

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: P333139-830

Luminaire Tested: **S125DIP-S375D810U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333139-830  
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-S375D810U830-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4488.4 lumens  
Efficiency: N/A  
Efficacy: 143.9 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

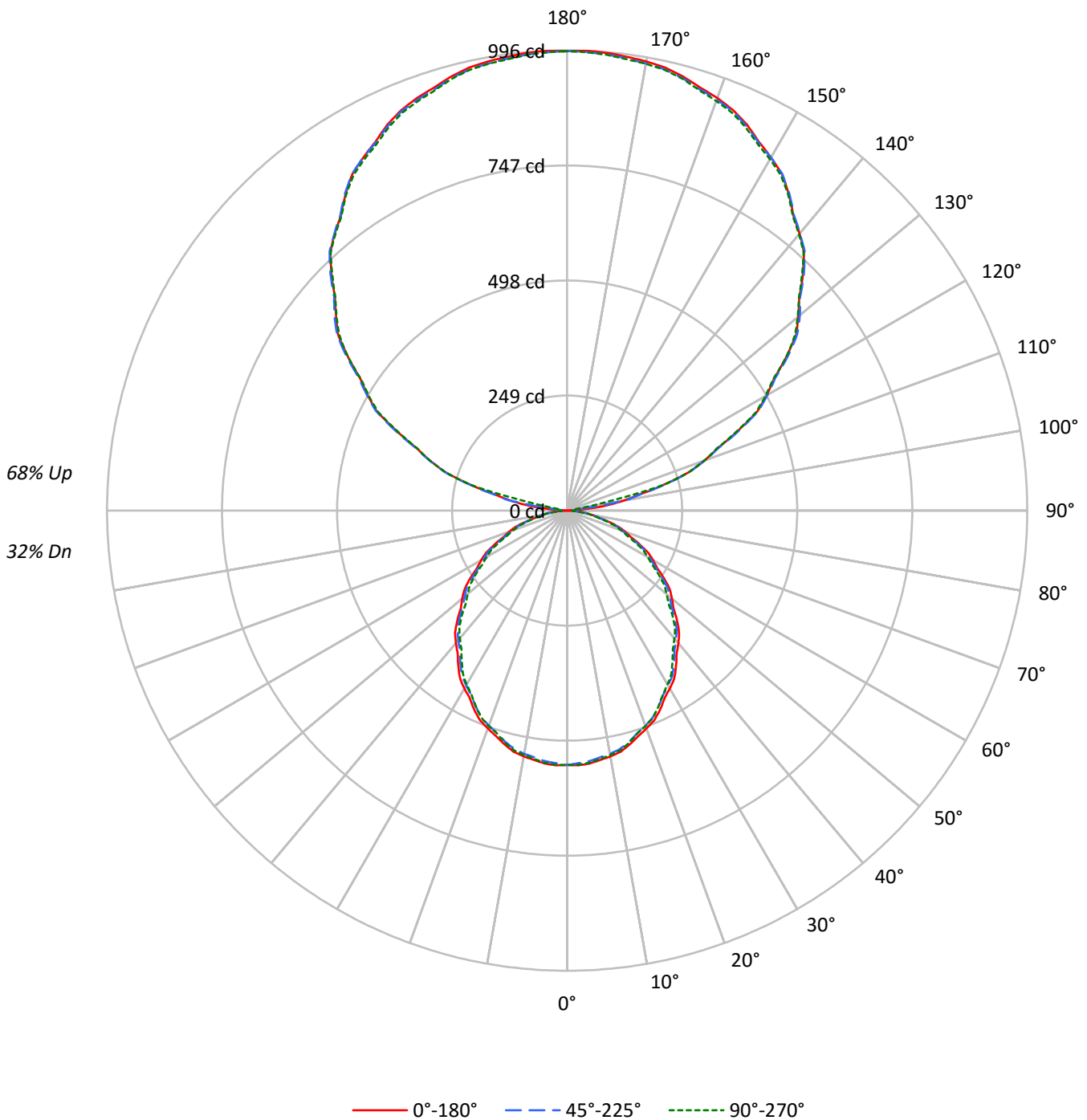
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33	27
2	85	78	72	67	76	70	65	61	56	53	50	43	41	38	31	29	28	22
3	78	69	61	56	70	62	56	51	49	45	42	38	35	33	27	25	24	19
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16	12
7	55	43	36	30	50	39	33	28	32	27	23	25	21	18	18	16	14	11
8	51	39	32	27	46	36	29	24	29	24	20	22	19	16	16	14	12	10
9	48	36	28	24	43	32	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

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

	0°	45°	90°
0°	3556	3556	3556
5°	3564	3530	3553
10°	3543	3505	3525
15°	3504	3463	3477
20°	3449	3404	3410
25°	3390	3334	3331
30°	3317	3258	3242
35°	3239	3177	3132
40°	3159	3089	3044
45°	3072	3008	2948
50°	2976	2910	2823
55°	2884	2800	2723
60°	2773	2689	2595
65°	2644	2557	2470
70°	2517	2402	2319
75°	2293	2218	2141
80°	2042	2008	1960
85°	1771	1808	1712



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.9	1.2
10°-20°	146.6	3.3
20°-30°	216.5	4.8
30°-40°	252.7	5.6
40°-50°	253.8	5.7
50°-60°	222.8	5.0
60°-70°	166.0	3.7
70°-80°	94.9	2.1
80°-90°	29.7	0.7
90°-100°	36.1	0.8
100°-110°	222.7	5.0
110°-120°	403.9	9.0
120°-130°	518.4	11.5
130°-140°	557.5	12.4
140°-150°	523.3	11.7
150°-160°	423.3	9.4
160°-170°	273.8	6.1
170°-180°	94.4	2.1
0°-30°	415.1	9.2
0°-40°	667.8	14.9
0°-60°	1144.3	25.5
0°-90°	1434.8	32.0
90°-120°	662.7	14.8
90°-150°	2262.0	50.4
90°-180°	3054.0	68.0
0°-180°	4488.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	551	551	551	551	551	
5°	550	549	544	548	548	52
15°	524	522	518	520	520	148
25°	476	473	468	469	467	219
35°	411	409	403	401	397	257
45°	336	334	329	324	323	259
55°	256	255	249	245	242	229
65°	173	172	167	164	162	172
75°	92	91	89	88	86	98
85°	24	24	24	24	23	27
90°	1	7	12	15	18	3
95°	42	38	12	15	16	54
105°	217	219	220	220	219	230
115°	407	410	411	408	404	403
125°	579	584	584	581	579	517
135°	722	726	725	723	719	556
