

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: P333513-830

Luminaire Tested: **S125RDIP-S375D1035U830-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333513-830  
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: S125RDIP-S375D1035U830-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4864.9 lumens  
Efficiency: N/A  
Efficacy: 130.4 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

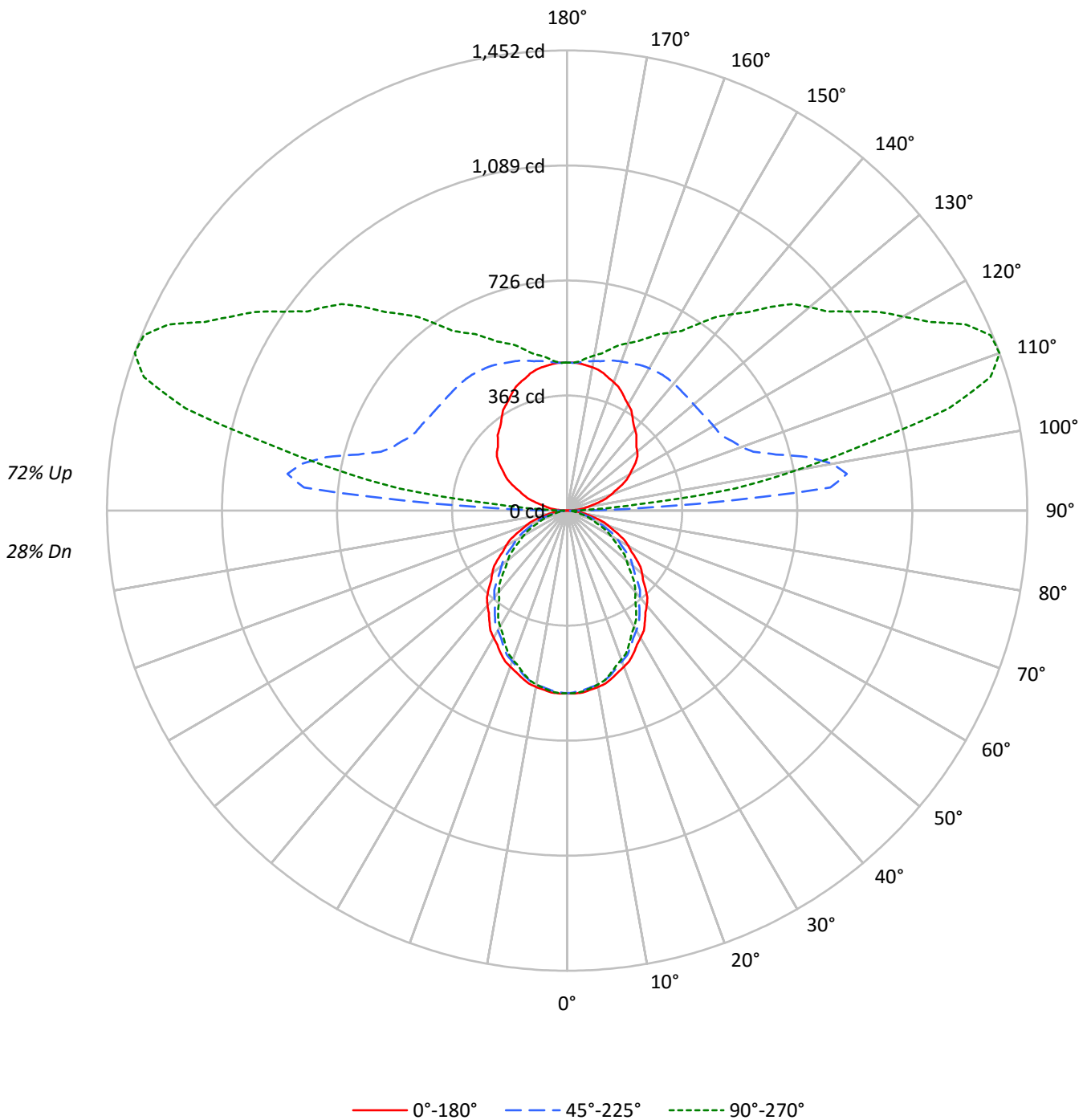
Input Watts (W): 37.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	91	91	91	91	71	71	71	53	53	53	36	36	36	28
1	93	89	85	82	83	80	77	74	62	60	58	47	45	44	32	31	31	24
2	85	78	72	67	76	70	65	61	55	51	49	41	39	37	28	27	26	20
3	77	68	61	56	69	61	55	51	48	44	41	36	34	31	25	23	22	17
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	22	21	19	15
5	65	54	46	40	58	48	42	37	38	34	30	29	26	23	20	18	17	13
6	60	48	40	35	53	43	37	32	34	30	26	26	23	20	18	16	15	11
7	55	43	36	30	49	39	32	28	31	26	23	24	20	18	17	15	13	10
8	51	39	32	27	46	35	29	24	28	24	20	22	18	16	15	13	12	9
9	47	36	28	24	42	32	26	22	26	21	18	20	17	14	14	12	11	8
10	44	33	26	21	40	30	23	19	24	19	16	18	15	13	13	11	10	8

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

	0°	45°	90°
0°	3725	3725	3725
5°	3734	3691	3713
10°	3705	3657	3657
15°	3661	3582	3553
20°	3604	3478	3437
25°	3539	3377	3302
30°	3456	3258	3155
35°	3372	3136	2988
40°	3295	3008	2824
45°	3199	2865	2645
50°	3104	2710	2460
55°	2992	2559	2262
60°	2880	2381	2047
65°	2749	2170	1803
70°	2598	1907	1554
75°	2393	1609	1293
80°	2105	1261	1086
85°	1771	1030	971



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.2	1.1
10°-20°	151.6	3.1
20°-30°	219.8	4.5
30°-40°	250.5	5.1
40°-50°	244.1	5.0
50°-60°	205.5	4.2
60°-70°	144.1	3.0
70°-80°	74.1	1.5
80°-90°	21.3	0.4
90°-100°	338.3	7.0
100°-110°	727.2	14.9
110°-120°	682.5	14.0
120°-130°	553.1	11.4
130°-140°	443.9	9.1
140°-150°	334.9	6.9
150°-160°	235.8	4.8
160°-170°	139.0	2.9
170°-180°	45.2	0.9
0°-30°	425.6	8.7
0°-40°	676.0	13.9
0°-60°	1125.7	23.1
0°-90°	1365.1	28.1
90°-120°	1747.9	35.9
90°-150°	3079.8	63.3
90°-180°	3500.0	71.9
0°-180°	4864.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	576	574	569	573	573	55
15°	548	545	536	535	531	154
25°	497	490	474	468	463	228
35°	428	417	398	385	379	268
45°	350	337	314	297	290	270
55°	266	251	227	208	201	238
65°	180	165	142	125	118	178
75°	96	83	64	55	52	101
