

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: P333246-930

Luminaire Tested: **S125DIP-S850D1205U930-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333246-930
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: S125DIP-S850D1205U930-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6201.4 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

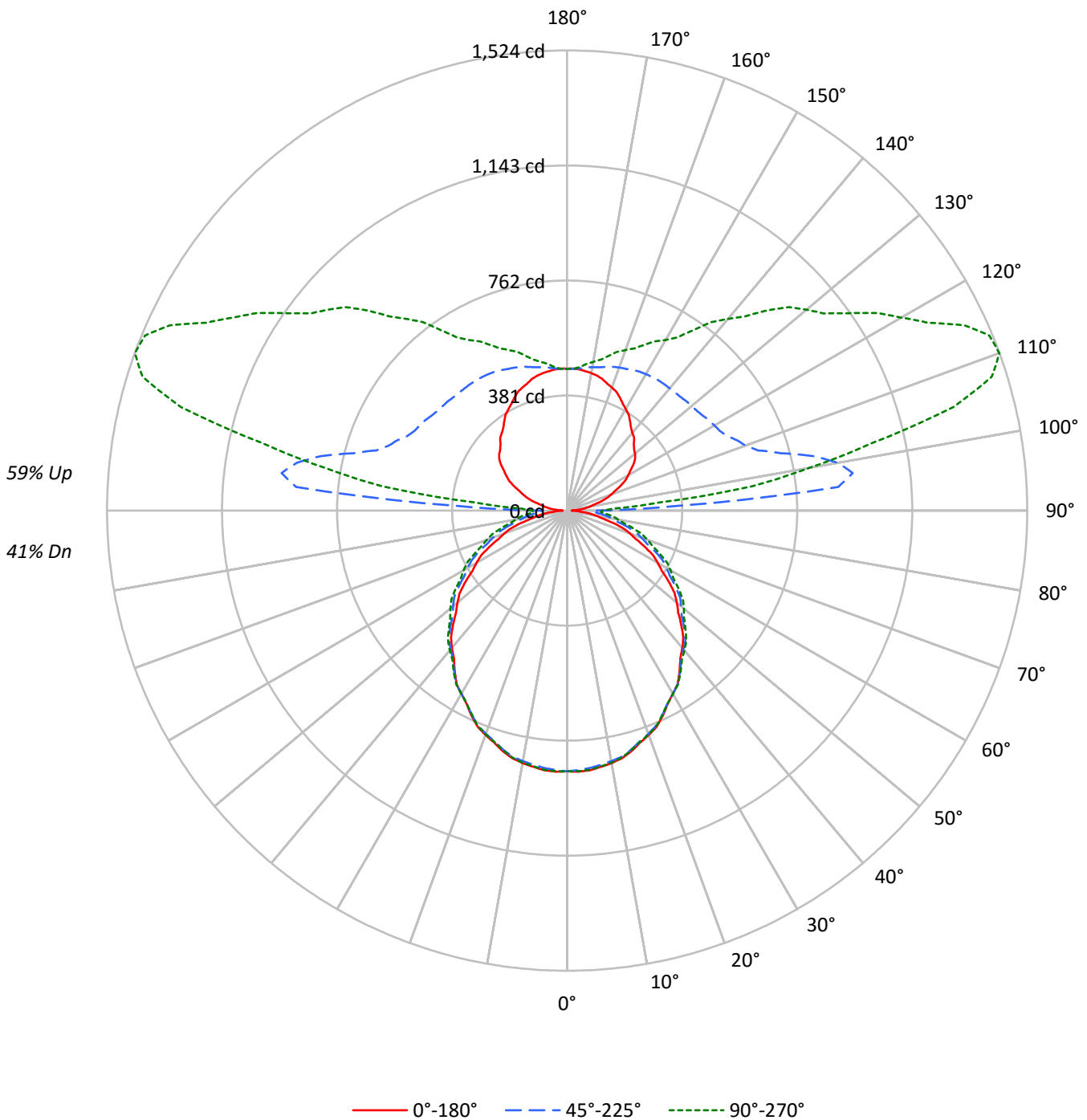
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47	41
1	95	91	86	83	86	83	79	76	67	65	63	54	52	50	41	40	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	27
3	79	69	61	56	71	63	56	51	52	47	43	41	38	35	31	29	27	23
4	72	61	53	47	65	56	49	43	46	40	36	37	33	30	28	25	23	19
5	66	54	46	40	60	49	42	37	41	35	31	33	29	26	25	22	20	17
6	60	48	40	34	55	44	37	32	37	31	27	29	25	22	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	39	32	26	47	36	29	25	30	25	21	24	20	17	19	16	14	11
9	48	36	28	23	44	33	26	22	28	22	19	22	18	16	18	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5577	5577	5577
5°	5589	5475	5492
10°	5549	5377	5369
15°	5484	5260	5212
20°	5394	5115	5055
25°	5288	4960	4863
30°	5160	4791	4687
35°	5040	4634	4526
40°	4918	4469	4364
45°	4780	4328	4221
50°	4649	4175	4095
55°	4491	4030	3946
60°	4317	3865	3793
65°	4137	3693	3622
70°	3931	3457	3446
75°	3607	3230	3231
80°	3183	2957	2996
85°	2789	2770	2923



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	1.3
10°-20°	231.8	3.7
20°-30°	344.8	5.6
30°-40°	408.4	6.6
40°-50°	422.2	6.8
50°-60°	389.0	6.3
60°-70°	314.4	5.1
70°-80°	210.6	3.4
80°-90°	111.8	1.8
90°-100°	401.9	6.5
100°-110°	777.3	12.5
110°-120°	717.4	11.6
120°-130°	574.1	9.3
130°-140°	454.4	7.3
140°-150°	338.8	5.5
150°-160°	237.4	3.8
160°-170°	139.9	2.3
170°-180°	45.5	0.7
0°-30°	658.3	10.6
0°-40°	1066.7	17.2
0°-60°	1877.9	30.3
0°-90°	2514.7	40.6
90°-120°	1896.6	30.6
90°-150°	3263.8	52.6
90°-180°	3687.0	59.5
0°-180°	6201.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	862	856	862	862	82
15°	825	825	820	824	821	232
25°	749	751	747	750	746	345
35°	649	654	652	654	654	406
45°	534	543	548	553	555	412
55°	411	424	438	447	450	367
65°	283	302	323	335	339	280
75°	156	178	205	221	226	165
85°	47	75	104	122	130	50
90°	14	49	85	108	117	11
95°	42	126	901	461	309	42
105°	115	171	733	1415	1325	121
115°	196	243	584	1236	1452	193
125°	269	314	548	978	1139	238
135°	312	375	532	810	937	243
