

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: P333127-927

Luminaire Tested: **S125DIP-S375D590U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333127-927  
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: S125DIP-S375D590U927-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 590 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3030.2 lumens  
Efficiency: N/A  
Efficacy: 118.4 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: Semi-Indirect

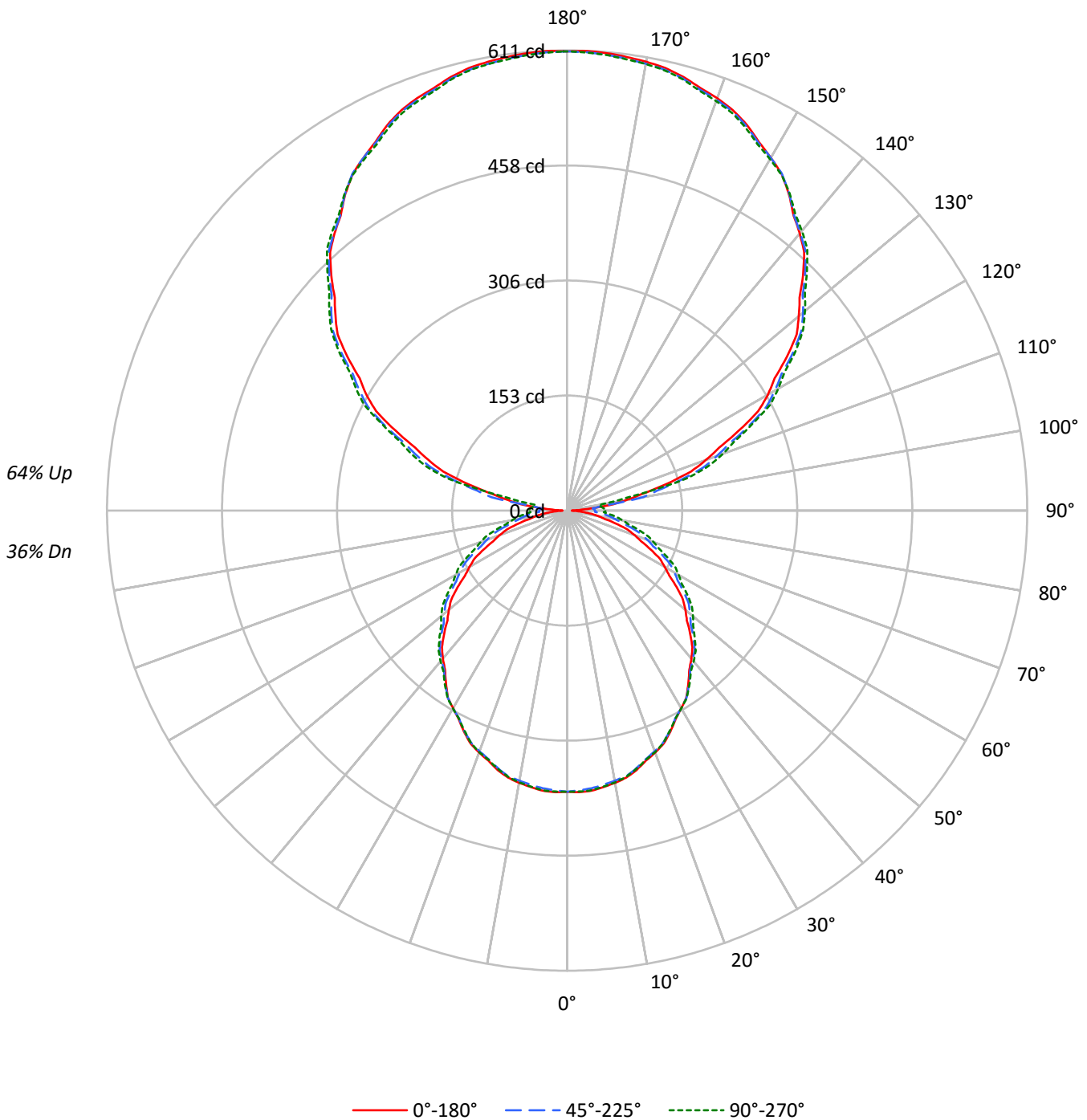
Input Watts (W): 25.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333127-927

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### Luminous Intensity Polar Plot





TEST NUMBER: P333127-927

CATALOG NUMBER: S125DIP-S375D590U927-4F0-1E-UDD-D

**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	75	75	75	59	59	59	43	43	43	36
1	94	90	86	82	85	81	78	75	65	63	61	51	49	48	37	36	35	29
2	85	78	72	66	77	71	65	61	57	53	50	44	42	39	32	31	29	24
3	78	68	61	55	70	62	56	50	50	45	42	39	36	33	29	27	25	20
4	71	60	52	46	64	55	48	43	44	39	35	34	31	28	25	23	21	17
5	65	53	45	39	59	49	42	36	39	34	30	31	27	24	23	20	18	15
6	60	48	40	34	54	44	36	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	30	50	39	32	27	32	27	23	25	21	19	19	16	14	11
8	51	39	31	26	46	36	29	24	29	24	20	23	19	16	17	15	13	10
9	48	35	28	23	43	32	26	21	27	22	18	21	17	15	16	13	11	9
10	44	32	25	21	40	30	23	19	24	19	16	19	16	13	15	12	10	8