85°	24	16	14	14	13	27
90°	1	8	15	20	22	3
95°	31	92	834	378	221	33
105°	106	149	682	1343	1247	112
115°	190	229	548	1180	1389	187
125°	263	309	525	939	1094	234
135°	309	371	521	787	909	240
145°	359	412	523	652	717	225
155°	410	441	510	576	601	189
165°	448	460	489	519	527	126
175°	466	466	470	475	473	44
180°	467	467	467	467	467	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	577.8	577.6	577.3	577.1	576.8	576.4	575.6	574.8	574.0	573.3	574.0
5°	575.9	575.5	575.1	574.7	574.3	573.6	572.5	571.5	570.4	569.3	570.3
7.5°	570.2	569.9	569.5	569.1	568.7	567.9	566.7	565.3	564.1	562.8	563.5
10°	565.0	564.7	564.4	564.1	563.8	563.0	561.7	560.2	558.9	557.6	557.9
12.5°	559.0	558.6	558.4	558.0	557.6	556.5	554.7	552.9	551.0	549.2	549.4
15°	547.5	547.0	546.4	545.8	545.3	543.9	541.9	539.9	537.8	535.8	535.7
17.5°	534.6	533.7	532.8	531.9	531.0	529.3	526.7	524.1	521.6	519.1	518.6
20°	524.4	523.5	522.5	521.6	520.6	518.6	515.5	512.4	509.3	506.1	505.7
22.5°	513.3	512.4	511.4	510.4	509.4	507.4	504.1	500.9	497.6	494.4	493.4
25°	496.6	495.1	493.7	492.2	490.8	488.2	484.7	481.1	477.5	473.9	472.7
27.5°	477.4	475.7	473.9	472.1	470.3	467.6	463.7	459.9	456.1	452.2	450.4
30°	463.4	461.7	459.8	458.0	456.1	453.2	449.1	445.1	441.0	436.9	434.7
32.5°	449.9	447.7	445.6	443.5	441.3	438.2	434.0	429.9	425.7	421.6	419.1
35°	427.7	425.5	423.1	420.8	418.5	415.1	410.8	406.4	402.1	397.8	394.9
37.5°	406.0	403.2	400.4	397.6	394.7	391.1	386.6	382.1	377.7	373.2	369.8
40°	390.8	387.9	384.9	382.0	379.1	375.3	370.7	366.1	361.4	356.8	353.1
42.5°	374.7	371.7	368.7	365.8	362.8	358.9	354.1	349.3	344.5	339.7	336.2
45°	350.2	347.4	344.6	341.8	339.0	334.9	329.6	324.3	319.0	313.7	309.7
47.5°	324.9	321.9	319.0	315.9	313.0	308.9	303.5	298.1	292.8	287.4	283.4
50°	308.9	305.7	302.5	299.3	296.1	291.7	286.2	280.7	275.1	269.7	265.6
52.5°	291.4	288.1	284.8	281.6	278.3	274.1	268.9	263.6	258.4	253.3	248.9
55°	265.7	262.6	259.5	256.5	253.4	249.1	243.6	238.2	232.8	227.3	223.0
57.5°	239.8	236.5	233.1	229.8	226.5	222.3	217.0	211.8	206.6	201.3	197.1
60°	223.0	219.6	216.2	212.8	209.4	205.2	199.9	194.7	189.5	184.3	180.0
62.5°	205.3	202.0	198.8	195.6	192.3	188.0	182.8	177.5	172.1	166.8	162.9
65°	179.9	176.6	173.3	170.0	166.7	162.5	157.4	152.3	147.1	142.0	138.2
67.5°	154.8	151.5	148.2	144.9	141.6	137.4	132.5	127.6	122.7	117.8	114.2
70°	137.6	134.4	131.1	127.8	124.5	120.5	115.6	110.7	105.9	101.0	98.0
