

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: P333136-935

Luminaire Tested: **S125DIP-S375D810U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333136-935  
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-S375D810U935-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4048.4 lumens  
Efficiency: N/A  
Efficacy: 129.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect

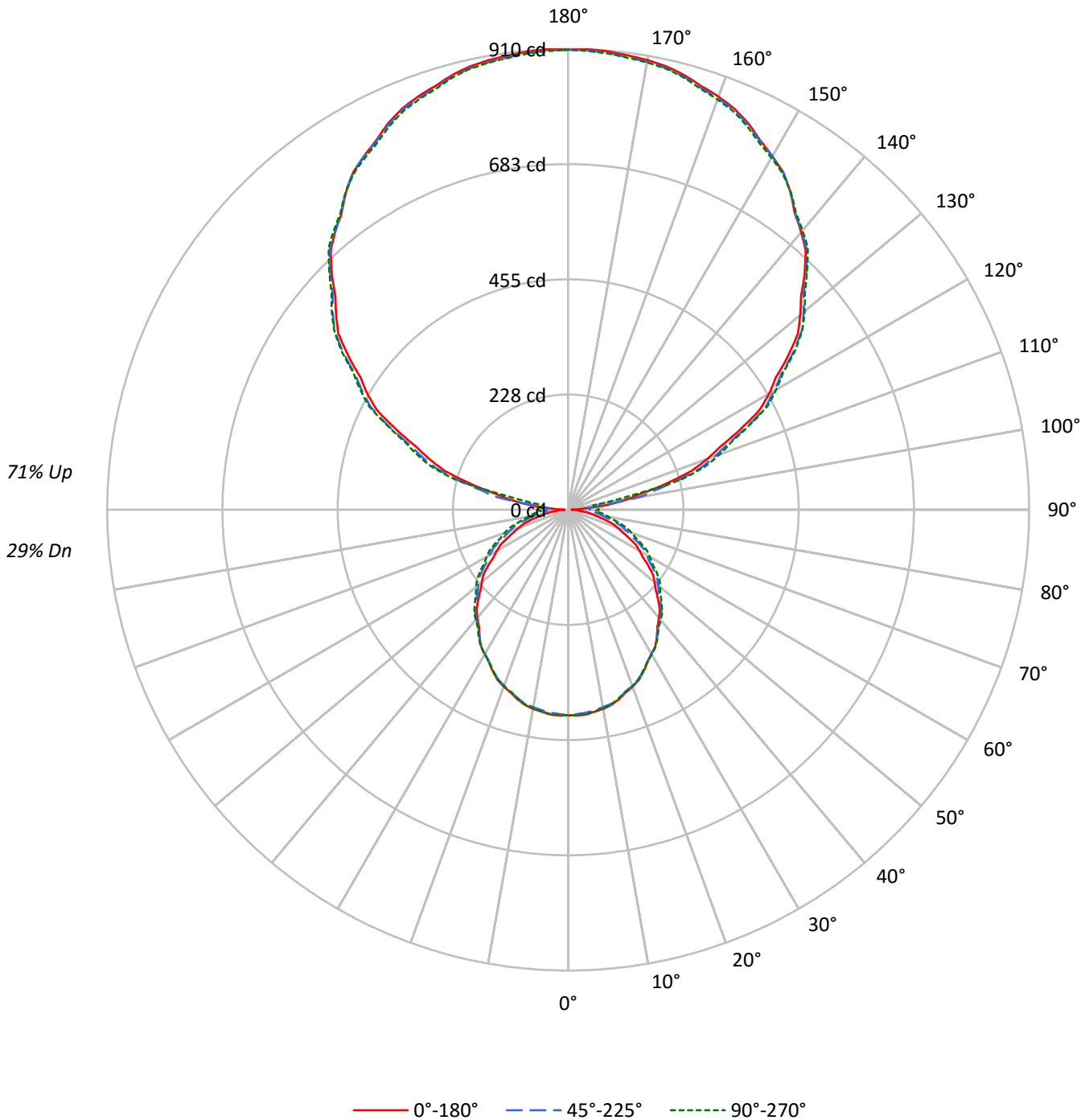
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	24
2	84	77	71	66	75	69	64	59	54	51	47	40	38	36	28	26	25	19
3	77	67	60	54	68	60	54	49	48	43	40	36	33	30	25	23	21	16
4	70	59	52	46	62	53	47	42	42	37	34	32	28	26	22	20	18	14
5	64	53	45	39	57	47	41	35	37	33	29	28	25	22	20	17	16	12
6	59	47	39	33	52	42	36	31	34	29	25	25	22	19	18	15	14	10
7	54	42	35	29	48	38	31	27	30	25	22	23	20	17	16	14	12	9
8	50	38	31	26	45	35	28	23	28	23	19	21	17	15	15	13	11	8
9	47	35	28	23	42	31	25	21	25	20	17	19	16	13	14	11	10	7
10	44	32	25	20	39	29	23	18	23	18	15	18	14	12	13	10	9	7

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

	0°	45°	90°
0°	2621	2621	2621
5°	2627	2573	2581
10°	2608	2527	2523
15°	2577	2472	2450
20°	2535	2404	2376
25°	2485	2331	2285
30°	2425	2251	2203
35°	2369	2178	2127
40°	2312	2100	2051
45°	2247	2033	1983
50°	2184	1962	1924
55°	2110	1894	1854
60°	2028	1817	1782
65°	1944	1736	1703
70°	1849	1625	1620
75°	1695	1518	1517
80°	1493	1389	1408
85°	1311	1301	1373



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.4	0.9
10°-20°	108.9	2.7
20°-30°	162.0	4.0
30°-40°	191.9	4.7
40°-50°	198.4	4.9
50°-60°	182.8	4.5
60°-70°	147.8	3.6
70°-80°	99.0	2.4
80°-90°	53.2	1.3
90°-100°	61.8	1.5
100°-110°	224.7	5.5
110°-120°	383.2	9.5
120°-130°	481.6	11.9
130°-140°	512.8	12.7
140°-150°	478.8	11.8
150°-160°	386.7	9.6
160°-170°	250.1	6.2
170°-180°	86.3	2.1
0°-30°	309.4	7.6
0°-40°	501.3	12.4
0°-60°	882.5	21.8
0°-90°	1182.4	29.2
90°-120°	669.7	16.5
90°-150°	2142.9	52.9
90°-180°	2866.0	70.8
0°-180°	4048.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	406	405	402	405	405	38
15°	388	388	385	387	386	109
25°	352	353	351	352	351	162
35°	305	307	306	308	308	191
45°	251	255	257	260	261	194
55°	193	199	206	210	212	172
65°	133	142	152	157	159	132
75°	73	84	96	104	106	78
85°	22	35	49	57	61	23
90°	7	25	43	56	61	6
95°	44	51	40	51	55	53
105°	202	211	223	230	233	214
