

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: P333204-927

Luminaire Tested: **S125DIP-S610D1205U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333204-927
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-S610D1205U927-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5406.0 lumens
Efficiency: N/A
Efficacy: 109.4 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: Semi-Indirect

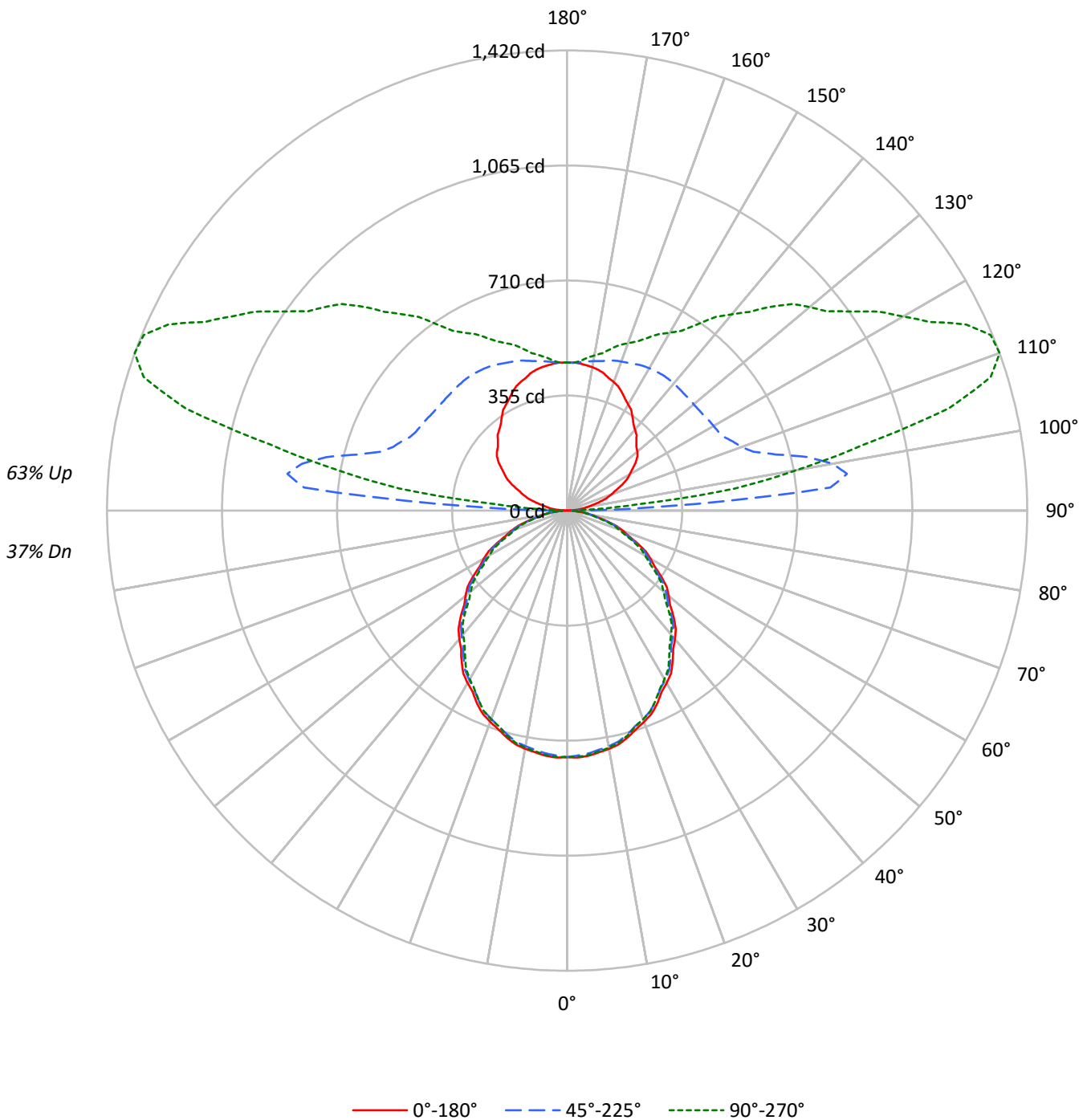
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37
1	95	90	87	83	86	82	79	76	66	64	62	52	50	49	39	38	37	31
2	86	79	73	68	78	72	67	62	58	54	51	46	43	41	34	32	31	26
3	79	69	62	56	71	63	57	52	51	47	43	40	37	35	30	28	26	22
4	72	61	54	48	65	56	49	44	45	41	37	36	32	30	27	25	23	19
5	66	54	47	41	59	50	43	38	41	35	31	32	28	26	24	22	20	16
6	61	49	41	35	55	45	38	33	36	31	27	29	25	22	22	19	17	14
7	56	44	36	31	51	40	33	28	33	28	24	26	23	20	20	17	15	13
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	10
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4914	4914	4914
5°	4924	4877	4909
10°	4894	4844	4871
15°	4841	4785	4805
20°	4766	4704	4712
25°	4684	4606	4603
30°	4583	4502	4480
35°	4475	4389	4328
40°	4364	4268	4207
45°	4244	4156	4074
50°	4112	4022	3900
55°	3985	3869	3762
60°	3834	3716	3584
65°	3651	3533	3412
70°	3478	3320	3206
75°	3169	3064	2959
80°	2819	2775	2708
85°	2453	2497	2364



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	1.3
10°-20°	202.6	3.7
20°-30°	299.2	5.5
30°-40°	349.1	6.5
40°-50°	350.6	6.5
50°-60°	307.8	5.7
60°-70°	229.3	4.2
70°-80°	131.1	2.4
80°-90°	40.7	0.8
90°-100°	330.9	6.1
100°-110°	711.4	13.2
110°-120°	667.6	12.3
120°-130°	541.1	10.0
130°-140°	434.2	8.0
140°-150°	327.7	6.1
150°-160°	230.6	4.3
160°-170°	136.0	2.5
170°-180°	44.2	0.8
0°-30°	573.6	10.6
0°-40°	922.7	17.1
0°-60°	1581.1	29.2
0°-90°	1982.2	36.7
90°-120°	1710.0	31.6
90°-150°	3013.0	55.7
90°-180°	3424.0	63.3
0°-180°	5406.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	761	761	761	761	761	
5°	760	758	752	757	757	72
15°	724	722	716	719	719	204
25°	657	654	646	648	646	302
35°	568	565	557	554	549	355
45°	465	462	455	448	446	358
55°	354	352	344	338	334	316
65°	239	237	231	226	223	237
75°	127	126	123	121	119	135
85°	33	34	34	33	32	37
90°	1	8	15	19	21	4
95°	30	90	816	370	216	32
105°	104	145	667	1314	1220	110
115°	186	224	536	1155	1359	183
125°	258	302	514	919	1071	229
