

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: P333505-935

Luminaire Tested: **S125RDIP-S375D810U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333505-935  
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: S125RDIP-S375D810U935-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 810 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4035.9 lumens  
Efficiency: N/A  
Efficacy: 129.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

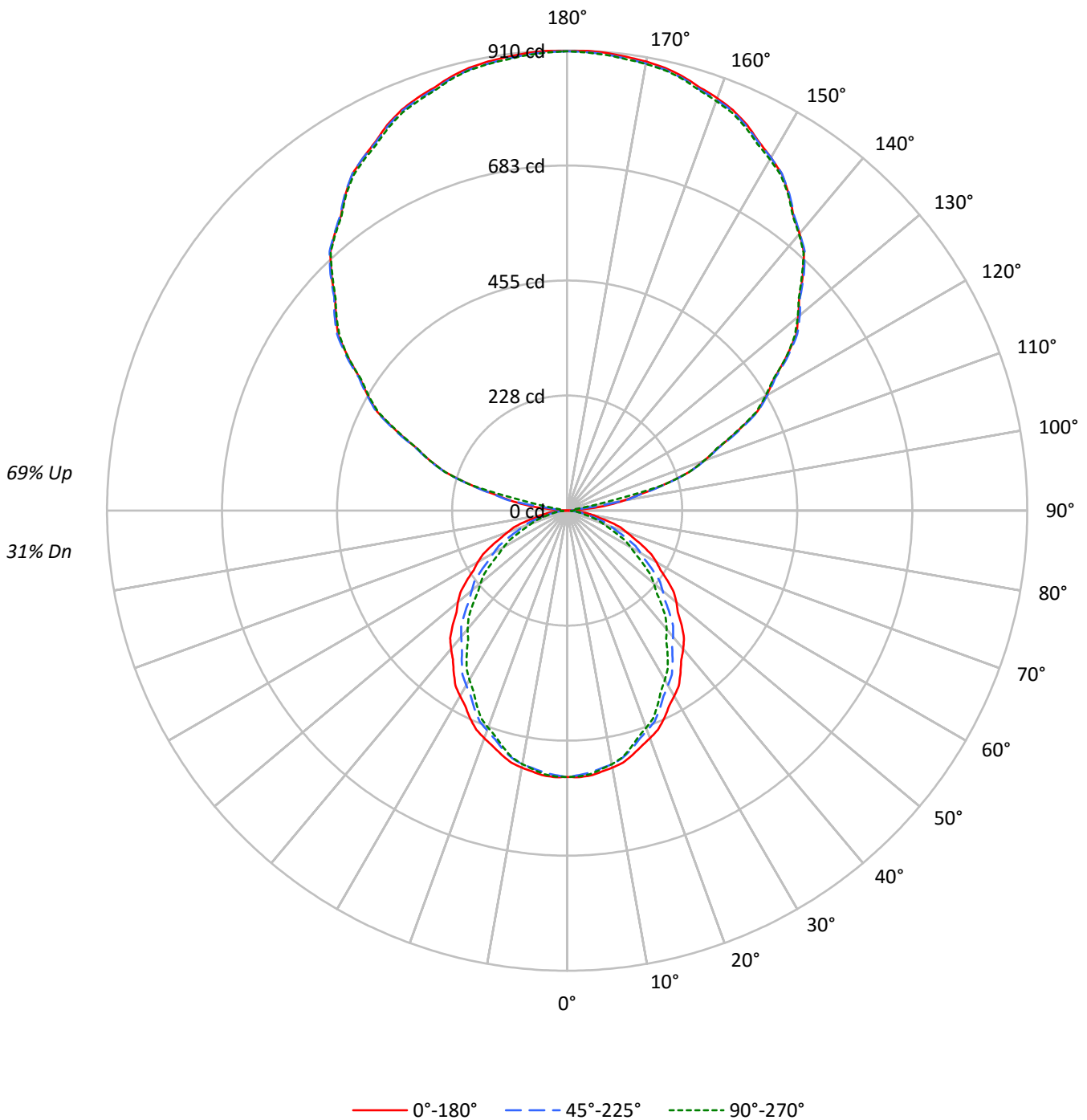
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	94	89	86	82	84	81	77	75	64	62	60	48	47	46	34	33	33	26
2	85	78	72	67	76	71	66	61	56	53	50	43	40	38	30	29	28	22
3	78	69	62	56	70	62	56	51	49	45	42	38	35	33	27	25	24	19
4	71	61	53	48	64	55	49	44	44	39	36	34	31	28	24	22	21	16
5	65	54	46	41	58	49	42	37	39	34	31	30	27	24	22	20	18	14
6	60	48	41	35	54	44	37	32	35	30	27	27	24	21	20	18	16	13
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	40	32	27	46	36	29	25	29	24	21	23	19	17	17	14	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	15	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

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

	0°	45°	90°
0°	3402	3402	3402
5°	3411	3371	3392
10°	3385	3341	3341
15°	3344	3273	3245
20°	3293	3178	3140
25°	3233	3085	3017
30°	3157	2976	2882
35°	3080	2864	2730
40°	3010	2748	2580
45°	2922	2617	2417
50°	2834	2475	2247
55°	2733	2339	2066
60°	2631	2174	1870
65°	2512	1984	1647
70°	2374	1743	1420
75°	2186	1470	1183
80°	1923	1153	993
85°	1623	941	889



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.5	1.2
10°-20°	138.4	3.4
20°-30°	200.8	5.0
30°-40°	228.8	5.7
40°-50°	223.0	5.5
50°-60°	187.7	4.7
60°-70°	131.6	3.3
70°-80°	67.6	1.7
80°-90°	19.0	0.5
90°-100°	33.0	0.8
100°-110°	203.4	5.0
110°-120°	369.0	9.1
120°-130°	473.5	11.7
130°-140°	509.3	12.6
140°-150°	478.1	11.8
150°-160°	386.7	9.6
160°-170°	250.1	6.2
170°-180°	86.3	2.1
0°-30°	388.7	9.6
0°-40°	617.6	15.3
0°-60°	1028.3	25.5
0°-90°	1246.5	30.9
90°-120°	605.4	15.0
90°-150°	2066.3	51.2
90°-180°	2789.0	69.1
