

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: P333141

Luminaire Tested: **S125DIP-S375D810U835-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333141  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DIP-S375D810U835-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4430.6 lumens  
Efficiency: N/A  
Efficacy: 142.0 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

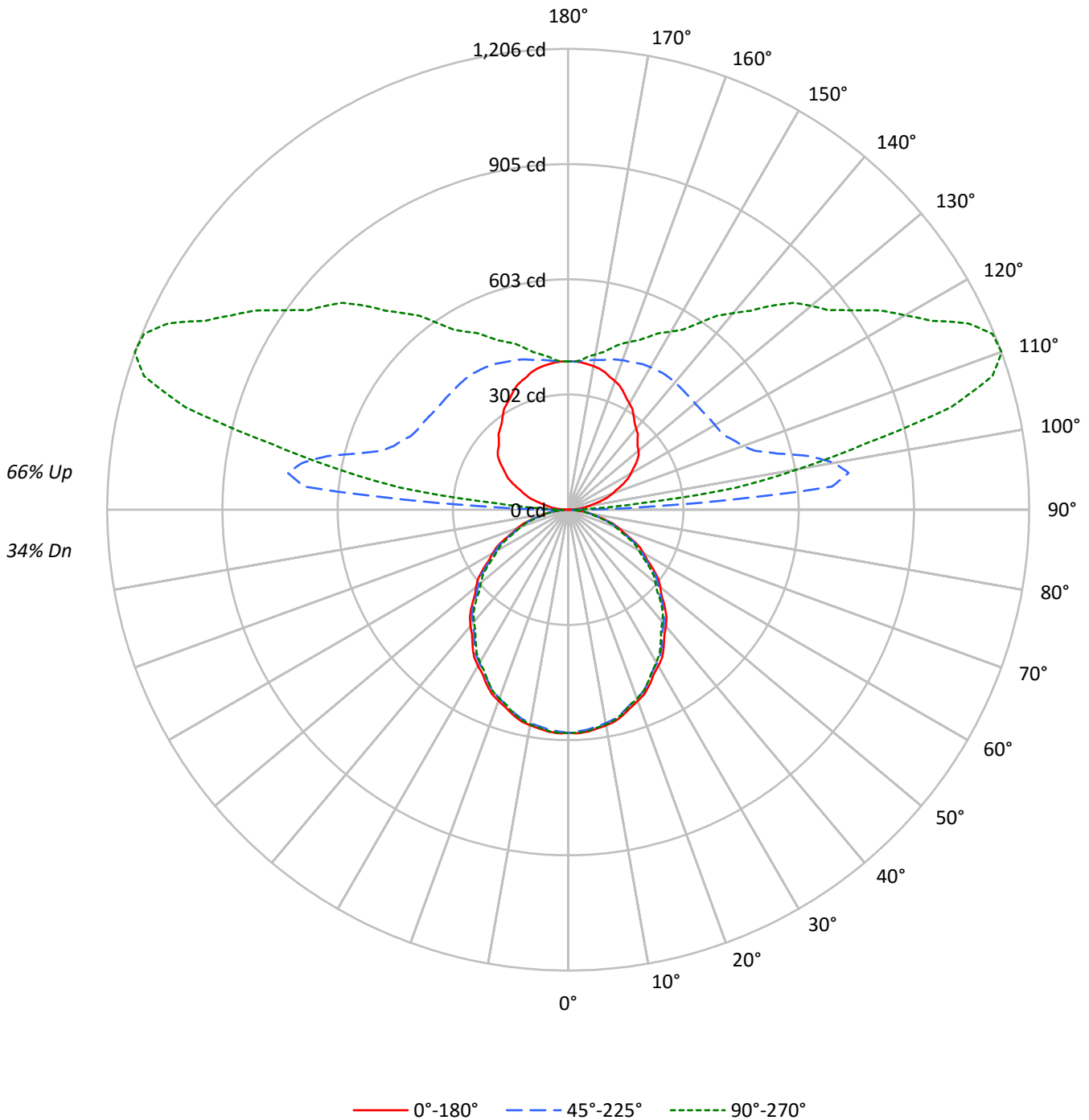
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
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	50	30	10	50	30	10	0														
RCR																																						
0	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42	34																				
1	94	90	86	83	85	81	78	75	65	63	61	50	49	48	37	36	35	29																				
2	86	79	73	67	77	71	66	62	57	54	50	44	42	40	32	31	30	24																				
3	78	69	62	56	70	62	56	51	50	46	42	39	36	34	29	27	25	20																				
4	71	61	53	47	64	55	49	43	45	40	36	35	31	29	26	23	22	17																				
5	65	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19	15																				
6	60	48	41	35	54	44	37	32	36	31	27	28	24	22	21	18	16	13																				
7	56	44	36	30	50	40	33	28	32	27	24	25	22	19	19	17	15	12																				
8	52	40	32	27	46	36	29	25	29	24	21	23	20	17	17	15	13	11																				
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12	10																				
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	11	9																				

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

	0°	45°	90°
0°	3773	3773	3773
5°	3781	3745	3769
10°	3758	3719	3740
15°	3718	3674	3689
20°	3659	3612	3618
25°	3596	3537	3534
30°	3519	3457	3439
35°	3436	3370	3323
40°	3351	3277	3230
45°	3259	3191	3128
50°	3158	3088	2995
55°	3059	2971	2888
60°	2942	2853	2753
65°	2804	2713	2621
70°	2670	2549	2460
75°	2433	2353	2271
80°	2165	2131	2079
85°	1882	1919	1815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.1	1.2
10°-20°	155.6	3.5
20°-30°	229.7	5.2
30°-40°	268.1	6.1
40°-50°	269.2	6.1
50°-60°	236.3	5.3
60°-70°	176.1	4.0
70°-80°	100.7	2.3
80°-90°	31.4	0.7
90°-100°	281.1	6.3
100°-110°	604.3	13.6
110°-120°	567.1	12.8
120°-130°	459.6	10.4
130°-140°	368.8	8.3
140°-150°	278.3	6.3
150°-160°	195.9	4.4
160°-170°	115.5	2.6
170°-180°	37.6	0.8
0°-30°	440.4	9.9
0°-40°	708.5	16.0
0°-60°	1214.0	27.4
0°-90°	1522.3	34.4
90°-120°	1452.5	32.8
90°-150°	2559.3	57.8
90°-180°	2908.0	65.6