135°	302	363	510	770	889	234
145°	352	403	512	637	701	220
155°	401	432	499	564	588	185
165°	438	450	479	508	516	123
175°	456	456	459	465	463	43
180°	456	456	456	456	456	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8
2.5°	762.7	762.4	762.1	761.8	761.4	760.7	759.7	758.6	757.6	756.5	757.6
5°	759.6	759.3	759.1	758.8	758.5	757.7	756.4	755.0	753.7	752.3	753.6
7.5°	752.6	752.3	752.1	751.8	751.5	750.7	749.2	747.7	746.2	744.8	745.9
10°	746.3	746.1	745.8	745.5	745.3	744.4	742.9	741.5	740.0	738.6	739.6
12.5°	738.6	738.2	737.7	737.2	736.7	735.8	734.4	733.1	731.7	730.3	731.2
15°	724.1	723.7	723.3	722.9	722.5	721.5	720.1	718.6	717.1	715.7	716.3
17.5°	707.3	706.8	706.2	705.6	705.0	703.9	702.4	700.8	699.3	697.8	698.6
20°	693.4	693.1	692.8	692.6	692.3	691.3	689.6	687.9	686.1	684.4	685.3
22.5°	679.4	678.9	678.4	677.9	677.5	676.4	674.8	673.2	671.5	669.9	670.5
25°	657.3	656.6	655.9	655.3	654.6	653.4	651.6	649.9	648.2	646.4	646.7
27.5°	631.4	631.0	630.6	630.2	629.8	628.7	626.9	625.1	623.3	621.5	621.5
30°	614.5	614.1	613.7	613.3	612.9	611.7	609.7	607.7	605.7	603.7	603.4
32.5°	596.2	595.6	595.0	594.4	593.7	592.6	590.8	589.0	587.2	585.4	584.9
35°	567.6	567.0	566.5	566.0	565.5	564.3	562.4	560.5	558.6	556.7	556.1
37.5°	537.8	537.2	536.5	535.8	535.2	533.9	532.2	530.4	528.6	526.9	525.9
40°	517.6	517.0	516.3	515.6	514.9	513.7	511.8	509.9	508.0	506.2	505.0
42.5°	496.0	495.4	494.8	494.2	493.7	492.5	490.6	488.8	486.9	485.0	483.9
45°	464.7	464.1	463.6	463.0	462.6	461.4	459.9	458.3	456.6	455.0	453.4
47.5°	430.9	430.9	431.0	431.0	431.0	430.1	428.2	426.3	424.4	422.4	420.8
50°	409.3	408.8	408.4	408.1	407.7	406.7	405.0	403.5	401.9	400.3	398.5
52.5°	387.1	386.8	386.6	386.3	386.0	384.9	383.3	381.5	379.9	378.1	376.6
55°	353.9	353.5	353.1	352.7	352.3	351.2	349.3	347.5	345.5	343.6	342.5
57.5°	318.9	318.7	318.5	318.2	318.1	317.1	315.5	313.9	312.4	310.9	309.3
60°	296.8	296.2	295.6	295.1	294.6	293.6	292.2	290.7	289.1	287.7	286.4
62.5°	273.6	273.2	272.7	272.4	271.9	271.1	269.8	268.5	267.3	266.0	264.6
65°	238.9	238.7	238.4	238.1	237.9	237.0	235.5	234.1	232.6	231.2	229.9
67.5°	205.3	204.8	204.2	203.7	203.1	202.3	201.2	200.1	199.0	197.9	196.9
70°	184.2	183.5	182.8	182.2	181.5	180.5	179.4	178.2	177.0	175.8	174.9
72.5°	161.1	160.6	160.2	159.7	159.2	158.6	157.9	157.1	156.3	155.5	154.6
