

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: P333342-927

Luminaire Tested: **S125DIW-S375D470U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333342-927
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: S125DIW-S375D470U927-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2642.3 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

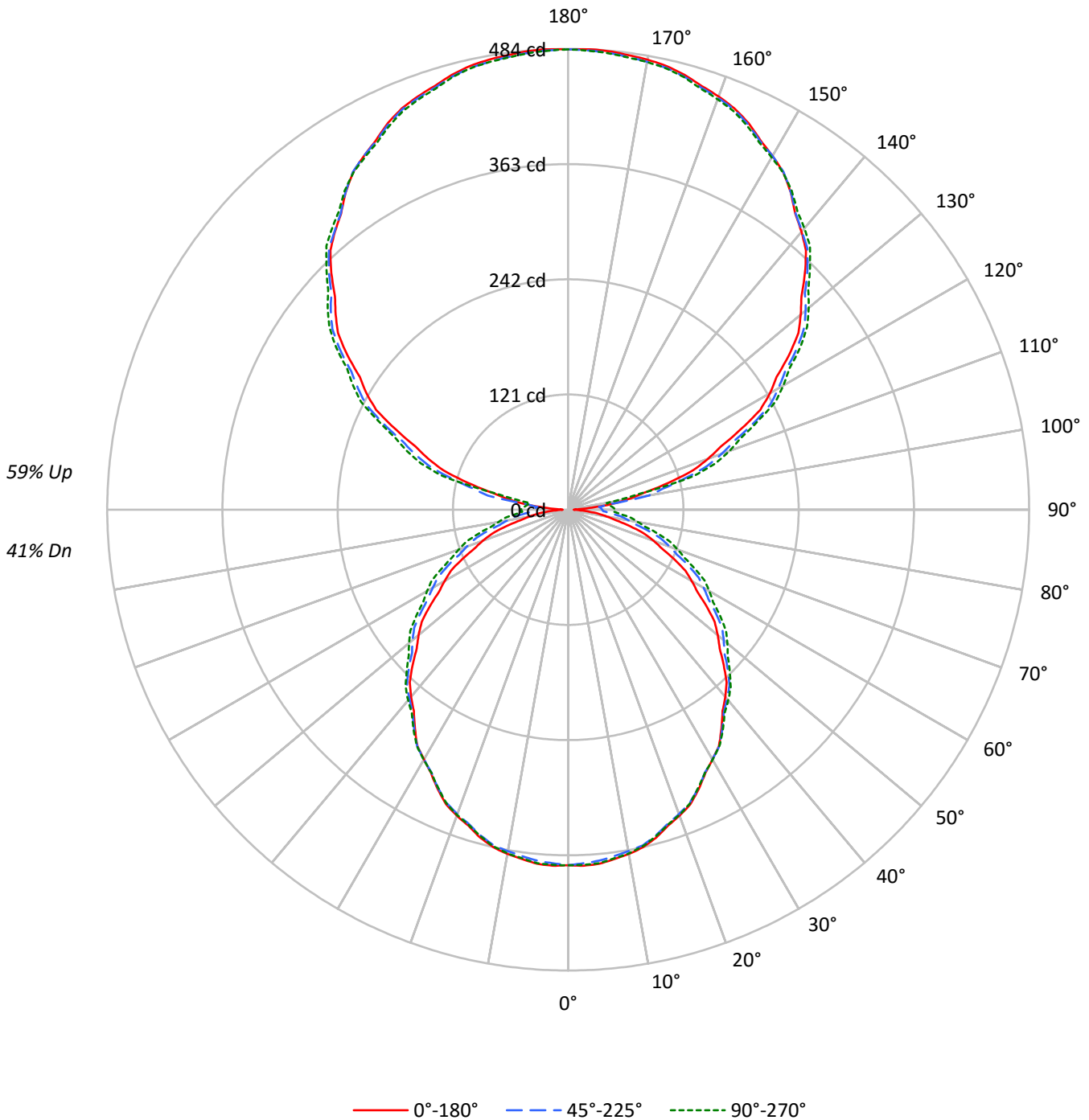
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333342-927

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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	96	96	96	96	78	78	78	63	63	63	48	48	48	41
1	95	91	87	83	87	83	79	76	68	65	63	54	52	51	41	40	39	33
2	86	79	72	67	78	72	66	62	59	55	52	47	44	42	36	34	33	27
3	79	69	62	56	71	63	57	51	52	47	43	41	38	35	32	29	27	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	23	20
5	66	54	46	40	60	50	42	37	41	35	31	33	29	26	25	23	20	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	39	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12
9	48	36	29	23	44	33	26	22	28	22	19	23	19	16	18	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	14	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2412	2412	2412
5°	2416	2367	2375
10°	2399	2324	2322
15°	2371	2274	2253
20°	2333	2212	2186
25°	2287	2145	2103
30°	2231	2071	2027
35°	2179	2003	1957
40°	2127	1932	1887
45°	2067	1871	1825
50°	2010	1805	1770
55°	1941	1743	1706
60°	1866	1671	1640
65°	1789	1597	1567
70°	1700	1494	1490
75°	1558	1397	1397
80°	1377	1278	1295
85°	1203	1197	1263



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.3	1.3
10°-20°	100.2	3.8
20°-30°	149.1	5.6
30°-40°	176.6	6.7
40°-50°	182.6	6.9
50°-60°	168.2	6.4
60°-70°	135.9	5.1
70°-80°	91.0	3.4
80°-90°	48.2	1.8
90°-100°	44.1	1.7
100°-110°	127.8	4.8
110°-120°	209.5	7.9
120°-130°	259.5	9.8
130°-140°	274.3	10.4
140°-150°	255.1	9.7
150°-160°	205.8	7.8
160°-170°	133.1	5.0
170°-180°	45.9	1.7
0°-30°	284.6	10.8
0°-40°	461.2	17.5
0°-60°	812.0	30.7
0°-90°	1087.2	41.1
90°-120°	381.3	14.4
90°-150°	1170.2	44.3
90°-180°	1555.0	58.9
0°-180°	2642.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	373	373	373	373	373	
5°	373	373	370	373	373	35
15°	357	357	354	356	355	100
25°	324	325	323	324	323	149
35°	280	283	282	283	283	175
45°	231	235	237	239	240	178
55°	178	183	189	193	195	159
65°	122	131	140	145	146	121
75°	67	77	89	96	98	71
