326.9	326.9	326.9	327.0	327.3
160°	333.2	333.0	332.8	332.6	332.5	332.4	332.5	332.5	332.6	332.6	332.9
162.5°	338.3	338.2	338.1	337.9	337.8	337.7	337.7	337.8	337.8	337.8	338.1
165°	345.2	345.1	345.0	344.8	344.8	344.7	344.8	344.8	344.9	344.9	345.2
167.5°	351.0	350.8	350.5	350.3	350.1	349.9	349.9	349.9	349.9	349.9	350.3
170°	354.2	353.9	353.7	353.5	353.2	353.1	353.1	353.1	353.1	353.1	353.5
172.5°	356.4	356.2	355.9	355.7	355.5	355.3	355.3	355.3	355.3	355.3	355.7
175°	358.9	358.7	358.5	358.2	358.0	357.8	357.8	357.8	357.8	357.8	358.2
177.5°	360.2	360.0	359.8	359.7	359.4	359.3	359.3	359.3	359.2	359.1	359.4
180°	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7
2.5°	483.1	483.8	484.4	484.7	484.7	484.6	484.5	484.4
5°	480.1	480.9	481.7	482.1	482.0	481.7	481.6	481.4
7.5°	474.1	474.8	475.3	475.5	475.3	475.2	475.0	474.8
10°	469.1	469.4	469.6	469.6	469.4	469.1	468.9	468.7
12.5°	461.9	462.2	462.3	462.2	461.8	461.4	461.1	460.7
15°	450.1	450.0	450.0	449.6	448.9	448.1	447.4	446.6
17.5°	435.5	435.1	434.7	434.1	433.6	432.9	432.3	431.7
20°	424.6	424.2	423.8	423.3	422.5	421.8	421.0	420.3
22.5°	413.8	413.0	412.3	411.5	411.0	410.4	409.8	409.2
25°	396.2	395.1	394.1	393.2	392.2	391.3	390.5	389.5
27.5°	377.2	375.7	374.1	373.0	372.2	371.3	370.4	369.6
30°	363.5	361.6	359.7	358.5	357.7	357.0	356.2	355.5
32.5°	350.2	348.2	346.0	344.6	343.6	342.7	341.7	340.9
35°	329.5	327.2	324.8	323.1	321.9	320.8	319.6	318.5
37.5°	307.9	305.1	302.3	300.3	299.2	298.1	297.0	295.9
40°	293.7	290.6	287.5	285.4	284.5	283.5	282.5	281.5
42.5°	279.6	276.6	273.6	271.5	270.1	268.5	267.1	265.7
45°	257.1	253.8	250.6	248.3	247.2	245.9	244.7	243.4
47.5°	234.9	231.5	228.1	225.8	224.4	223.1	221.7	220.4
50°	219.8	216.3	212.9	210.6	209.5	208.2	207.0	205.7
52.5°	205.5	201.8	198.1	195.7	194.5	193.3	192.0	190.8
55°	183.8	180.1	176.5	174.0	172.7	171.3	170.1	168.8
57.5°	162.1	158.5	154.9	152.5	151.4	150.2	149.1	147.9
60°	147.7	144.1	140.5	138.2	136.9	135.7	134.5	133.2
62.5°	133.6	130.2	126.9	124.7	123.4	122.2	121.0	119.8
65°	112.8	109.6	106.3	104.1	102.9	101.6	100.4	99.2
67.5°	93.0	90.1	87.1	85.1	84.1	83.2	82.1	81.2
70°	79.9	77.4	74.9	73.1	72.1	71.1	70.2	69.2
72.5°	67.7	65.4	63.1	61.6	60.9	60.3	59.6	58.9
75°	50.6	48.8	47.1	45.9	45.3	44.7	44.1	43.6
77.5°	36.0	34.8	33.5	32.6	32.2	31.8	31.4	31.0
80°	27.1	26.4	25.7	25.2	25.0	24.9	24.7	24.6
82.5°	20.3	19.9	19.6	19.3	19.3	19.2	19.1	18.9
85°	11.6	11.5	11.4	11.3	11.2	11.2	11.1	11.0
87.5°	5.4	5.5	5.5	5.5	5.5	5.5	5.5	5.5
90°	5.1	5.4	5.7	5.9	6.2	6.3	6.5	6.7
92.5°	11.6	12.0	12.4	12.7	12.8	12.9	13.1	13.2
95°	22.4	22.9	23.3	23.6	23.7	23.8	23.9	24.1
97.5°	35.2	35.6	36.0	36.2	36.3	36.4	36.4	36.5
100°	44.0	44.5	45.1	45.4	45.6	45.7	45.8	45.9
102.5°	53.0	53.6	54.3	54.7	54.8	55.0	55.1	55.3
105°	67.7	68.0	68.4	68.7	68.8	69.1	69.2	69.5
107.5°	83.5	83.7	83.8	84.0	83.9	83.9	83.9	83.9
110°	94.4	94.7	94.8	94.9	94.8	94.7	94.7	94.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	105.4	105.5	105.6	105.6	105.5	105.4	105.3	105.2
115°	122.2	122.2	122.1	122.1	122.0	121.9	121.8	121.8
117.5°	139.0	139.1	139.1	139.0	138.8	138.6	138.3	138.0
120°	150.4	150.4	150.4	150.2	150.0	149.7	149.5	149.2
122.5°	161.4	161.4	161.4	161.2	161.1	160.8	160.7	160.4
125°	177.8	177.7	177.6	177.4	177.4	177.4	177.3	177.2
127.5°	194.1	194.0	193.9	193.8	193.8	193.6	193.5	193.4
130°	204.9	204.8	204.7	204.6	204.5	204.4	204.2	204.1
132.5°	215.2	215.1	215.0	214.9	214.7	214.5	214.4	214.2
135°	231.0	231.0	231.0	230.8	230.6	230.4	230.1	229.9
137.5°	246.4	246.5	246.6	246.4	246.1	245.8	245.5	245.2
140°	256.2	256.3	256.4	256.4	256.0	255.7	255.4	255.1
142.5°	265.7	265.8	265.9	265.7	265.4	265.1	264.8	264.5
145°	279.4	279.4	279.4	279.3	279.2	278.9	278.8	278.6
147.5°	292.2	292.3	292.5	292.3	291.9	291.4	291.0	290.7
150°	300.2	300.2	300.2	300.1	300.0	299.8	299.7	299.6
152.5°	307.6	307.8	307.9	307.8	307.7	307.4	307.2	307.0
155°	318.3	318.5	318.8	318.8	318.5	318.1	317.8	317.5
157.5°	327.5	327.8	328.0	328.0	327.6	327.1	326.7	326.3
160°	333.1	333.4	333.6	333.6	333.3	333.0	332.6	332.3
162.5°	338.3	338.7	339.0	339.0	338.6	338.2	337.9	337.5
165°	345.5	345.7	345.9	345.9	345.5	345.2	344.8	344.4
167.5°	350.7	351.0	351.4	351.4	351.0	350.6	350.2	349.9
170°	353.8	354.2	354.6	354.5	354.1	353.6	353.2	352.8
172.5°	356.1	356.4	356.8	356.8	356.4	356.0	355.6	355.2
175°	358.5	358.9	359.3	359.3	358.9	358.4	358.0	357.5
177.5°	359.7	360.0	360.3	360.3	360.0	359.6	359.3	358.9
180°	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8

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