

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: P333549-935

Luminaire Tested: **S125RDIP-S610D1205U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333549-935
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-S610D1205U935-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5770.2 lumens
Efficiency: N/A
Efficacy: 116.8 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

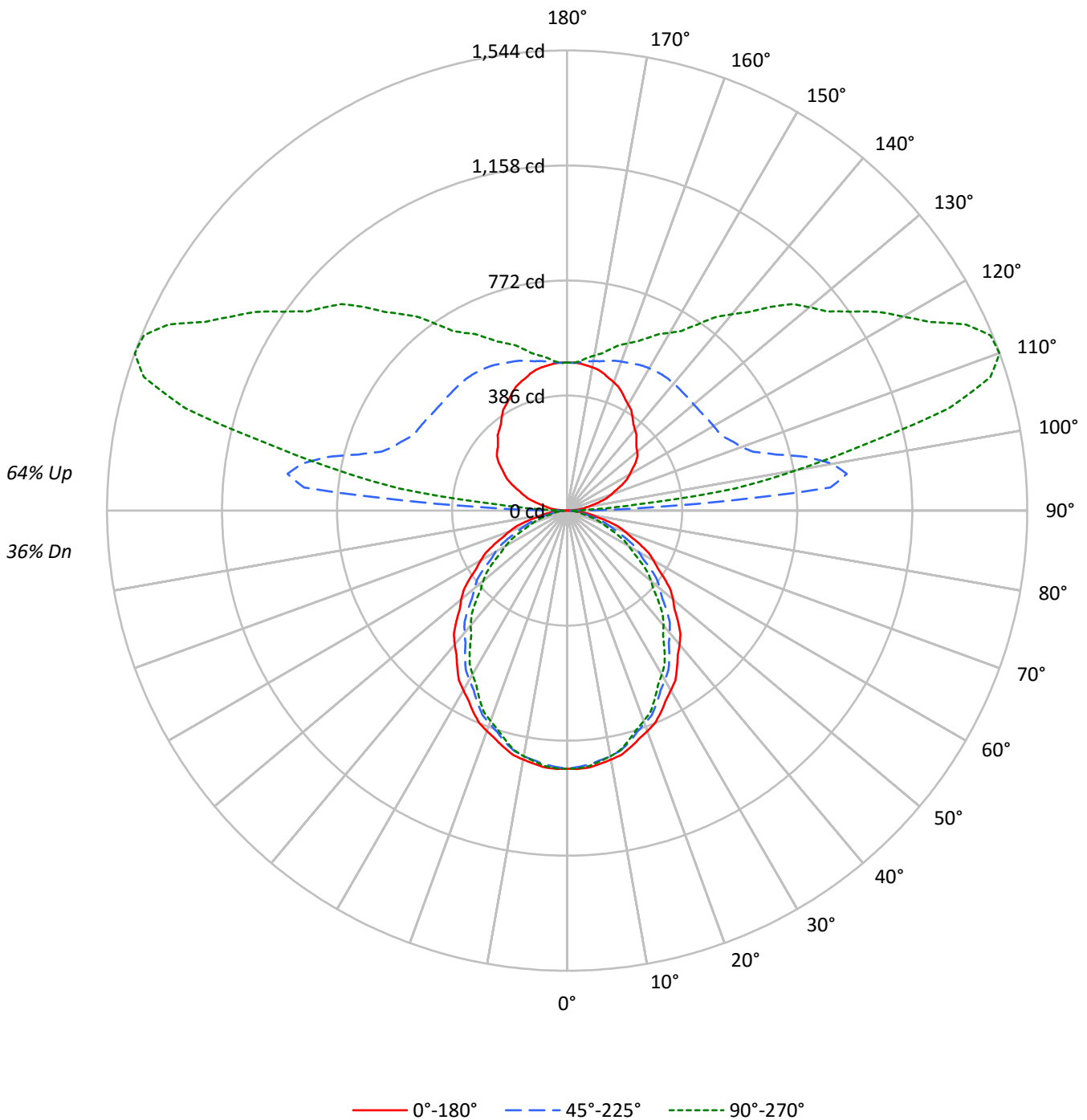
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	75	75	75		58	58	58		43	43	43	36
1	95	91	87	83	86	82	79	76	66	64	62		52	50	49		38	37	36	30
2	86	79	73	68	78	72	67	63	58	55	52		45	43	41		34	32	31	26
3	79	70	63	57	71	63	57	52	51	47	43		40	37	35		30	28	26	22
4	72	62	54	48	65	56	50	44	46	41	37		36	33	30		27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32		32	29	26		24	22	20	16
6	61	49	41	36	55	45	38	33	37	32	28		29	25	23		22	20	18	14
7	56	44	37	31	51	41	34	29	33	28	24		26	23	20		20	18	16	13
8	52	40	33	28	47	37	30	26	30	25	22		24	21	18		18	16	14	12
9	48	37	29	24	44	34	27	23	28	23	19		22	19	16		17	15	13	10
10	45	34	27	22	41	31	25	20	25	21	17		21	17	14		16	13	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	1.4
10°-20°	227.6	3.9
20°-30°	330.1	5.7
30°-40°	376.2	6.5
40°-50°	366.7	6.4
50°-60°	308.6	5.3
60°-70°	216.4	3.7
70°-80°	111.2	1.9
80°-90°	30.9	0.5
90°-100°	359.7	6.2
100°-110°	773.2	13.4
110°-120°	725.6	12.6
120°-130°	588.1	10.2
130°-140°	471.9	8.2
140°-150°	356.1	6.2
150°-160°	250.7	4.3
160°-170°	147.8	2.6
170°-180°	48.1	0.8
0°-30°	639.1	11.1
0°-40°	1015.3	17.6
0°-60°	1690.5	29.3
0°-90°	2049.0	35.5
90°-120°	1858.5	32.2
90°-150°	3274.7	56.8
90°-180°	3721.0	64.5
0°-180°	5770.2	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	9	16	21	23	4
95°	33	98	886	402	235	35
105°	113	158	725	1428	1326	119
115°	202	244	582	1255	1477	199
125°	280	328	558	998	1164	248
135°	328	395	554	837	966	255
145°	382	438	556	693	762	239
155°	436	469	542	613	639	201
165°	476	489	520	552	560	134
175°	495	495	499	505	503	47
180°	496	496	496	496	496	