85°	20	32	45	53	56	21
90°	6	21	36	46	50	5
95°	25	33	32	42	45	30
105°	109	116	127	134	136	115
115°	200	205	214	219	219	198
125°	283	285	292	296	298	252
135°	352	353	355	359	359	271
145°	407	407	408	410	409	254
155°	448	446	447	447	445	206
165°	473	471	471	473	470	133
175°	484	481	482	484	481	46
180°	484	484	484	484	484	



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CATALOG NUMBER: S125DIW-S375D470U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	374.3	374.1	374.1	373.9	373.8	373.5	373.0	372.6	372.2	371.7	372.2
5°	373.4	373.3	373.1	373.0	372.8	372.4	371.9	371.3	370.7	370.1	370.8
7.5°	370.1	370.1	370.0	369.9	369.9	369.6	369.0	368.4	367.8	367.2	367.8
10°	367.2	367.2	367.2	367.2	367.2	366.9	366.2	365.6	365.0	364.2	364.9
12.5°	363.1	363.2	363.2	363.3	363.4	363.1	362.7	362.1	361.6	361.1	361.5
15°	356.6	356.6	356.7	356.9	357.0	356.6	356.1	355.5	355.0	354.4	354.9
17.5°	348.1	348.2	348.4	348.6	348.7	348.6	348.0	347.4	346.8	346.3	346.7
20°	342.0	342.1	342.3	342.5	342.6	342.4	341.8	341.3	340.7	340.1	340.4
22.5°	334.9	335.3	335.5	335.8	336.1	335.9	335.3	334.6	334.0	333.4	333.7
25°	324.0	324.2	324.5	324.7	325.0	324.9	324.4	323.9	323.4	322.9	323.2
27.5°	311.9	312.2	312.6	312.9	313.3	313.2	312.7	312.1	311.6	311.0	311.2
30°	302.8	303.2	303.7	304.3	304.8	304.8	304.3	303.7	303.2	302.8	302.9
32.5°	294.6	295.0	295.4	295.9	296.3	296.3	296.0	295.6	295.2	294.9	295.0
35°	280.4	281.0	281.6	282.2	282.7	282.9	282.7	282.4	282.2	281.9	282.2
37.5°	266.3	266.8	267.4	267.8	268.4	268.6	268.5	268.5	268.4	268.3	268.6
40°	256.7	257.3	257.9	258.6	259.3	259.5	259.4	259.4	259.3	259.2	259.5
42.5°	246.1	246.9	247.8	248.7	249.5	250.0	250.2	250.3	250.6	250.7	251.1
45°	231.0	232.0	232.8	233.7	234.6	235.3	235.7	236.1	236.5	236.9	237.4
47.5°	215.6	216.4	217.2	218.1	218.9	219.7	220.4	221.0	221.7	222.4	223.3
50°	205.0	205.9	206.8	207.7	208.6	209.5	210.4	211.3	212.1	213.1	214.0
52.5°	193.9	195.0	196.1	197.2	198.3	199.3	200.4	201.5	202.6	203.7	204.7
55°	177.5	178.9	180.1	181.5	182.8	184.1	185.4	186.6	188.0	189.3	190.2
57.5°	160.9	162.4	164.0	165.6	167.2	168.7	170.2	171.7	173.2	174.6	175.6
60°	149.7	151.4	153.0	154.6	156.2	157.9	159.5	161.1	162.8	164.4	165.6
62.5°	138.9	140.5	142.2	143.8	145.4	147.1	148.9	150.6	152.4	154.2	155.5
65°	122.3	124.1	126.0	127.9	129.8	131.7	133.6	135.6	137.5	139.5	140.7
67.5°	106.6	108.4	110.2	112.0	113.8	115.7	117.7	119.7	121.7	123.7	125.2
