

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: P333345-930

Luminaire Tested: **S125DIW-S375D470U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333345-930  
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-S375D470U930-4F0-1E-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: 2565.4 lumens  
Efficiency: N/A  
Efficacy: 111.5 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

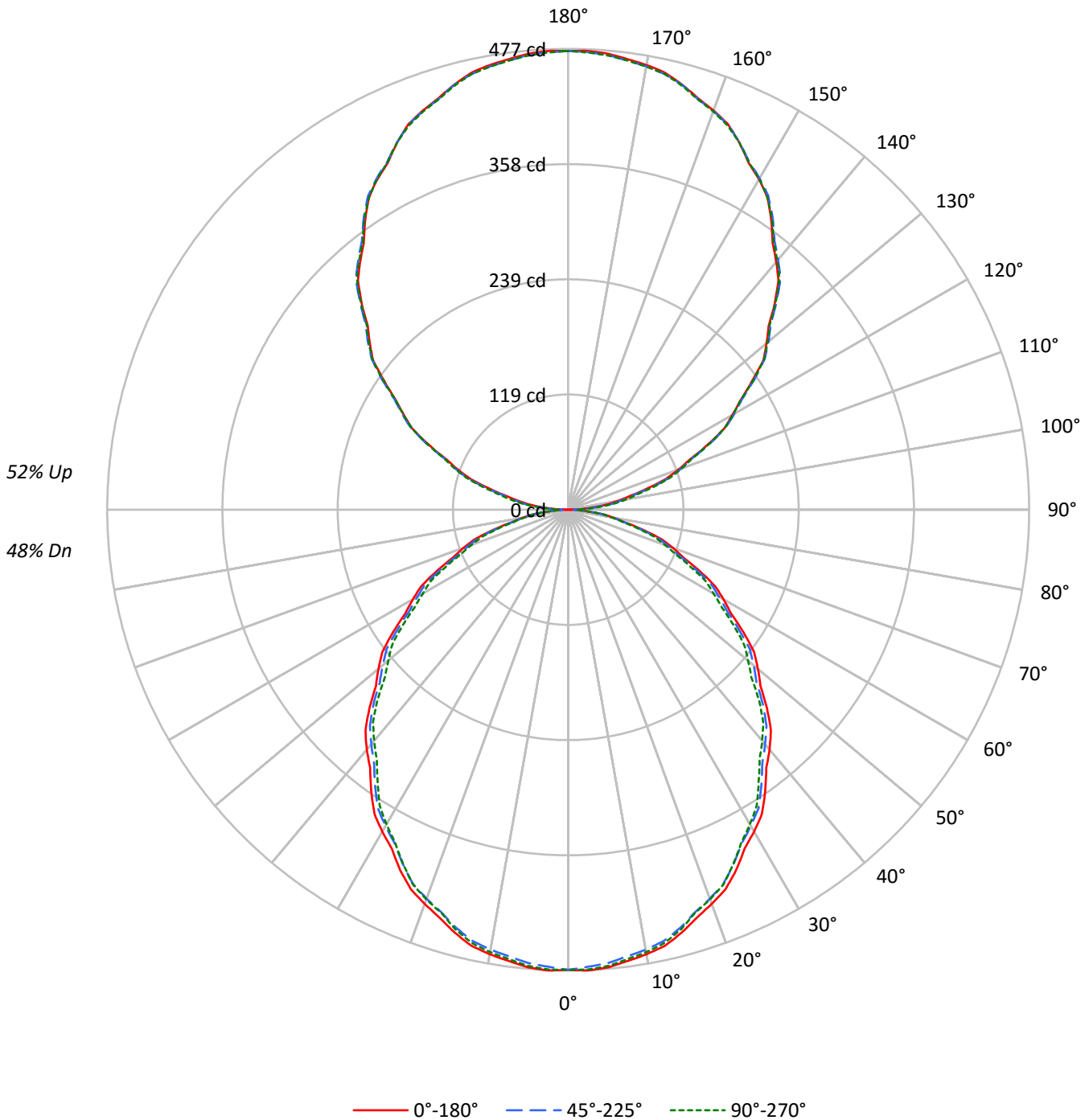
Input Watts (W): 23  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3076	3076	3076
5°	3083	3053	3073
10°	3064	3032	3049
15°	3031	2995	3008
20°	2983	2944	2950
25°	2932	2884	2881
30°	2869	2818	2804
35°	2801	2748	2709
40°	2732	2672	2633
45°	2657	2602	2550
50°	2574	2517	2442
55°	2494	2423	2354
60°	2399	2326	2244
65°	2286	2211	2136
70°	2177	2079	2005
75°	1984	1919	1852
80°	1767	1737	1696
85°	1534	1564	1482



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.9	1.8
10°-20°	126.9	4.9
20°-30°	187.3	7.3
30°-40°	218.5	8.5
40°-50°	219.5	8.6
50°-60°	192.7	7.5
60°-70°	143.6	5.6
70°-80°	82.1	3.2
80°-90°	24.9	1.0
90°-100°	31.8	1.2
100°-110°	93.9	3.7
110°-120°	159.1	6.2
120°-130°	209.4	8.2
130°-140°	234.6	9.1
140°-150°	229.9	9.0
150°-160°	193.1	7.5
160°-170°	128.4	5.0
170°-180°	44.9	1.8
0°-30°	359.1	14.0
0°-40°	577.6	22.5
0°-60°	989.8	38.6
0°-90°	1240.4	48.4
90°-120°	284.8	11.1
90°-150°	958.7	37.4
90°-180°	1325.0	51.6
0°-180°	2565.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	471	474	474	45
15°	453	452	448	450	450	128
25°	412	409	405	405	404	189
35°	355	354	348	347	344	222
45°	291	289	285	281	279	224
55°	222	220	215	212	209	198
65°	150	149	145	141	140	148
75°	80	79	77	76	74	85
85°	21	21	21	21	20	23
90°	0	3	6	8	9	2
95°	24	25	28	31	32	26
105°	84	86	88	90	92	90
115°	159	161	162	161	161	157
125°	232	235	235	234	234	208
135°	302	304	305	305	303	233
145°	366	368	369	369	368	229
155°	419	419	419	421	419	193
165°	456	455	455	457	454	128
175°	474	472	472	474	472	45
180°	475	475	475	475	475	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	477.4	477.3	477.1	476.9	476.7	476.2	475.6	474.9	474.3	473.5	474.3
5°	475.5	475.3	475.2	475.0	474.8	474.3	473.5	472.7	471.8	471.0	471.7