0°-180°	4035.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	526	524	520	524	523	50
15°	500	498	490	489	485	141
25°	454	447	433	428	423	209
35°	391	381	363	352	346	245
45°	320	308	286	271	265	247
55°	243	230	208	190	184	217
65°	164	150	130	114	108	163
75°	88	75	59	50	47	93
85°	22	15	13	12	12	25
90°	1	6	11	14	16	3
95°	38	35	11	14	14	49
105°	198	200	201	201	200	210
115°	372	375	376	373	369	368
125°	529	533	533	531	529	472
135°	659	663	662	660	656	508
145°	764	766	766	766	762	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°	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8
2.5°	527.8	527.6	527.4	527.2	526.9	526.5	525.8	525.0	524.3	523.7	524.3
5°	526.1	525.7	525.4	525.0	524.6	524.0	523.0	522.0	521.1	520.0	521.0
7.5°	520.9	520.6	520.2	519.9	519.5	518.8	517.6	516.4	515.3	514.1	514.7
10°	516.1	515.8	515.6	515.3	515.1	514.3	513.1	511.8	510.6	509.4	509.6
12.5°	510.7	510.3	510.1	509.7	509.4	508.3	506.7	505.1	503.3	501.7	501.9
15°	500.2	499.6	499.1	498.6	498.1	496.9	495.0	493.2	491.3	489.5	489.4
17.5°	488.4	487.5	486.7	485.9	485.1	483.5	481.1	478.8	476.5	474.2	473.7
20°	479.1	478.2	477.3	476.5	475.5	473.7	470.9	468.0	465.2	462.4	461.9
22.5°	468.9	468.0	467.2	466.2	465.4	463.5	460.5	457.5	454.5	451.6	450.7
25°	453.7	452.3	451.0	449.6	448.3	446.0	442.7	439.5	436.2	432.9	431.8
27.5°	436.1	434.5	432.9	431.3	429.6	427.1	423.6	420.1	416.6	413.1	411.5
30°	423.4	421.7	420.0	418.4	416.6	414.0	410.3	406.6	402.9	399.1	397.1
32.5°	411.0	409.0	407.1	405.1	403.1	400.3	396.5	392.7	388.9	385.1	382.9
35°	390.7	388.7	386.5	384.4	382.3	379.2	375.2	371.3	367.3	363.3	360.8
37.5°	370.9	368.3	365.8	363.2	360.6	357.2	353.2	349.0	345.0	340.9	337.8
40°	357.0	354.3	351.6	349.0	346.3	342.9	338.6	334.4	330.1	325.9	322.5
42.5°	342.2	339.6	336.8	334.2	331.4	327.9	323.5	319.1	314.7	310.3	307.1
45°	319.9	317.4	314.8	312.2	309.7	305.9	301.1	296.3	291.4	286.5	282.9
47.5°	296.8	294.0	291.4	288.6	285.9	282.1	277.2	272.3	267.4	262.5	258.9
50°	282.1	279.2	276.3	273.4	270.4	266.5	261.4	256.4	251.3	246.3	242.6
