

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: P333351-927

Luminaire Tested: **S125DIW-S375D770U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333351-927  
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-S375D770U927-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3314.5 lumens  
Efficiency: N/A  
Efficacy: 109.0 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: Semi-Indirect

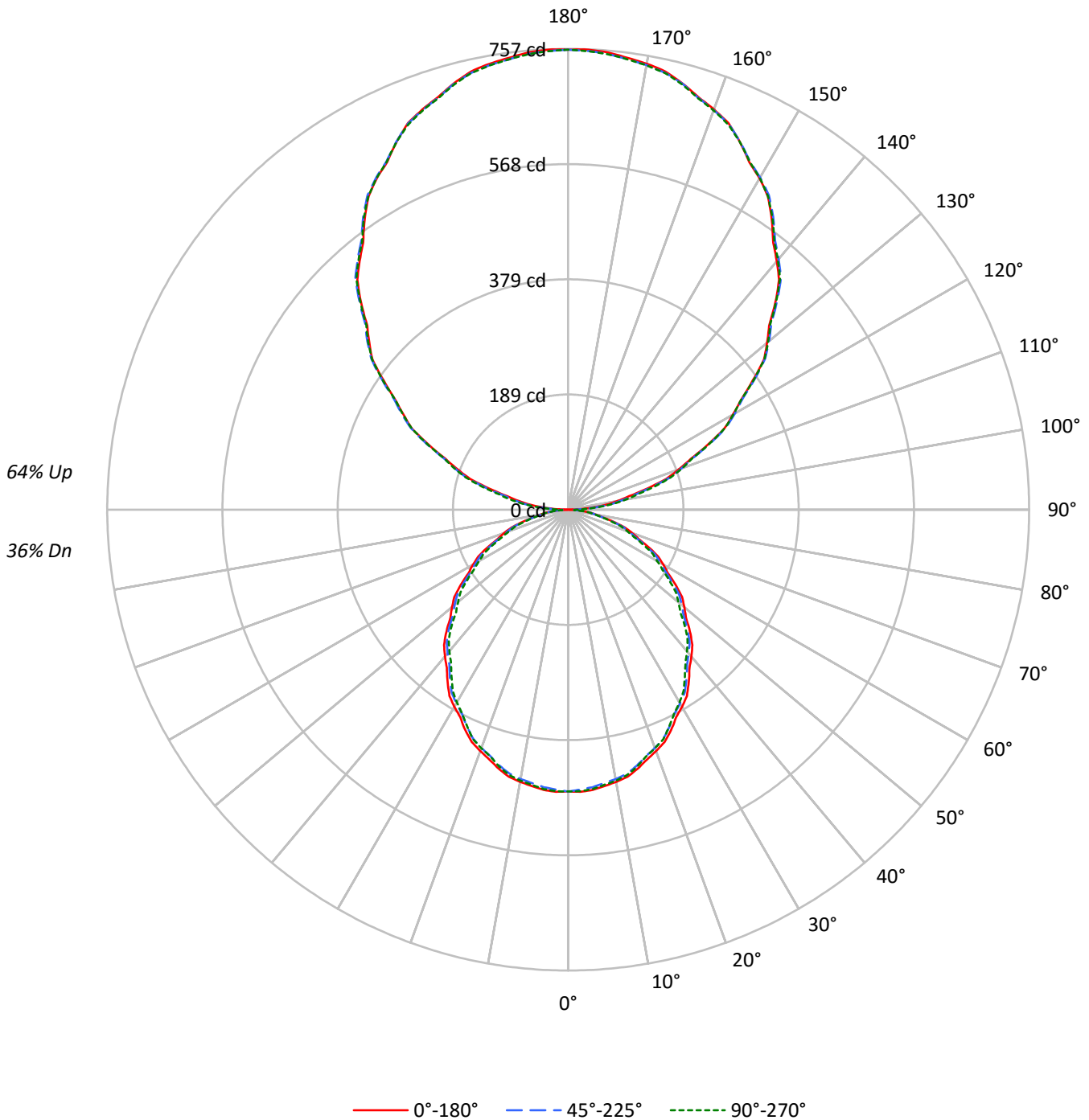
Input Watts (W): 30.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	36
1	95	90	87	83	86	82	79	76	66	64	62	52	50	49	38	38	37	31
2	86	79	73	68	78	72	67	62	58	54	51	45	43	41	34	32	31	26
3	79	69	62	56	71	63	57	52	51	47	43	40	37	34	30	28	26	22
4	72	61	53	48	65	56	49	44	45	40	37	36	32	29	27	24	23	19
5	66	54	47	41	59	50	43	38	40	35	31	32	28	25	24	22	20	16
6	61	49	41	35	55	44	38	32	36	31	27	29	25	22	22	19	17	14
7	56	44	36	31	50	40	33	28	33	28	24	26	22	20	20	17	15	13
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	10
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2989	2989	2989
5°	2995	2967	2986
10°	2977	2946	2963
15°	2945	2910	2923
20°	2899	2861	2866
25°	2849	2802	2799
30°	2788	2738	2725
35°	2722	2670	2633
40°	2655	2596	2559
45°	2582	2528	2478
50°	2502	2446	2372
55°	2423	2354	2288
60°	2331	2260	2180
65°	2222	2149	2077
70°	2115	2019	1949
75°	1926	1864	1799
80°	1715	1689	1648
85°	1489	1519	1438



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.6	1.3
10°-20°	123.3	3.7
20°-30°	182.0	5.5
30°-40°	212.4	6.4
40°-50°	213.3	6.4
50°-60°	187.2	5.6
60°-70°	139.5	4.2
70°-80°	79.8	2.4
80°-90°	24.9	0.7
90°-100°	50.6	1.5
100°-110°	149.5	4.5
110°-120°	253.2	7.6
120°-130°	333.2	10.1
130°-140°	373.3	11.3
140°-150°	365.9	11.0
150°-160°	307.3	9.3
160°-170°	204.3	6.2
170°-180°	71.5	2.2
0°-30°	348.9	10.5
0°-40°	561.2	16.9
0°-60°	961.7	29.0
0°-90°	1205.8	36.4
90°-120°	453.2	13.7
90°-150°	1525.6	46.0
90°-180°	2109.0	63.6
0°-180°	3314.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	463	463	463	463	463	
5°	462	461	458	461	461	44
15°	440	439	435	437	437	124
25°	400	398	393	394	393	184
35°	345	344	339	337	334	216
45°	283	281	277	273	271	218
55°	215	214	209	206	203	192
65°	145	144	141	137	136	144
75°	77	76	75	74	72	82
85°	20	20	20	20	19	23
90°	1	5	9	12	14	3
95°	38	40	45	49	50	41
105°	134	137	140	144	146	143