70°	95.2	97.0	98.9	100.8	102.7	104.6	106.8	108.9	111.0	113.1	114.7
72.5°	84.1	86.0	87.9	89.8	91.8	94.0	96.3	98.5	100.8	103.1	104.9
75°	67.3	69.5	71.6	73.7	75.8	78.2	80.8	83.4	86.0	88.6	90.2
77.5°	51.3	53.8	56.2	58.6	61.1	63.5	66.1	68.6	71.1	73.6	75.4
80°	41.4	43.8	46.3	48.7	51.1	53.7	56.5	59.3	62.0	64.8	66.6
82.5°	32.3	34.9	37.5	40.0	42.5	45.3	48.1	50.9	53.8	56.6	58.3
85°	20.1	22.8	25.5	28.2	30.9	33.7	36.5	39.4	42.2	45.0	46.8
87.5°	11.5	14.3	17.0	19.7	22.4	25.2	28.1	31.0	33.8	36.8	38.7
90°	6.2	9.4	12.7	15.9	19.2	22.5	25.7	29.1	32.4	35.7	38.0
92.5°	10.8	12.8	14.7	16.7	18.6	21.3	24.6	28.0	31.3	34.6	36.8
95°	25.2	27.1	28.9	30.8	32.7	33.5	33.3	33.0	32.7	32.5	34.6
97.5°	47.0	49.3	51.7	53.9	56.3	55.8	52.5	49.2	45.9	42.5	42.0
100°	63.8	65.8	67.8	69.7	71.7	74.1	77.0	79.9	82.9	85.8	75.7
102.5°	81.0	82.9	84.8	86.7	88.6	90.9	93.6	96.3	99.1	101.8	101.2
105°	108.7	110.3	111.9	113.5	115.1	117.2	119.6	122.1	124.5	126.9	128.6
107.5°	137.3	138.4	139.5	140.6	141.7	143.5	146.1	148.5	151.1	153.5	155.2
110°	156.0	156.9	157.9	158.9	159.9	161.5	164.0	166.4	168.9	171.3	172.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	173.7	174.7	175.7	176.7	177.6	179.3	181.6	183.9	186.2	188.5	189.6
115°	200.0	201.0	201.9	203.0	203.9	205.5	207.6	209.8	212.1	214.3	215.4
117.5°	227.3	227.6	228.0	228.3	228.7	230.0	232.3	234.6	236.9	239.2	240.2
120°	244.5	244.6	244.8	244.9	245.1	246.2	248.3	250.5	252.5	254.7	255.9
122.5°	259.4	259.8	260.2	260.6	261.0	262.2	264.1	266.0	267.9	269.9	271.0
125°	282.8	283.3	283.8	284.2	284.7	285.7	287.4	289.0	290.7	292.2	293.3
127.5°	304.8	305.1	305.5	305.8	306.1	306.9	308.2	309.5	310.8	312.0	313.1
130°	318.6	318.9	319.2	319.6	319.9	320.7	321.9	323.1	324.3	325.5	326.5
132.5°	332.1	332.6	333.0	333.4	333.9	334.5	335.2	335.9	336.5	337.2	338.3
135°	351.6	352.0	352.4	352.8	353.2	353.6	353.9	354.4	354.8	355.2	356.1
137.5°	369.5	369.9	370.2	370.6	370.9	371.1	371.3	371.4	371.5	371.7	372.6
140°	381.0	381.1	381.3	381.4	381.6	381.7	381.7	381.7	381.7	381.7	382.7
142.5°	391.6	391.6	391.7	391.7	391.7	391.7	391.9	392.1	392.1	392.3	393.1
145°	407.1	407.2	407.3	407.3	407.4	407.5	407.5	407.5	407.5	407.5	408.0
147.5°	420.4	420.3	420.3	420.3	420.3	420.3	420.4	420.5	420.6	420.6	420.9
150°	429.0	428.8	428.6	428.5	428.3	428.3	428.5	428.6	428.8	429.0	429.1
152.5°	437.3	437.0	436.6	436.3	435.9	435.8	435.9	436.1	436.3	436.4	436.6