72.5°	120.9	117.7	114.5	111.3	108.1	104.2	99.6	95.1	90.6	86.1	83.3
75°	95.9	92.9	90.0	87.1	84.3	80.8	76.6	72.6	68.5	64.5	62.3
77.5°	70.9	68.6	66.3	63.9	61.6	58.8	55.6	52.3	49.1	45.8	44.3
80°	56.6	54.3	52.0	49.7	47.3	44.9	42.1	39.4	36.7	33.9	33.1
82.5°	42.7	40.6	38.5	36.4	34.3	32.3	30.5	28.7	26.8	24.9	24.5
85°	23.9	22.2	20.5	18.8	17.0	15.8	15.4	14.9	14.4	13.9	13.9
87.5°	8.2	7.8	7.7	7.5	7.4	7.4	7.5	7.8	7.9	8.2	8.4
90°	0.9	1.9	3.8	5.7	7.5	9.4	10.4	12.3	13.2	15.1	16.0
92.5°	11.5	13.9	21.9	33.5	49.7	77.2	128.6	214.7	308.2	303.3	245.5
95°	31.0	32.0	39.5	49.9	70.6	112.9	213.6	420.6	680.3	833.7	815.8
97.5°	51.6	52.7	58.0	68.3	86.9	117.4	184.1	335.7	607.5	890.3	1032.2
100°	65.9	67.8	71.5	81.8	99.7	128.0	182.6	304.8	542.0	849.6	1084.9
102.5°	81.7	82.8	85.8	96.9	113.3	140.7	189.4	292.1	492.3	778.2	1053.3
105°	106.3	106.3	111.0	120.5	135.5	161.8	203.2	287.0	444.1	682.1	952.3
107.5°	130.4	132.3	136.8	144.5	160.1	183.9	223.9	295.7	423.8	616.1	849.0
110°	147.7	149.6	153.4	161.8	176.0	200.4	239.0	303.9	417.7	585.2	790.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	165.0	166.9	169.9	178.4	192.5	216.2	253.3	314.4	417.7	567.2	746.7
115°	190.1	191.9	194.7	203.2	217.4	240.9	275.7	330.3	420.6	547.6	699.1
117.5°	212.6	215.5	218.5	227.0	243.0	265.7	298.7	348.4	426.8	538.0	670.7
120°	227.7	230.5	234.3	242.8	258.7	282.3	315.2	360.3	432.8	533.5	654.9
122.5°	243.6	245.5	248.5	257.0	274.6	298.1	331.0	373.9	438.1	529.7	641.3
125°	263.4	265.3	270.0	278.5	296.4	320.8	351.9	392.4	447.0	525.0	622.9
127.5°	279.1	281.9	287.9	298.7	317.6	342.1	372.0	409.3	456.9	522.7	606.0
130°	288.9	291.7	299.3	311.4	331.2	355.6	384.8	420.6	463.0	521.2	594.7
132.5°	296.4	299.9	309.0	322.7	343.3	367.7	396.9	430.4	469.7	521.2	585.6
135°	308.6	312.4	323.7	338.7	358.4	383.9	413.0	444.1	478.9	521.2	574.9
137.5°	324.0	326.9	337.4	352.5	371.8	398.0	424.5	454.3	487.4	522.4	565.3
140°	333.1	335.9	347.2	362.2	380.1	405.6	432.8	461.1	491.2	523.1	560.8
142.5°	343.7	345.7	356.2	371.3	388.4	412.3	438.1	464.8	493.4	523.9	557.0
145°	359.4	361.3	370.7	383.9	400.9	422.4	447.0	470.4	495.9	523.1	551.4
147.5°	376.0	377.1	385.2	397.5	412.1	431.1	452.6	473.8	496.8	520.7	545.5
150°	385.8	387.7	394.3	406.5	419.6	435.6	456.4	476.1	496.8	518.4	541.0
152.5°	396.3	397.5	403.3	414.0	426.4	440.9	460.1	477.6	496.1	515.5	535.7
