

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: P333543-930

Luminaire Tested: **S125RDIP-S610D1035U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333543-930
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-S610D1035U930-4F0-1E-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: 4967.2 lumens
Efficiency: N/A
Efficacy: 111.6 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

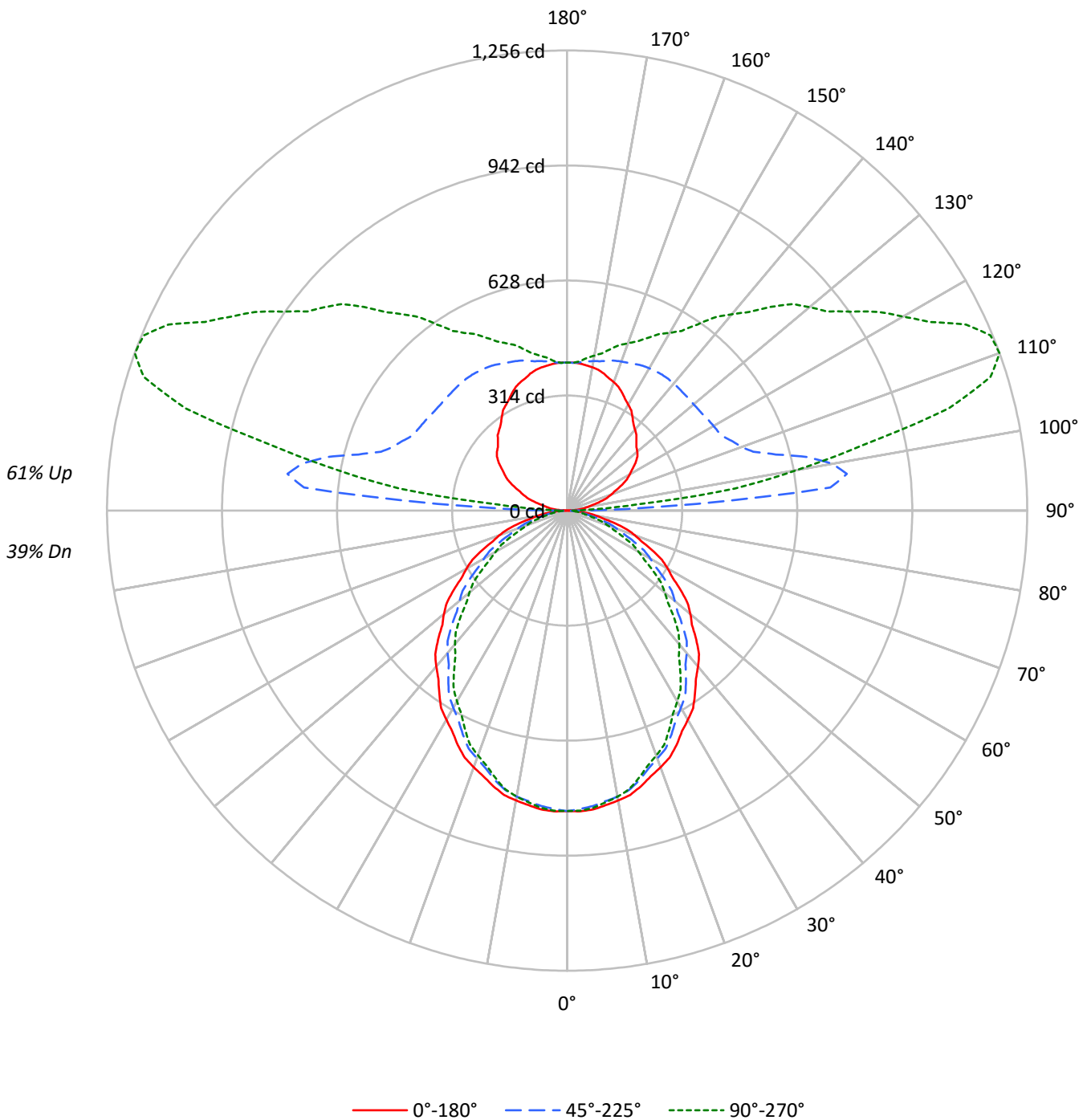
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46
1	96	91	88	84	87	83	80	77	68	66	64	54	52	51	41	40	39
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	35	33
3	79	70	63	58	72	64	58	53	53	48	45	42	39	36	32	30	28
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25
5	67	55	48	42	60	51	44	39	42	37	33	34	30	27	26	24	22
6	61	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	18	16	14
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5297	5297	5297
5°	5309	5249	5281
10°	5269	5200	5200
15°	5207	5094	5053
20°	5126	4947	4887
25°	5032	4802	4697
30°	4915	4633	4486
35°	4796	4459	4249
40°	4684	4278	4016
45°	4549	4074	3763
50°	4413	3852	3497
55°	4255	3640	3216
60°	4097	3384	2913
65°	3909	3085	2566
70°	3697	2713	2211
75°	3401	2286	1839
80°	2998	1796	1543
85°	2527	1467	1378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.1	1.6
10°-20°	215.5	4.3
20°-30°	312.5	6.3
30°-40°	356.2	7.2
40°-50°	347.2	7.0
50°-60°	292.3	5.9
60°-70°	204.9	4.1
70°-80°	105.3	2.1
80°-90°	28.8	0.6
90°-100°	292.6	5.9
100°-110°	629.0	12.7
110°-120°	590.3	11.9
120°-130°	478.4	9.6
130°-140°	383.9	7.7
140°-150°	289.7	5.8
150°-160°	203.9	4.1
160°-170°	120.2	2.4
170°-180°	39.1	0.8
0°-30°	605.2	12.2
0°-40°	961.4	19.4
0°-60°	1600.8	32.2
0°-90°	1939.8	39.1
90°-120°	1512.0	30.4
90°-150°	2664.1	53.6
90°-180°	3027.0	60.9
0°-180°	4967.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	819	816	810	815	815	78
15°	779	774	762	761	756	219
25°	706	696	674	666	659	325
35°	608	593	566	548	539	381
45°	498	479	446	422	412	384
55°	378	357	323	296	286	338
65°	256	234	202	178	168	253
75°	136	117	92	79	74	144
85°	34	23	20	19	19	38
90°	1	7	13	17	19	3
95°	27	79	721	327	191	29
105°	92	129	590	1162	1078	97
115°	164	198	474	1021	1201	162
125°	228	267	454	812	947	202
135°	267	321	451	681	786	207
145°	311	356	452	564	620	195
155°	355	382	441	499	520	163
