

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: P333343-927

Luminaire Tested: **S125DIW-S375D470U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333343-927
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: S125DIW-S375D470U927-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2445.1 lumens
Efficiency: N/A
Efficacy: 106.3 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

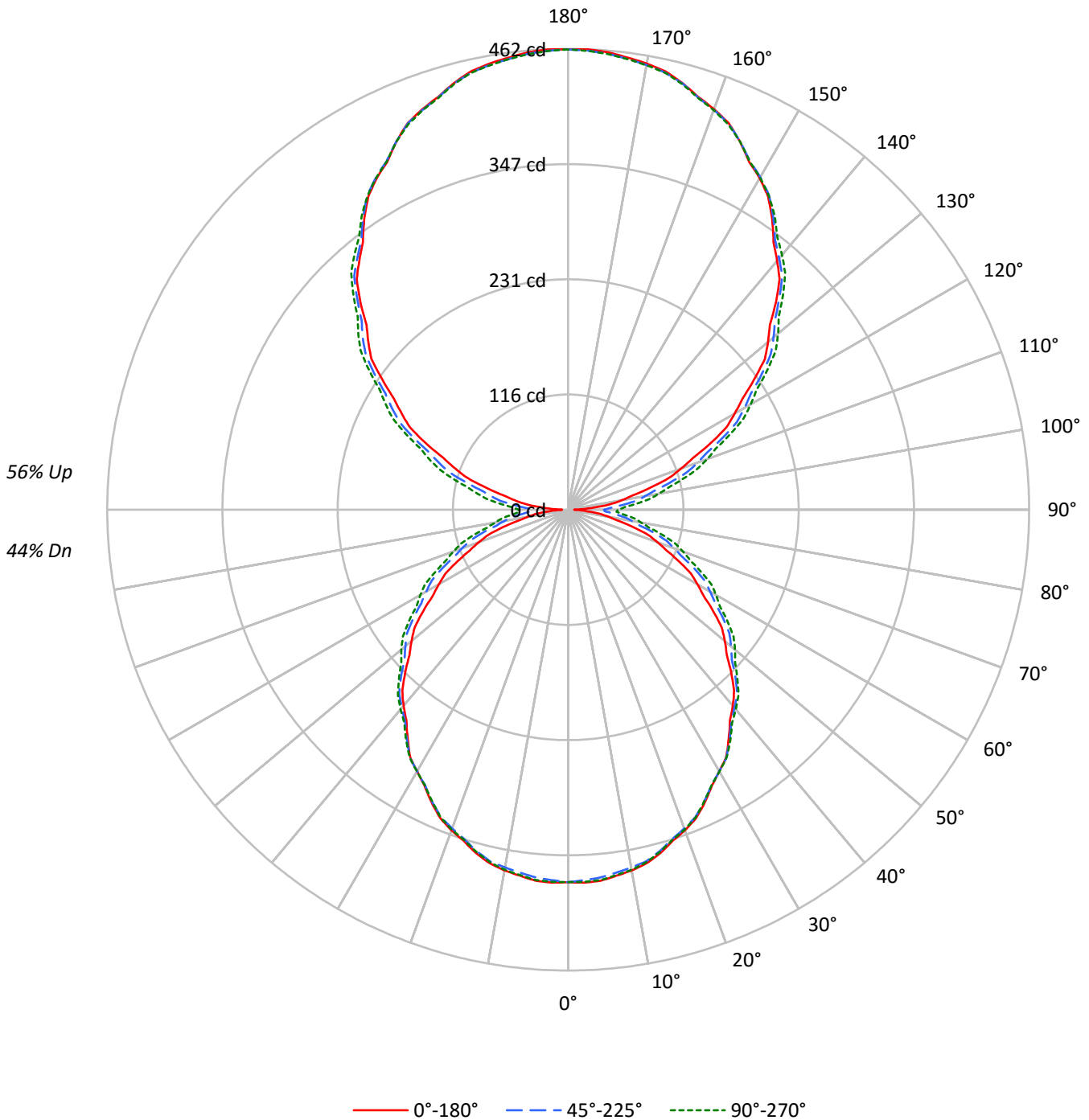
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	65	65	65	51	51	51	44
1	96	91	87	83	88	84	80	77	69	67	64	56	54	53	44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	37	34	31	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	27	25	21
5	66	55	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	24	21	19	16
7	56	44	36	30	51	41	33	28	34	28	24	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	20	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	14	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	14	12	10

