

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: P333543-935

Luminaire Tested: **S125RDIP-S610D1035U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333543-935  
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-S610D1035U935-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 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: 5245.6 lumens  
Efficiency: N/A  
Efficacy: 117.9 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

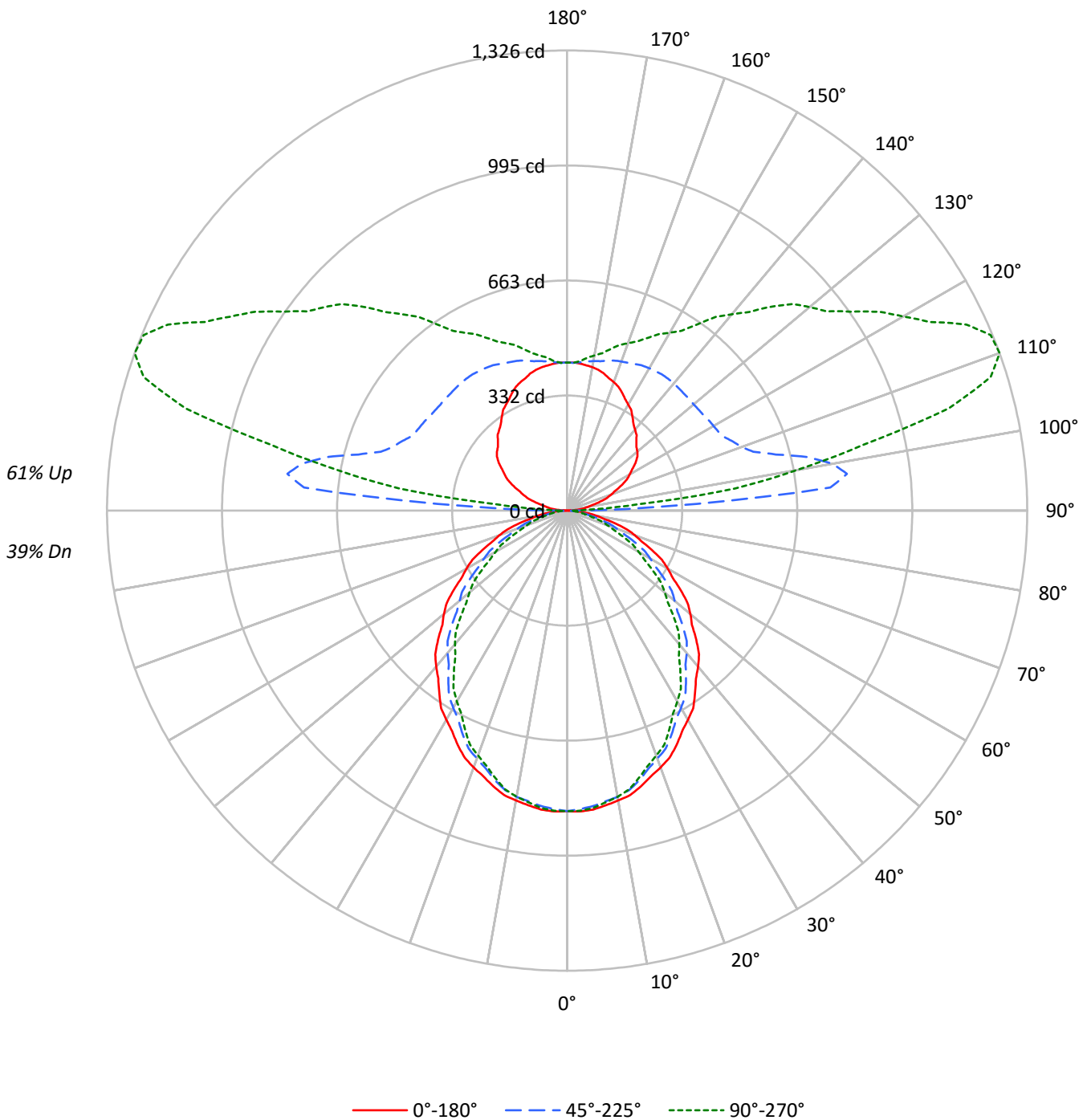
Input Watts (W): 44.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	96	91	88	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	35	33	28
3	79	70	63	58	72	64	58	53	53	48	45	42	39	36	32	30	28	24
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	55	48	42	60	51	44	39	42	37	33	34	30	27	26	24	22	18
6	61	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15	13
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	18	16	14	11
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	14	12	10

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

	0°	45°	90°
0°	5594	5594	5594
5°	5607	5543	5577
10°	5564	5491	5491
15°	5498	5380	5336
20°	5413	5225	5161
25°	5315	5072	4960
30°	5190	4894	4737
35°	5065	4709	4487
40°	4947	4517	4242
45°	4804	4302	3974
50°	4660	4068	3693
55°	4494	3845	3396
60°	4326	3574	3077
65°	4129	3260	2709
70°	3903	2866	2334
75°	3593	2415	1941
80°	3165	1901	1629
85°	2668	1549	1452



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.4	1.6
10°-20°	227.6	4.3
20°-30°	330.1	6.3
30°-40°	376.2	7.2
40°-50°	366.7	7.0
50°-60°	308.6	5.9
60°-70°	216.4	4.1
70°-80°	111.2	2.1
80°-90°	30.5	0.6
90°-100°	309.0	5.9
100°-110°	664.3	12.7
110°-120°	623.4	11.9
120°-130°	505.2	9.6
130°-140°	405.5	7.7
140°-150°	306.0	5.8
150°-160°	215.4	4.1
160°-170°	126.9	2.4
170°-180°	41.3	0.8
0°-30°	639.1	12.2
0°-40°	1015.3	19.4
0°-60°	1690.5	32.2
0°-90°	2048.6	39.1
90°-120°	1596.7	30.4
90°-150°	2813.4	53.6
90°-180°	3197.0	60.9
0°-180°	5245.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	865	862	855	861	860	82
15°	822	818	805	804	798	232
25°	746	735	712	703	696	343
35°	642	626	597	579	569	402
45°	526	506	471	446	435	406
55°	399	377	342	313	302	357
65°	270	247	213	188	177	268
75°	144	124	97	83	78	152
85°	36	25	21	20	20	40
90°	1	8	14	18	20	3
95°	28	84	762	346	202	30
105°	97	136	623	1227	1139	102