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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	11.6	11.2	10.8	10.4	10.3	10.4	10.7	10.8	11.0	11.3
90°	1.0	2.0	4.0	6.0	8.0	10.0	11.0	13.0	14.0	16.0	17.0
92.5°	12.2	14.8	23.2	35.6	52.9	82.1	136.6	228.3	327.8	322.5	261.1
95°	33.0	34.0	42.0	53.0	75.0	120.0	227.1	447.2	723.3	886.4	867.4
97.5°	54.8	56.1	61.6	72.7	92.5	124.8	195.7	357.0	645.9	946.6	1097.5
100°	70.0	72.1	76.0	87.0	106.1	136.0	194.1	324.2	576.3	903.4	1153.5
102.5°	86.9	88.1	91.3	103.1	120.5	149.6	201.3	310.6	523.4	827.3	1119.9
105°	113.0	113.0	118.0	128.0	144.0	172.1	216.1	305.1	472.2	725.3	1012.4
107.5°	138.6	140.7	145.4	153.7	170.3	195.4	238.1	314.4	450.6	655.0	902.8
110°	157.0	159.1	163.1	172.1	187.1	213.1	254.1	323.1	444.2	622.2	840.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	175.5	177.5	180.6	189.7	204.7	229.9	269.3	334.3	444.2	603.0	793.9
115°	202.1	204.1	207.1	216.1	231.1	256.1	293.2	351.1	447.2	582.3	743.3
117.5°	226.1	229.1	232.3	241.3	258.3	282.5	317.5	370.4	453.8	572.0	713.1
120°	242.1	245.1	249.1	258.1	275.1	300.1	335.2	383.1	460.2	567.2	696.3
122.5°	258.9	261.1	264.3	273.3	292.0	316.9	352.0	397.6	465.8	563.3	681.9
125°	280.1	282.1	287.1	296.1	315.1	341.1	374.2	417.2	475.2	558.3	662.3
127.5°	296.7	299.7	306.2	317.5	337.8	363.8	395.5	435.2	485.8	555.9	644.3
130°	307.1	310.1	318.1	331.1	352.1	378.2	409.1	447.2	492.2	554.2	632.3
132.5°	315.1	318.9	328.6	343.2	365.0	391.0	422.0	457.6	499.4	554.2	622.7
135°	328.1	332.2	344.1	360.2	381.2	408.2	439.2	472.2	509.2	554.2	611.3
137.5°	344.6	347.6	358.8	374.8	395.4	423.2	451.4	483.0	518.2	555.4	601.1
140°	354.1	357.1	369.2	385.2	404.2	431.2	460.2	490.3	522.2	556.2	596.2
142.5°	365.3	367.6	378.8	394.8	413.0	438.4	465.8	494.2	524.6	557.1	592.3
145°	382.2	384.2	394.2	408.2	426.2	449.2	475.2	500.2	527.3	556.2	586.3
147.5°	399.8	401.0	409.6	422.6	438.2	458.4	481.2	503.9	528.2	553.6	580.1
150°	410.2	412.2	419.2	432.2	446.2	463.2	485.2	506.3	528.2	551.2	575.2
152.5°	421.4	422.6	428.8	440.2	453.4	468.8	489.2	507.8	527.4	548.0	569.6
155°	436.2	436.2	442.2	452.2	462.2	476.2	493.2	509.2	525.2	542.3	560.3
157.5°	449.4	449.2	454.0	462.6	471.4	482.0	496.6	510.2	522.6	536.2	551.5
160°	458.2	457.2	461.2	468.2	476.2	485.2	498.3	510.2	520.2	532.3	544.2
162.5°	465.4	464.4	468.4	474.6	481.0	488.4	499.8	509.5	517.8	527.4	537.9
165°	476.2	474.2	477.3	482.2	486.2	492.2	500.2	508.2	514.2	520.2	528.2
167.5°	483.5	482.4	484.2	487.0	489.8	493.6	500.2	505.8	508.6	513.2	518.8
170°	488.2	487.2	488.2	490.3	492.2	495.2	500.2	504.2	506.3	509.2	513.2
172.5°	491.5	489.7	490.6	492.6	493.8	495.2	499.4	502.7	503.0	504.5	507.6
175°	495.2	493.2	494.2	495.2	495.2	495.2	498.3	500.2	499.2	499.2	500.2
177.5°	497.1	495.4	495.4	496.2	495.4	495.4	497.1	497.8	496.2	496.2	497.1
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2