115°	374	380	391	395	394	371
125°	530	535	542	546	546	473
135°	660	664	665	669	667	509
145°	765	766	766	768	766	478
155°	842	838	839	841	836	388
165°	888	884	885	888	883	251
175°	908	905	905	910	904	86
180°	908	908	908	908	908	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	406.8	406.7	406.6	406.4	406.3	406.0	405.4	404.9	404.5	404.0	404.5
5°	405.9	405.7	405.5	405.4	405.2	404.8	404.2	403.6	402.9	402.3	403.0
7.5°	402.3	402.3	402.2	402.1	402.0	401.7	401.1	400.4	399.8	399.1	399.8
10°	399.1	399.1	399.1	399.1	399.1	398.7	398.0	397.4	396.7	395.9	396.6
12.5°	394.7	394.8	394.8	394.9	394.9	394.7	394.2	393.6	393.0	392.4	392.9
15°	387.5	387.6	387.7	387.9	388.0	387.6	387.0	386.4	385.8	385.2	385.7
17.5°	378.3	378.5	378.7	378.8	379.0	378.8	378.2	377.5	376.9	376.3	376.8
20°	371.7	371.9	372.0	372.2	372.4	372.1	371.5	370.9	370.3	369.6	370.0
22.5°	364.0	364.4	364.6	365.0	365.3	365.1	364.4	363.7	363.0	362.3	362.7
25°	352.1	352.4	352.7	352.9	353.2	353.1	352.6	352.1	351.5	350.9	351.3
27.5°	339.0	339.3	339.8	340.1	340.5	340.4	339.8	339.2	338.6	338.0	338.2
30°	329.1	329.6	330.1	330.7	331.2	331.2	330.7	330.1	329.6	329.1	329.2
32.5°	320.2	320.6	321.1	321.6	322.0	322.0	321.7	321.2	320.9	320.5	320.6
35°	304.8	305.4	306.1	306.7	307.3	307.5	307.2	306.9	306.7	306.4	306.7
37.5°	289.5	290.0	290.6	291.1	291.7	292.0	291.9	291.8	291.7	291.6	292.0
40°	279.0	279.7	280.3	281.0	281.8	282.1	282.0	281.9	281.8	281.7	282.1
42.5°	267.5	268.4	269.3	270.3	271.1	271.7	271.9	272.1	272.3	272.5	272.9
45°	251.1	252.1	253.0	254.0	254.9	255.7	256.1	256.6	257.0	257.4	258.0
47.5°	234.3	235.2	236.1	237.0	237.9	238.8	239.5	240.2	241.0	241.8	242.7
50°	222.8	223.8	224.8	225.8	226.7	227.7	228.7	229.6	230.6	231.6	232.6
52.5°	210.8	211.9	213.1	214.3	215.5	216.6	217.8	219.0	220.2	221.4	222.5
55°	193.0	194.4	195.8	197.3	198.6	200.1	201.5	202.9	204.3	205.7	206.7
57.5°	174.9	176.5	178.2	179.9	181.7	183.3	184.9	186.6	188.2	189.8	190.9
60°	162.7	164.5	166.3	168.1	169.8	171.6	173.3	175.1	176.9	178.7	179.9
62.5°	150.9	152.7	154.5	156.3	158.1	159.9	161.8	163.7	165.7	167.6	169.0
65°	132.9	134.9	137.0	139.0	141.0	143.1	145.3	147.4	149.5	151.6	152.9
67.5°	115.9	117.9	119.8	121.7	123.7	125.8	127.9	130.1	132.2	134.4	136.0
70°	103.5	105.5	107.5	109.5	111.6	113.7	116.1	118.4	120.6	123.0	124.7
72.5°	91.4	93.5	95.6	97.6	99.8	102.1	104.6	107.1	109.6	112.1	114.0