115°	254	256	257	256	256	251
125°	370	373	374	373	372	331
135°	481	484	485	485	483	371
145°	583	585	587	587	585	364
155°	667	667	668	670	667	307
165°	725	724	724	726	723	204
175°	754	752	752	755	751	72
180°	756	756	756	756	756	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8
2.5°	463.9	463.7	463.6	463.3	463.2	462.7	462.1	461.4	460.8	460.1	460.8
5°	462.0	461.8	461.7	461.5	461.4	460.9	460.1	459.3	458.4	457.6	458.4
7.5°	457.8	457.6	457.5	457.3	457.2	456.6	455.7	454.8	453.9	453.0	453.8
10°	454.0	453.8	453.7	453.5	453.4	452.8	451.9	451.0	450.1	449.2	449.9
12.5°	449.3	449.0	448.7	448.5	448.1	447.6	446.7	445.9	445.0	444.3	444.7
15°	440.5	440.2	440.0	439.7	439.4	438.9	438.0	437.1	436.2	435.3	435.7
17.5°	430.2	429.9	429.5	429.2	428.8	428.2	427.2	426.4	425.4	424.5	425.0
20°	421.8	421.6	421.4	421.3	421.1	420.5	419.5	418.4	417.3	416.3	416.8
22.5°	413.3	413.0	412.6	412.4	412.1	411.5	410.4	409.5	408.4	407.5	407.9
25°	399.8	399.4	398.9	398.5	398.2	397.4	396.4	395.3	394.3	393.2	393.4
27.5°	384.0	383.8	383.6	383.3	383.1	382.4	381.4	380.2	379.1	378.0	378.1
30°	373.8	373.6	373.3	373.0	372.8	372.1	370.9	369.6	368.4	367.2	367.0
32.5°	362.7	362.3	361.9	361.6	361.2	360.4	359.3	358.2	357.2	356.1	355.8
35°	345.2	344.9	344.6	344.3	344.0	343.2	342.1	341.0	339.8	338.7	338.3
37.5°	327.2	326.8	326.4	325.9	325.5	324.8	323.7	322.7	321.5	320.5	319.9
40°	314.9	314.4	314.0	313.6	313.2	312.4	311.3	310.2	309.0	307.9	307.2
42.5°	301.7	301.3	301.0	300.6	300.3	299.6	298.4	297.3	296.1	295.0	294.4
45°	282.7	282.3	282.0	281.7	281.3	280.7	279.7	278.8	277.7	276.8	275.8
47.5°	262.1	262.1	262.1	262.2	262.2	261.7	260.5	259.3	258.1	256.9	256.0
50°	249.0	248.7	248.5	248.2	248.0	247.4	246.4	245.4	244.5	243.4	242.4
52.5°	235.5	235.3	235.1	235.0	234.8	234.2	233.1	232.1	231.0	230.0	229.1
55°	215.2	215.0	214.8	214.5	214.3	213.6	212.5	211.4	210.2	209.1	208.3
57.5°	194.0	193.8	193.7	193.6	193.5	192.9	191.9	191.0	190.0	189.1	188.1
60°	180.5	180.1	179.8	179.5	179.2	178.6	177.7	176.8	175.9	175.0	174.2
62.5°	166.4	166.2	165.9	165.6	165.4	164.9	164.1	163.3	162.6	161.8	161.0
65°	145.4	145.2	145.0	144.9	144.7	144.2	143.3	142.4	141.5	140.6	139.8
67.5°	124.9	124.6	124.2	123.9	123.6	123.0	122.4	121.7	121.0	120.4	119.8
70°	112.0	111.6	111.2	110.8	110.4	109.8	109.1	108.4	107.7	106.9	106.4