52.5°	266.2	263.2	260.2	257.3	254.3	250.4	245.6	240.8	236.1	231.4	227.4
55°	242.7	239.9	237.0	234.3	231.4	227.6	222.6	217.6	212.7	207.7	203.7
57.5°	219.0	216.0	212.9	209.9	206.9	203.0	198.2	193.5	188.7	183.9	180.0
60°	203.7	200.6	197.5	194.4	191.3	187.4	182.6	177.9	173.1	168.3	164.5
62.5°	187.5	184.5	181.6	178.7	175.6	171.8	166.9	162.1	157.2	152.4	148.8
65°	164.4	161.4	158.3	155.3	152.3	148.4	143.8	139.1	134.4	129.8	126.2
67.5°	141.4	138.4	135.3	132.3	129.3	125.5	121.1	116.6	112.1	107.6	104.4
70°	125.7	122.8	119.8	116.8	113.7	110.0	105.6	101.2	96.8	92.3	89.5
72.5°	110.5	107.5	104.6	101.7	98.8	95.1	91.0	86.9	82.7	78.6	76.1
75°	87.6	84.9	82.2	79.6	77.0	73.8	70.0	66.3	62.6	58.9	56.9
77.5°	64.7	62.7	60.5	58.4	56.3	53.7	50.8	47.8	44.9	41.8	40.5
80°	51.7	49.6	47.5	45.4	43.2	41.0	38.5	36.0	33.5	31.0	30.2
82.5°	39.0	37.1	35.2	33.2	31.3	29.5	27.9	26.2	24.5	22.7	22.4
85°	21.9	20.3	18.7	17.1	15.5	14.5	14.0	13.6	13.2	12.7	12.7
87.5°	7.5	7.2	7.0	6.7	6.5	6.4	6.5	6.6	6.8	6.9	7.1
90°	0.7	1.9	3.1	4.3	5.4	6.5	7.7	8.7	9.7	10.8	11.5
92.5°	10.3	9.6	8.7	7.8	7.1	7.1	8.0	9.0	9.8	10.8	11.5
95°	38.4	38.0	37.5	37.0	36.6	33.5	27.8	22.1	16.4	10.8	11.5
97.5°	80.2	80.9	81.7	82.6	83.3	78.2	66.9	55.6	44.3	33.1	28.9
100°	112.4	112.9	113.3	113.8	114.3	114.8	115.4	116.0	116.6	117.2	94.9
102.5°	145.3	145.9	146.5	147.0	147.6	148.0	148.4	148.8	149.1	149.5	145.3
105°	197.9	198.5	199.1	199.8	200.4	200.6	200.6	200.6	200.6	200.6	200.6
107.5°	252.6	252.6	252.6	252.6	252.6	252.8	253.0	253.4	253.7	254.0	254.0
110°	288.2	288.2	288.2	288.2	288.2	288.3	288.6	289.0	289.2	289.6	289.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	321.6	321.9	322.3	322.7	323.0	323.3	323.5	323.6	323.8	324.0	323.5
115°	371.7	372.5	373.2	373.9	374.7	375.1	375.3	375.4	375.6	375.7	375.1
117.5°	423.5	423.5	423.4	423.4	423.4	423.7	424.2	424.8	425.4	425.9	425.2
120°	455.8	455.7	455.6	455.4	455.2	455.4	455.8	456.3	456.8	457.2	456.9
122.5°	484.4	485.0	485.5	486.1	486.6	487.1	487.2	487.5	487.7	487.9	487.6
125°	528.6	529.6	530.6	531.8	532.8	533.3	533.3	533.3	533.3	533.3	532.7