75°	73.2	75.5	77.8	80.1	82.4	85.0	87.8	90.7	93.5	96.3	98.1
77.5°	55.8	58.5	61.1	63.7	66.4	69.1	71.8	74.6	77.2	80.0	82.0
80°	44.9	47.6	50.3	53.0	55.5	58.4	61.4	64.4	67.4	70.4	72.4
82.5°	35.1	37.9	40.7	43.5	46.2	49.2	52.3	55.4	58.5	61.5	63.4
85°	21.9	24.8	27.7	30.7	33.6	36.6	39.7	42.8	45.9	48.9	50.9
87.5°	12.6	15.6	18.7	21.8	24.8	28.0	31.2	34.4	37.6	40.8	43.0
90°	7.1	11.1	15.1	19.1	23.2	27.2	31.3	35.3	39.3	43.4	46.1
92.5°	16.1	17.9	19.6	21.4	23.2	26.1	30.1	34.1	38.1	42.1	44.9
95°	43.6	45.4	47.3	49.1	51.0	50.5	47.9	45.2	42.5	39.9	42.5
97.5°	84.8	87.7	90.6	93.4	96.3	93.6	85.2	76.9	68.5	60.2	57.9
100°	116.8	119.2	121.4	123.7	126.1	128.9	132.3	135.8	139.2	142.7	122.2
102.5°	149.4	151.6	153.9	156.2	158.5	161.2	164.3	167.5	170.6	173.7	171.3
105°	201.6	203.5	205.6	207.6	209.6	211.9	214.6	217.2	219.9	222.6	224.3
107.5°	255.7	256.9	258.1	259.3	260.5	262.6	265.4	268.3	271.1	274.0	275.8
110°	291.0	292.1	293.1	294.1	295.2	297.1	299.9	302.7	305.5	308.2	309.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	324.3	325.5	326.7	328.0	329.2	331.1	333.7	336.3	338.9	341.5	342.5
115°	374.1	375.4	376.8	378.2	379.5	381.4	383.9	386.3	388.8	391.2	392.3
117.5°	425.5	425.9	426.3	426.6	427.1	428.6	431.4	434.1	436.8	439.5	440.3
120°	457.9	458.0	458.1	458.2	458.3	459.6	462.1	464.6	467.1	469.5	470.7
122.5°	486.0	486.7	487.5	488.2	488.9	490.3	492.4	494.6	496.8	498.9	500.1
125°	530.2	531.2	532.1	533.0	534.0	535.4	537.1	538.9	540.7	542.4	543.3
127.5°	571.9	572.6	573.3	573.9	574.5	575.6	577.0	578.2	579.6	581.0	581.9
130°	597.8	598.4	599.1	599.8	600.4	601.4	602.8	604.2	605.6	607.0	607.8
132.5°	623.3	624.1	625.0	625.9	626.7	627.4	628.1	628.7	629.3	630.0	631.1
135°	660.0	660.8	661.6	662.5	663.2	663.8	664.1	664.4	664.8	665.0	665.9
137.5°	693.7	694.4	695.2	695.9	696.5	696.9	697.0	697.0	697.0	697.1	698.2
140°	715.5	715.7	716.1	716.4	716.7	716.8	716.8	716.7	716.6	716.5	717.8
142.5°	735.4	735.6	735.6	735.7	735.8	736.0	736.2	736.5	736.7	736.9	737.8
145°	764.7	764.8	765.1	765.3	765.5	765.6	765.6	765.6	765.6	765.6	766.2
147.5°	789.8	789.8	789.7	789.6	789.6	789.6	789.8	790.0	790.2	790.4	790.7
150°	806.0	805.7	805.4	805.1	804.8	804.8	805.1	805.4	805.7	806.0	806.3
152.5°	821.7	821.0	820.3	819.7	819.0	818.8	819.1	819.4	819.7	820.0	820.3
155°	841.7	840.8	839.9	839.0	838.1	837.8	838.1	838.4	838.7	839.0	839.4
