

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: P333345-935

Luminaire Tested: **S125DIW-S375D470U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333345-935
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: S125DIW-S375D470U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH 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: 2709.2 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

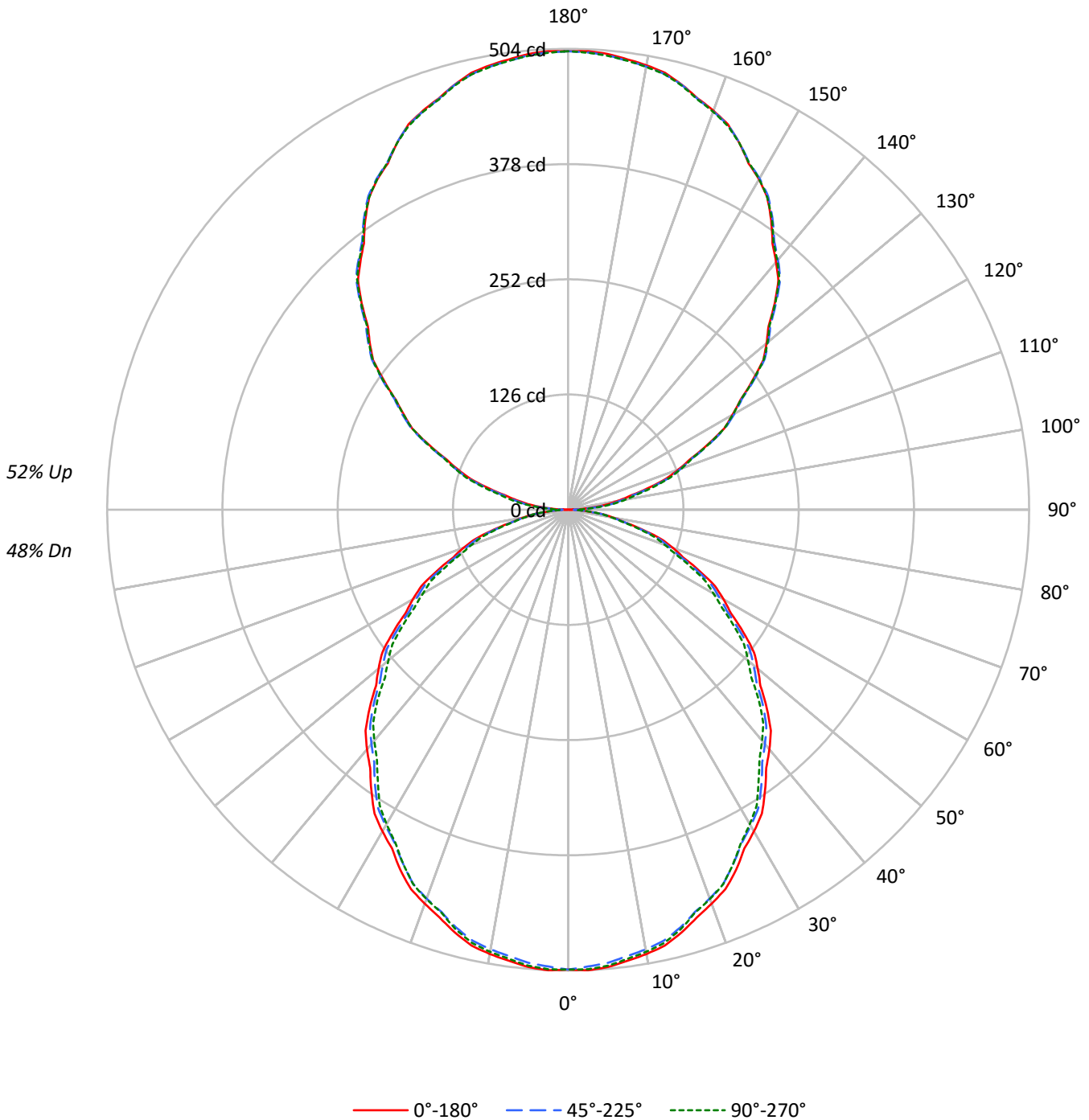
Input Watts (W): 23
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48
1	97	93	89	86	89	86	82	79	72	70	68	60	58	56	48	47	46	41
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39	34
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	29
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	31	28	25
5	68	56	48	42	62	52	45	39	44	39	34	37	33	29	30	27	25	21
6	62	50	42	36	57	47	40	34	40	34	30	33	29	26	27	24	22	19
7	58	45	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19	17
8	54	41	34	28	49	38	31	27	33	27	23	28	23	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	13
10	47	35	27	23	43	32	26	21	28	23	19	24	19	17	20	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3249	3249	3249
5°	3255	3225	3245
10°	3236	3202	3220
15°	3201	3163	3177
20°	3151	3110	3115
25°	3096	3046	3043
30°	3030	2976	2961
35°	2958	2902	2861
40°	2885	2822	2780
45°	2806	2747	2693
50°	2719	2659	2579
55°	2634	2558	2486
60°	2533	2457	2370
65°	2415	2335	2257
70°	2298	2194	2119
75°	2094	2026	1956
80°	1863	1834	1789
85°	1623	1652	1564



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	1.8
10°-20°	134.0	4.9
20°-30°	197.8	7.3
30°-40°	230.8	8.5
40°-50°	231.8	8.6
50°-60°	203.5	7.5
60°-70°	151.6	5.6
70°-80°	86.7	3.2
80°-90°	26.3	1.0
90°-100°	33.6	1.2
100°-110°	99.2	3.7
110°-120°	168.0	6.2
120°-130°	221.1	8.2
130°-140°	247.7	9.1
140°-150°	242.8	9.0
150°-160°	203.9	7.5
160°-170°	135.6	5.0
170°-180°	47.4	1.8
0°-30°	379.2	14.0
0°-40°	610.0	22.5
0°-60°	1045.3	38.6
0°-90°	1309.9	48.4
90°-120°	300.8	11.1
90°-150°	1012.4	37.4
90°-180°	1399.0	51.6
0°-180°	2709.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	502	501	497	501	501	48
15°	479	477	473	475	475	135
25°	434	432	427	428	427	200
35°	375	373	368	366	363	235
45°	307	305	301	296	295	237
55°	234	232	227	224	221	209
65°	158	157	153	149	148	157
75°	84	83	81	80	78	89
85°	22	22	22	22	21	24