165°	387	398	423	449	456	109
175°	403	403	406	411	409	38
180°	404	404	404	404	404	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	821.7	821.3	821.0	820.7	820.4	819.6	818.5	817.4	816.3	815.2	816.3
5°	818.9	818.4	817.8	817.3	816.7	815.7	814.2	812.7	811.1	809.6	811.0
7.5°	810.9	810.3	809.8	809.3	808.8	807.6	805.8	804.0	802.2	800.3	801.3
10°	803.4	803.0	802.6	802.2	801.8	800.6	798.7	796.8	794.8	792.9	793.3
12.5°	795.0	794.5	793.9	793.4	792.9	791.3	788.8	786.2	783.6	781.0	781.3
15°	778.7	777.8	777.0	776.2	775.3	773.5	770.6	767.7	764.8	761.9	761.8
17.5°	760.2	759.0	757.7	756.4	755.1	752.7	749.0	745.4	741.8	738.2	737.4
20°	745.8	744.4	743.1	741.7	740.3	737.4	733.0	728.6	724.2	719.8	719.1
22.5°	729.9	728.6	727.2	725.9	724.5	721.5	716.8	712.2	707.6	703.0	701.6
25°	706.2	704.1	702.1	700.0	697.9	694.3	689.3	684.1	679.1	673.9	672.2
27.5°	678.9	676.5	673.9	671.4	668.9	665.0	659.5	654.0	648.6	643.1	640.6
30°	659.1	656.5	653.9	651.3	648.7	644.4	638.6	632.9	627.1	621.3	618.2
32.5°	639.8	636.7	633.7	630.6	627.5	623.1	617.2	611.3	605.4	599.5	596.0
35°	608.3	605.0	601.7	598.4	595.1	590.4	584.2	578.0	571.8	565.6	561.6
37.5°	577.5	573.4	569.4	565.4	561.4	556.2	549.8	543.4	537.0	530.6	525.9
40°	555.6	551.5	547.4	543.2	539.2	533.8	527.2	520.6	514.0	507.4	502.1
42.5°	532.9	528.6	524.4	520.2	515.9	510.4	503.5	496.7	489.9	483.1	478.0
45°	498.1	494.1	490.1	486.1	482.1	476.3	468.7	461.1	453.6	446.0	440.5
47.5°	462.0	457.8	453.6	449.4	445.2	439.2	431.6	424.0	416.4	408.7	403.1
50°	439.2	434.6	430.1	425.6	421.0	414.8	407.0	399.2	391.3	383.4	377.6
52.5°	414.4	409.8	405.1	400.5	395.8	389.8	382.4	375.0	367.5	360.1	353.9
55°	377.9	373.5	369.1	364.7	360.3	354.2	346.5	338.8	331.1	323.3	317.2
57.5°	341.0	336.2	331.5	326.9	322.1	316.0	308.6	301.2	293.8	286.3	280.2
60°	317.2	312.3	307.5	302.7	297.9	291.8	284.3	276.9	269.5	262.0	256.0
62.5°	291.9	287.3	282.7	278.1	273.5	267.4	259.9	252.3	244.8	237.3	231.6
65°	255.8	251.2	246.5	241.8	237.1	231.1	223.8	216.5	209.2	201.9	196.4
67.5°	220.0	215.3	210.7	206.0	201.3	195.5	188.5	181.5	174.5	167.5	162.5
70°	195.8	191.1	186.4	181.7	177.0	171.2	164.4	157.5	150.6	143.7	139.4
72.5°	171.9	167.4	162.8	158.2	153.7	148.1	141.7	135.3	128.8	122.4	118.5
75°	136.3	132.2	128.0	123.9	119.8	114.8	109.0	103.2	97.4	91.6	88.6