75°	127.0	126.7	126.4	126.2	126.0	125.5	124.8	124.1	123.4	122.8	122.4
77.5°	95.6	95.5	95.4	95.2	95.1	94.9	94.5	94.2	93.8	93.4	93.2
80°	75.8	75.8	75.8	75.8	75.8	75.7	75.4	75.2	74.9	74.6	74.5
82.5°	58.5	58.3	58.1	57.8	57.7	57.5	57.4	57.4	57.4	57.3	57.0
85°	33.1	33.3	33.4	33.5	33.7	33.7	33.7	33.7	33.7	33.7	33.6
87.5°	13.2	13.4	13.7	14.1	14.5	14.8	14.9	15.1	15.2	15.4	15.7
90°	1.0	1.8	3.6	5.5	7.4	9.2	10.1	12.0	12.9	14.7	15.7
92.5°	11.2	13.6	21.4	32.8	48.6	75.5	125.7	210.1	301.6	296.8	240.3
95°	30.3	31.3	38.7	48.8	69.0	110.4	209.0	411.5	665.5	815.6	798.0
97.5°	50.5	51.6	56.7	66.9	85.1	114.9	180.1	328.4	594.3	870.9	1009.8
100°	64.4	66.3	69.9	80.1	97.6	125.2	178.6	298.3	530.2	831.2	1061.3
102.5°	79.9	81.0	84.0	94.8	110.8	137.7	185.2	285.7	481.6	761.2	1030.4
105°	104.0	104.0	108.6	117.8	132.5	158.4	198.8	280.7	434.4	667.3	931.5
107.5°	127.5	129.4	133.8	141.4	156.7	179.8	219.0	289.2	414.5	602.7	830.7
110°	144.5	146.4	150.0	158.4	172.1	196.1	233.8	297.3	408.7	572.5	773.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	161.4	163.3	166.2	174.5	188.3	211.5	247.8	307.6	408.7	554.8	730.5
115°	185.9	187.7	190.5	198.8	212.6	235.7	269.7	323.1	411.5	535.8	683.9
117.5°	208.0	210.8	213.7	222.0	237.7	259.9	292.2	340.8	417.6	526.3	656.1
120°	222.8	225.5	229.2	237.5	253.1	276.2	308.4	352.5	423.4	521.9	640.6
122.5°	238.2	240.3	243.2	251.4	268.6	291.6	323.8	365.8	428.6	518.2	627.4
125°	257.7	259.6	264.2	272.4	289.9	313.9	344.3	383.8	437.2	513.7	609.3
127.5°	273.0	275.8	281.7	292.2	310.8	334.7	363.9	400.4	446.9	511.4	592.8
130°	282.6	285.3	292.7	304.7	324.0	347.9	376.4	411.5	452.9	509.9	581.8
132.5°	289.9	293.4	302.3	315.8	335.8	359.7	388.2	421.0	459.5	509.9	572.9
135°	301.9	305.6	316.6	331.4	350.7	375.6	404.1	434.4	468.5	509.9	562.4
137.5°	317.0	319.8	330.1	344.8	363.8	389.4	415.3	444.4	476.8	511.0	553.0
140°	325.8	328.6	339.7	354.4	371.9	396.7	423.4	451.1	480.5	511.7	548.6
142.5°	336.1	338.2	348.5	363.2	380.0	403.4	428.6	454.7	482.7	512.5	544.9
145°	351.6	353.5	362.7	375.6	392.1	413.3	437.2	460.3	485.1	511.7	539.4
147.5°	367.8	368.9	376.8	388.8	403.1	421.8	442.8	463.6	486.0	509.4	533.7
150°	377.4	379.2	385.7	397.7	410.5	426.2	446.4	465.8	486.0	507.2	529.3
152.5°	387.7	388.8	394.5	405.0	417.2	431.3	450.1	467.2	485.3	504.2	524.1
155°	401.3	401.3	406.9	416.1	425.2	438.2	453.8	468.5	483.2	498.9	515.5