7.5°	471.2	471.0	470.8	470.7	470.5	469.9	469.0	468.1	467.2	466.3	467.0
10°	467.2	467.1	466.9	466.8	466.6	466.0	465.1	464.1	463.3	462.4	463.0
12.5°	462.4	462.1	461.8	461.5	461.2	460.6	459.7	458.9	458.0	457.2	457.7
15°	453.3	453.1	452.8	452.6	452.2	451.7	450.8	449.9	448.9	448.0	448.4
17.5°	442.8	442.5	442.1	441.7	441.3	440.7	439.7	438.8	437.8	436.8	437.4
20°	434.1	433.9	433.7	433.6	433.4	432.8	431.7	430.6	429.5	428.4	429.0
22.5°	425.3	425.0	424.7	424.4	424.1	423.5	422.4	421.4	420.4	419.4	419.8
25°	411.5	411.1	410.6	410.2	409.8	409.0	408.0	406.8	405.8	404.7	404.9
27.5°	395.3	395.0	394.8	394.5	394.3	393.5	392.5	391.3	390.2	389.1	389.1
30°	384.7	384.5	384.2	383.9	383.7	382.9	381.7	380.4	379.2	377.9	377.7
32.5°	373.2	372.8	372.5	372.1	371.7	371.0	369.8	368.7	367.6	366.5	366.2
35°	355.3	355.0	354.7	354.3	354.0	353.2	352.0	350.9	349.7	348.5	348.1
37.5°	336.7	336.3	335.9	335.4	335.0	334.3	333.1	332.1	330.9	329.9	329.2
40°	324.1	323.6	323.2	322.8	322.4	321.6	320.4	319.3	318.0	316.9	316.2
42.5°	310.5	310.1	309.8	309.4	309.1	308.3	307.1	306.0	304.8	303.6	303.0
45°	290.9	290.6	290.2	289.9	289.5	288.9	287.9	286.9	285.8	284.9	283.9
47.5°	269.8	269.8	269.8	269.9	269.9	269.3	268.1	266.8	265.6	264.4	263.4
50°	256.2	256.0	255.8	255.4	255.2	254.6	253.6	252.6	251.6	250.5	249.5
52.5°	242.4	242.1	242.0	241.8	241.7	241.0	239.9	238.9	237.7	236.7	235.8
55°	221.5	221.3	221.0	220.8	220.5	219.8	218.7	217.5	216.3	215.2	214.4
57.5°	199.7	199.5	199.3	199.3	199.1	198.5	197.5	196.6	195.6	194.6	193.6
60°	185.7	185.4	185.1	184.7	184.4	183.8	182.9	182.0	181.0	180.1	179.3
62.5°	171.3	171.0	170.7	170.5	170.2	169.7	168.9	168.1	167.3	166.6	165.7
65°	149.6	149.4	149.3	149.1	149.0	148.4	147.5	146.5	145.6	144.7	143.9
67.5°	128.6	128.2	127.8	127.5	127.2	126.6	126.0	125.2	124.6	123.9	123.3
70°	115.3	114.9	114.5	114.1	113.7	113.0	112.3	111.5	110.8	110.1	109.5
72.5°	100.9	100.5	100.3	100.0	99.7	99.3	98.8	98.3	97.8	97.3	96.8
75°	79.5	79.3	79.2	79.0	78.8	78.5	78.1	77.7	77.3	76.9	76.6
77.5°	59.8	59.8	59.7	59.6	59.6	59.4	59.2	58.9	58.7	58.5	58.3
80°	47.5	47.5	47.5	47.5	47.5	47.4	47.2	47.0	46.9	46.7	46.6
82.5°	36.6	36.5	36.4	36.2	36.1	36.0	36.0	36.0	35.9	35.9	35.7
85°	20.7	20.8	20.9	21.0	21.0	21.1	21.1	21.1	21.1	21.1	21.0