77.5°	100.9	97.5	94.2	90.9	87.6	83.6	79.0	74.4	69.8	65.1	63.0
80°	80.6	77.2	73.9	70.6	67.3	63.8	59.8	56.0	52.2	48.3	47.0
82.5°	60.7	57.7	54.8	51.8	48.8	46.0	43.4	40.7	38.1	35.5	34.9
85°	34.1	31.6	29.1	26.7	24.1	22.6	21.9	21.2	20.5	19.8	19.6
87.5°	11.6	10.9	10.5	10.0	9.6	9.5	9.5	9.8	9.8	10.0	10.2
90°	0.8	1.6	3.3	4.9	6.5	8.2	9.0	10.6	11.4	13.0	13.9
92.5°	9.9	12.1	18.9	28.9	43.0	66.8	111.2	185.7	266.6	262.4	212.4
95°	26.8	27.6	34.2	43.1	61.1	97.7	184.7	363.8	588.5	721.1	705.6
97.5°	44.6	45.6	50.1	59.1	75.2	101.6	159.2	290.4	525.5	770.1	892.8
100°	57.0	58.6	61.9	70.8	86.3	110.7	157.9	263.7	468.8	734.9	938.4
102.5°	70.7	71.6	74.2	83.8	98.0	121.7	163.8	252.7	425.8	673.1	911.1
105°	92.0	92.0	96.0	104.2	117.2	140.0	175.8	248.3	384.2	590.0	823.7
107.5°	112.8	114.5	118.3	125.0	138.5	159.1	193.7	255.8	366.6	533.0	734.4
110°	127.8	129.4	132.6	140.0	152.2	173.3	206.8	262.9	361.3	506.2	683.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	142.8	144.4	147.0	154.3	166.5	187.0	219.1	272.0	361.3	490.6	645.9
115°	164.4	166.0	168.4	175.8	188.0	208.4	238.5	285.7	363.8	473.7	604.7
117.5°	183.9	186.4	189.0	196.3	210.2	229.8	258.4	301.3	369.2	465.4	580.2
120°	197.0	199.4	202.7	210.0	223.8	244.2	272.6	311.7	374.4	461.5	566.5
122.5°	210.7	212.4	215.0	222.3	237.5	257.9	286.3	323.4	379.0	458.2	554.7
125°	227.9	229.5	233.6	240.9	256.4	277.5	304.4	339.4	386.6	454.1	538.8
127.5°	241.4	243.9	249.1	258.4	274.8	296.0	321.8	354.0	395.3	452.2	524.2
130°	249.9	252.3	258.9	269.4	286.5	307.6	332.9	363.8	400.5	450.9	514.4
132.5°	256.4	259.4	267.3	279.2	296.9	318.0	343.3	372.3	406.3	450.9	506.5
135°	266.9	270.2	280.0	293.0	310.1	332.1	357.3	384.2	414.3	450.9	497.3
137.5°	280.3	282.7	291.9	304.9	321.6	344.3	367.2	393.0	421.6	451.8	489.0
140°	288.1	290.6	300.4	313.3	328.8	350.8	374.4	398.8	424.9	452.5	485.1
142.5°	297.3	299.1	308.1	321.1	336.0	356.6	379.0	402.0	426.8	453.1	481.8
145°	310.9	312.5	320.7	332.1	346.7	365.4	386.6	406.9	428.9	452.5	477.0
147.5°	325.2	326.2	333.2	343.8	356.4	372.9	391.5	409.9	429.7	450.4	471.9
150°	333.7	335.3	341.0	351.6	363.0	376.8	394.8	411.8	429.7	448.4	468.0
152.5°	342.8	343.8	348.9	358.1	368.8	381.4	398.0	413.1	429.1	445.9	463.4
155°	354.8	354.8	359.7	367.9	376.0	387.4	401.2	414.3	427.3	441.2	455.8
157.5°	365.6	365.4	369.3	376.3	383.5	392.2	404.0	415.1	425.2	436.3	448.6