145°	837	838	838	839	834	523
155°	921	917	918	920	915	424
165°	972	968	969	972	967	275
175°	994	990	991	996	990	95
180°	994	994	994	994	994	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	552.0	551.8	551.6	551.3	551.1	550.5	549.8	549.0	548.3	547.4	548.3
5°	549.7	549.5	549.3	549.1	548.9	548.4	547.4	546.5	545.4	544.5	545.4
7.5°	544.7	544.5	544.3	544.1	543.9	543.3	542.2	541.1	540.1	539.0	539.9
10°	540.2	540.0	539.8	539.6	539.4	538.8	537.7	536.6	535.6	534.5	535.3
12.5°	534.6	534.2	533.9	533.6	533.2	532.5	531.5	530.6	529.5	528.6	529.1
15°	524.1	523.8	523.5	523.2	522.8	522.2	521.1	520.1	519.0	517.9	518.4
17.5°	511.9	511.5	511.0	510.7	510.2	509.4	508.3	507.3	506.1	505.0	505.7
20°	501.8	501.6	501.4	501.2	501.1	500.3	499.1	497.8	496.5	495.3	496.0
22.5°	491.7	491.3	491.0	490.7	490.3	489.6	488.3	487.2	486.0	484.8	485.3
25°	475.7	475.2	474.7	474.2	473.7	472.9	471.6	470.3	469.1	467.9	468.1
27.5°	456.9	456.7	456.4	456.1	455.8	455.0	453.7	452.4	451.1	449.8	449.9
30°	444.8	444.5	444.1	443.8	443.6	442.7	441.3	439.8	438.4	436.9	436.7
32.5°	431.5	431.0	430.6	430.2	429.7	428.9	427.5	426.2	425.0	423.7	423.3
35°	410.8	410.4	410.0	409.6	409.3	408.3	407.0	405.7	404.3	402.9	402.5
37.5°	389.3	388.8	388.3	387.8	387.3	386.4	385.1	383.9	382.6	381.4	380.6
40°	374.7	374.1	373.6	373.2	372.7	371.7	370.4	369.1	367.7	366.4	365.5
42.5°	358.9	358.5	358.2	357.7	357.3	356.5	355.1	353.7	352.3	351.0	350.2
45°	336.3	335.9	335.5	335.2	334.7	333.9	332.8	331.7	330.5	329.3	328.2
47.5°	311.9	311.9	311.9	312.0	312.0	311.3	309.9	308.5	307.1	305.7	304.5
50°	296.2	296.0	295.7	295.3	295.0	294.4	293.1	292.0	290.9	289.6	288.4
52.5°	280.2	279.9	279.7	279.6	279.4	278.6	277.4	276.2	274.8	273.6	272.6
55°	256.1	255.8	255.5	255.2	255.0	254.1	252.8	251.5	250.1	248.7	247.9
57.5°	230.8	230.6	230.5	230.4	230.2	229.5	228.4	227.2	226.1	225.0	223.9
60°	214.7	214.3	214.0	213.6	213.2	212.4	211.4	210.4	209.2	208.2	207.3
62.5°	198.0	197.7	197.4	197.1	196.8	196.1	195.3	194.4	193.4	192.6	191.5
65°	173.0	172.8	172.6	172.4	172.2	171.5	170.5	169.4	168.3	167.3	166.4
67.5°	148.6	148.3	147.8	147.4	147.0	146.4	145.6	144.8	144.0	143.3	142.5
70°	133.3	132.8	132.3	131.9	131.4	130.6	129.8	128.9	128.1	127.2	126.6
72.5°	116.6	116.2	115.9	115.6	115.3	114.8	114.2	113.7	113.1	112.5	111.9
75°	91.9	91.7	91.5	91.3	91.1	90.8	90.3	89.8	89.4	88.9	88.6