155°	448.0	447.5	447.0	446.6	446.1	445.9	446.1	446.2	446.4	446.6	446.8
157.5°	456.2	455.9	455.7	455.3	455.0	455.0	455.0	455.0	455.0	455.0	455.3
160°	461.9	461.4	461.0	460.5	460.0	459.9	459.9	460.0	460.1	460.2	460.5
162.5°	466.5	466.0	465.6	465.1	464.6	464.5	464.5	464.6	464.7	464.8	465.2
165°	472.7	472.2	471.7	471.3	470.8	470.6	470.6	470.7	470.8	470.9	471.3
167.5°	477.3	476.8	476.3	475.8	475.3	475.1	475.2	475.2	475.3	475.4	476.0
170°	479.9	479.3	478.7	478.2	477.6	477.4	477.4	477.5	477.6	477.7	478.3
172.5°	481.6	481.0	480.5	479.9	479.3	479.2	479.3	479.4	479.6	479.7	480.3
175°	483.5	483.0	482.5	482.0	481.6	481.3	481.4	481.5	481.6	481.6	482.3
177.5°	484.3	483.9	483.5	483.2	482.8	482.6	482.7	482.8	482.8	482.9	483.3
180°	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	372.6	373.0	373.5	373.7	373.6	373.6	373.5	373.4
5°	371.5	372.1	372.7	373.0	373.0	372.9	372.8	372.7
7.5°	368.4	368.9	369.5	369.7	369.6	369.6	369.5	369.4
10°	365.4	366.0	366.5	366.8	366.7	366.6	366.5	366.5
12.5°	361.9	362.3	362.8	362.9	362.7	362.5	362.3	362.1
15°	355.4	355.8	356.3	356.4	356.1	355.8	355.5	355.1
17.5°	347.1	347.4	347.8	347.8	347.7	347.5	347.3	347.1
20°	340.6	340.9	341.1	341.2	341.2	341.2	341.2	341.2
22.5°	334.0	334.3	334.6	334.7	334.5	334.3	334.1	333.9
25°	323.5	323.9	324.2	324.2	323.8	323.4	323.0	322.6
27.5°	311.4	311.6	311.9	312.0	311.8	311.6	311.5	311.3
30°	303.1	303.2	303.4	303.5	303.4	303.3	303.2	303.2
32.5°	295.2	295.3	295.5	295.6	295.5	295.4	295.3	295.2
35°	282.4	282.7	282.9	283.0	283.0	283.0	283.0	283.0
37.5°	268.9	269.3	269.6	269.7	269.7	269.7	269.7	269.6
40°	259.8	260.2	260.5	260.8	260.9	261.1	261.3	261.4
42.5°	251.5	251.9	252.3	252.5	252.5	252.5	252.5	252.6
45°	238.1	238.6	239.2	239.5	239.6	239.6	239.7	239.8
47.5°	224.1	225.0	225.8	226.2	226.5	226.6	226.8	227.0
50°	214.8	215.8	216.7	217.2	217.5	217.7	217.9	218.2
52.5°	205.7	206.6	207.6	208.1	208.3	208.5	208.7	208.8
55°	191.1	191.9	192.9	193.5	193.8	194.1	194.5	194.8
57.5°	176.7	177.7	178.7	179.4	179.6	179.8	180.1	180.4
60°	166.8	168.0	169.3	170.0	170.2	170.5	170.7	171.0
62.5°	156.9	158.2	159.5	160.3	160.7	161.0	161.3	161.6
65°	142.0	143.1	144.3	145.1	145.4	145.8	146.2	146.5
67.5°	126.7	128.1	129.6	130.6	130.9	131.4	131.8	132.2
70°	116.2	117.8	119.3	120.3	120.8	121.3	121.8	122.3
72.5°	106.5	108.2	109.9	110.9	111.2	111.6	111.9	112.3