160°	372.8	371.9	375.2	380.9	387.4	394.8	405.3	415.1	423.2	433.0	442.8
162.5°	378.6	377.8	381.1	386.1	391.3	397.4	406.6	414.4	421.3	429.1	437.6
165°	387.4	385.8	388.2	392.3	395.6	400.5	406.9	413.4	418.3	423.2	429.7
167.5°	393.3	392.5	394.0	396.2	398.5	401.5	406.9	411.5	413.8	417.5	422.1
170°	397.2	396.4	397.2	398.8	400.5	402.8	406.9	410.2	411.8	414.3	417.5
172.5°	399.8	398.4	399.2	400.7	401.7	402.8	406.3	408.9	409.2	410.3	412.9
175°	402.8	401.2	402.0	402.8	402.8	402.8	405.3	406.9	406.1	406.1	406.9
177.5°	404.3	403.0	403.0	403.7	403.0	403.0	404.3	405.0	403.7	403.7	404.3
180°	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	817.4	818.5	819.6	820.1	820.0	819.9	819.8	819.7
5°	812.4	813.8	815.1	815.7	815.4	815.1	814.9	814.6
7.5°	802.3	803.2	804.2	804.5	804.2	803.9	803.6	803.3
10°	793.7	794.1	794.6	794.6	794.1	793.7	793.3	792.9
12.5°	781.6	782.0	782.2	782.0	781.4	780.8	780.2	779.5
15°	761.7	761.5	761.4	760.7	759.5	758.2	757.0	755.7
17.5°	736.8	736.1	735.4	734.5	733.5	732.5	731.5	730.4
20°	718.4	717.7	717.1	716.1	714.9	713.6	712.4	711.1
22.5°	700.3	698.9	697.6	696.3	695.4	694.3	693.3	692.3
25°	670.4	668.6	666.8	665.1	663.7	662.1	660.6	659.1
27.5°	638.1	635.6	633.1	631.1	629.7	628.2	626.7	625.3
30°	615.0	611.8	608.6	606.4	605.2	604.0	602.8	601.5
32.5°	592.5	589.1	585.5	583.0	581.4	579.8	578.3	576.7
35°	557.6	553.6	549.6	546.7	544.7	542.7	540.9	538.9
37.5°	521.1	516.2	511.4	508.1	506.2	504.4	502.6	500.7
40°	496.8	491.6	486.4	483.0	481.4	479.6	478.0	476.4
42.5°	473.0	468.0	463.0	459.3	456.9	454.4	452.0	449.6
45°	435.0	429.5	424.0	420.2	418.2	416.0	414.0	412.0
47.5°	397.4	391.7	386.0	382.0	379.8	377.5	375.2	372.9
50°	371.9	366.1	360.3	356.4	354.3	352.3	350.2	348.1
52.5°	347.7	341.4	335.3	331.1	329.1	327.0	324.9	322.9
55°	311.0	304.8	298.6	294.4	292.2	290.0	287.8	285.6
57.5°	274.2	268.2	262.1	258.0	256.1	254.1	252.3	250.3
60°	249.9	243.9	237.8	233.7	231.7	229.6	227.6	225.5
62.5°	226.0	220.4	214.7	210.9	208.9	206.8	204.7	202.7
65°	190.9	185.4	179.9	176.1	174.1	172.0	169.9	167.9
67.5°	157.4	152.4	147.3	144.0	142.4	140.7	139.0	137.4
70°	135.2	130.9	126.6	123.7	122.1	120.4	118.7	117.1
72.5°	114.5	110.6	106.6	104.1	103.1	101.9	100.9	99.7
75°	85.6	82.6	79.6	77.5	76.6	75.7	74.7	73.7
77.5°	60.9	58.8	56.7	55.3	54.5	53.8	53.2	52.4
80°	45.8	44.6	43.4	42.6	42.3	42.1	41.7	41.5