**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	1.2
10°-20°	100.2	3.3
20°-30°	149.1	4.9
30°-40°	176.6	5.8
40°-50°	182.6	6.0
50°-60°	168.2	5.6
60°-70°	135.9	4.5
70°-80°	91.0	3.0
80°-90°	48.5	1.6
90°-100°	48.6	1.6
100°-110°	156.1	5.2
110°-120°	260.8	8.6
120°-130°	325.3	10.7
130°-140°	345.1	11.4
140°-150°	321.5	10.6
150°-160°	259.6	8.6
160°-170°	167.9	5.5
170°-180°	57.9	1.9
0°-30°	284.6	9.4
0°-40°	461.2	15.2
0°-60°	812.0	26.8
0°-90°	1087.5	35.9
90°-120°	465.5	15.4
90°-150°	1457.4	48.1
90°-180°	1943.0	64.1
0°-180°	3030.2	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	22	37	48	52	5
95°	30	38	34	44	47	37
105°	136	144	155	162	164	144
115°	252	257	266	271	271	249
125°	356	359	366	370	371	318
135°	443	446	447	451	450	342
145°	513	514	514	516	515	321
155°	565	562	563	564	561	260
165°	596	594	594	596	593	168
175°	610	607	607	611	607	58
180°	610	610	610	610	610	



TEST NUMBER: P333127-927

CATALOG NUMBER: S125DIP-S375D590U927-4F0-1E-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	19.8	22.6	25.4	28.3	31.2	34.1	37.0	39.0
90°	6.3	9.7	13.2	16.6	20.0	23.4	26.9	30.3	33.7	37.2	39.6
92.5°	12.2	14.1	15.9	17.7	19.6	22.3	25.7	29.2	32.6	36.0	38.4
95°	30.5	32.3	34.1	36.0	37.8	38.2	37.1	36.0	35.0	34.0	36.3
97.5°	58.1	60.5	63.0	65.4	67.9	66.7	61.8	56.9	52.0	47.1	46.0
100°	79.5	81.5	83.5	85.6	87.5	90.1	93.1	96.1	99.1	102.1	88.8
102.5°	101.2	103.2	105.2	107.2	109.1	111.5	114.2	117.0	119.9	122.6	121.4
105°	136.2	137.8	139.6	141.2	143.0	145.0	147.5	150.0	152.4	154.8	156.5
107.5°	172.5	173.6	174.7	175.8	176.9	178.7	181.3	183.8	186.3	188.9	190.5
110°	196.0	197.0	198.0	198.9	199.9	201.6	204.1	206.6	209.1	211.6	212.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	218.4	219.4	220.5	221.5	222.5	224.2	226.5	228.9	231.2	233.5	234.6
115°	251.7	252.8	253.8	254.9	256.0	257.6	259.8	262.1	264.3	266.5	267.5
117.5°	286.1	286.5	286.8	287.2	287.6	288.9	291.3	293.7	296.0	298.4	299.3
120°	307.8	307.9	308.1	308.2	308.4	309.6	311.7	313.9	316.1	318.2	319.4
122.5°	326.7	327.2	327.6	328.2	328.7	329.9	331.8	333.7	335.7	337.7	338.8
125°	356.2	356.9	357.5	358.1	358.8	359.9	361.5	363.1	364.7	366.4	367.3
127.5°	384.2	384.6	385.0	385.5	385.9	386.7	388.0	389.3	390.5	391.8	392.8
130°	401.6	402.0	402.3	402.8	403.2	404.1	405.3	406.5	407.8	409.0	409.9
132.5°	418.6	419.1	419.8	420.3	420.9	421.5	422.2	422.8	423.4	424.1	425.2
135°	443.2	443.7	444.3	444.8	445.3	445.8	446.1	446.5	446.9	447.2	448.1
137.5°	465.8	466.3	466.8	467.2	467.6	467.9	468.0	468.1	468.3	468.3	469.3
140°	480.4	480.5	480.8	480.9	481.2	481.3	481.3	481.3	481.2	481.2	482.3
142.5°	493.8	493.8	493.8	493.9	493.9	494.1	494.2	494.4	494.6	494.7	495.5
145°	513.3	513.5	513.6	513.7	513.8	513.9	513.9	513.9	513.9	513.9	514.4
147.5°	530.1	530.1	530.0	530.0	530.0	530.0	530.1	530.3	530.4	530.5	530.8
150°	541.0	540.8	540.6	540.4	540.2	540.2	540.4	540.6	540.8	541.0	541.2
152.5°	551.5	551.0	550.6	550.2	549.7	549.6	549.8	550.0	550.2	550.4	550.6
155°	565.0	564.4	563.8	563.2	562.5	562.4	562.5	562.8	562.9	563.2	563.5
157.5°	575.4	575.0	574.6	574.3	573.9	573.8	573.8	573.8	573.8	573.9	574.2
160°	582.6	582.0	581.4	580.7	580.2	580.0	580.0	580.1	580.2	580.4	580.7
162.5°	588.4	587.8	587.2	586.5	586.0	585.7	585.8	585.9	586.0	586.1	586.7
165°	596.1	595.6	594.9	594.4	593.7	593.5	593.6	593.7	593.8	593.9	594.5
167.5°	601.9	601.3	600.7	600.1	599.4	599.2	599.3	599.4	599.4	599.6	600.3
170°	605.2	604.5	603.8	603.1	602.4	602.1	602.1	602.3	602.4	602.5	603.2
172.5°	607.4	606.7	605.9	605.2	604.5	604.3	604.4	604.7	604.8	605.0	605.7
175°	609.7	609.1	608.5	607.9	607.3	607.0	607.1	607.3	607.4	607.4	608.2
177.5°	610.8	610.3	609.8	609.3	608.9	608.6	608.7	608.8	608.9	609.0	609.6
180°	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7