72.5°	98.0	97.7	97.4	97.1	96.9	96.5	96.0	95.5	95.1	94.6	94.0
75°	77.2	77.1	76.9	76.8	76.6	76.3	75.9	75.5	75.1	74.7	74.5
77.5°	58.1	58.1	58.0	57.9	57.9	57.8	57.5	57.3	57.0	56.8	56.6
80°	46.1	46.1	46.1	46.1	46.1	46.0	45.9	45.7	45.6	45.4	45.3
82.5°	35.6	35.5	35.3	35.2	35.1	35.0	34.9	34.9	34.9	34.9	34.7
85°	20.1	20.2	20.3	20.4	20.4	20.5	20.5	20.5	20.5	20.5	20.4
87.5°	8.0	8.2	8.5	8.6	8.9	9.0	9.1	9.3	9.3	9.5	9.7
90°	0.6	1.7	2.7	3.7	4.8	5.8	6.7	7.6	8.5	9.4	10.1
92.5°	14.3	15.0	15.7	16.4	17.2	18.1	19.3	20.4	21.5	22.6	23.4
95°	38.3	38.5	38.7	39.0	39.3	40.1	41.4	42.7	44.0	45.3	46.2
97.5°	63.5	63.6	63.7	63.8	63.9	64.9	66.7	68.5	70.3	72.1	73.0
100°	82.3	82.3	82.3	82.3	82.3	83.2	84.8	86.6	88.2	90.0	91.2
102.5°	102.6	103.1	103.6	104.1	104.6	105.4	106.2	107.1	107.9	108.8	110.1
105°	134.1	134.8	135.4	136.0	136.7	137.4	138.2	138.9	139.7	140.5	141.3
107.5°	168.9	169.5	170.2	170.9	171.5	172.1	172.8	173.3	174.0	174.5	174.9
110°	192.9	193.5	194.2	194.9	195.5	196.0	196.4	196.8	197.2	197.6	198.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	217.4	217.7	218.0	218.4	218.7	219.1	219.6	220.1	220.6	221.1	221.3
115°	253.5	254.0	254.5	255.0	255.6	256.0	256.2	256.4	256.7	257.0	256.8
117.5°	289.7	289.9	290.2	290.4	290.7	290.9	291.1	291.4	291.6	291.8	291.9
120°	312.3	312.9	313.5	314.3	314.9	315.3	315.4	315.5	315.7	315.8	315.8
122.5°	336.8	337.0	337.2	337.5	337.7	337.9	338.3	338.7	339.0	339.3	339.2
125°	369.9	370.7	371.5	372.2	373.0	373.5	373.6	373.8	373.9	374.0	373.8
127.5°	405.2	405.6	406.1	406.5	406.9	407.3	407.4	407.6	407.7	407.9	407.7
130°	426.4	427.0	427.7	428.3	429.0	429.4	429.7	429.9	430.2	430.5	430.3
132.5°	447.5	448.6	449.6	450.8	451.8	452.3	452.3	452.2	452.2	452.1	452.0
135°	481.0	481.8	482.6	483.4	484.2	484.7	484.7	484.9	485.1	485.1	485.1
137.5°	512.5	513.3	514.0	514.8	515.6	516.1	516.4	516.7	517.0	517.3	517.5
140°	532.8	533.5	534.1	534.7	535.4	535.9	536.3	536.7	537.1	537.5	537.7
142.5°	553.0	553.6	554.1	554.7	555.2	555.7	556.3	556.7	557.2	557.7	557.9
145°	582.8	583.3	583.8	584.3	584.9	585.3	585.7	586.1	586.5	586.9	586.9
147.5°	610.3	610.6	610.9	611.2	611.5	611.7	612.0	612.4	612.7	613.0	613.3
150°	628.7	628.5	628.4	628.3	628.1	628.4	628.8	629.4	629.9	630.4	630.4
152.5°	643.7	643.9	644.0	644.3	644.4	644.6	644.8	645.1	645.2	645.5	645.8
155°	666.9	666.9	666.9	666.9	666.9	666.9	667.1	667.2	667.3	667.5	668.0