127.5°	570.8	571.4	572.2	573.0	573.7	574.0	573.9	573.9	573.8	573.7	573.3
130°	596.6	597.4	598.1	598.8	599.6	600.0	600.2	600.3	600.5	600.6	600.2
132.5°	622.4	623.3	624.1	625.0	625.9	626.2	625.9	625.5	625.2	624.8	624.7
135°	659.2	660.1	661.0	661.9	662.8	663.1	662.8	662.5	662.2	661.9	661.6
137.5°	693.0	693.8	694.6	695.3	696.1	696.4	696.1	695.9	695.6	695.3	695.3
140°	715.1	715.4	715.7	716.0	716.3	716.4	716.2	716.1	715.9	715.7	716.1
142.5°	735.0	735.2	735.4	735.6	735.7	735.9	736.2	736.3	736.6	736.8	736.8
145°	764.2	764.6	764.8	765.2	765.4	765.6	765.6	765.6	765.6	765.6	765.8
147.5°	789.8	789.8	789.7	789.6	789.6	789.6	789.8	790.0	790.2	790.4	790.6
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°	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8
2.5°	525.0	525.8	526.5	526.8	526.8	526.7	526.6	526.5
5°	521.9	522.7	523.6	524.0	523.8	523.6	523.4	523.2
7.5°	515.3	516.0	516.6	516.8	516.6	516.4	516.3	516.0
10°	509.9	510.1	510.4	510.4	510.1	509.9	509.6	509.4
12.5°	502.0	502.3	502.5	502.4	502.0	501.5	501.2	500.8
15°	489.2	489.1	489.0	488.6	487.8	487.1	486.3	485.4
17.5°	473.3	472.9	472.4	471.8	471.2	470.5	469.8	469.2
20°	461.5	461.1	460.6	460.0	459.2	458.4	457.6	456.8
22.5°	449.8	448.9	448.1	447.3	446.7	446.0	445.4	444.7
25°	430.7	429.5	428.3	427.3	426.3	425.3	424.4	423.4
27.5°	409.9	408.3	406.7	405.4	404.5	403.6	402.6	401.7
30°	395.0	393.0	391.0	389.6	388.7	388.0	387.2	386.4
32.5°	380.6	378.4	376.1	374.5	373.5	372.5	371.4	370.5
35°	358.2	355.6	353.0	351.1	349.9	348.7	347.4	346.2
37.5°	334.7	331.7	328.6	326.4	325.2	324.0	322.8	321.6
40°	319.2	315.8	312.5	310.2	309.2	308.2	307.0	306.0
42.5°	303.8	300.7	297.4	295.1	293.5	291.9	290.3	288.8
45°	279.4	275.9	272.3	269.9	268.6	267.3	266.0	264.6
47.5°	255.3	251.6	248.0	245.4	243.9	242.5	241.0	239.5
50°	238.8	235.1	231.4	228.9	227.6	226.3	225.0	223.6
52.5°	223.3	219.4	215.3	212.7	211.4	210.1	208.7	207.4
55°	199.8	195.8	191.8	189.1	187.7	186.2	184.9	183.5
57.5°	176.2	172.3	168.3	165.7	164.5	163.2	162.0	160.7
60°	160.6	156.6	152.7	150.2	148.8	147.5	146.2	144.8