115°	174	209	500	1078	1269	171
125°	241	282	480	858	1000	213
135°	282	339	476	719	830	219
145°	328	376	478	595	655	206
155°	375	403	466	526	549	173
165°	409	420	447	474	481	115
175°	425	425	429	434	432	40
180°	426	426	426	426	426	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	867.7	867.4	867.0	866.7	866.3	865.6	864.4	863.2	862.0	860.9	862.0
5°	864.8	864.3	863.7	863.1	862.5	861.4	859.8	858.2	856.6	855.0	856.4
7.5°	856.4	855.7	855.2	854.6	854.1	852.9	850.9	849.0	847.1	845.2	846.2
10°	848.4	848.0	847.6	847.1	846.7	845.5	843.4	841.5	839.4	837.3	837.8
12.5°	839.6	839.0	838.4	837.9	837.3	835.7	833.0	830.3	827.5	824.8	825.1
15°	822.3	821.4	820.5	819.7	818.8	816.8	813.8	810.7	807.7	804.6	804.5
17.5°	802.8	801.5	800.1	798.8	797.5	794.9	791.0	787.2	783.3	779.5	778.8
20°	787.6	786.2	784.7	783.3	781.8	778.8	774.1	769.5	764.8	760.2	759.4
22.5°	770.9	769.4	768.0	766.5	765.1	761.9	757.0	752.2	747.3	742.4	741.0
25°	745.8	743.6	741.4	739.3	737.0	733.2	727.9	722.5	717.1	711.7	709.9
27.5°	717.0	714.4	711.7	709.0	706.4	702.2	696.5	690.7	684.9	679.2	676.5
30°	696.0	693.3	690.5	687.8	685.0	680.5	674.4	668.4	662.3	656.2	652.8
32.5°	675.6	672.4	669.2	666.0	662.7	658.0	651.8	645.6	639.3	633.1	629.4
35°	642.4	638.9	635.4	632.0	628.4	623.5	616.9	610.4	603.8	597.3	593.1
37.5°	609.8	605.5	601.3	597.1	592.9	587.4	580.6	573.9	567.1	560.3	555.3
40°	586.8	582.5	578.1	573.7	569.4	563.7	556.7	549.7	542.8	535.8	530.3
42.5°	562.7	558.3	553.8	549.3	544.8	539.0	531.8	524.5	517.4	510.1	504.8
45°	526.0	521.8	517.5	513.3	509.1	503.0	495.0	487.0	479.0	471.0	465.2
47.5°	487.9	483.5	479.0	474.6	470.1	463.8	455.8	447.7	439.7	431.6	425.7
50°	463.8	459.0	454.2	449.4	444.6	438.1	429.8	421.5	413.2	404.9	398.8
52.5°	437.6	432.7	427.8	422.9	418.0	411.6	403.8	396.0	388.1	380.3	373.8
55°	399.1	394.4	389.8	385.1	380.5	374.0	365.9	357.7	349.7	341.5	334.9
57.5°	360.1	355.1	350.1	345.2	340.2	333.7	325.9	318.1	310.2	302.4	295.9
60°	334.9	329.8	324.8	319.7	314.6	308.2	300.2	292.4	284.6	276.7	270.4
62.5°	308.2	303.4	298.5	293.7	288.9	282.4	274.5	266.5	258.6	250.6	244.6
65°	270.2	265.3	260.3	255.4	250.4	244.1	236.3	228.7	220.9	213.3	207.4
67.5°	232.4	227.4	222.5	217.6	212.6	206.5	199.1	191.7	184.3	176.8	171.6
70°	206.7	201.8	196.8	191.9	186.9	180.8	173.6	166.3	159.0	151.8	147.2
72.5°	181.6	176.8	171.9	167.1	162.3	156.4	149.6	142.8	136.0	129.2	125.1