145°	363	414	527	660	730	227
155°	413	444	514	580	605	190
165°	451	463	493	522	530	127
175°	469	469	473	478	476	45
180°	470	470	470	470	470	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	865.7	865.4	865.1	864.8	864.5	863.8	862.7	861.7	860.6	859.6	860.6
5°	863.6	863.3	862.9	862.5	862.2	861.3	860.0	858.7	857.4	856.1	857.5
7.5°	856.1	855.9	855.7	855.6	855.4	854.7	853.4	852.0	850.6	849.3	850.6
10°	849.3	849.3	849.3	849.3	849.3	848.6	847.0	845.5	844.0	842.5	843.8
12.5°	839.8	839.9	840.1	840.2	840.4	839.8	838.7	837.5	836.3	835.0	836.1
15°	824.8	824.9	825.1	825.2	825.5	824.9	823.6	822.3	820.9	819.6	820.8
17.5°	805.1	805.4	805.8	806.2	806.6	806.1	804.8	803.5	802.2	800.9	801.7
20°	790.8	791.2	791.6	792.0	792.4	791.9	790.6	789.3	787.9	786.6	787.2
22.5°	774.6	775.3	775.9	776.7	777.3	776.9	775.4	774.0	772.5	771.0	771.8
25°	749.3	749.9	750.5	751.1	751.6	751.3	750.2	749.1	748.0	746.8	747.5
27.5°	721.2	722.1	722.9	723.7	724.6	724.3	723.1	721.8	720.5	719.3	719.7
30°	700.3	701.4	702.5	703.6	704.7	704.7	703.6	702.5	701.4	700.3	700.7
32.5°	681.3	682.2	683.2	684.2	685.2	685.3	684.4	683.6	682.8	682.0	682.3
35°	648.6	650.0	651.3	652.6	653.9	654.3	653.7	653.1	652.6	652.0	652.6
37.5°	615.9	617.1	618.3	619.5	620.8	621.3	621.0	620.9	620.7	620.5	621.3
40°	593.5	595.1	596.6	598.1	599.6	600.2	600.1	599.9	599.7	599.5	600.2
42.5°	569.2	571.1	573.1	575.0	577.0	578.2	578.6	579.0	579.4	579.8	580.7
45°	534.3	536.4	538.4	540.5	542.6	544.0	545.0	545.9	546.9	547.8	549.2
47.5°	498.6	500.5	502.4	504.3	506.2	508.0	509.6	511.3	512.8	514.5	516.4
50°	474.2	476.2	478.3	480.4	482.4	484.5	486.6	488.7	490.7	492.8	494.9
52.5°	448.4	450.9	453.5	456.0	458.5	461.1	463.6	466.1	468.6	471.2	473.4
55°	410.7	413.7	416.7	419.7	422.7	425.7	428.8	431.8	434.7	437.7	439.9
57.5°	372.0	375.7	379.3	382.9	386.5	390.0	393.5	397.0	400.4	403.9	406.3
60°	346.3	350.1	353.8	357.6	361.3	365.2	368.9	372.7	376.4	380.2	383.0
62.5°	321.2	325.0	328.8	332.6	336.3	340.2	344.3	348.4	352.4	356.4	359.6
65°	282.8	287.1	291.5	295.8	300.1	304.5	309.1	313.6	318.1	322.6	325.5
67.5°	246.5	250.8	254.9	259.1	263.3	267.7	272.2	276.9	281.4	286.0	289.4
70°	220.1	224.5	228.8	233.2	237.5	242.1	247.0	251.8	256.7	261.6	265.2
72.5°	194.4	198.9	203.3	207.8	212.3	217.2	222.6	228.0	233.3	238.6	242.5
75°	155.8	160.7	165.6	170.5	175.4	180.8	186.9	192.9	198.9	204.9	208.6