90°	0	4	6	8	9	3
95°	25	26	30	33	34	27
105°	89	91	93	96	97	95
115°	168	170	171	170	170	166
125°	246	248	248	247	247	220
135°	319	321	322	322	320	246
145°	387	388	389	389	388	242
155°	443	443	443	444	443	204
165°	481	480	481	482	480	136
175°	500	499	499	501	498	48
180°	501	501	501	501	501	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0
2.5°	504.2	504.0	503.9	503.6	503.4	502.9	502.2	501.5	500.8	500.1	500.8
5°	502.1	502.0	501.8	501.6	501.4	500.9	500.1	499.2	498.3	497.4	498.2
7.5°	497.6	497.4	497.2	497.1	496.9	496.3	495.3	494.3	493.4	492.4	493.2
10°	493.4	493.3	493.1	492.9	492.8	492.1	491.2	490.2	489.2	488.3	489.0
12.5°	488.4	488.0	487.7	487.4	487.1	486.5	485.5	484.7	483.7	482.8	483.4
15°	478.7	478.5	478.2	477.9	477.6	477.0	476.0	475.1	474.1	473.1	473.6
17.5°	467.6	467.3	466.8	466.5	466.1	465.4	464.3	463.4	462.4	461.3	461.9
20°	458.4	458.2	458.1	457.9	457.7	457.0	455.9	454.7	453.6	452.5	453.1
22.5°	449.2	448.8	448.5	448.2	447.9	447.2	446.1	445.1	443.9	442.9	443.3
25°	434.5	434.1	433.6	433.2	432.7	432.0	430.8	429.6	428.5	427.4	427.6
27.5°	417.4	417.2	416.9	416.6	416.4	415.6	414.5	413.3	412.1	410.9	411.0
30°	406.3	406.0	405.7	405.4	405.2	404.4	403.1	401.7	400.5	399.1	398.9
32.5°	394.2	393.7	393.4	393.0	392.5	391.8	390.5	389.3	388.2	387.0	386.7
35°	375.2	374.9	374.5	374.2	373.8	373.0	371.8	370.6	369.3	368.1	367.6
37.5°	355.6	355.2	354.7	354.2	353.8	353.0	351.8	350.7	349.5	348.4	347.7
40°	342.2	341.7	341.3	340.9	340.4	339.6	338.4	337.2	335.9	334.7	333.9
42.5°	327.9	327.5	327.2	326.7	326.4	325.6	324.3	323.1	321.8	320.6	319.9
45°	307.2	306.9	306.5	306.2	305.7	305.1	304.0	303.0	301.9	300.8	299.8
47.5°	284.9	284.9	284.9	285.0	285.0	284.4	283.1	281.8	280.5	279.2	278.2
50°	270.6	270.4	270.1	269.8	269.5	268.9	267.8	266.7	265.7	264.6	263.5
52.5°	256.0	255.7	255.5	255.4	255.2	254.5	253.4	252.3	251.1	249.9	249.0
55°	233.9	233.7	233.4	233.2	232.9	232.1	230.9	229.7	228.4	227.2	226.4
57.5°	210.9	210.7	210.5	210.4	210.3	209.7	208.6	207.6	206.6	205.5	204.5
60°	196.1	195.8	195.4	195.1	194.8	194.1	193.1	192.2	191.1	190.2	189.3
62.5°	180.9	180.6	180.3	180.0	179.8	179.2	178.4	177.5	176.7	175.9	175.0
65°	158.0	157.8	157.6	157.5	157.3	156.7	155.8	154.7	153.8	152.8	152.0
67.5°	135.8	135.4	135.0	134.7	134.3	133.7	133.0	132.2	131.6	130.9	130.2
70°	121.7	121.3	120.9	120.5	120.0	119.3	118.6	117.8	117.0	116.2	115.6