82.5°	34.2	33.7	33.1	32.8	32.6	32.4	32.3	32.1
85°	19.6	19.4	19.2	19.2	19.0	18.8	18.8	18.6
87.5°	10.4	10.5	10.7	10.9	10.8	10.8	10.8	10.7
90°	14.7	15.5	16.3	17.9	17.9	17.9	18.8	18.8
92.5°	144.2	104.7	78.8	66.8	56.3	54.4	53.2	51.9
95°	585.2	461.5	361.3	293.0	235.2	210.8	204.3	191.3
97.5°	871.6	784.7	687.2	592.2	541.9	496.3	472.7	462.3
100°	1001.1	961.2	877.3	792.7	736.5	678.0	647.8	634.9
102.5°	1044.7	1069.3	1029.1	971.8	911.7	870.1	837.3	827.5
105°	1019.0	1130.5	1166.3	1157.3	1131.3	1104.5	1088.2	1078.4
107.5°	927.2	1076.0	1167.9	1210.4	1223.6	1223.4	1218.1	1211.5
110°	859.5	1014.1	1128.9	1198.1	1234.7	1250.1	1255.8	1255.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	806.1	952.9	1068.9	1150.6	1204.0	1230.6	1244.8	1250.6
115°	739.0	865.2	976.6	1065.4	1128.9	1167.9	1190.7	1201.3
117.5°	695.7	804.5	900.5	981.9	1045.4	1085.7	1108.3	1114.8
120°	672.3	770.0	859.5	931.1	991.3	1030.4	1052.4	1058.9
122.5°	654.7	745.2	824.9	892.0	945.7	981.5	1003.6	1009.4
125°	629.2	712.2	782.9	841.6	887.1	920.5	938.4	946.6
127.5°	603.1	680.6	746.7	801.5	842.9	872.3	889.2	892.8
130°	586.9	658.4	721.9	774.9	815.5	842.4	858.7	863.6
132.5°	570.5	637.6	695.2	746.2	786.8	813.8	828.7	834.2
135°	549.3	605.5	657.6	704.0	739.8	766.7	781.3	786.2
137.5°	531.5	576.9	620.2	659.6	691.6	716.1	729.6	734.9
140°	521.7	559.9	597.4	631.6	661.7	682.9	695.0	699.1
142.5°	513.2	545.6	577.9	607.5	633.1	650.9	662.5	665.9
145°	502.1	527.4	552.6	574.6	594.1	608.0	616.9	620.2
147.5°	491.8	512.3	531.7	548.2	563.7	574.8	580.0	581.5
150°	485.9	503.8	519.3	533.9	546.1	555.9	559.1	559.9
152.5°	479.4	495.3	509.5	520.9	531.2	539.0	542.2	543.0
155°	469.6	482.7	494.1	503.0	511.1	516.8	519.3	520.1
157.5°	459.8	470.6	479.4	486.4	492.8	497.4	499.7	499.5
160°	453.3	461.5	469.6	475.3	481.0	485.1	486.7	485.9
162.5°	446.2	453.6	460.5	465.5	469.9	473.4	473.7	473.5
165°	436.3	442.0	446.9	450.9	454.1	455.8	455.8	455.8
167.5°	426.8	430.6	434.3	437.2	438.9	440.3	439.7	439.5
170°	421.6	424.0	426.5	428.1	429.7	430.6	430.6	429.7
172.5°	415.7	418.2	420.0	420.9	421.3	422.7	421.4	420.6
175°	409.4	409.4	411.0	411.0	411.0	411.8	410.2	409.4
177.5°	405.0	405.6	405.6	405.6	405.0	405.6	403.7	403.7
180°	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7

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