77.5°	118.7	124.3	130.0	135.7	141.3	147.0	152.8	158.6	164.4	170.2	174.3
80°	95.7	101.3	107.0	112.6	118.3	124.3	130.7	137.1	143.5	149.9	154.0
82.5°	74.7	80.6	86.6	92.5	98.5	104.7	111.3	117.8	124.3	130.9	134.9
85°	46.6	52.7	59.0	65.2	71.4	77.8	84.4	91.0	97.6	104.1	108.3
87.5°	26.6	32.9	39.2	45.7	52.0	58.6	65.2	72.0	78.6	85.4	89.8
90°	14.5	21.4	29.4	37.3	45.2	53.3	60.7	69.0	76.3	84.6	89.8
92.5°	23.7	31.8	45.3	62.6	84.5	118.2	176.5	269.8	370.6	372.2	318.1
95°	42.2	48.1	60.6	75.9	101.7	149.9	257.6	472.5	740.4	901.2	887.3
97.5°	61.9	67.4	77.1	92.0	115.1	151.2	224.4	383.3	663.0	954.0	1100.7
100°	75.7	81.4	89.2	103.6	125.6	159.0	219.9	349.1	593.9	909.6	1150.5
102.5°	90.9	95.6	102.3	117.2	137.3	169.7	224.5	333.8	541.3	834.9	1115.7
105°	114.6	117.6	125.4	137.9	156.0	186.9	234.2	324.2	488.0	733.4	1009.0
107.5°	137.9	142.4	149.4	159.8	178.1	205.9	251.7	329.3	463.7	662.8	901.2
110°	154.7	158.8	164.9	175.6	192.1	220.5	264.6	335.3	455.2	629.0	839.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	172.1	175.8	180.7	190.9	207.0	234.3	276.8	343.5	452.6	608.1	792.3
115°	196.4	199.7	203.8	213.7	229.2	256.0	296.0	355.7	451.6	584.4	740.3
117.5°	218.3	222.0	225.9	235.3	252.3	277.9	315.8	370.4	454.0	570.6	707.4
120°	233.5	236.9	241.2	250.4	267.0	293.1	330.6	380.4	457.7	563.4	688.8
122.5°	248.7	251.1	254.4	263.2	281.0	307.0	344.3	391.7	460.5	556.9	672.3
125°	268.6	270.4	274.9	283.2	301.0	327.5	362.5	407.0	465.7	548.1	649.6
127.5°	283.6	286.2	292.0	302.6	321.6	347.7	380.9	421.5	472.5	541.9	628.4
130°	293.3	296.0	303.5	315.5	335.3	361.1	393.1	431.7	477.0	538.3	614.9
132.5°	300.3	303.9	312.9	326.7	347.3	372.9	404.3	440.1	481.8	535.7	603.1
135°	312.4	316.0	327.2	342.2	361.9	388.0	418.7	451.3	487.6	531.6	588.1
137.5°	327.8	330.4	341.0	356.0	375.3	401.9	429.3	459.8	493.8	529.7	575.1
140°	336.2	339.1	350.4	365.6	383.6	409.3	436.9	465.5	496.0	528.4	568.3
142.5°	346.8	348.8	359.2	374.2	391.3	415.3	441.3	468.2	497.1	527.8	563.0
145°	362.7	364.4	373.7	386.8	403.7	425.3	450.0	473.7	499.3	526.7	556.1
147.5°	378.5	379.7	387.8	400.1	414.9	434.1	455.7	477.1	500.2	524.2	549.6
150°	388.4	390.3	397.0	409.3	422.5	438.6	459.4	479.4	500.2	522.0	544.7
152.5°	399.0	400.1	406.0	416.9	429.3	443.9	463.3	480.9	499.5	518.9	539.4
155°	413.0	413.0	418.7	428.2	437.7	450.9	467.0	482.2	497.3	513.5	530.5
157.5°	425.6	425.3	429.9	438.1	446.4	456.4	470.3	483.1	494.9	507.8	522.2