0°-180°	4430.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	583	582	578	582	581	55
15°	556	554	550	552	552	157
25°	505	502	496	497	496	232
35°	436	434	428	425	422	272
45°	357	355	349	344	342	275
55°	272	270	264	260	256	243
65°	184	182	178	173	172	182
75°	98	96	94	93	91	104
85°	25	26	26	25	24	28
90°	1	7	12	16	18	3
95°	26	76	693	314	184	27
105°	88	124	567	1116	1036	93
115°	158	190	455	981	1154	155
125°	219	256	436	780	909	194
135°	256	308	433	654	755	199
145°	299	342	435	541	596	187
155°	341	367	424	479	500	157
165°	372	382	407	431	438	105
175°	387	387	390	395	393	37
180°	388	388	388	388	388	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	585.6	585.4	585.2	584.9	584.7	584.1	583.3	582.5	581.7	580.8	581.7
5°	583.2	583.0	582.8	582.6	582.4	581.8	580.8	579.8	578.7	577.7	578.6
7.5°	577.9	577.7	577.5	577.3	577.1	576.4	575.3	574.1	573.0	571.9	572.8
10°	573.1	572.9	572.7	572.5	572.3	571.6	570.5	569.3	568.2	567.1	567.9
12.5°	567.2	566.8	566.4	566.1	565.7	565.0	563.9	562.9	561.8	560.8	561.4
15°	556.0	555.7	555.4	555.1	554.7	554.0	552.9	551.8	550.6	549.5	550.0
17.5°	543.1	542.7	542.2	541.8	541.3	540.5	539.3	538.2	537.0	535.8	536.5
20°	532.4	532.2	532.0	531.8	531.6	530.8	529.5	528.1	526.8	525.5	526.2
22.5°	521.7	521.3	520.9	520.6	520.2	519.4	518.1	516.9	515.6	514.4	514.9
25°	504.7	504.2	503.6	503.1	502.6	501.7	500.4	499.0	497.7	496.4	496.6
27.5°	484.8	484.5	484.2	483.9	483.6	482.7	481.4	480.0	478.6	477.2	477.3
30°	471.9	471.6	471.2	470.9	470.6	469.7	468.2	466.6	465.1	463.5	463.3
32.5°	457.8	457.3	456.9	456.4	455.9	455.0	453.6	452.2	450.9	449.5	449.1
35°	435.8	435.4	435.0	434.6	434.2	433.2	431.8	430.4	428.9	427.5	427.0
37.5°	413.0	412.5	412.0	411.4	410.9	410.0	408.6	407.3	405.9	404.6	403.8
40°	397.5	396.9	396.4	395.9	395.4	394.4	393.0	391.6	390.1	388.7	387.8
42.5°	380.8	380.4	380.0	379.5	379.1	378.2	376.7	375.3	373.8	372.4	371.6
45°	356.8	356.4	356.0	355.6	355.1	354.3	353.1	351.9	350.6	349.4	348.2
47.5°	330.9	330.9	330.9	331.0	331.0	330.3	328.8	327.3	325.8	324.3	323.1
50°	314.3	314.0	313.7	313.3	313.0	312.3	311.0	309.8	308.6	307.3	306.0
52.5°	297.3	297.0	296.8	296.6	296.4	295.6	294.3	293.0	291.6	290.3	289.2
55°	271.7	271.4	271.1	270.8	270.5	269.6	268.2	266.8	265.3	263.9	263.0
57.5°	244.9	244.7	244.5	244.4	244.2	243.5	242.3	241.1	239.9	238.7	237.5
60°	227.8	227.4	227.0	226.6	226.2	225.4	224.3	223.2	222.0	220.9	219.9
62.5°	210.1	209.8	209.4	209.1	208.8	208.1	207.2	206.2	205.2	204.3	203.2