77.5°	69.2	69.1	69.0	68.9	68.9	68.7	68.4	68.1	67.9	67.6	67.4
80°	54.9	54.9	54.9	54.9	54.9	54.8	54.6	54.4	54.2	54.0	53.9
82.5°	42.3	42.2	42.0	41.8	41.8	41.7	41.6	41.6	41.5	41.5	41.3
85°	23.9	24.0	24.1	24.2	24.3	24.4	24.4	24.4	24.4	24.4	24.3
87.5°	9.5	9.8	10.1	10.4	10.7	10.8	10.9	11.1	11.3	11.4	11.6
90°	0.8	2.1	3.4	4.7	5.9	7.2	8.4	9.5	10.7	11.8	12.6
92.5°	11.3	10.5	9.5	8.6	7.7	7.7	8.8	9.8	10.7	11.8	12.6
95°	42.0	41.6	41.0	40.5	40.1	36.7	30.4	24.2	18.0	11.8	12.6
97.5°	87.8	88.6	89.4	90.4	91.2	85.6	73.2	60.9	48.5	36.3	31.7
100°	123.1	123.6	124.0	124.6	125.1	125.6	126.3	127.0	127.6	128.3	103.9
102.5°	159.1	159.7	160.3	160.9	161.6	162.0	162.5	162.9	163.2	163.6	159.0
105°	216.7	217.4	218.0	218.7	219.3	219.6	219.6	219.6	219.6	219.6	219.6
107.5°	276.5	276.5	276.5	276.5	276.5	276.7	277.0	277.4	277.7	278.1	278.1
110°	315.5	315.5	315.5	315.5	315.5	315.7	315.9	316.3	316.6	317.0	316.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	352.0	352.4	352.8	353.3	353.6	353.9	354.1	354.3	354.5	354.7	354.1
115°	406.9	407.7	408.5	409.3	410.2	410.7	410.9	410.9	411.1	411.3	410.7
117.5°	463.6	463.6	463.5	463.5	463.5	463.8	464.4	465.1	465.7	466.3	465.4
120°	499.0	498.9	498.7	498.5	498.3	498.5	499.0	499.5	500.0	500.5	500.2
122.5°	530.3	530.9	531.5	532.2	532.7	533.2	533.4	533.7	533.9	534.1	533.8
125°	578.6	579.8	580.9	582.1	583.2	583.8	583.8	583.8	583.8	583.8	583.2
127.5°	624.8	625.6	626.4	627.3	628.0	628.4	628.3	628.2	628.1	628.0	627.6
130°	653.1	653.9	654.7	655.5	656.4	656.9	657.0	657.1	657.3	657.5	657.0
132.5°	681.4	682.3	683.2	684.2	685.2	685.5	685.1	684.8	684.4	684.0	683.9
135°	721.6	722.6	723.6	724.6	725.6	725.9	725.6	725.2	724.9	724.6	724.2
137.5°	758.7	759.5	760.3	761.2	762.0	762.3	762.0	761.8	761.5	761.1	761.2
140°	782.8	783.2	783.4	783.8	784.1	784.2	784.0	783.9	783.7	783.5	783.9
142.5°	804.6	804.8	805.0	805.2	805.4	805.6	805.9	806.1	806.3	806.5	806.6
145°	836.6	837.0	837.3	837.6	837.9	838.1	838.1	838.1	838.1	838.1	838.3
147.5°	864.6	864.6	864.5	864.4	864.4	864.4	864.6	864.8	865.1	865.3	865.4
150°	882.3	882.0	881.7	881.4	881.0	881.0	881.4	881.7	882.0	882.3	882.7
152.5°	899.5	898.7	898.0	897.3	896.5	896.4	896.6	897.0	897.3	897.7	898.0
155°	921.4	920.4	919.5	918.4	917.5	917.1	917.5	917.8	918.1	918.4	918.9