75°	144.0	139.6	135.2	130.9	126.5	121.2	115.1	109.0	102.9	96.8	93.6
77.5°	106.5	103.0	99.5	96.0	92.6	88.3	83.4	78.6	73.7	68.8	66.6
80°	85.1	81.5	78.1	74.6	71.1	67.3	63.2	59.2	55.1	51.1	49.7
82.5°	64.1	61.0	57.9	54.7	51.6	48.6	45.8	43.0	40.2	37.5	36.9
85°	36.0	33.3	30.7	28.2	25.5	23.8	23.1	22.4	21.7	20.9	20.8
87.5°	12.2	11.5	11.1	10.6	10.2	10.1	10.1	10.3	10.3	10.6	10.8
90°	0.9	1.7	3.4	5.2	6.9	8.6	9.5	11.2	12.1	13.8	14.6
92.5°	10.5	12.7	20.0	30.6	45.4	70.5	117.4	196.1	281.5	277.1	224.3
95°	28.3	29.2	36.1	45.5	64.5	103.1	195.1	384.2	621.5	761.6	745.2
97.5°	47.1	48.1	53.0	62.4	79.4	107.3	168.2	306.7	554.9	813.3	942.9
100°	60.2	61.9	65.3	74.7	91.1	116.9	166.8	278.4	495.1	776.1	991.0
102.5°	74.6	75.6	78.4	88.5	103.5	128.5	173.0	266.8	449.7	710.8	962.2
105°	97.1	97.1	101.4	110.0	123.8	147.8	185.6	262.2	405.7	623.1	869.9
107.5°	119.2	120.9	124.9	132.0	146.3	168.0	204.6	270.1	387.1	562.8	775.6
110°	134.9	136.6	140.1	147.8	160.7	183.0	218.3	277.6	381.6	534.6	721.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	150.8	152.5	155.2	163.0	175.8	197.5	231.4	287.2	381.6	518.1	682.1
115°	173.7	175.3	177.9	185.6	198.5	220.1	251.8	301.7	384.2	500.2	638.6
117.5°	194.2	196.8	199.6	207.3	222.0	242.7	272.9	318.2	389.9	491.5	612.7
120°	208.0	210.6	214.0	221.8	236.3	257.9	287.9	329.2	395.4	487.3	598.2
122.5°	222.5	224.3	227.0	234.8	250.8	272.3	302.4	341.6	400.2	483.9	585.8
125°	240.6	242.4	246.7	254.4	270.8	293.1	321.5	358.4	408.3	479.6	569.0
127.5°	254.9	257.5	263.0	272.9	290.2	312.5	339.8	373.8	417.4	477.5	553.5
130°	263.9	266.5	273.4	284.5	302.6	324.9	351.5	384.2	422.9	476.1	543.2
132.5°	270.8	274.0	282.2	294.8	313.6	335.9	362.6	393.1	429.0	476.1	534.9
135°	281.9	285.3	295.7	309.4	327.4	350.7	377.3	405.7	437.5	476.1	525.1
137.5°	296.0	298.6	308.2	322.0	339.7	363.6	387.8	415.0	445.2	477.2	516.4
140°	304.3	306.9	317.2	330.9	347.2	370.5	395.4	421.2	448.7	477.9	512.3
142.5°	313.9	315.8	325.4	339.1	354.8	376.6	400.2	424.6	450.7	478.5	508.9
145°	328.3	330.0	338.6	350.7	366.2	385.9	408.3	429.7	453.0	477.9	503.7
147.5°	343.5	344.5	351.9	363.1	376.4	393.8	413.5	432.8	453.8	475.6	498.3
150°	352.4	354.1	360.2	371.3	383.3	398.0	416.9	434.9	453.8	473.6	494.2
152.5°	362.1	363.1	368.4	378.2	389.5	402.8	420.3	436.3	453.1	470.9	489.4
155°	374.7	374.7	379.9	388.5	397.1	409.1	423.7	437.5	451.3	465.9	481.3