157.5°	857.1	856.6	856.1	855.6	855.0	854.7	854.8	854.8	854.8	854.9	855.3
160°	868.0	867.0	866.2	865.2	864.4	864.0	864.1	864.3	864.4	864.5	865.1
162.5°	876.6	875.6	874.8	873.8	873.0	872.6	872.7	872.9	873.1	873.2	874.0
165°	888.1	887.3	886.3	885.5	884.5	884.2	884.3	884.5	884.6	884.8	885.7
167.5°	896.7	895.9	894.9	894.0	893.0	892.7	892.8	892.9	893.1	893.3	894.3
170°	901.6	900.5	899.5	898.5	897.4	897.0	897.1	897.2	897.4	897.6	898.8
172.5°	904.8	903.8	902.8	901.7	900.6	900.3	900.5	900.8	901.0	901.3	902.4
175°	908.4	907.4	906.5	905.7	904.7	904.4	904.5	904.7	904.8	905.0	906.2
177.5°	910.0	909.2	908.5	907.8	907.1	906.8	906.9	907.0	907.1	907.2	908.1
180°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	404.9	405.4	406.0	406.1	406.0	406.0	406.0	405.9
5°	403.7	404.4	405.1	405.4	405.4	405.3	405.2	405.1
7.5°	400.4	401.0	401.6	401.8	401.7	401.7	401.6	401.5
10°	397.2	397.8	398.4	398.6	398.6	398.5	398.4	398.3
12.5°	393.4	393.8	394.3	394.4	394.3	394.0	393.7	393.6
15°	386.2	386.8	387.3	387.4	387.0	386.7	386.3	386.0
17.5°	377.2	377.5	378.0	378.1	377.9	377.6	377.5	377.2
20°	370.2	370.5	370.7	370.8	370.8	370.8	370.8	370.8
22.5°	363.0	363.3	363.7	363.8	363.5	363.3	363.1	362.9
25°	351.6	352.1	352.4	352.3	351.9	351.5	351.0	350.6
27.5°	338.5	338.7	339.0	339.1	338.9	338.7	338.5	338.4
30°	329.4	329.6	329.8	329.8	329.8	329.7	329.6	329.5
32.5°	320.8	321.0	321.2	321.2	321.2	321.1	321.0	320.9
35°	306.9	307.2	307.5	307.5	307.5	307.5	307.5	307.5
37.5°	292.3	292.7	293.0	293.2	293.2	293.1	293.1	293.0
40°	282.4	282.8	283.2	283.4	283.6	283.8	284.0	284.1
42.5°	273.4	273.8	274.2	274.4	274.5	274.5	274.5	274.6
45°	258.7	259.3	259.9	260.3	260.4	260.5	260.5	260.6
47.5°	243.6	244.5	245.4	245.9	246.2	246.3	246.5	246.7
50°	233.5	234.5	235.5	236.1	236.3	236.6	236.9	237.1
52.5°	223.5	224.5	225.6	226.2	226.4	226.6	226.8	227.0
55°	207.7	208.6	209.7	210.3	210.6	210.9	211.4	211.7
57.5°	192.0	193.1	194.2	194.9	195.2	195.4	195.8	196.0
60°	181.3	182.6	184.0	184.8	185.0	185.3	185.5	185.8
62.5°	170.5	171.9	173.4	174.3	174.6	175.0	175.3	175.6
65°	154.3	155.6	156.9	157.7	158.1	158.4	158.9	159.2
67.5°	137.7	139.2	140.9	141.9	142.3	142.8	143.3	143.7
70°	126.3	128.0	129.7	130.8	131.3	131.8	132.3	132.9
72.5°	115.8	117.6	119.4	120.5	120.9	121.3	121.7	122.1
75°	99.9	101.6	103.4	104.4	105.0	105.4	105.8	106.2