155°	410.2	410.2	415.8	425.3	434.7	447.9	463.8	478.9	494.0	510.0	526.9
157.5°	422.6	422.4	427.0	435.1	443.4	453.4	467.0	479.8	491.5	504.4	518.6
160°	430.9	430.0	433.8	440.4	447.9	456.4	468.5	479.8	489.3	500.6	511.9
162.5°	437.7	436.8	440.5	446.4	452.4	459.4	470.0	479.1	487.0	496.1	505.9
165°	447.9	446.0	448.8	453.6	457.3	463.0	470.4	478.0	483.6	489.3	496.8
167.5°	454.7	453.7	455.4	458.1	460.7	464.2	470.4	475.7	478.3	482.7	488.0
170°	459.2	458.3	459.2	461.1	463.0	465.7	470.4	474.2	476.1	478.9	482.7
172.5°	462.2	460.5	461.5	463.3	464.4	465.7	469.7	472.7	473.1	474.4	477.4
175°	465.7	463.8	464.8	465.7	465.7	465.7	468.5	470.4	469.5	469.5	470.4
177.5°	467.4	465.9	465.9	466.7	465.9	465.9	467.4	468.2	466.7	466.7	467.4
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	574.8	575.6	576.4	576.7	576.6	576.6	576.5	576.4
5°	571.3	572.2	573.2	573.6	573.4	573.2	573.0	572.8
7.5°	564.1	564.9	565.5	565.7	565.5	565.3	565.1	564.9
10°	558.2	558.5	558.7	558.7	558.5	558.2	557.9	557.6
12.5°	549.6	549.9	550.1	550.0	549.5	549.0	548.7	548.2
15°	535.6	535.5	535.4	534.9	534.0	533.2	532.3	531.4
17.5°	518.1	517.6	517.2	516.5	515.9	515.1	514.3	513.7
20°	505.2	504.7	504.3	503.6	502.7	501.8	501.0	500.1
22.5°	492.4	491.4	490.5	489.7	489.0	488.2	487.6	486.8
25°	471.5	470.1	468.9	467.8	466.7	465.6	464.6	463.4
27.5°	448.7	447.0	445.2	443.8	442.8	441.8	440.7	439.7
30°	432.4	430.3	428.0	426.5	425.6	424.7	423.9	423.0
32.5°	416.7	414.2	411.7	410.0	408.9	407.7	406.6	405.6
35°	392.1	389.3	386.4	384.4	383.0	381.7	380.3	379.0
37.5°	366.4	363.1	359.7	357.3	356.0	354.7	353.4	352.0
40°	349.4	345.7	342.0	339.6	338.5	337.3	336.1	335.0
42.5°	332.6	329.1	325.6	323.0	321.3	319.5	317.8	316.1
45°	305.9	302.0	298.1	295.5	294.1	292.6	291.2	289.6
47.5°	279.5	275.4	271.5	268.6	267.0	265.4	263.8	262.2
50°	261.5	257.4	253.4	250.6	249.2	247.7	246.3	244.8
52.5°	244.5	240.2	235.7	232.8	231.4	230.0	228.5	227.1
55°	218.7	214.3	210.0	207.0	205.5	203.9	202.4	200.9
57.5°	192.8	188.6	184.3	181.4	180.1	178.7	177.4	176.0
60°	175.8	171.4	167.2	164.4	162.9	161.5	160.0	158.5
62.5°	158.9	155.0	151.0	148.4	146.8	145.4	144.0	142.5
65°	134.2	130.4	126.5	123.9	122.4	120.9	119.5	118.0
67.5°	110.7	107.2	103.6	101.2	100.1	99.0	97.7	96.6
70°	95.1	92.1	89.1	87.0	85.8	84.6	83.5	82.3
72.5°	80.5	77.8	75.0	73.2	72.5	71.7	70.9	70.1
75°	60.2	58.1	56.0	54.6	53.9	53.2	52.5	51.8
77.5°	42.9	41.4	39.9	38.8	38.4	37.9	37.3	36.9