157.5°	687.6	687.3	687.0	686.7	686.4	686.3	686.5	686.6	686.7	686.9	687.4
160°	699.8	699.4	699.0	698.6	698.2	698.1	698.2	698.4	698.5	698.6	699.2
162.5°	710.7	710.3	710.0	709.8	709.5	709.3	709.4	709.4	709.4	709.5	710.1
165°	725.1	724.8	724.6	724.3	724.1	724.0	724.1	724.2	724.4	724.5	725.0
167.5°	737.4	736.8	736.3	735.8	735.2	735.0	735.0	735.0	735.0	735.0	735.8
170°	743.9	743.4	742.8	742.4	741.8	741.6	741.6	741.6	741.6	741.6	742.4
172.5°	748.6	748.1	747.6	747.0	746.6	746.2	746.2	746.2	746.2	746.2	747.0
175°	753.9	753.4	752.9	752.3	751.8	751.5	751.5	751.5	751.5	751.5	752.3
177.5°	756.6	756.2	755.7	755.3	754.9	754.7	754.6	754.5	754.4	754.2	754.9
180°	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8
2.5°	461.4	462.1	462.7	463.0	463.0	462.9	462.9	462.8
5°	459.1	459.9	460.6	460.9	460.8	460.7	460.7	460.6
7.5°	454.5	455.2	455.9	456.2	456.1	456.1	456.0	455.9
10°	450.5	451.1	451.9	452.1	452.0	451.9	451.9	451.8
12.5°	445.3	445.8	446.3	446.6	446.6	446.6	446.6	446.5
15°	436.1	436.5	437.0	437.1	437.1	437.1	437.1	437.1
17.5°	425.5	426.0	426.5	426.5	426.1	425.7	425.3	424.9
20°	417.4	418.0	418.5	418.7	418.2	417.8	417.4	417.0
22.5°	408.2	408.6	409.0	409.0	408.8	408.4	408.2	407.9
25°	393.6	393.7	393.9	393.8	393.6	393.3	393.1	392.8
27.5°	378.1	378.1	378.2	378.1	377.8	377.6	377.3	377.1
30°	366.9	366.7	366.5	366.4	366.1	365.9	365.6	365.4
32.5°	355.5	355.2	354.9	354.6	354.1	353.6	353.2	352.8
35°	337.9	337.5	337.0	336.5	335.9	335.2	334.5	333.9
37.5°	319.3	318.7	318.1	317.6	317.2	316.9	316.5	316.1
40°	306.4	305.7	305.0	304.5	304.3	304.0	303.7	303.5
42.5°	293.7	293.0	292.3	291.8	291.4	291.0	290.7	290.3
45°	274.8	273.9	272.9	272.3	272.0	271.8	271.6	271.3
47.5°	254.9	254.0	252.9	252.2	251.6	251.0	250.5	249.9
50°	241.4	240.3	239.2	238.4	237.8	237.3	236.7	236.1
52.5°	228.1	227.2	226.2	225.5	224.9	224.3	223.6	223.0
55°	207.6	206.8	206.1	205.5	204.9	204.3	203.7	203.2
57.5°	187.2	186.2	185.3	184.7	184.3	184.0	183.7	183.4
60°	173.4	172.5	171.7	171.0	170.5	169.9	169.4	168.8
62.5°	160.1	159.1	158.3	157.6	157.2	156.8	156.3	155.9
65°	139.1	138.4	137.7	137.1	136.8	136.5	136.2	135.9
67.5°	119.1	118.5	117.9	117.5	117.3	117.1	116.9	116.7
70°	105.9	105.4	105.0	104.6	104.3	103.9	103.5	103.2
72.5°	93.5	92.9	92.4	92.0	91.7	91.3	90.9	90.6
75°	74.2	74.0	73.7	73.4	73.1	72.8	72.5	72.1