157.5°	938.3	937.7	937.2	936.6	935.9	935.7	935.8	935.8	935.8	935.9	936.3
160°	950.2	949.1	948.2	947.2	946.2	945.8	945.9	946.1	946.3	946.4	947.1
162.5°	959.6	958.6	957.6	956.6	955.6	955.3	955.4	955.5	955.7	955.9	956.8
165°	972.2	971.3	970.3	969.3	968.3	967.9	968.1	968.3	968.4	968.6	969.6
167.5°	981.7	980.7	979.7	978.6	977.6	977.2	977.3	977.5	977.7	977.9	979.0
170°	987.0	985.8	984.7	983.5	982.4	981.9	982.0	982.2	982.4	982.6	983.9
172.5°	990.5	989.4	988.3	987.1	985.9	985.5	985.8	986.1	986.4	986.7	987.9
175°	994.4	993.3	992.4	991.5	990.4	990.0	990.1	990.3	990.5	990.7	992.0
177.5°	996.2	995.3	994.6	993.8	993.0	992.7	992.8	992.9	993.1	993.2	994.1
180°	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	549.0	549.8	550.5	550.9	550.8	550.7	550.7	550.6
5°	546.2	547.1	548.0	548.4	548.3	548.2	548.1	548.0
7.5°	540.7	541.6	542.4	542.8	542.7	542.6	542.5	542.4
10°	536.0	536.8	537.6	537.9	537.8	537.7	537.6	537.5
12.5°	529.8	530.5	531.0	531.3	531.3	531.3	531.3	531.2
15°	518.9	519.3	519.9	520.1	520.1	520.1	520.1	520.1
17.5°	506.2	506.8	507.5	507.5	507.0	506.5	506.1	505.6
20°	496.6	497.3	497.9	498.1	497.6	497.1	496.6	496.2
22.5°	485.7	486.2	486.6	486.6	486.4	486.0	485.7	485.3
25°	468.3	468.4	468.6	468.5	468.3	468.0	467.7	467.4
27.5°	449.9	449.9	450.0	449.9	449.5	449.2	448.9	448.7
30°	436.5	436.3	436.1	435.9	435.6	435.4	435.0	434.7
32.5°	423.0	422.6	422.3	421.9	421.3	420.8	420.3	419.7
35°	402.0	401.5	401.0	400.4	399.6	398.8	398.0	397.3
37.5°	379.9	379.2	378.4	377.9	377.4	377.0	376.5	376.1
40°	364.6	363.7	362.9	362.3	362.0	361.7	361.4	361.1
42.5°	349.4	348.6	347.8	347.2	346.8	346.3	345.9	345.4
45°	327.0	325.8	324.7	324.0	323.7	323.4	323.1	322.8
47.5°	303.3	302.2	301.0	300.0	299.4	298.7	298.0	297.4
50°	287.2	285.9	284.6	283.7	283.0	282.3	281.6	281.0
52.5°	271.5	270.3	269.2	268.3	267.6	266.8	266.1	265.3
55°	246.9	246.1	245.2	244.5	243.8	243.1	242.4	241.8
57.5°	222.7	221.6	220.5	219.7	219.3	219.0	218.6	218.2
60°	206.3	205.3	204.3	203.5	202.8	202.2	201.5	200.9
62.5°	190.5	189.4	188.3	187.6	187.1	186.5	186.0	185.5
65°	165.5	164.7	163.8	163.2	162.8	162.4	162.0	161.6
67.5°	141.8	141.0	140.3	139.8	139.6	139.3	139.1	138.8
70°	126.0	125.5	124.9	124.4	124.0	123.7	123.2	122.8
72.5°	111.2	110.6	109.9	109.4	109.1	108.7	108.2	107.8
75°	88.3	88.0	87.7	87.4	87.0	86.6	86.2	85.8
