

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: P333195-930

Luminaire Tested: **S125DIP-S610D1035U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333195-930
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-S610D1035U930-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5067.1 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

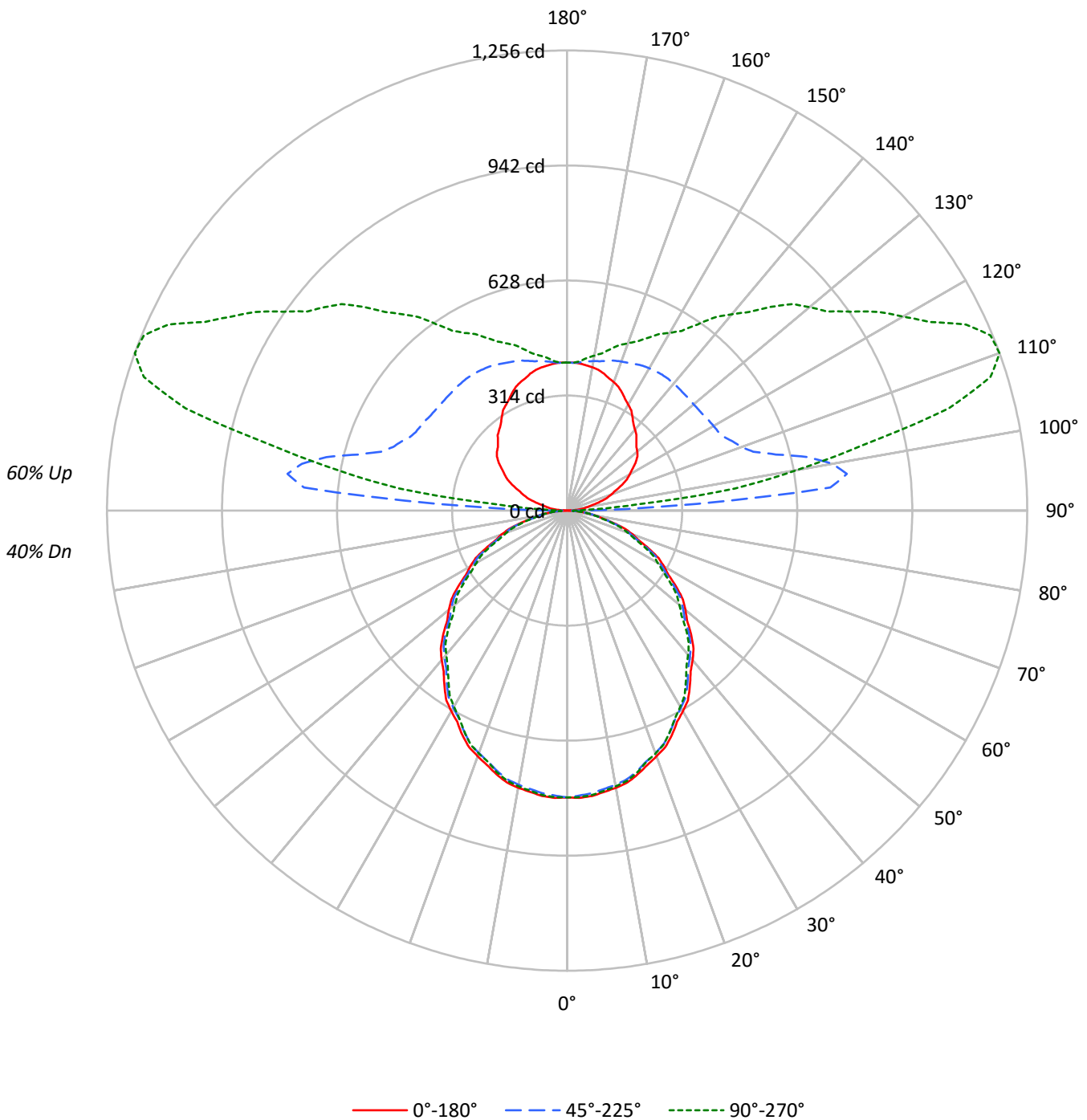
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	78	78	78	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	72	62	54	48	66	57	50	45	47	42	38	37	34	31	29	26	24	20
5	66	55	47	41	60	50	43	38	42	36	32	34	30	27	26	23	21	18
6	61	49	41	36	55	45	38	33	38	32	28	30	26	23	24	21	19	16
7	57	44	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14
8	52	40	33	27	48	37	30	26	31	26	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	26	22	41	31	25	20	26	21	18	21	18	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5057	5057	5057
5°	5068	5020	5052
10°	5037	4985	5013
15°	4983	4924	4945
20°	4904	4841	4849
25°	4821	4741	4737
30°	4716	4633	4610
35°	4606	4518	4454
40°	4491	4392	4330
45°	4369	4277	4192
50°	4233	4140	4015
55°	4102	3983	3871
60°	3945	3825	3689
65°	3758	3636	3512
70°	3580	3416	3299
75°	3261	3154	3047
80°	2901	2856	2786
85°	2527	2571	2438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.8	1.5
10°-20°	208.5	4.1
20°-30°	307.9	6.1
30°-40°	359.3	7.1
40°-50°	360.9	7.1
50°-60°	316.8	6.3
60°-70°	236.0	4.7
70°-80°	135.0	2.7
80°-90°	41.5	0.8
90°-100°	292.6	5.8
100°-110°	629.0	12.4
110°-120°	590.3	11.7
120°-130°	478.4	9.4
130°-140°	383.9	7.6
140°-150°	289.7	5.7
150°-160°	203.9	4.0
160°-170°	120.2	2.4
170°-180°	39.1	0.8
0°-30°	590.3	11.6
0°-40°	949.6	18.7
0°-60°	1627.2	32.1
0°-90°	2039.7	40.3
90°-120°	1512.0	29.8
90°-150°	2664.1	52.6
90°-180°	3027.0	59.7
0°-180°	5067.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	782	780	774	780	779	74
15°	745	743	736	739	740	210
25°	676	673	665	666	665	311
35°	584	581	573	570	565	365
45°	478	476	468	461	459	368
55°	364	362	354	348	344	325
65°	246	244	238	232	230	244
75°	131	129	126	124	122	139
85°	34	35	35	34	33	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°	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0
