

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: P333643-927

Luminaire Tested: **S125RDIW-S375D470U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333643-927
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: S125RDIW-S375D470U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2433.6 lumens
Efficiency: N/A
Efficacy: 105.8 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

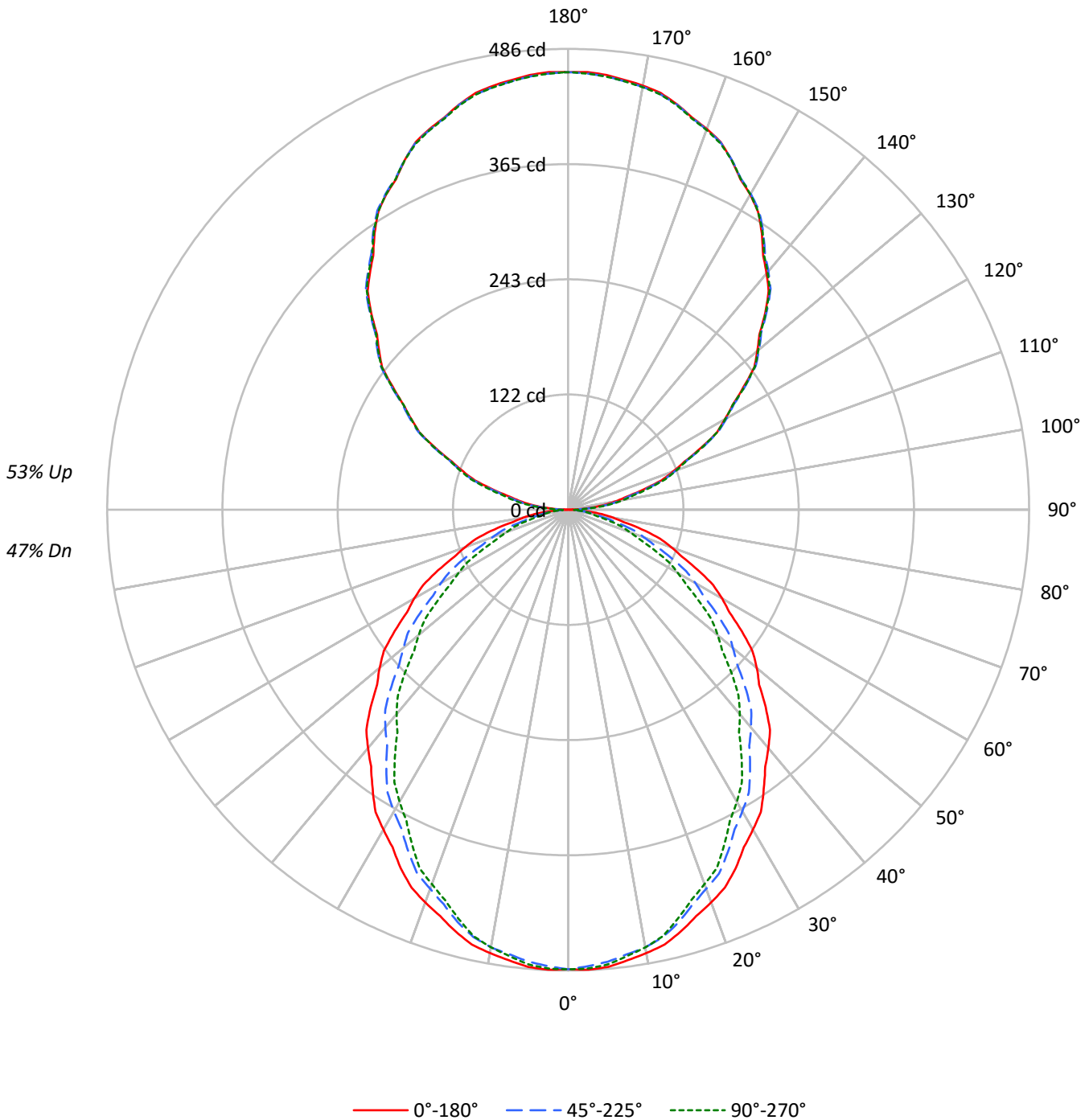
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47				47
1	97	93	89	86	89	86	83	80	72	70	68	59	58	56	48	47	46				40	
2	89	82	76	70	81	75	70	66	63	59	56	52	50	47	42	40	39				34	
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	35	33				29	
4	74	64	56	50	68	59	52	47	50	45	41	41	38	35	34	31	29				25	
5	68	57	49	43	62	53	46	40	45	39	35	37	33	30	30	27	25				22	
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22				19	
7	58	46	38	33	53	43	36	31	37	31	27	31	26	23	25	22	20				17	
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18				15	
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	21	18	16				14	
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15				13	