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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°	11.5	11.6	11.9	12.2	12.1	12.0	12.1	12.0
90°	18.0	19.0	20.0	22.0	22.0	22.0	23.0	23.0
92.5°	177.3	128.6	96.9	82.1	69.2	66.8	65.4	63.8
95°	719.3	567.2	444.2	360.2	289.1	259.1	251.2	235.1
97.5°	1071.3	964.7	844.8	727.9	666.1	610.1	581.1	568.3
100°	1230.5	1181.6	1078.5	974.4	905.4	833.4	796.3	780.3
102.5°	1284.2	1314.4	1265.0	1194.6	1120.7	1069.4	1029.2	1017.3
105°	1252.6	1389.7	1433.7	1422.6	1390.6	1357.6	1337.6	1325.6
107.5°	1139.7	1322.6	1435.6	1487.9	1504.1	1503.9	1497.3	1489.3
110°	1056.4	1246.6	1387.6	1472.7	1517.7	1536.7	1543.7	1543.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	990.8	1171.3	1314.0	1414.2	1480.1	1512.7	1530.1	1537.3
115°	908.4	1063.5	1200.5	1309.6	1387.6	1435.6	1463.6	1476.6
117.5°	855.1	988.9	1106.9	1206.9	1285.0	1334.6	1362.4	1370.4
120°	826.4	946.4	1056.4	1144.5	1218.6	1266.5	1293.6	1301.6
122.5°	804.8	916.0	1014.1	1096.5	1162.5	1206.5	1233.6	1240.8
125°	773.4	875.4	962.4	1034.5	1090.5	1131.5	1153.5	1163.6
127.5°	741.3	836.5	917.8	985.2	1036.0	1072.3	1093.1	1097.5
130°	721.3	809.3	887.4	952.4	1002.5	1035.4	1055.5	1061.4
132.5°	701.3	783.8	854.5	917.2	967.2	1000.2	1018.6	1025.5
135°	675.3	744.3	808.4	865.4	909.4	942.5	960.4	966.5
137.5°	653.3	709.1	762.3	810.8	850.2	880.2	896.8	903.4
140°	641.3	688.3	734.3	776.4	813.4	839.4	854.4	859.4
142.5°	630.9	670.7	710.3	746.7	778.2	800.1	814.3	818.6
145°	617.3	648.2	679.3	706.3	730.3	747.3	758.4	762.3
147.5°	604.5	629.6	653.5	673.9	692.9	706.5	712.9	714.7
150°	597.3	619.3	638.3	656.3	671.3	683.3	687.3	688.3
152.5°	589.3	608.9	626.3	640.3	652.9	662.5	666.5	667.5
155°	577.2	593.2	607.3	618.3	628.3	635.2	638.3	639.3
157.5°	565.2	578.4	589.3	597.9	605.6	611.5	614.2	614.1
160°	557.2	567.2	577.2	584.3	591.2	596.2	598.3	597.3
162.5°	548.5	557.7	566.0	572.2	577.6	581.9	582.3	582.0
165°	536.2	543.2	549.2	554.2	558.3	560.3	560.3	560.3
167.5°	524.6	529.3	533.8	537.4	539.4	541.2	540.4	540.3
170°	518.2	521.2	524.3	526.2	528.2	529.3	529.3	528.2
172.5°	511.0	514.0	516.3	517.5	517.8	519.6	518.1	517.0
175°	503.3	503.3	505.2	505.2	505.2	506.3	504.2	503.3
177.5°	497.8	498.6	498.6	498.6	497.8	498.6	496.2	496.2
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2

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