77.5°	56.6	56.4	56.2	56.1	55.8	55.6	55.4	55.1
80°	45.2	45.2	45.1	44.9	44.8	44.6	44.4	44.3
82.5°	34.5	34.4	34.3	34.1	34.1	34.1	34.1	34.1
85°	20.4	20.3	20.2	20.0	19.9	19.7	19.6	19.4
87.5°	9.7	9.9	10.0	10.1	10.0	10.0	9.9	9.8
90°	10.7	11.4	12.0	12.5	12.9	13.3	13.7	14.1
92.5°	24.3	25.2	26.1	26.6	26.9	27.2	27.5	27.7
95°	47.1	48.0	49.0	49.5	49.8	50.1	50.3	50.5
97.5°	73.8	74.7	75.6	76.0	76.2	76.4	76.5	76.7
100°	92.3	93.5	94.7	95.4	95.7	95.9	96.2	96.4
102.5°	111.4	112.6	113.9	114.7	115.1	115.5	115.8	116.2
105°	142.1	142.9	143.7	144.3	144.7	145.0	145.4	145.8
107.5°	175.3	175.7	176.1	176.3	176.3	176.3	176.2	176.2
110°	198.4	198.8	199.2	199.3	199.2	199.0	198.9	198.8





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	221.5	221.7	221.8	221.8	221.6	221.3	221.1	220.9
115°	256.7	256.6	256.4	256.4	256.2	256.1	256.0	255.8
117.5°	292.0	292.1	292.2	292.0	291.5	291.0	290.4	289.9
120°	315.8	315.8	315.8	315.5	315.1	314.5	313.9	313.5
122.5°	339.1	339.0	338.9	338.7	338.2	337.8	337.4	337.0
125°	373.5	373.2	373.0	372.8	372.6	372.5	372.4	372.2
127.5°	407.7	407.5	407.3	407.2	406.9	406.6	406.4	406.2
130°	430.2	430.1	429.9	429.8	429.5	429.2	429.0	428.7
132.5°	451.9	451.7	451.6	451.3	451.0	450.6	450.3	449.9
135°	485.1	485.1	485.1	484.9	484.3	483.9	483.3	482.8
137.5°	517.6	517.8	517.9	517.6	517.0	516.3	515.7	515.0
140°	538.1	538.3	538.5	538.4	537.7	537.0	536.4	535.8
142.5°	558.0	558.2	558.3	558.1	557.5	556.8	556.1	555.5
145°	586.9	586.9	586.9	586.7	586.3	585.9	585.5	585.1
147.5°	613.6	613.9	614.3	613.9	613.1	612.2	611.3	610.5
150°	630.4	630.4	630.4	630.3	630.0	629.8	629.5	629.2
152.5°	646.1	646.4	646.7	646.7	646.2	645.7	645.2	644.8
155°	668.5	669.0	669.6	669.5	668.8	668.2	667.5	666.9
157.5°	687.9	688.4	689.0	688.8	687.9	687.1	686.2	685.3
160°	699.7	700.2	700.7	700.7	700.0	699.3	698.7	698.1
162.5°	710.7	711.3	711.9	711.9	711.1	710.3	709.6	708.8
165°	725.6	726.1	726.6	726.4	725.7	724.9	724.1	723.3
167.5°	736.6	737.4	738.1	738.1	737.3	736.5	735.7	734.8
170°	743.1	743.9	744.7	744.7	743.7	742.8	741.9	741.0
172.5°	747.8	748.6	749.4	749.4	748.6	747.7	746.9	746.2
175°	753.1	753.9	754.7	754.6	753.7	752.8	751.9	751.0
177.5°	755.5	756.1	756.8	756.7	756.0	755.3	754.6	753.8
180°	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7

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