75°	91.9	93.5	95.1	96.1	96.6	97.0	97.4	97.8
77.5°	77.2	79.0	80.7	81.8	82.1	82.5	82.8	83.1
80°	68.4	70.2	71.9	73.0	73.4	73.7	74.0	74.3
82.5°	60.0	61.8	63.5	64.6	65.3	65.8	66.4	67.0
85°	48.6	50.4	52.2	53.4	54.0	54.7	55.4	56.0
87.5°	40.6	42.6	44.5	45.8	46.4	47.1	47.7	48.3
90°	40.3	42.5	44.8	46.3	47.2	48.0	48.8	49.6
92.5°	39.0	41.2	43.4	44.8	45.6	46.2	46.9	47.5
95°	36.8	39.1	41.2	42.6	43.2	43.7	44.3	44.8
97.5°	41.4	40.9	40.4	40.4	41.0	41.5	42.1	42.6
100°	65.4	55.3	45.2	40.2	40.3	40.5	40.6	40.9
102.5°	100.6	100.0	99.4	96.6	91.7	86.8	81.8	76.9
105°	130.2	131.8	133.4	134.5	135.0	135.5	135.9	136.5
107.5°	156.9	158.4	160.1	161.1	161.3	161.5	161.8	162.1
110°	174.0	175.2	176.5	177.5	178.2	178.8	179.4	180.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	190.8	192.0	193.2	194.0	194.5	195.0	195.4	195.8
115°	216.6	217.7	218.8	219.4	219.4	219.4	219.4	219.4
117.5°	241.1	242.2	243.1	243.8	244.2	244.5	244.8	245.2
120°	257.1	258.3	259.6	260.2	260.3	260.4	260.5	260.6
122.5°	272.2	273.3	274.5	275.1	275.1	275.1	275.2	275.2
125°	294.2	295.2	296.2	296.8	296.9	297.1	297.3	297.5
127.5°	314.1	315.1	316.2	316.6	316.6	316.4	316.3	316.2
130°	327.3	328.2	329.2	329.5	329.6	329.6	329.6	329.6
132.5°	339.5	340.6	341.6	342.1	342.1	342.1	342.0	341.9
135°	357.0	357.9	358.8	359.3	359.2	359.1	359.0	358.9
137.5°	373.7	374.6	375.7	376.1	376.0	375.9	375.8	375.7
140°	383.8	384.8	385.9	386.3	386.2	386.0	385.9	385.7
142.5°	393.9	394.7	395.5	395.8	395.6	395.5	395.3	395.2
145°	408.4	408.9	409.4	409.6	409.4	409.3	409.2	409.0
147.5°	421.1	421.4	421.6	421.4	421.0	420.6	420.2	419.8
150°	429.3	429.4	429.6	429.4	428.9	428.3	427.8	427.2
152.5°	436.7	436.9	437.0	436.9	436.3	435.8	435.2	434.7
155°	447.0	447.3	447.5	447.3	446.6	446.0	445.4	444.7
157.5°	455.5	455.7	456.0	455.8	455.2	454.6	453.9	453.3
160°	460.8	461.1	461.4	461.3	460.7	460.0	459.4	458.8
162.5°	465.6	466.1	466.5	466.4	465.7	465.0	464.3	463.6
165°	471.9	472.4	472.9	472.8	472.1	471.4	470.8	470.2
167.5°	476.6	477.1	477.7	477.7	476.9	476.2	475.5	474.8
170°	479.0	479.7	480.3	480.2	479.5	478.8	478.1	477.4
172.5°	480.9	481.4	482.0	482.0	481.3	480.5	479.8	479.1
175°	482.9	483.5	484.2	484.2	483.5	482.8	482.0	481.3
177.5°	483.8	484.2	484.7	484.7	484.1	483.6	483.1	482.6
180°	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5

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