87.5°	8.2	8.3	8.5	8.6	8.7	8.8	8.9	8.9	9.0	9.0	9.1
90°	0.4	1.1	1.7	2.4	3.0	3.6	4.2	4.7	5.3	6.0	6.4
92.5°	9.0	9.4	9.9	10.4	10.8	11.3	12.1	12.8	13.5	14.2	14.8
95°	24.1	24.2	24.4	24.5	24.7	25.2	26.0	26.8	27.6	28.5	29.0
97.5°	39.9	39.9	40.0	40.1	40.2	40.8	41.9	43.0	44.2	45.3	45.8
100°	51.8	51.8	51.8	51.8	51.8	52.3	53.3	54.4	55.4	56.5	57.3
102.5°	64.4	64.7	65.1	65.5	65.8	66.2	66.8	67.3	67.8	68.3	69.1
105°	84.2	84.6	85.0	85.4	85.9	86.3	86.8	87.3	87.8	88.3	88.8
107.5°	106.2	106.6	107.0	107.4	107.8	108.2	108.5	108.9	109.3	109.7	109.9
110°	121.2	121.6	122.1	122.5	122.9	123.2	123.4	123.7	123.9	124.2	124.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	136.6	136.8	137.0	137.2	137.5	137.7	138.0	138.4	138.6	138.9	139.1
115°	159.2	159.6	160.0	160.3	160.6	160.9	161.0	161.2	161.3	161.5	161.4
117.5°	182.1	182.1	182.3	182.5	182.6	182.8	183.0	183.0	183.2	183.4	183.4
120°	196.2	196.7	197.1	197.5	197.9	198.1	198.2	198.3	198.4	198.4	198.4
122.5°	211.6	211.7	211.9	212.1	212.1	212.4	212.5	212.8	213.0	213.2	213.1
125°	232.4	232.9	233.4	233.9	234.4	234.7	234.8	234.9	235.0	235.1	234.9
127.5°	254.6	254.9	255.2	255.4	255.8	255.9	256.0	256.1	256.2	256.3	256.2
130°	267.9	268.3	268.7	269.1	269.5	269.9	270.0	270.2	270.4	270.5	270.4
132.5°	281.2	281.8	282.6	283.2	283.9	284.2	284.2	284.1	284.1	284.1	284.0
135°	302.2	302.8	303.3	303.8	304.3	304.5	304.6	304.7	304.8	304.8	304.8
137.5°	322.0	322.5	323.0	323.5	324.0	324.3	324.5	324.7	324.8	325.1	325.1
140°	334.8	335.2	335.6	336.0	336.4	336.8	337.0	337.3	337.5	337.8	337.9
142.5°	347.5	347.8	348.2	348.5	348.9	349.2	349.5	349.8	350.2	350.5	350.6
145°	366.2	366.6	366.9	367.2	367.5	367.8	368.0	368.3	368.5	368.8	368.8
147.5°	383.5	383.7	383.8	384.0	384.3	384.4	384.6	384.8	385.0	385.2	385.4
150°	395.0	394.9	394.8	394.8	394.7	394.8	395.2	395.5	395.8	396.2	396.2
152.5°	404.5	404.6	404.7	404.8	405.0	405.0	405.2	405.4	405.4	405.6	405.8
155°	419.1	419.1	419.1	419.1	419.1	419.1	419.1	419.2	419.3	419.4	419.7
157.5°	432.0	431.9	431.7	431.5	431.3	431.3	431.4	431.5	431.5	431.6	431.9
160°	439.8	439.5	439.2	439.0	438.7	438.6	438.7	438.8	438.9	439.0	439.4
162.5°	446.5	446.4	446.2	446.0	445.8	445.7	445.7	445.7	445.8	445.8	446.2