62.5°	145.2	141.5	137.9	135.5	134.1	132.9	131.6	130.2
65°	122.6	119.1	115.5	113.1	111.8	110.5	109.2	107.8
67.5°	101.1	97.9	94.6	92.5	91.4	90.4	89.3	88.3
70°	86.9	84.1	81.4	79.5	78.4	77.3	76.3	75.2
72.5°	73.5	71.0	68.5	66.9	66.2	65.5	64.7	64.1
75°	55.0	53.0	51.1	49.9	49.2	48.6	48.0	47.4
77.5°	39.2	37.8	36.4	35.5	35.0	34.6	34.1	33.7
80°	29.4	28.7	27.9	27.4	27.2	27.0	26.9	26.7
82.5°	22.0	21.6	21.3	21.0	20.9	20.8	20.8	20.6
85°	12.6	12.5	12.4	12.3	12.2	12.1	12.1	12.0
87.5°	7.2	7.4	7.5	7.6	7.7	7.7	7.7	7.7
90°	12.3	13.0	13.8	14.4	14.8	15.2	15.7	16.2
92.5°	12.3	13.0	13.8	14.2	14.5	14.6	14.9	15.1
95°	12.3	13.0	13.8	14.1	14.1	14.1	14.1	14.1
97.5°	24.7	20.5	16.3	14.1	14.1	14.1	14.1	14.1
100°	72.6	50.3	28.0	16.5	15.9	15.3	14.7	14.1
102.5°	141.0	136.8	132.6	125.4	115.2	105.0	94.9	84.7
105°	200.6	200.6	200.6	200.6	200.4	200.3	200.1	200.0
107.5°	254.1	254.1	254.1	253.9	253.5	253.0	252.5	252.1
110°	288.6	288.2	287.7	287.6	287.7	287.9	288.0	288.2





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	322.9	322.3	321.8	321.3	321.2	320.9	320.7	320.6
115°	374.5	373.9	373.3	372.6	371.7	370.7	369.9	369.0
117.5°	424.4	423.6	422.8	422.2	421.9	421.5	421.1	420.7
120°	456.6	456.3	456.0	455.5	454.7	454.0	453.2	452.5
122.5°	487.3	487.0	486.7	486.1	485.3	484.4	483.5	482.7
125°	532.1	531.5	530.9	530.4	529.9	529.4	529.0	528.6
127.5°	573.0	572.7	572.4	571.6	570.6	569.5	568.3	567.2
130°	599.7	599.3	598.8	598.2	597.4	596.8	596.0	595.2
132.5°	624.7	624.6	624.5	624.1	623.4	622.6	621.8	621.1
135°	661.3	661.0	660.7	660.1	659.2	658.3	657.4	656.5
137.5°	695.4	695.4	695.5	695.2	694.4	693.6	692.8	692.1
140°	716.4	716.7	717.0	716.7	715.7	714.9	713.9	713.1
142.5°	736.9	736.9	737.0	736.6	735.7	734.8	733.9	733.0
145°	765.9	766.0	766.2	765.8	764.9	764.1	763.1	762.2
147.5°	790.7	790.9	791.1	790.7	789.5	788.5	787.4	786.4
150°	806.6	806.9	807.2	806.8	805.6	804.3	803.1	801.9
152.5°	820.6	820.9	821.2	820.8	819.8	818.6	817.6	816.5
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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