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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°	41.0	42.9	44.9	46.2	46.8	47.5	48.1	48.7
90°	42.0	44.4	46.7	48.4	49.3	50.1	51.0	51.9
92.5°	40.7	43.0	45.3	46.8	47.5	48.2	49.0	49.7
95°	38.6	40.8	43.1	44.5	45.2	45.7	46.3	46.8
97.5°	44.9	43.7	42.6	42.4	42.9	43.5	44.0	44.6
100°	75.6	62.3	49.0	42.5	42.5	42.6	42.7	42.8
102.5°	120.3	119.1	117.9	114.1	107.7	101.4	95.1	88.7
105°	158.0	159.7	161.4	162.4	162.9	163.3	163.8	164.2
107.5°	192.1	193.8	195.4	196.3	196.5	196.7	196.9	197.1
110°	214.0	215.3	216.5	217.5	218.2	218.8	219.5	220.1





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	235.8	236.8	237.9	238.7	239.1	239.6	240.0	240.4
115°	268.6	269.7	270.8	271.2	271.1	271.0	270.8	270.8
117.5°	300.2	301.0	301.9	302.5	302.8	303.0	303.3	303.6
120°	320.6	321.8	323.0	323.5	323.5	323.5	323.5	323.5
122.5°	339.9	341.0	342.1	342.6	342.5	342.5	342.4	342.3
125°	368.2	369.1	369.9	370.5	370.6	370.7	370.8	370.9
127.5°	393.8	394.7	395.8	396.1	395.9	395.5	395.3	395.0
130°	410.7	411.5	412.3	412.7	412.6	412.6	412.5	412.3
132.5°	426.3	427.4	428.4	428.9	428.7	428.6	428.4	428.3
135°	448.9	449.8	450.7	451.0	450.8	450.6	450.4	450.2
137.5°	470.3	471.3	472.3	472.7	472.5	472.3	472.1	471.9
140°	483.4	484.5	485.5	486.0	485.7	485.4	485.1	484.9
142.5°	496.3	497.1	497.9	498.2	497.9	497.6	497.3	497.1
145°	514.9	515.4	515.9	516.0	515.8	515.5	515.2	514.9
147.5°	531.0	531.2	531.6	531.4	530.8	530.2	529.7	529.0
150°	541.4	541.6	541.8	541.5	540.8	540.1	539.4	538.7
152.5°	550.8	551.0	551.2	551.0	550.2	549.5	548.8	548.1
155°	563.8	564.0	564.4	564.1	563.3	562.5	561.7	560.9
157.5°	574.5	574.8	575.1	574.9	574.1	573.2	572.4	571.6
160°	581.1	581.5	581.9	581.7	580.9	580.1	579.3	578.5
162.5°	587.2	587.8	588.4	588.2	587.3	586.5	585.6	584.6
165°	595.1	595.7	596.3	596.2	595.4	594.6	593.8	592.9
167.5°	601.0	601.7	602.5	602.4	601.5	600.6	599.7	598.7
170°	604.1	604.9	605.7	605.6	604.8	603.8	602.9	602.1
172.5°	606.4	607.2	607.9	607.8	606.9	606.0	605.1	604.2
175°	609.0	609.8	610.7	610.6	609.7	608.8	607.9	607.0
177.5°	610.1	610.7	611.2	611.2	610.5	609.9	609.3	608.6
180°	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7

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