65°	183.5	183.3	183.1	182.9	182.7	182.0	180.9	179.7	178.6	177.5	176.5
67.5°	157.7	157.3	156.8	156.4	156.0	155.3	154.5	153.6	152.8	152.0	151.2
70°	141.4	140.9	140.4	139.9	139.4	138.6	137.7	136.8	135.9	135.0	134.3
72.5°	123.7	123.3	123.0	122.6	122.3	121.8	121.2	120.6	120.0	119.4	118.7
75°	97.5	97.3	97.1	96.9	96.7	96.3	95.8	95.3	94.8	94.3	94.0
77.5°	73.4	73.3	73.2	73.1	73.1	72.9	72.6	72.3	72.0	71.7	71.5
80°	58.2	58.2	58.2	58.2	58.2	58.1	57.9	57.7	57.5	57.3	57.2
82.5°	44.9	44.8	44.6	44.4	44.3	44.2	44.1	44.1	44.0	44.0	43.8
85°	25.4	25.5	25.6	25.7	25.8	25.9	25.9	25.9	25.9	25.9	25.8
87.5°	10.1	10.3	10.6	10.9	11.2	11.5	11.6	11.8	11.9	12.1	12.3
90°	0.8	1.6	3.1	4.7	6.3	7.8	8.6	10.2	10.9	12.5	13.3
92.5°	9.5	11.6	18.1	27.8	41.3	64.1	106.8	178.4	256.1	252.1	204.1
95°	25.8	26.6	32.8	41.4	58.6	93.8	177.5	349.5	565.3	692.8	677.9
97.5°	42.8	43.8	48.2	56.8	72.2	97.6	152.9	279.0	504.8	739.8	857.7
100°	54.7	56.3	59.4	68.0	82.9	106.3	151.7	253.3	450.4	706.1	901.5
102.5°	67.9	68.8	71.3	80.5	94.1	117.0	157.3	242.7	409.1	646.6	875.3
105°	88.4	88.4	92.3	100.1	112.6	134.5	168.9	238.5	369.1	566.9	791.3
107.5°	108.4	109.9	113.7	120.1	133.1	152.8	186.1	245.7	352.2	512.0	705.6
110°	122.8	124.3	127.4	134.5	146.2	166.5	198.6	252.6	347.2	486.3	656.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	137.1	138.7	141.2	148.2	160.0	179.7	210.5	261.3	347.2	471.3	620.5
115°	157.9	159.5	161.9	168.9	180.6	200.2	229.1	274.4	349.5	455.1	580.9
117.5°	176.7	179.1	181.6	188.6	201.9	220.8	248.2	289.5	354.7	447.1	557.3
120°	189.2	191.6	194.7	201.7	215.0	234.6	261.9	299.5	359.7	443.3	544.2
122.5°	202.4	204.1	206.6	213.6	228.2	247.7	275.1	310.7	364.0	440.2	532.9
125°	218.9	220.5	224.4	231.4	246.3	266.6	292.4	326.0	371.4	436.3	517.6
127.5°	231.9	234.3	239.3	248.2	264.0	284.3	309.2	340.1	379.7	434.4	503.5
130°	240.0	242.4	248.6	258.8	275.2	295.6	319.8	349.5	384.7	433.2	494.2
132.5°	246.3	249.3	256.8	268.2	285.2	305.6	329.8	357.6	390.3	433.2	486.7
135°	256.5	259.6	269.0	281.5	297.9	319.0	343.3	369.1	398.0	433.2	477.7
137.5°	269.3	271.6	280.4	292.9	309.0	330.7	352.8	377.5	405.0	434.1	469.8
140°	276.8	279.1	288.5	301.0	315.9	337.0	359.7	383.1	408.1	434.7	466.0
142.5°	285.5	287.3	296.0	308.5	322.8	342.6	364.0	386.3	410.0	435.4	462.9
145°	298.7	300.2	308.1	319.0	333.1	351.1	371.4	390.9	412.1	434.7	458.2
147.5°	312.4	313.4	320.1	330.3	342.5	358.3	376.1	393.8	412.8	432.7	453.3
150°	320.6	322.1	327.6	337.8	348.7	362.0	379.2	395.6	412.8	430.8	449.6