165°	455.6	455.4	455.3	455.1	454.9	454.9	455.0	455.1	455.2	455.3	455.6
167.5°	463.3	463.0	462.7	462.4	462.0	461.9	461.9	461.9	461.9	461.9	462.4
170°	467.4	467.1	466.8	466.4	466.1	465.9	465.9	465.9	465.9	465.9	466.4
172.5°	470.4	470.1	469.8	469.4	469.1	469.0	469.0	469.0	469.0	469.0	469.4
175°	473.8	473.4	473.0	472.7	472.4	472.2	472.2	472.2	472.2	472.2	472.7
177.5°	475.4	475.2	474.9	474.7	474.3	474.2	474.2	474.1	474.0	473.9	474.3
180°	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	474.9	475.6	476.2	476.5	476.5	476.4	476.4	476.3
5°	472.5	473.3	474.0	474.3	474.3	474.2	474.1	474.0
7.5°	467.7	468.5	469.2	469.5	469.4	469.4	469.3	469.2
10°	463.7	464.3	465.0	465.3	465.2	465.1	465.0	465.0
12.5°	458.3	458.9	459.3	459.6	459.6	459.6	459.6	459.5
15°	448.8	449.2	449.7	449.9	449.9	449.9	449.9	449.9
17.5°	437.9	438.4	439.0	439.0	438.5	438.1	437.7	437.3
20°	429.6	430.2	430.7	430.9	430.4	430.0	429.6	429.2
22.5°	420.1	420.5	420.9	420.9	420.7	420.4	420.1	419.8
25°	405.0	405.2	405.4	405.3	405.0	404.8	404.6	404.3
27.5°	389.1	389.1	389.2	389.1	388.8	388.6	388.3	388.1
30°	377.6	377.4	377.2	377.1	376.8	376.6	376.3	376.0
32.5°	365.9	365.6	365.3	364.9	364.4	363.9	363.5	363.1
35°	347.7	347.3	346.8	346.3	345.7	345.0	344.3	343.6
37.5°	328.6	328.0	327.3	326.9	326.4	326.1	325.7	325.3
40°	315.4	314.6	313.9	313.4	313.2	312.8	312.6	312.3
42.5°	302.2	301.6	300.8	300.4	299.9	299.5	299.2	298.8
45°	282.8	281.8	280.9	280.2	280.0	279.7	279.5	279.2
47.5°	262.4	261.4	260.3	259.5	258.9	258.4	257.8	257.2
50°	248.4	247.3	246.2	245.4	244.8	244.2	243.6	243.0
52.5°	234.8	233.8	232.8	232.1	231.5	230.8	230.2	229.5
55°	213.6	212.9	212.1	211.5	210.9	210.3	209.7	209.1
57.5°	192.7	191.7	190.7	190.0	189.7	189.4	189.1	188.7
60°	178.5	177.6	176.8	176.0	175.5	174.9	174.3	173.7
62.5°	164.8	163.8	162.9	162.2	161.8	161.3	160.9	160.5
65°	143.2	142.4	141.7	141.1	140.8	140.5	140.1	139.8
67.5°	122.6	122.0	121.3	120.9	120.7	120.5	120.3	120.1
70°	109.0	108.5	108.0	107.6	107.3	107.0	106.6	106.2
72.5°	96.2	95.6	95.1	94.7	94.3	94.0	93.6	93.3
75°	76.4	76.1	75.8	75.6	75.3	74.9	74.6	74.2
77.5°	58.2	58.0	57.9	57.7	57.5	57.2	57.0	56.7
80°	46.6	46.5	46.4	46.2	46.1	45.9	45.7	45.6