2.5°	785.0	784.6	784.3	784.0	783.7	782.9	781.9	780.7	779.7	778.5	779.7
5°	781.8	781.5	781.2	780.9	780.6	779.8	778.4	777.1	775.7	774.3	775.6
7.5°	774.5	774.3	774.0	773.7	773.5	772.6	771.0	769.6	768.0	766.5	767.7
10°	768.1	767.8	767.6	767.3	767.0	766.1	764.6	763.1	761.6	760.1	761.2
12.5°	760.2	759.7	759.2	758.7	758.2	757.2	755.9	754.5	753.0	751.6	752.5
15°	745.2	744.8	744.4	744.0	743.6	742.6	741.1	739.6	738.0	736.5	737.2
17.5°	728.0	727.4	726.8	726.2	725.5	724.5	722.9	721.3	719.7	718.2	719.0
20°	713.6	713.3	713.1	712.8	712.5	711.5	709.7	707.9	706.1	704.3	705.3
22.5°	699.2	698.7	698.2	697.7	697.2	696.2	694.5	692.8	691.1	689.4	690.1
25°	676.5	675.7	675.1	674.4	673.7	672.5	670.7	668.9	667.1	665.3	665.6
27.5°	649.8	649.4	649.0	648.6	648.2	647.0	645.1	643.4	641.5	639.7	639.7
30°	632.4	632.0	631.6	631.2	630.8	629.6	627.5	625.4	623.4	621.3	621.0
32.5°	613.6	613.0	612.4	611.7	611.1	609.8	608.1	606.2	604.3	602.5	602.0
35°	584.2	583.6	583.0	582.5	582.0	580.7	578.8	576.8	574.9	573.0	572.3
37.5°	553.5	552.9	552.2	551.5	550.8	549.5	547.7	545.9	544.0	542.3	541.3
40°	532.7	532.1	531.3	530.7	529.9	528.6	526.8	524.8	522.9	521.0	519.8
42.5°	510.5	509.9	509.2	508.7	508.1	506.9	504.9	503.0	501.1	499.1	498.1
45°	478.3	477.7	477.1	476.5	476.1	474.9	473.3	471.7	469.9	468.3	466.7
47.5°	443.5	443.5	443.6	443.6	443.6	442.6	440.7	438.7	436.8	434.7	433.1
50°	421.3	420.8	420.4	420.0	419.6	418.6	416.9	415.2	413.6	412.0	410.2
52.5°	398.4	398.1	397.9	397.5	397.2	396.2	394.4	392.6	390.9	389.1	387.6
55°	364.3	363.8	363.4	363.0	362.6	361.4	359.5	357.6	355.6	353.7	352.5
57.5°	328.2	328.0	327.8	327.5	327.3	326.4	324.7	323.1	321.5	319.9	318.3
60°	305.4	304.8	304.3	303.7	303.2	302.1	300.7	299.1	297.6	296.1	294.7
62.5°	281.6	281.2	280.7	280.3	279.8	279.0	277.7	276.4	275.1	273.8	272.3
65°	245.9	245.6	245.4	245.1	244.8	243.9	242.4	240.9	239.4	237.9	236.6
67.5°	211.3	210.8	210.2	209.6	209.0	208.2	207.1	205.9	204.8	203.7	202.6
70°	189.6	188.9	188.2	187.5	186.8	185.8	184.6	183.4	182.1	180.9	180.0
72.5°	165.8	165.3	164.9	164.4	163.9	163.2	162.5	161.7	160.9	160.0	159.1
75°	130.7	130.4	130.1	129.9	129.6	129.1	128.4	127.8	127.0	126.4	126.0
77.5°	98.4	98.2	98.2	98.0	97.9	97.7	97.3	96.9	96.5	96.1	95.9
80°	78.0	78.0	78.0	78.0	78.0	77.9	77.6	77.4	77.1	76.8	76.6