160°	433.9	432.9	436.8	443.4	450.9	459.4	471.8	483.1	492.6	504.0	515.4
162.5°	440.7	439.8	443.5	449.4	455.5	462.5	473.3	482.4	490.3	499.5	509.3
165°	450.9	449.1	451.9	456.6	460.4	466.1	473.7	481.3	486.9	492.6	500.2
167.5°	457.8	456.8	458.5	461.1	463.8	467.4	473.7	479.0	481.6	486.0	491.3
170°	462.3	461.4	462.3	464.2	466.1	469.0	473.7	477.4	479.4	482.2	486.0
172.5°	465.4	463.7	464.6	466.4	467.6	469.0	472.9	476.0	476.3	477.7	480.7
175°	469.0	467.0	468.0	469.0	469.0	469.0	471.8	473.7	472.7	472.7	473.7
177.5°	470.7	469.1	469.1	469.9	469.1	469.1	470.7	471.4	469.9	469.9	470.7
180°	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	861.7	862.7	863.8	864.3	864.1	864.0	863.8	863.6
5°	859.1	860.5	862.1	862.7	862.5	862.3	862.2	862.0
7.5°	851.9	853.2	854.5	855.1	854.9	854.8	854.5	854.4
10°	845.1	846.4	847.7	848.3	848.2	848.0	847.7	847.6
12.5°	837.1	838.1	839.1	839.4	838.9	838.4	837.9	837.4
15°	821.9	823.0	824.2	824.3	823.6	822.8	822.1	821.3
17.5°	802.6	803.5	804.3	804.5	804.0	803.6	803.2	802.7
20°	787.7	788.3	788.9	789.1	789.1	789.1	789.1	789.1
22.5°	772.5	773.1	773.9	774.0	773.6	773.1	772.7	772.3
25°	748.4	749.1	749.8	749.7	748.8	747.9	746.9	746.0
27.5°	720.2	720.8	721.3	721.5	721.1	720.7	720.4	720.1
30°	701.0	701.4	701.7	701.9	701.6	701.5	701.3	701.1
32.5°	682.7	683.1	683.5	683.5	683.4	683.2	683.0	682.8
35°	653.1	653.7	654.3	654.5	654.5	654.5	654.5	654.5
37.5°	622.0	622.7	623.5	623.9	623.8	623.7	623.6	623.5
40°	601.0	601.8	602.5	603.1	603.4	603.8	604.2	604.5
42.5°	581.6	582.5	583.4	583.9	584.0	584.1	584.2	584.2
45°	550.5	551.8	553.1	553.8	554.1	554.2	554.4	554.6
47.5°	518.3	520.2	522.1	523.3	523.7	524.2	524.6	525.0
50°	496.9	499.0	501.1	502.4	503.0	503.5	504.1	504.7
52.5°	475.6	477.8	480.0	481.4	481.8	482.2	482.6	483.0
55°	441.9	444.0	446.1	447.4	448.2	449.0	449.7	450.5
57.5°	408.6	411.0	413.4	414.8	415.4	416.0	416.5	417.1
60°	385.8	388.7	391.5	393.1	393.7	394.3	394.8	395.4
62.5°	362.7	365.8	369.0	370.9	371.6	372.3	373.0	373.7
65°	328.2	331.1	333.9	335.7	336.5	337.2	337.9	338.7
67.5°	292.9	296.3	299.7	301.9	302.9	303.9	304.8	305.8
70°	268.8	272.4	276.0	278.3	279.4	280.5	281.7	282.8
72.5°	246.4	250.2	254.1	256.5	257.3	258.1	258.9	259.8
75°	212.5	216.2	220.0	222.3	223.2	224.2	225.1	226.1
77.5°	178.5	182.6	186.8	189.2	190.0	190.7	191.4	192.2
80°	158.2	162.3	166.4	168.8	169.7	170.4	171.1	171.9