82.5°	35.5	35.4	35.3	35.1	35.1	35.1	35.1	35.1
85°	21.0	20.9	20.8	20.6	20.5	20.3	20.1	20.0
87.5°	9.2	9.3	9.4	9.4	9.3	9.2	9.1	9.0
90°	6.8	7.2	7.6	7.9	8.2	8.4	8.6	8.9
92.5°	15.2	15.8	16.4	16.7	16.9	17.0	17.3	17.4
95°	29.6	30.2	30.7	31.1	31.3	31.5	31.6	31.8
97.5°	46.4	47.0	47.5	47.8	47.9	48.0	48.1	48.2
100°	58.0	58.8	59.5	59.9	60.1	60.3	60.4	60.6
102.5°	70.0	70.8	71.6	72.1	72.3	72.6	72.8	73.1
105°	89.3	89.8	90.3	90.7	90.9	91.2	91.4	91.6
107.5°	110.1	110.4	110.6	110.8	110.8	110.7	110.7	110.7
110°	124.7	124.9	125.1	125.2	125.1	125.1	125.0	124.9





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	139.2	139.3	139.4	139.4	139.3	139.1	138.9	138.8
115°	161.3	161.3	161.2	161.1	161.0	160.9	160.9	160.8
117.5°	183.5	183.5	183.6	183.5	183.2	182.9	182.5	182.1
120°	198.4	198.4	198.4	198.3	198.0	197.6	197.3	197.0
122.5°	213.1	213.0	213.0	212.8	212.5	212.3	212.0	211.7
125°	234.7	234.6	234.4	234.2	234.2	234.1	234.0	233.9
127.5°	256.2	256.1	256.0	255.8	255.7	255.5	255.4	255.2
130°	270.4	270.3	270.2	270.0	269.9	269.7	269.5	269.4
132.5°	283.9	283.8	283.7	283.6	283.4	283.2	282.9	282.7
135°	304.8	304.8	304.8	304.7	304.4	304.0	303.7	303.4
137.5°	325.2	325.3	325.5	325.3	324.9	324.5	324.0	323.6
140°	338.1	338.3	338.4	338.3	337.9	337.5	337.0	336.6
142.5°	350.7	350.7	350.8	350.7	350.3	349.8	349.4	349.0
145°	368.8	368.8	368.8	368.7	368.4	368.2	367.9	367.7
147.5°	385.6	385.8	386.0	385.8	385.2	384.7	384.1	383.6
150°	396.2	396.2	396.2	396.1	395.9	395.7	395.6	395.4
152.5°	406.0	406.2	406.3	406.3	406.0	405.8	405.4	405.1
155°	420.0	420.4	420.7	420.7	420.3	419.9	419.5	419.1
157.5°	432.3	432.6	432.9	432.8	432.3	431.7	431.2	430.6
160°	439.7	440.0	440.3	440.3	439.9	439.4	439.0	438.6
162.5°	446.6	446.9	447.4	447.4	446.9	446.4	445.9	445.4
165°	455.9	456.2	456.6	456.5	456.0	455.5	455.0	454.5
167.5°	462.8	463.3	463.8	463.8	463.3	462.8	462.3	461.8
170°	466.9	467.4	468.0	467.9	467.3	466.8	466.2	465.6
172.5°	469.9	470.4	470.9	470.9	470.3	469.9	469.4	468.9
175°	473.2	473.8	474.3	474.2	473.6	473.0	472.5	471.9
177.5°	474.7	475.2	475.6	475.5	475.1	474.6	474.1	473.7
180°	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8

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