82.5°	60.3	60.0	59.8	59.5	59.4	59.2	59.1	59.1	59.0	58.9	58.7
85°	34.1	34.2	34.3	34.5	34.7	34.7	34.7	34.7	34.7	34.7	34.6
87.5°	13.5	13.7	14.0	14.3	14.7	14.9	15.0	15.2	15.2	15.5	15.7
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°	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0
2.5°	780.7	781.9	782.9	783.4	783.3	783.2	783.1	783.0
5°	776.8	778.0	779.3	779.8	779.7	779.6	779.4	779.3
7.5°	768.9	770.1	771.4	771.9	771.8	771.6	771.5	771.4
10°	762.3	763.4	764.5	765.0	764.8	764.7	764.5	764.4
12.5°	753.4	754.3	755.1	755.6	755.5	755.5	755.5	755.5
15°	737.9	738.6	739.3	739.6	739.6	739.6	739.6	739.6
17.5°	719.9	720.7	721.6	721.7	721.0	720.3	719.7	718.9
20°	706.2	707.2	708.2	708.3	707.6	706.9	706.2	705.6
22.5°	690.7	691.4	692.0	692.1	691.6	691.1	690.6	690.2
25°	665.9	666.1	666.4	666.3	665.9	665.5	665.1	664.7
27.5°	639.8	639.8	639.8	639.7	639.3	638.9	638.5	638.1
30°	620.8	620.5	620.2	619.9	619.5	619.1	618.6	618.2
32.5°	601.5	601.0	600.5	599.9	599.2	598.4	597.6	596.9
35°	571.6	571.0	570.2	569.3	568.3	567.1	566.1	564.9
37.5°	540.2	539.2	538.2	537.4	536.7	536.1	535.5	534.8
40°	518.4	517.2	516.0	515.2	514.8	514.4	514.0	513.6
42.5°	496.9	495.8	494.6	493.7	493.1	492.5	491.9	491.2
45°	465.0	463.3	461.7	460.6	460.2	459.8	459.4	459.0
47.5°	431.4	429.7	428.0	426.7	425.7	424.8	423.8	422.8
50°	408.4	406.6	404.8	403.4	402.4	401.5	400.5	399.6
52.5°	386.0	384.4	382.9	381.6	380.5	379.4	378.3	377.2
55°	351.2	350.0	348.8	347.6	346.7	345.7	344.8	343.8
57.5°	316.7	315.1	313.5	312.4	311.9	311.4	310.9	310.4
60°	293.3	292.0	290.6	289.4	288.5	287.5	286.5	285.6
62.5°	270.8	269.4	267.8	266.8	266.0	265.2	264.5	263.7
65°	235.4	234.2	232.9	232.0	231.5	230.9	230.4	229.8
67.5°	201.6	200.6	199.5	198.8	198.4	198.1	197.8	197.5
70°	179.2	178.4	177.6	176.9	176.3	175.8	175.2	174.7
72.5°	158.2	157.3	156.3	155.6	155.0	154.5	153.9	153.4
75°	125.6	125.1	124.7	124.3	123.7	123.1	122.6	122.1
77.5°	95.6	95.4	95.1	94.8	94.4	94.1	93.7	93.3
80°	76.6	76.4	76.2	76.1	75.7	75.5	75.3	74.9
82.5°	58.5	58.2	58.0	57.8	57.8	57.7	57.6	57.6
85°	34.4	34.2	34.2	33.9	33.7	33.3	33.1	32.9
87.5°	15.8	16.0	16.1	16.4	16.1	15.9	15.9	15.7
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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