82.5°	138.8	142.8	146.8	149.5	150.9	152.2	153.6	155.0
85°	112.4	116.6	120.7	123.5	125.1	126.5	128.1	129.6
87.5°	94.3	98.9	103.4	106.6	107.9	109.3	110.7	112.0
90°	95.1	100.4	105.7	110.4	111.7	113.1	115.3	116.6
92.5°	243.0	201.1	175.1	163.9	153.0	152.1	152.1	151.9
95°	751.2	611.4	499.0	422.2	356.2	329.1	322.9	309.0
97.5°	1079.9	982.8	873.3	765.3	708.0	656.2	630.1	619.2
100°	1227.4	1184.9	1091.2	995.2	931.0	863.9	830.0	816.0
102.5°	1275.1	1307.5	1264.5	1200.3	1131.5	1084.1	1047.2	1036.9
105°	1240.2	1373.7	1419.2	1411.3	1382.3	1352.3	1334.7	1324.7
107.5°	1129.2	1306.1	1416.8	1468.8	1485.2	1486.2	1481.2	1474.7
110°	1047.3	1230.9	1368.1	1451.1	1495.0	1514.3	1522.2	1523.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	982.2	1156.5	1295.0	1392.3	1456.0	1488.2	1505.9	1514.1
115°	900.0	1050.2	1183.4	1288.9	1363.9	1410.5	1438.2	1451.6
117.5°	845.1	974.9	1089.9	1186.8	1262.0	1310.3	1337.9	1346.8
120°	815.1	932.1	1039.4	1124.9	1196.2	1242.8	1269.5	1278.2
122.5°	791.7	900.1	996.0	1076.1	1139.8	1182.6	1209.3	1217.2
125°	757.8	857.5	942.9	1013.0	1067.1	1106.9	1128.6	1139.1
127.5°	723.2	816.1	895.9	961.6	1010.8	1046.2	1067.0	1072.3
130°	701.9	787.8	864.4	927.7	976.1	1008.3	1028.2	1034.8
132.5°	680.2	760.9	830.6	891.6	939.8	971.8	990.0	997.3
135°	651.1	718.9	782.0	837.7	880.4	912.6	930.5	937.2
137.5°	626.8	681.8	734.5	781.8	819.9	849.1	865.5	872.5
140°	613.1	659.7	705.3	746.5	782.4	807.7	822.6	828.2
142.5°	601.3	640.7	680.0	715.8	746.2	767.8	782.0	786.8
145°	586.4	616.7	647.0	673.4	696.9	713.8	725.0	729.5
147.5°	573.0	597.1	620.0	639.7	658.0	671.2	677.6	679.6
150°	565.6	586.4	604.4	621.6	635.9	647.5	651.5	652.6
152.5°	558.0	576.6	593.0	606.3	618.3	627.5	631.3	632.3
155°	546.6	561.7	575.0	585.5	594.9	601.5	604.4	605.4
157.5°	535.2	547.7	558.0	566.1	573.5	579.0	581.6	581.5
160°	527.7	537.1	546.6	553.3	559.9	564.6	566.6	565.6
162.5°	519.3	528.1	536.0	541.8	547.0	551.0	551.4	551.1
165°	507.8	514.4	520.1	524.8	528.6	530.5	530.5	530.5
167.5°	496.8	501.2	505.5	508.9	510.8	512.5	511.8	511.6
170°	490.7	493.6	496.4	498.3	500.2	501.2	501.2	500.2
172.5°	483.9	486.7	488.9	490.0	490.3	492.0	490.6	489.6
175°	476.5	476.5	478.4	478.4	478.4	479.4	477.4	476.5
177.5°	471.4	472.1	472.1	472.1	471.4	472.1	469.9	469.9
180°	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9

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