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	1.9
10°-20°	127.4	5.2
20°-30°	184.7	7.6
30°-40°	210.5	8.7
40°-50°	205.2	8.4
50°-60°	172.7	7.1
60°-70°	121.1	5.0
70°-80°	62.2	2.6
80°-90°	16.7	0.7
90°-100°	30.9	1.3
100°-110°	91.2	3.7
110°-120°	154.6	6.4
120°-130°	203.4	8.4
130°-140°	227.9	9.4
140°-150°	223.4	9.2
150°-160°	187.6	7.7
160°-170°	124.7	5.1
170°-180°	43.6	1.8
0°-30°	357.7	14.7
0°-40°	568.2	23.3
0°-60°	946.1	38.9
0°-90°	1146.2	47.1
90°-120°	276.7	11.4
90°-150°	931.5	38.3
90°-180°	1287.0	52.9
0°-180°	2433.6	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	6	8	9	2
95°	23	24	28	30	31	25
105°	82	84	86	88	89	87
115°	155	156	157	157	156	153
125°	226	228	228	228	227	202
135°	294	296	296	296	295	226
145°	356	357	358	358	357	222
155°	407	407	408	409	407	187
165°	443	442	442	444	442	125
175°	460	459	459	461	458	44
180°	461	461	461	461	461	



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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	6.5	6.2	5.9	5.5	5.4	5.4	5.5	5.5	5.5	5.6
90°	0.4	1.0	1.7	2.3	2.9	3.5	4.0	4.6	5.1	5.8	6.2
92.5°	8.7	9.1	9.6	10.1	10.5	11.0	11.7	12.4	13.1	13.8	14.3
95°	23.4	23.5	23.7	23.8	24.0	24.5	25.3	26.1	26.9	27.6	28.2
97.5°	38.7	38.8	38.9	39.0	39.1	39.6	40.7	41.8	42.9	44.0	44.5
100°	50.3	50.3	50.3	50.3	50.3	50.8	51.8	52.8	53.9	54.9	55.7
102.5°	62.6	62.9	63.3	63.6	63.9	64.3	64.9	65.4	65.9	66.4	67.2
105°	81.8	82.2	82.6	83.0	83.5	83.9	84.4	84.8	85.3	85.8	86.3
107.5°	103.1	103.5	103.9	104.3	104.7	105.1	105.4	105.8	106.2	106.5	106.8
110°	117.8	118.2	118.6	119.0	119.4	119.7	119.9	120.2	120.4	120.6	120.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	132.7	132.9	133.1	133.3	133.6	133.8	134.1	134.4	134.7	135.0	135.1
115°	154.7	155.0	155.4	155.7	156.1	156.3	156.5	156.6	156.8	156.9	156.9
117.5°	176.9	177.0	177.1	177.3	177.4	177.6	177.8	177.8	178.0	178.2	178.2
120°	190.7	191.1	191.5	191.9	192.3	192.5	192.6	192.7	192.7	192.8	192.8
122.5°	205.6	205.7	205.9	206.0	206.1	206.4	206.5	206.8	207.0	207.2	207.1
125°	225.9	226.3	226.8	227.3	227.8	228.1	228.1	228.2	228.3	228.4	228.2
127.5°	247.4	247.6	248.0	248.2	248.5	248.7	248.7	248.8	248.9	249.1	249.0
130°	260.3	260.7	261.1	261.5	261.9	262.2	262.4	262.5	262.7	262.8	262.8
132.5°	273.2	273.9	274.6	275.2	275.8	276.2	276.2	276.1	276.1	276.0	275.9
135°	293.7	294.2	294.7	295.2	295.6	295.9	296.0	296.0	296.1	296.2	296.2
137.5°	312.9	313.4	313.9	314.3	314.8	315.1	315.3	315.4	315.6	315.8	315.9
140°	325.3	325.7	326.1	326.5	326.9	327.3	327.5	327.7	328.0	328.2	328.4
142.5°	337.6	337.9	338.3	338.7	339.0	339.3	339.6	339.9	340.2	340.6	340.6
145°	355.8	356.2	356.5	356.8	357.1	357.4	357.6	357.8	358.1	358.3	358.3
147.5°	372.6	372.8	373.0	373.1	373.4	373.5	373.7	373.9	374.1	374.3	374.5
150°	383.8	383.7	383.7	383.6	383.5	383.7	384.0	384.3	384.6	384.9	384.9
152.5°	393.0	393.2	393.2	393.3	393.5	393.6	393.7	393.9	394.0	394.1	394.3
155°	407.2	407.2	407.2	407.2	407.2	407.2	407.3	407.3	407.4	407.5	407.8
157.5°	419.8	419.6	419.5	419.3	419.1	419.1	419.1	419.2	419.3	419.4	419.7
160°	427.3	427.1	426.7	426.5	426.3	426.2	426.3	426.4	426.4	426.5	426.9
162.5°	433.9	433.7	433.6	433.3	433.2	433.1	433.1	433.1	433.2	433.2	433.6
165°	442.7	442.5	442.4	442.2	442.0	442.0	442.1	442.2	442.3	442.4	442.7
167.5°	450.2	449.9	449.6	449.2	448.9	448.8	448.8	448.8	448.8	448.8	449.2
170°	454.2	453.8	453.5	453.2	452.9	452.7	452.7	452.7	452.7	452.7	453.2
172.5°	457.1	456.8	456.5	456.1	455.8	455.7	455.7	455.7	455.7	455.7	456.1
175°	460.3	459.9	459.6	459.3	459.0	458.8	458.8	458.8	458.8	458.8	459.3
177.5°	461.9	461.7	461.4	461.2	460.9	460.7	460.7	460.7	460.6	460.5	460.9
180°	461.4	461.4	461.4	461.4	461.4	461.4	461.4	461.4	461.4	461.4	461.4