157.5°	386.1	385.9	390.0	397.4	405.0	414.1	426.6	438.3	449.0	460.7	473.7
160°	393.6	392.8	396.2	402.3	409.1	416.9	428.0	438.3	446.9	457.3	467.6
162.5°	399.8	399.0	402.4	407.8	413.3	419.7	429.4	437.6	444.9	453.1	462.1
165°	409.1	407.4	410.0	414.3	417.8	422.9	429.7	436.6	441.8	446.9	453.8
167.5°	415.3	414.5	416.0	418.4	420.9	424.0	429.7	434.5	437.0	440.9	445.7
170°	419.5	418.6	419.5	421.2	422.9	425.4	429.7	433.2	434.9	437.5	440.9
172.5°	422.2	420.7	421.5	423.2	424.2	425.4	429.0	431.8	432.1	433.3	436.1
175°	425.4	423.7	424.6	425.4	425.4	425.4	428.0	429.7	428.9	428.9	429.7
177.5°	427.0	425.6	425.6	426.3	425.6	425.6	427.0	427.7	426.3	426.3	427.0
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	863.2	864.4	865.6	866.1	866.0	865.8	865.7	865.6
5°	857.9	859.4	860.8	861.4	861.1	860.8	860.6	860.2
7.5°	847.2	848.3	849.3	849.6	849.3	848.9	848.7	848.3
10°	838.2	838.6	839.1	839.1	838.6	838.2	837.8	837.3
12.5°	825.4	825.8	826.0	825.9	825.2	824.6	823.9	823.2
15°	804.3	804.2	804.1	803.3	802.0	800.7	799.4	798.1
17.5°	778.1	777.3	776.6	775.7	774.6	773.5	772.5	771.4
20°	758.7	757.9	757.2	756.2	754.9	753.6	752.3	751.0
22.5°	739.5	738.0	736.7	735.4	734.3	733.2	732.2	731.1
25°	708.0	706.1	704.2	702.4	700.9	699.2	697.7	696.0
27.5°	673.9	671.2	668.6	666.5	665.0	663.4	661.9	660.3
30°	649.5	646.1	642.7	640.4	639.1	637.8	636.5	635.2
32.5°	625.7	622.1	618.4	615.7	614.0	612.3	610.7	609.1
35°	588.8	584.6	580.4	577.3	575.2	573.2	571.2	569.1
37.5°	550.3	545.2	540.1	536.6	534.6	532.7	530.7	528.7
40°	524.7	519.2	513.7	510.1	508.3	506.5	504.8	503.1
42.5°	499.6	494.2	489.0	485.0	482.5	479.9	477.3	474.8
45°	459.3	453.6	447.7	443.8	441.6	439.4	437.2	435.1
47.5°	419.7	413.6	407.7	403.5	401.1	398.6	396.2	393.8
50°	392.7	386.6	380.5	376.3	374.2	372.0	369.8	367.6
52.5°	367.2	360.6	354.0	349.7	347.5	345.3	343.1	341.0
55°	328.4	321.8	315.3	310.9	308.6	306.3	303.9	301.6
57.5°	289.6	283.2	276.8	272.5	270.4	268.4	266.4	264.3
60°	263.9	257.5	251.2	246.8	244.7	242.5	240.3	238.2
62.5°	238.7	232.7	226.8	222.7	220.6	218.4	216.2	214.0
65°	201.6	195.8	190.0	186.0	183.8	181.7	179.4	177.3
67.5°	166.3	160.9	155.6	152.1	150.3	148.6	146.8	145.1
70°	142.8	138.3	133.7	130.6	128.9	127.2	125.4	123.6
72.5°	121.0	116.8	112.6	109.9	108.8	107.6	106.5	105.3
75°	90.4	87.2	84.0	81.9	80.9	79.9	78.9	77.8
77.5°	64.3	62.1	59.8	58.4	57.6	56.8	56.1	55.4