77.5°	67.3	67.1	66.9	66.7	66.4	66.2	65.9	65.6
80°	53.8	53.7	53.6	53.4	53.3	53.1	52.9	52.7
82.5°	41.1	40.9	40.8	40.6	40.6	40.6	40.5	40.5
85°	24.2	24.1	24.0	23.8	23.7	23.5	23.3	23.1
87.5°	11.8	11.9	12.1	12.2	12.1	12.0	12.0	11.9
90°	13.5	14.2	15.1	15.7	16.2	16.7	17.2	17.7
92.5°	13.5	14.2	15.1	15.6	15.8	16.0	16.3	16.5
95°	13.5	14.2	15.1	15.5	15.5	15.5	15.5	15.5
97.5°	27.1	22.4	17.8	15.5	15.5	15.5	15.5	15.5
100°	79.5	55.0	30.6	18.1	17.4	16.8	16.1	15.5
102.5°	154.4	149.8	145.2	137.3	126.1	115.0	103.9	92.7
105°	219.6	219.6	219.6	219.6	219.4	219.2	219.0	219.0
107.5°	278.1	278.1	278.1	278.0	277.5	276.9	276.4	276.0
110°	315.9	315.5	315.0	314.8	315.0	315.2	315.3	315.5





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	353.5	352.8	352.2	351.8	351.6	351.3	351.1	350.9
115°	410.0	409.3	408.7	407.8	406.9	405.9	404.9	404.0
117.5°	464.6	463.7	462.9	462.2	461.8	461.4	461.0	460.5
120°	499.8	499.5	499.2	498.6	497.8	497.0	496.2	495.3
122.5°	533.5	533.1	532.8	532.2	531.2	530.3	529.3	528.4
125°	582.5	581.8	581.2	580.6	580.1	579.6	579.1	578.6
127.5°	627.3	627.0	626.6	625.8	624.6	623.4	622.2	620.9
130°	656.5	656.0	655.5	654.9	654.0	653.3	652.4	651.6
132.5°	683.8	683.7	683.6	683.2	682.4	681.6	680.7	680.0
135°	724.0	723.6	723.3	722.6	721.6	720.7	719.6	718.7
137.5°	761.3	761.3	761.4	761.0	760.2	759.3	758.5	757.6
140°	784.2	784.6	784.9	784.6	783.5	782.6	781.6	780.6
142.5°	806.7	806.7	806.8	806.3	805.4	804.4	803.4	802.4
145°	838.4	838.6	838.8	838.3	837.4	836.4	835.4	834.4
147.5°	865.6	865.8	866.0	865.5	864.3	863.2	862.0	860.8
150°	883.0	883.4	883.6	883.2	881.8	880.5	879.2	877.9
152.5°	898.3	898.6	899.0	898.5	897.4	896.2	895.0	893.8
155°	919.5	919.9	920.4	920.0	918.7	917.4	916.1	914.7
157.5°	936.9	937.5	937.9	937.5	936.2	934.9	933.6	932.3
160°	947.7	948.4	949.0	948.8	947.4	946.1	944.8	943.5
162.5°	957.7	958.7	959.5	959.3	957.8	956.4	955.0	953.6
165°	970.5	971.5	972.5	972.3	971.0	969.7	968.4	967.0
167.5°	980.2	981.4	982.6	982.4	980.9	979.5	978.0	976.6
170°	985.1	986.5	987.8	987.7	986.3	984.8	983.3	981.8
172.5°	989.0	990.2	991.5	991.3	989.8	988.4	986.8	985.3
175°	993.3	994.6	995.9	995.8	994.4	992.9	991.5	990.0
177.5°	995.0	995.9	996.8	996.8	995.7	994.7	993.6	992.6
180°	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4

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