152.5°	329.3	330.3	335.1	344.0	354.4	366.4	382.3	396.9	412.2	428.3	445.2
155°	340.9	340.9	345.6	353.4	361.2	372.2	385.5	398.0	410.5	423.8	437.9
157.5°	351.2	351.1	354.8	361.5	368.4	376.7	388.1	398.8	408.5	419.1	431.0
160°	358.1	357.3	360.5	365.9	372.2	379.2	389.4	398.8	406.6	416.0	425.4
162.5°	363.7	363.0	366.1	370.9	375.9	381.7	390.6	398.1	404.7	412.2	420.3
165°	372.2	370.6	373.0	376.9	380.0	384.7	390.9	397.2	401.9	406.6	412.8
167.5°	377.8	377.0	378.4	380.6	382.8	385.8	390.9	395.3	397.5	401.1	405.5
170°	381.6	380.8	381.6	383.1	384.7	387.0	390.9	394.1	395.6	398.0	401.1
172.5°	384.1	382.7	383.4	385.0	385.9	387.0	390.3	392.8	393.1	394.2	396.7
175°	387.0	385.5	386.3	387.0	387.0	387.0	389.4	390.9	390.2	390.2	390.9
177.5°	388.4	387.2	387.2	387.8	387.2	387.2	388.4	389.1	387.8	387.8	388.4
180°	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	582.5	583.3	584.1	584.5	584.4	584.3	584.3	584.2
5°	579.5	580.5	581.4	581.8	581.7	581.6	581.5	581.4
7.5°	573.7	574.6	575.5	575.9	575.8	575.7	575.6	575.5
10°	568.7	569.5	570.4	570.7	570.6	570.5	570.4	570.3
12.5°	562.1	562.8	563.4	563.7	563.7	563.7	563.7	563.6
15°	550.5	551.0	551.6	551.8	551.8	551.8	551.8	551.8
17.5°	537.1	537.7	538.4	538.4	537.9	537.4	536.9	536.4
20°	526.9	527.6	528.3	528.5	527.9	527.4	526.9	526.4
22.5°	515.3	515.8	516.3	516.3	516.0	515.6	515.3	514.9
25°	496.8	497.0	497.2	497.1	496.8	496.5	496.2	495.9
27.5°	477.3	477.3	477.4	477.3	476.9	476.6	476.3	476.0
30°	463.1	462.9	462.7	462.5	462.2	461.9	461.5	461.2
32.5°	448.8	448.4	448.0	447.6	447.0	446.4	445.9	445.3
35°	426.5	426.0	425.4	424.8	424.0	423.1	422.3	421.5
37.5°	403.1	402.3	401.5	400.9	400.4	400.0	399.5	399.0
40°	386.8	385.9	385.0	384.4	384.1	383.7	383.4	383.1
42.5°	370.7	369.9	369.0	368.4	367.9	367.4	367.0	366.5
45°	346.9	345.7	344.5	343.7	343.4	343.1	342.8	342.5
47.5°	321.8	320.6	319.3	318.3	317.6	316.9	316.2	315.5
50°	304.7	303.3	302.0	301.0	300.2	299.5	298.8	298.1
52.5°	288.0	286.8	285.6	284.7	283.9	283.1	282.3	281.5
55°	262.0	261.1	260.2	259.4	258.7	257.9	257.2	256.5
57.5°	236.3	235.1	233.9	233.1	232.7	232.3	231.9	231.5
60°	218.9	217.8	216.8	215.9	215.2	214.5	213.8	213.1
62.5°	202.1	200.9	199.8	199.0	198.5	197.9	197.3	196.8
65°	175.6	174.7	173.8	173.1	172.7	172.3	171.9	171.5
67.5°	150.4	149.6	148.8	148.3	148.1	147.8	147.6	147.3
70°	133.7	133.1	132.5	132.0	131.6	131.2	130.7	130.3
72.5°	118.0	117.3	116.6	116.1	115.7	115.3	114.8	114.4