72.5°	106.5	106.2	105.9	105.6	105.3	104.9	104.4	103.8	103.3	102.8	102.2
75°	83.9	83.8	83.6	83.4	83.3	82.9	82.5	82.1	81.6	81.2	80.9
77.5°	63.2	63.1	63.0	62.9	62.9	62.8	62.5	62.3	62.0	61.7	61.6
80°	50.1	50.1	50.1	50.1	50.1	50.0	49.9	49.7	49.5	49.3	49.2
82.5°	38.7	38.6	38.4	38.2	38.1	38.1	38.0	38.0	37.9	37.9	37.7
85°	21.9	22.0	22.0	22.1	22.2	22.3	22.3	22.3	22.3	22.3	22.2
87.5°	8.7	8.8	9.0	9.1	9.2	9.3	9.4	9.4	9.5	9.6	9.6
90°	0.4	1.1	1.8	2.5	3.2	3.8	4.4	5.0	5.6	6.3	6.7
92.5°	9.5	9.9	10.4	10.9	11.4	12.0	12.7	13.5	14.2	15.0	15.6
95°	25.4	25.6	25.7	25.9	26.1	26.6	27.5	28.3	29.2	30.0	30.7
97.5°	42.1	42.2	42.3	42.4	42.4	43.0	44.3	45.5	46.7	47.9	48.4
100°	54.7	54.7	54.7	54.7	54.7	55.2	56.3	57.4	58.5	59.7	60.5
102.5°	68.0	68.4	68.8	69.1	69.5	69.9	70.5	71.0	71.6	72.2	73.0
105°	88.9	89.4	89.8	90.2	90.7	91.2	91.7	92.2	92.7	93.2	93.8
107.5°	112.1	112.5	113.0	113.4	113.8	114.3	114.6	115.0	115.5	115.8	116.1
110°	128.0	128.5	128.9	129.3	129.8	130.1	130.4	130.6	130.9	131.1	131.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	144.2	144.5	144.6	144.9	145.2	145.4	145.8	146.1	146.4	146.7	146.9
115°	168.2	168.5	168.9	169.3	169.6	169.9	170.0	170.2	170.4	170.6	170.5
117.5°	192.3	192.3	192.5	192.7	192.9	193.0	193.2	193.3	193.5	193.6	193.7
120°	207.2	207.7	208.1	208.5	209.0	209.2	209.3	209.4	209.5	209.6	209.6
122.5°	223.4	223.6	223.8	223.9	224.0	224.3	224.5	224.7	225.0	225.2	225.1
125°	245.5	246.0	246.5	247.0	247.5	247.9	248.0	248.1	248.1	248.2	248.1
127.5°	268.9	269.1	269.5	269.8	270.1	270.3	270.4	270.4	270.5	270.7	270.6
130°	282.9	283.4	283.8	284.2	284.6	285.0	285.2	285.3	285.5	285.7	285.6
132.5°	297.0	297.6	298.4	299.1	299.8	300.1	300.1	300.1	300.1	300.0	299.9
135°	319.2	319.8	320.3	320.8	321.3	321.6	321.7	321.8	321.8	321.9	321.9
137.5°	340.1	340.6	341.1	341.6	342.2	342.5	342.7	342.9	343.0	343.3	343.4
140°	353.5	354.0	354.4	354.8	355.2	355.7	355.9	356.2	356.5	356.7	356.9
142.5°	367.0	367.3	367.7	368.1	368.4	368.8	369.1	369.5	369.8	370.1	370.2
145°	386.8	387.1	387.4	387.8	388.1	388.4	388.7	388.9	389.2	389.4	389.4
147.5°	405.0	405.2	405.4	405.5	405.8	406.0	406.1	406.4	406.6	406.8	407.0
150°	417.2	417.1	417.0	416.9	416.8	417.0	417.3	417.7	418.0	418.4	418.4
152.5°	427.1	427.3	427.4	427.5	427.7	427.7	427.9	428.1	428.2	428.3	428.5