157.5°	413.5	413.3	417.7	425.6	433.7	443.5	456.9	469.4	480.9	493.4	507.4
160°	421.6	420.6	424.4	430.8	438.2	446.4	458.4	469.4	478.6	489.7	500.7
162.5°	428.2	427.3	430.9	436.7	442.6	449.4	459.9	468.7	476.4	485.3	494.9
165°	438.2	436.3	439.1	443.7	447.3	452.9	460.3	467.6	473.1	478.6	486.0
167.5°	444.8	443.9	445.5	448.1	450.7	454.2	460.3	465.4	467.9	472.2	477.4
170°	449.2	448.3	449.2	451.1	452.9	455.7	460.3	463.9	465.8	468.5	472.2
172.5°	452.2	450.5	451.4	453.2	454.3	455.7	459.5	462.5	462.8	464.1	467.1
175°	455.7	453.8	454.7	455.7	455.7	455.7	458.4	460.3	459.3	459.3	460.3
177.5°	457.3	455.8	455.8	456.5	455.8	455.8	457.3	458.0	456.5	456.5	457.3
180°	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8
2.5°	758.6	759.7	760.7	761.2	761.1	761.0	760.9	760.8
5°	754.8	756.0	757.2	757.7	757.6	757.5	757.3	757.2
7.5°	747.1	748.3	749.5	750.0	749.9	749.7	749.6	749.5
10°	740.7	741.7	742.8	743.3	743.1	743.0	742.8	742.8
12.5°	732.1	732.9	733.7	734.2	734.1	734.1	734.1	734.0
15°	717.0	717.6	718.4	718.7	718.7	718.7	718.7	718.7
17.5°	699.5	700.3	701.2	701.2	700.5	699.9	699.3	698.5
20°	686.2	687.1	688.1	688.2	687.5	686.9	686.2	685.6
22.5°	671.1	671.8	672.4	672.5	672.0	671.5	671.1	670.7
25°	647.0	647.2	647.5	647.5	647.1	646.7	646.3	645.9
27.5°	621.6	621.7	621.7	621.5	621.2	620.8	620.4	620.0
30°	603.2	602.9	602.6	602.3	601.9	601.5	601.1	600.7
32.5°	584.5	583.9	583.4	582.9	582.2	581.5	580.7	580.0
35°	555.4	554.8	554.1	553.2	552.2	551.0	550.0	548.9
37.5°	524.9	523.9	522.9	522.1	521.5	520.9	520.3	519.7
40°	503.7	502.6	501.4	500.6	500.2	499.8	499.4	499.0
42.5°	482.8	481.7	480.6	479.7	479.1	478.6	477.9	477.3
45°	451.8	450.2	448.6	447.6	447.2	446.8	446.4	446.0
47.5°	419.1	417.5	415.9	414.6	413.7	412.7	411.8	410.8
50°	396.8	395.1	393.3	392.0	391.0	390.1	389.1	388.2
52.5°	375.0	373.5	372.0	370.7	369.7	368.6	367.6	366.5
55°	341.3	340.1	338.9	337.8	336.8	335.9	335.0	334.1
57.5°	307.7	306.2	304.6	303.6	303.1	302.5	302.1	301.6
60°	285.0	283.7	282.3	281.2	280.3	279.3	278.4	277.5
62.5°	263.2	261.7	260.2	259.2	258.5	257.7	257.0	256.3
65°	228.7	227.5	226.3	225.5	224.9	224.3	223.9	223.3
67.5°	195.9	194.9	193.8	193.1	192.8	192.5	192.2	191.9
70°	174.1	173.3	172.5	171.9	171.3	170.8	170.2	169.8
72.5°	153.7	152.8	151.9	151.1	150.6	150.1	149.6	149.0
75°	122.0	121.6	121.2	120.7	120.2	119.6	119.1	118.6
77.5°	92.9	92.7	92.4	92.1	91.7	91.4	91.0	90.6