75°	93.7	93.4	93.0	92.7	92.3	91.9	91.5	91.0
77.5°	71.4	71.2	71.0	70.8	70.5	70.2	69.9	69.6
80°	57.1	57.0	56.9	56.7	56.5	56.3	56.1	55.9
82.5°	43.6	43.4	43.3	43.1	43.1	43.1	43.0	43.0
85°	25.7	25.6	25.5	25.3	25.1	24.9	24.7	24.5
87.5°	12.4	12.6	12.7	13.0	12.8	12.6	12.6	12.5
90°	14.1	14.9	15.6	17.2	17.2	17.2	18.0	18.0
92.5°	138.6	100.6	75.7	64.1	54.1	52.2	51.1	49.9
95°	562.2	443.3	347.2	281.5	226.0	202.5	196.3	183.7
97.5°	837.3	753.9	660.2	568.9	520.6	476.8	454.1	444.1
100°	961.7	923.4	842.9	761.6	707.6	651.3	622.4	609.9
102.5°	1003.6	1027.3	988.6	933.6	875.9	835.8	804.4	795.0
105°	978.9	1086.1	1120.5	1111.9	1086.8	1061.0	1045.4	1036.0
107.5°	890.7	1033.7	1122.0	1162.8	1175.5	1175.3	1170.2	1163.9
110°	825.7	974.2	1084.5	1150.9	1186.1	1201.0	1206.5	1206.5





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	774.4	915.4	1026.9	1105.3	1156.7	1182.2	1195.8	1201.5
115°	710.0	831.2	938.3	1023.5	1084.5	1122.0	1143.9	1154.1
117.5°	668.4	772.8	865.1	943.3	1004.3	1043.0	1064.8	1071.0
120°	645.8	739.7	825.7	894.5	952.3	989.9	1011.0	1017.2
122.5°	629.0	715.9	792.5	857.0	908.6	943.0	964.1	969.7
125°	604.4	684.2	752.2	808.5	852.3	884.3	901.5	909.3
127.5°	579.4	653.8	717.3	770.0	809.7	838.0	854.3	857.7
130°	563.7	632.6	693.5	744.4	783.5	809.3	824.9	829.6
132.5°	548.1	612.5	667.9	716.8	755.9	781.7	796.1	801.4
135°	527.8	581.7	631.8	676.3	710.7	736.5	750.6	755.3
137.5°	510.6	554.2	595.8	633.6	664.5	687.9	700.9	706.1
140°	501.2	537.9	573.9	606.7	635.7	656.0	667.7	671.6
142.5°	493.1	524.2	555.1	583.6	608.2	625.4	636.5	639.7
145°	482.4	506.7	530.9	552.0	570.8	584.1	592.7	595.8
147.5°	472.4	492.1	510.7	526.7	541.5	552.2	557.2	558.6
150°	466.8	484.0	498.8	512.9	524.7	534.0	537.2	537.9
152.5°	460.5	475.9	489.5	500.4	510.3	517.8	520.9	521.7
155°	451.2	463.7	474.6	483.2	491.0	496.5	498.8	499.6
157.5°	441.8	452.1	460.5	467.3	473.4	477.9	480.1	479.9
160°	435.5	443.3	451.2	456.6	462.1	466.0	467.6	466.8
162.5°	428.6	435.8	442.4	447.2	451.5	454.7	455.1	454.9
165°	419.1	424.6	429.3	433.2	436.3	437.9	437.9	437.9
167.5°	410.0	413.6	417.2	420.0	421.6	423.0	422.4	422.2
170°	405.0	407.4	409.7	411.3	412.8	413.6	413.6	412.8
172.5°	399.4	401.7	403.5	404.4	404.7	406.1	404.9	404.1
175°	393.3	393.3	394.9	394.9	394.9	395.6	394.1	393.3
177.5°	389.1	389.7	389.7	389.7	389.1	389.7	387.8	387.8
180°	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8

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