80°	32.2	31.4	30.5	30.0	29.8	29.6	29.4	29.2
82.5°	24.1	23.7	23.3	23.0	22.9	22.8	22.7	22.5
85°	13.8	13.7	13.6	13.5	13.4	13.3	13.2	13.1
87.5°	8.6	8.8	9.0	9.3	9.2	9.1	9.3	9.2
90°	17.0	17.9	18.9	20.7	20.7	20.7	21.7	21.7
92.5°	166.7	121.0	91.0	77.2	65.1	62.9	61.5	60.0
95°	676.6	533.5	417.7	338.7	271.9	243.7	236.2	221.1
97.5°	1007.6	907.2	794.5	684.6	626.5	573.7	546.5	534.4
100°	1157.3	1111.3	1014.3	916.4	851.5	783.8	748.9	734.0
102.5°	1207.8	1236.1	1189.7	1123.4	1054.0	1005.9	968.0	956.7
105°	1178.0	1306.9	1348.3	1337.9	1307.9	1276.9	1258.0	1246.7
107.5°	1071.9	1243.9	1350.2	1399.3	1414.6	1414.4	1408.2	1400.6
110°	993.6	1172.3	1305.0	1385.1	1427.4	1445.2	1451.8	1451.8





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	931.9	1101.6	1235.8	1330.1	1391.9	1422.7	1439.1	1445.8
115°	854.3	1000.2	1129.1	1231.6	1305.0	1350.2	1376.6	1388.8
117.5°	804.3	930.0	1041.0	1135.1	1208.5	1255.2	1281.3	1288.8
120°	777.2	890.1	993.6	1076.4	1146.0	1191.2	1216.6	1224.2
122.5°	756.9	861.5	953.7	1031.2	1093.3	1134.7	1160.2	1167.0
125°	727.4	823.3	905.1	972.9	1025.6	1064.1	1084.9	1094.3
127.5°	697.2	786.8	863.2	926.6	974.4	1008.4	1028.0	1032.2
130°	678.4	761.2	834.6	895.8	942.8	973.8	992.7	998.3
132.5°	659.6	737.1	803.7	862.6	909.6	940.8	958.0	964.4
135°	635.1	700.0	760.3	813.9	855.3	886.4	903.2	908.9
137.5°	614.4	666.9	717.0	762.5	799.6	827.8	843.5	849.6
140°	603.1	647.3	690.6	730.2	765.0	789.5	803.5	808.2
142.5°	593.3	630.7	668.1	702.3	731.9	752.5	765.9	769.9
145°	580.5	609.7	638.9	664.3	686.8	702.9	713.2	717.0
147.5°	568.5	592.2	614.6	633.8	651.7	664.5	670.5	672.2
150°	561.8	582.4	600.3	617.3	631.3	642.6	646.4	647.3
152.5°	554.2	572.6	589.0	602.2	614.1	623.1	626.8	627.7
155°	542.9	558.0	571.2	581.5	590.9	597.5	600.3	601.2
157.5°	531.6	544.0	554.2	562.3	569.7	575.0	577.7	577.5
160°	524.1	533.5	542.9	549.5	556.1	560.8	562.7	561.8
162.5°	515.9	524.4	532.3	538.2	543.3	547.2	547.6	547.4
165°	504.4	511.0	516.6	521.2	525.0	526.9	526.9	526.9
167.5°	493.4	497.8	502.1	505.5	507.4	509.1	508.3	508.1
170°	487.4	490.2	493.0	494.9	496.8	497.8	497.8	496.8
172.5°	480.6	483.4	485.5	486.6	487.0	488.7	487.2	486.3
175°	473.3	473.3	475.1	475.1	475.1	476.1	474.2	473.3
177.5°	468.2	468.9	468.9	468.9	468.2	468.9	466.7	466.7
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7

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