80°	48.4	47.1	45.8	45.0	44.7	44.4	44.1	43.8
82.5°	36.2	35.6	35.0	34.6	34.4	34.3	34.1	33.9
85°	20.7	20.5	20.3	20.2	20.1	19.9	19.8	19.6
87.5°	10.9	11.1	11.3	11.5	11.5	11.4	11.4	11.3
90°	15.5	16.4	17.2	18.9	18.9	18.9	19.8	19.8
92.5°	152.3	110.6	83.2	70.5	59.5	57.4	56.2	54.8
95°	618.0	487.3	381.6	309.4	248.4	222.7	215.8	202.0
97.5°	920.4	828.7	725.7	625.3	572.3	524.1	499.2	488.2
100°	1057.2	1015.1	926.5	837.2	777.8	716.0	684.2	670.5
102.5°	1103.3	1129.2	1086.8	1026.2	962.9	918.9	884.2	873.9
105°	1076.1	1193.9	1231.7	1222.2	1194.7	1166.4	1149.2	1138.8
107.5°	979.1	1136.3	1233.4	1278.2	1292.2	1292.0	1286.3	1279.4
110°	907.7	1070.9	1192.1	1265.2	1303.9	1320.2	1326.2	1326.2





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	851.3	1006.3	1128.9	1215.0	1271.5	1299.6	1314.6	1320.7
115°	780.4	913.7	1031.4	1125.1	1192.1	1233.4	1257.5	1268.7
117.5°	734.7	849.5	951.0	1036.9	1104.0	1146.6	1170.4	1177.3
120°	710.0	813.1	907.7	983.3	1046.9	1088.1	1111.4	1118.3
122.5°	691.4	787.0	871.2	942.0	998.8	1036.6	1059.8	1066.0
125°	664.4	752.1	826.8	888.7	936.9	972.1	991.0	999.6
127.5°	636.9	718.8	788.5	846.4	890.1	921.2	939.1	942.9
130°	619.7	695.3	762.4	818.3	861.3	889.6	906.8	912.0
132.5°	602.5	673.3	734.2	788.0	831.0	859.4	875.1	881.0
135°	580.1	639.5	694.5	743.5	781.3	809.7	825.1	830.3
137.5°	561.3	609.2	655.0	696.5	730.4	756.2	770.5	776.1
140°	551.0	591.3	630.9	667.0	698.8	721.2	734.0	738.3
142.5°	542.0	576.2	610.3	641.5	668.6	687.4	699.6	703.3
145°	530.3	557.0	583.6	606.8	627.4	642.0	651.5	655.0
147.5°	519.4	541.0	561.5	578.9	595.3	607.0	612.5	614.1
150°	513.2	532.0	548.4	563.9	576.7	587.0	590.5	591.3
152.5°	506.3	523.1	538.0	550.1	560.9	569.2	572.6	573.4
155°	495.9	509.7	521.8	531.2	539.8	545.8	548.4	549.2
157.5°	485.6	497.0	506.3	513.7	520.4	525.3	527.7	527.5
160°	478.7	487.3	495.9	502.0	508.0	512.3	514.0	513.2
162.5°	471.2	479.1	486.3	491.6	496.3	499.9	500.2	500.1
165°	460.7	466.7	471.9	476.1	479.6	481.3	481.3	481.3
167.5°	450.7	454.7	458.7	461.8	463.5	465.0	464.3	464.2
170°	445.2	447.8	450.4	452.1	453.8	454.7	454.7	453.8
172.5°	439.0	441.6	443.5	444.5	444.9	446.4	445.1	444.2
175°	432.3	432.3	434.0	434.0	434.0	434.9	433.2	432.3
177.5°	427.7	428.3	428.3	428.3	427.7	428.3	426.3	426.3
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3

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