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	1.4
10°-20°	100.2	4.1
20°-30°	149.1	6.1
30°-40°	176.6	7.2
40°-50°	182.6	7.5
50°-60°	168.2	6.9
60°-70°	135.9	5.6
70°-80°	91.0	3.7
80°-90°	48.2	2.0
90°-100°	57.4	2.3
100°-110°	110.8	4.5
110°-120°	167.7	6.9
120°-130°	210.8	8.6
130°-140°	231.2	9.5
140°-150°	224.0	9.2
150°-160°	187.6	7.7
160°-170°	124.7	5.1
170°-180°	43.6	1.8
0°-30°	284.6	11.6
0°-40°	461.2	18.9
0°-60°	812.0	33.2
0°-90°	1087.2	44.5
90°-120°	335.8	13.7
90°-150°	1001.9	41.0
90°-180°	1358.0	55.5
0°-180°	2445.1	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°	28	39	54	65	68	29
105°	85	93	106	115	119	91
115°	157	161	171	177	179	155
125°	227	229	237	242	243	203
135°	294	296	299	304	304	227
145°	356	357	358	360	360	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°	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	25.8	29.2	32.5	35.7	38.0
92.5°	13.9	16.8	19.6	22.5	25.3	28.6	32.1	35.6	39.1	42.6	45.0
95°	28.1	30.3	32.6	34.9	37.2	40.1	43.6	47.2	50.8	54.3	56.7
97.5°	43.1	45.1	47.1	49.0	50.9	53.9	57.6	61.4	65.1	68.9	71.1
100°	54.3	56.0	57.8	59.4	61.2	63.8	67.4	71.1	74.7	78.3	80.8
102.5°	66.4	68.3	70.1	72.0	73.9	76.4	79.5	82.5	85.6	88.6	91.1
105°	85.2	86.8	88.6	90.2	92.0	94.3	97.2	100.1	103.1	105.9	108.1
107.5°	106.0	107.5	109.0	110.5	112.0	114.1	116.8	119.5	122.2	124.9	126.8
110°	120.3	121.7	123.1	124.5	125.8	127.8	130.3	132.8	135.3	137.8	139.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	135.3	136.3	137.2	138.2	139.2	141.0	143.5	146.0	148.5	151.1	152.7
115°	156.9	157.8	158.8	159.6	160.5	162.1	164.4	166.6	168.9	171.2	172.5
117.5°	178.7	179.2	179.7	180.2	180.8	182.1	184.3	186.4	188.5	190.7	192.1
120°	192.5	193.1	193.8	194.4	195.0	196.4	198.3	200.3	202.2	204.1	205.6
122.5°	207.2	207.4	207.6	207.9	208.2	209.3	211.3	213.3	215.3	217.4	218.6
125°	227.3	227.7	228.1	228.5	228.9	230.0	231.6	233.4	235.0	236.8	237.9
127.5°	248.5	248.7	248.8	249.1	249.2	250.0	251.5	252.9	254.4	255.8	256.9
130°	261.4	261.7	262.1	262.4	262.7	263.5	264.7	266.1	267.4	268.7	269.7
132.5°	274.0	274.6	275.3	275.9	276.6	277.3	278.2	279.0	279.9	280.7	281.8
135°	294.5	294.9	295.2	295.6	296.0	296.5	297.2	297.9	298.5	299.1	300.2
137.5°	313.6	314.0	314.4	314.8	315.2	315.6	316.1	316.6	317.0	317.4	318.5
140°	325.7	326.1	326.5	326.9	327.3	327.6	328.0	328.3	328.6	328.9	329.9
142.5°	338.0	338.3	338.6	338.8	339.1	339.4	339.7	340.0	340.3	340.6	341.5
145°	356.2	356.4	356.6	356.9	357.1	357.4	357.6	357.8	358.1	358.3	358.7
147.5°	372.6	372.8	373.0	373.1	373.4	373.5	373.7	373.9	374.1	374.3	374.6
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°	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	46.4	47.2	48.0	48.8	49.6
92.5°	47.3	49.7	52.0	53.5	54.3	55.0	55.8	56.5
95°	59.1	61.4	63.8	65.3	66.1	66.8	67.5	68.2
97.5°	73.4	75.7	77.9	79.3	79.9	80.6	81.3	81.9
100°	83.3	85.6	88.1	89.6	90.2	90.9	91.6	92.2
102.5°	93.6	95.9	98.4	100.0	100.7	101.4	102.1	102.8
105°	110.2	112.3	114.4	115.8	116.6	117.5	118.3	119.1
107.5°	128.7	130.5	132.4	133.5	134.0	134.5	135.0	135.5
110°	141.4	143.2	145.0	146.2	146.6	147.1	147.6	148.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	154.2	155.8	157.4	158.4	158.8	159.3	159.7	160.1
115°	174.0	175.3	176.7	177.6	178.0	178.4	178.9	179.3
117.5°	193.6	195.0	196.5	197.3	197.6	197.8	198.0	198.3
120°	206.9	208.3	209.7	210.5	210.6	210.8	211.0	211.1
122.5°	219.8	221.1	222.4	223.1	223.3	223.6	223.8	224.0
125°	239.1	240.2	241.4	242.1	242.4	242.7	243.0	243.4
127.5°	258.0	259.1	260.2	261.0	261.3	261.6	261.9	262.2
130°	270.8	271.9	272.9	273.5	273.9	274.1	274.3	274.6
132.5°	282.8	283.9	284.9	285.6	285.7	285.8	285.9	286.1
135°	301.3	302.3	303.4	304.0	304.0	304.1	304.2	304.3
137.5°	319.6	320.6	321.6	322.2	322.1	322.0	321.9	321.9
140°	331.0	332.1	333.1	333.6	333.5	333.4	333.4	333.4
142.5°	342.4	343.3	344.1	344.5	344.4	344.4	344.3	344.2
145°	359.2	359.6	360.0	360.2	360.3	360.4	360.4	360.5
147.5°	374.9	375.3	375.6	375.5	375.1	374.7	374.3	373.9
150°	384.9	384.9	384.9	384.8	384.8	384.7	384.6	384.5
152.5°	394.5	394.7	394.8	394.8	394.5	394.3	394.0	393.7
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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