80°	74.4	74.2	74.1	73.9	73.6	73.4	73.1	72.8
82.5°	56.8	56.6	56.3	56.2	56.2	56.1	56.0	56.0
85°	33.4	33.3	33.2	33.0	32.7	32.4	32.2	31.9
87.5°	15.8	16.0	16.2	16.5	16.2	16.0	16.0	15.8
90°	16.6	17.5	18.4	20.3	20.3	20.3	21.2	21.2
92.5°	163.1	118.4	89.1	75.5	63.7	61.5	60.2	58.7
95°	661.8	521.9	408.7	331.4	266.0	238.4	231.1	216.3
97.5°	985.6	887.6	777.3	669.7	612.8	561.3	534.6	522.8
100°	1132.2	1087.1	992.3	896.5	833.1	766.8	732.7	718.0
102.5°	1181.5	1209.3	1163.9	1099.1	1031.1	984.0	947.0	936.0
105°	1152.5	1278.6	1319.1	1308.9	1279.5	1249.1	1230.7	1219.6
107.5°	1048.6	1216.9	1320.9	1369.0	1383.9	1383.7	1377.6	1370.2
110°	972.0	1146.9	1276.7	1354.9	1396.4	1413.9	1420.3	1420.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	911.6	1077.7	1208.9	1301.2	1361.8	1391.8	1407.8	1414.4
115°	835.8	978.5	1104.5	1204.9	1276.7	1320.9	1346.6	1358.6
117.5°	786.8	909.8	1018.4	1110.5	1182.3	1228.0	1253.5	1260.8
120°	760.3	870.8	972.0	1053.0	1121.2	1165.3	1190.2	1197.5
122.5°	740.5	842.8	933.0	1008.8	1069.6	1110.1	1135.0	1141.6
125°	711.5	805.4	885.5	951.8	1003.3	1041.1	1061.3	1070.6
127.5°	682.1	769.7	844.5	906.5	953.2	986.6	1005.8	1009.8
130°	663.7	744.7	816.5	876.3	922.3	952.7	971.1	976.6
132.5°	645.2	721.1	786.2	843.9	889.9	920.3	937.2	943.5
135°	621.3	684.8	743.8	796.2	836.7	867.1	883.7	889.2
137.5°	601.1	652.4	701.4	746.0	782.2	809.8	825.1	831.2
140°	590.0	633.3	675.7	714.3	748.4	772.3	786.1	790.7
142.5°	580.4	617.1	653.6	687.1	716.0	736.2	749.2	753.1
145°	567.9	596.4	625.0	649.8	671.9	687.6	697.8	701.4
147.5°	556.2	579.3	601.3	620.0	637.5	650.1	655.9	657.6
150°	549.5	569.8	587.2	603.8	617.7	628.7	632.4	633.3
152.5°	542.2	560.2	576.2	589.1	600.7	609.5	613.2	614.2
155°	531.1	545.8	558.7	568.9	578.1	584.5	587.2	588.2
157.5°	520.1	532.2	542.2	550.1	557.2	562.6	565.1	565.0
160°	512.7	521.9	531.1	537.6	544.0	548.6	550.5	549.5
162.5°	504.6	513.1	520.8	526.5	531.5	535.4	535.8	535.5
165°	493.4	499.8	505.3	509.9	513.7	515.5	515.5	515.5
167.5°	482.7	487.0	491.2	494.5	496.3	498.0	497.3	497.1
170°	476.8	479.6	482.4	484.2	486.0	487.0	487.0	486.0
172.5°	470.2	472.9	475.0	476.1	476.4	478.1	476.7	475.7
175°	463.0	463.0	464.9	464.9	464.9	465.8	463.9	463.0
177.5°	458.0	458.8	458.8	458.8	458.0	458.8	456.5	456.5
180°	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5

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