155°	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.7	442.8	442.9	443.2
157.5°	456.2	456.1	455.9	455.7	455.5	455.5	455.6	455.6	455.7	455.8	456.2
160°	464.4	464.2	463.8	463.6	463.3	463.2	463.3	463.4	463.5	463.6	464.0
162.5°	471.6	471.4	471.2	471.0	470.8	470.7	470.7	470.7	470.8	470.8	471.2
165°	481.1	481.0	480.8	480.6	480.4	480.4	480.5	480.6	480.7	480.8	481.1
167.5°	489.3	489.0	488.6	488.3	487.9	487.8	487.8	487.8	487.8	487.8	488.3
170°	493.6	493.3	492.9	492.6	492.2	492.1	492.1	492.1	492.1	492.1	492.6
172.5°	496.8	496.5	496.1	495.8	495.4	495.2	495.2	495.2	495.2	495.2	495.8
175°	500.3	499.9	499.6	499.2	498.9	498.7	498.7	498.7	498.7	498.7	499.2
177.5°	502.0	501.8	501.5	501.3	500.9	500.8	500.8	500.7	500.6	500.5	500.9
180°	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0
2.5°	501.5	502.2	502.9	503.3	503.2	503.1	503.1	503.0
5°	498.9	499.8	500.6	500.9	500.8	500.8	500.7	500.6
7.5°	494.0	494.7	495.5	495.8	495.8	495.7	495.6	495.5
10°	489.7	490.3	491.1	491.4	491.3	491.2	491.1	491.0
12.5°	484.0	484.6	485.1	485.3	485.3	485.3	485.3	485.3
15°	474.0	474.4	474.9	475.1	475.1	475.1	475.1	475.1
17.5°	462.4	463.0	463.6	463.6	463.1	462.7	462.3	461.8
20°	453.7	454.3	454.9	455.0	454.5	454.1	453.7	453.2
22.5°	443.7	444.1	444.5	444.5	444.3	443.9	443.7	443.3
25°	427.7	427.9	428.1	428.0	427.7	427.5	427.2	427.0
27.5°	411.0	411.0	411.0	411.0	410.6	410.4	410.1	409.8
30°	398.7	398.6	398.4	398.2	398.0	397.7	397.4	397.1
32.5°	386.4	386.1	385.7	385.4	384.9	384.4	383.9	383.4
35°	367.2	366.8	366.3	365.8	365.1	364.3	363.6	362.9
37.5°	347.1	346.4	345.7	345.2	344.7	344.4	344.0	343.5
40°	333.0	332.3	331.5	331.0	330.7	330.4	330.1	329.8
42.5°	319.2	318.5	317.7	317.2	316.8	316.3	316.0	315.6
45°	298.7	297.6	296.6	295.9	295.7	295.4	295.2	294.9
47.5°	277.1	276.0	274.9	274.1	273.5	272.9	272.2	271.6
50°	262.3	261.1	260.0	259.2	258.5	257.9	257.3	256.7
52.5°	248.0	246.9	245.9	245.1	244.4	243.7	243.1	242.4
55°	225.6	224.8	224.0	223.3	222.7	222.1	221.4	220.8
57.5°	203.5	202.4	201.4	200.7	200.4	200.0	199.7	199.3
60°	188.5	187.5	186.7	185.9	185.3	184.7	184.1	183.5
62.5°	174.0	173.0	172.0	171.3	170.9	170.4	169.9	169.4
65°	151.2	150.4	149.6	149.0	148.7	148.4	148.0	147.7
67.5°	129.5	128.8	128.1	127.7	127.5	127.3	127.1	126.8
70°	115.1	114.6	114.1	113.7	113.3	113.0	112.5	112.2
72.5°	101.6	101.0	100.4	100.0	99.6	99.3	98.8	98.5