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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°	5.7	5.8	5.9	5.9	5.9	5.9	5.9	5.9
90°	6.6	7.0	7.4	7.7	7.9	8.2	8.4	8.6
92.5°	14.8	15.4	15.9	16.2	16.4	16.6	16.8	17.0
95°	28.8	29.3	29.9	30.3	30.4	30.6	30.7	30.9
97.5°	45.1	45.6	46.1	46.4	46.5	46.7	46.7	46.8
100°	56.4	57.1	57.8	58.2	58.4	58.5	58.7	58.9
102.5°	68.0	68.8	69.6	70.0	70.3	70.5	70.7	71.0
105°	86.7	87.2	87.7	88.1	88.3	88.6	88.8	89.0
107.5°	107.0	107.3	107.5	107.7	107.7	107.6	107.6	107.6
110°	121.1	121.4	121.6	121.7	121.6	121.5	121.4	121.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	135.2	135.3	135.5	135.5	135.3	135.1	135.0	134.8
115°	156.8	156.7	156.6	156.5	156.5	156.4	156.3	156.2
117.5°	178.3	178.3	178.4	178.3	178.0	177.7	177.3	177.0
120°	192.8	192.8	192.8	192.7	192.3	192.0	191.7	191.4
122.5°	207.1	207.0	206.9	206.8	206.5	206.3	206.0	205.7
125°	228.1	227.9	227.8	227.6	227.5	227.4	227.4	227.3
127.5°	248.9	248.8	248.7	248.6	248.4	248.3	248.1	248.0
130°	262.7	262.6	262.5	262.4	262.2	262.1	261.9	261.7
132.5°	275.8	275.8	275.7	275.6	275.4	275.1	274.9	274.6
135°	296.2	296.2	296.2	296.0	295.7	295.4	295.1	294.8
137.5°	316.0	316.1	316.2	316.1	315.7	315.3	314.8	314.4
140°	328.5	328.7	328.8	328.7	328.3	327.9	327.5	327.1
142.5°	340.7	340.8	340.9	340.7	340.3	339.9	339.5	339.1
145°	358.3	358.3	358.3	358.2	358.0	357.7	357.5	357.3
147.5°	374.6	374.9	375.0	374.9	374.3	373.8	373.2	372.7
150°	384.9	384.9	384.9	384.8	384.7	384.5	384.4	384.2
152.5°	394.5	394.7	394.8	394.8	394.5	394.3	394.0	393.6
155°	408.1	408.4	408.8	408.8	408.4	408.0	407.6	407.2
157.5°	420.0	420.3	420.6	420.6	420.0	419.5	419.0	418.4
160°	427.2	427.5	427.9	427.8	427.4	427.0	426.6	426.2
162.5°	434.0	434.3	434.7	434.7	434.2	433.7	433.2	432.8
165°	443.0	443.3	443.6	443.5	443.1	442.6	442.1	441.6
167.5°	449.7	450.2	450.7	450.7	450.1	449.6	449.2	448.7
170°	453.7	454.2	454.7	454.6	454.1	453.5	453.0	452.4
172.5°	456.6	457.1	457.6	457.6	457.0	456.5	456.1	455.6
175°	459.8	460.3	460.8	460.7	460.2	459.6	459.1	458.5
177.5°	461.3	461.7	462.1	462.0	461.6	461.1	460.7	460.3
180°	461.4	461.4	461.4	461.4	461.4	461.4	461.4	461.4

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