77.5°	83.9	85.8	87.7	88.9	89.3	89.6	90.0	90.3
80°	74.3	76.3	78.2	79.4	79.7	80.1	80.4	80.8
82.5°	65.3	67.2	69.1	70.3	70.9	71.5	72.2	72.8
85°	52.9	54.8	56.7	58.0	58.7	59.5	60.2	60.9
87.5°	45.2	47.4	49.6	51.0	51.7	52.4	53.1	53.8
90°	49.0	51.7	54.5	56.5	57.5	58.6	59.7	60.7
92.5°	47.5	50.3	53.0	54.8	55.5	56.4	57.3	58.0
95°	45.2	47.9	50.6	52.3	52.9	53.5	54.1	54.8
97.5°	55.4	53.1	50.7	49.9	50.5	51.1	51.7	52.3
100°	101.8	81.3	60.9	50.6	50.5	50.5	50.5	50.4
102.5°	168.8	166.3	163.9	157.9	148.3	138.6	129.0	119.3
105°	226.1	227.8	229.6	230.7	231.2	231.7	232.1	232.6
107.5°	277.5	279.3	281.1	282.1	282.1	282.2	282.3	282.4
110°	310.7	311.9	313.1	314.2	315.0	315.7	316.5	317.3





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	343.5	344.6	345.6	346.3	346.7	347.2	347.6	347.9
115°	393.2	394.3	395.2	395.5	395.2	394.8	394.4	394.1
117.5°	441.0	441.8	442.5	442.9	443.2	443.3	443.6	443.8
120°	471.9	473.1	474.3	474.8	474.6	474.4	474.2	474.0
122.5°	501.3	502.4	503.5	503.9	503.6	503.3	502.9	502.6
125°	544.1	544.9	545.7	546.1	546.1	546.1	546.0	546.0
127.5°	583.0	583.9	585.0	585.1	584.5	583.9	583.3	582.7
130°	608.6	609.3	610.1	610.4	610.1	609.8	609.5	609.2
132.5°	632.2	633.4	634.6	634.9	634.6	634.2	633.8	633.4
135°	666.8	667.6	668.5	668.7	668.2	667.8	667.3	666.8
137.5°	699.2	700.3	701.5	701.8	701.4	700.9	700.5	700.1
140°	719.1	720.4	721.6	722.0	721.4	720.9	720.4	719.8
142.5°	738.7	739.6	740.5	740.6	740.1	739.6	739.0	738.5
145°	766.8	767.3	767.9	768.0	767.4	766.9	766.4	765.8
147.5°	791.0	791.3	791.7	791.3	790.4	789.5	788.6	787.6
150°	806.6	806.9	807.2	806.8	805.6	804.6	803.5	802.4
152.5°	820.6	820.9	821.2	820.8	819.8	818.7	817.6	816.6
155°	839.9	840.3	840.8	840.4	839.2	838.0	836.8	835.6
157.5°	855.8	856.4	856.8	856.4	855.2	854.0	852.8	851.6
160°	865.7	866.3	866.9	866.7	865.5	864.3	863.1	861.9
162.5°	874.9	875.7	876.5	876.3	874.9	873.7	872.4	871.1
165°	886.6	887.4	888.4	888.2	887.0	885.8	884.6	883.4
167.5°	895.4	896.5	897.6	897.4	896.0	894.8	893.4	892.1
170°	899.9	901.1	902.3	902.2	901.0	899.6	898.2	896.9
172.5°	903.4	904.6	905.7	905.5	904.1	902.8	901.5	900.1
175°	907.3	908.5	909.7	909.6	908.4	907.0	905.7	904.3
177.5°	909.0	909.7	910.6	910.6	909.6	908.6	907.7	906.7
180°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4

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