75°	80.7	80.4	80.1	79.8	79.5	79.1	78.8	78.4
77.5°	61.5	61.3	61.1	61.0	60.7	60.4	60.2	59.9
80°	49.2	49.1	49.0	48.8	48.6	48.5	48.3	48.1
82.5°	37.5	37.4	37.3	37.1	37.1	37.1	37.0	37.0
85°	22.1	22.0	22.0	21.8	21.6	21.4	21.3	21.1
87.5°	9.7	9.8	9.9	9.9	9.8	9.7	9.6	9.5
90°	7.1	7.6	8.0	8.4	8.6	8.9	9.1	9.4
92.5°	16.1	16.7	17.3	17.7	17.8	18.0	18.3	18.4
95°	31.3	31.9	32.5	32.9	33.1	33.2	33.4	33.6
97.5°	49.0	49.6	50.1	50.5	50.5	50.7	50.8	50.9
100°	61.3	62.1	62.9	63.3	63.5	63.6	63.8	64.0
102.5°	73.9	74.7	75.6	76.1	76.4	76.6	76.9	77.1
105°	94.3	94.8	95.3	95.7	96.0	96.3	96.5	96.8
107.5°	116.3	116.6	116.8	117.0	117.0	116.9	116.9	116.9
110°	131.6	131.9	132.2	132.2	132.2	132.1	132.0	131.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	147.0	147.1	147.2	147.2	147.1	146.9	146.7	146.5
115°	170.4	170.3	170.2	170.1	170.0	170.0	169.9	169.8
117.5°	193.8	193.8	193.9	193.8	193.5	193.1	192.7	192.3
120°	209.6	209.6	209.6	209.4	209.1	208.7	208.4	208.0
122.5°	225.1	225.0	224.9	224.7	224.5	224.2	223.9	223.6
125°	247.9	247.7	247.5	247.4	247.3	247.2	247.1	247.0
127.5°	270.5	270.4	270.4	270.2	270.0	269.8	269.7	269.5
130°	285.5	285.4	285.3	285.2	285.0	284.8	284.6	284.5
132.5°	299.8	299.7	299.6	299.5	299.3	299.0	298.8	298.5
135°	321.9	321.9	321.9	321.8	321.4	321.1	320.7	320.4
137.5°	343.5	343.5	343.7	343.5	343.1	342.7	342.2	341.7
140°	357.1	357.2	357.4	357.2	356.8	356.4	355.9	355.5
142.5°	370.3	370.4	370.5	370.3	369.9	369.5	369.0	368.6
145°	389.4	389.4	389.4	389.3	389.1	388.8	388.6	388.3
147.5°	407.2	407.4	407.6	407.4	406.8	406.2	405.6	405.1
150°	418.4	418.4	418.4	418.3	418.1	417.9	417.8	417.6
152.5°	428.8	429.0	429.1	429.1	428.8	428.5	428.2	427.8
155°	443.6	443.9	444.3	444.3	443.8	443.4	443.0	442.6
157.5°	456.5	456.8	457.2	457.1	456.5	455.9	455.4	454.8
160°	464.3	464.7	465.0	464.9	464.5	464.1	463.6	463.2
162.5°	471.7	472.0	472.4	472.4	471.9	471.4	470.9	470.4
165°	481.5	481.8	482.2	482.1	481.6	481.0	480.5	480.0
167.5°	488.8	489.3	489.8	489.8	489.2	488.7	488.2	487.7
170°	493.1	493.6	494.2	494.1	493.5	492.9	492.3	491.7
172.5°	496.3	496.8	497.3	497.3	496.7	496.2	495.7	495.2
175°	499.7	500.3	500.8	500.8	500.2	499.6	498.9	498.3
177.5°	501.4	501.8	502.2	502.1	501.7	501.2	500.7	500.2
180°	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4

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