

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: P333529-930

Luminaire Tested: **S125RDIP-S610D590U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333529-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S610D590U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3865.9 lumens
Efficiency: N/A
Efficacy: 117.9 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: General Diffuse

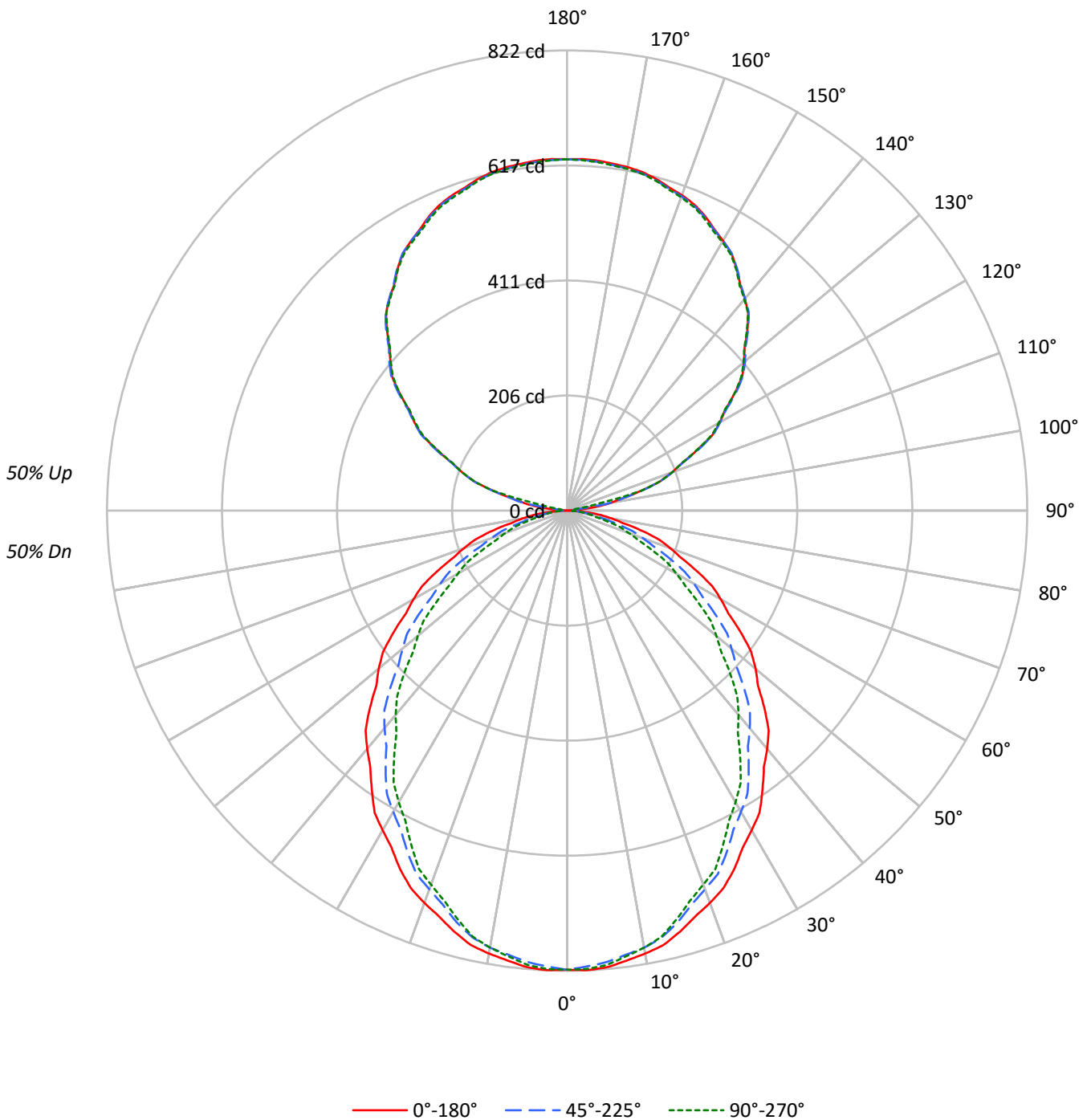
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	94	90	87	90	87	83	81	73	71	69	61	60	58	50	49	48	43
2	89	82	76	71	82	76	71	66	65	61	57	54	51	49	44	42	41	36
3	82	72	65	59	75	67	61	56	57	52	49	48	44	42	39	37	35	31
4	75	64	56	50	69	60	53	47	51	46	41	43	39	36	35	33	30	27
5	69	57	49	43	63	53	46	41	46	40	36	39	34	31	32	29	26	23
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	20
7	59	46	39	33	54	43	36	31	37	32	28	32	27	24	27	23	21	18
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	23	19	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	21	18	15	13

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	2.0
10°-20°	215.5	5.6
20°-30°	312.5	8.1
30°-40°	356.2	9.2
40°-50°	347.2	9.0
50°-60°	292.3	7.6
60°-70°	204.9	5.3
70°-80°	105.3	2.7
80°-90°	27.9	0.7
90°-100°	22.8	0.6
100°-110°	140.5	3.6
110°-120°	254.9	6.6
120°-130°	327.1	8.5
130°-140°	351.8	9.1
140°-150°	330.3	8.5
150°-160°	267.1	6.9
160°-170°	172.8	4.5
170°-180°	59.6	1.5
0°-30°	605.2	15.7
0°-40°	961.4	24.9
0°-60°	1600.8	41.4
0°-90°	1938.9	50.2
90°-120°	418.2	10.8
90°-150°	1427.4	36.9
90°-180°	1927.0	49.8
0°-180°	3865.9	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°	0	4	7	10	11	3
95°	26	24	7	10	10	34
105°	137	138	139	139	138	145
115°	257	259	260	258	255	254
125°	365	368	368	367	365	326
135°	455	458	457	456	454	351
145°	528	529	529	529	526	330
155°	582	579	580	581	577	268
165°	614	611	611	614	610	173
175°	628	625	625	628	625	60
180°	628	628	628	628	628	



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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°	11.5	10.9	10.3	9.7	9.0	8.8	8.8	8.9	8.9	8.9	9.0
90°	0.5	1.3	2.1	2.9	3.8	4.6	5.3	6.0	6.7	7.4	8.0
92.5°	7.2	6.6	6.0	5.5	4.8	4.9	5.5	6.2	6.8	7.4	8.0
95°	26.5	26.2	25.9	25.6	25.3	23.2	19.2	15.3	11.3	7.4	8.0
97.5°	55.4	55.9	56.5	57.0	57.6	54.0	46.2	38.4	30.7	22.9	20.0
100°	77.7	78.0	78.3	78.6	78.9	79.2	79.7	80.1	80.6	81.0	65.6
102.5°	100.4	100.8	101.2	101.6	101.9	102.2	102.5	102.8	103.1	103.3	100.4
105°	136.7	137.1	137.6	138.0	138.4	138.6	138.6	138.6	138.6	138.6	138.6
107.5°	174.6	174.6	174.6	174.6	174.6	174.6	174.8	175.0	175.3	175.5	175.5
110°	199.1	199.1	199.1	199.1	199.1	199.2	199.4	199.6	199.8	200.0	199.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	222.2	222.4	222.7	222.9	223.1	223.3	223.5	223.6	223.7	223.8	223.5
115°	256.7	257.3	257.8	258.3	258.9	259.2	259.3	259.3	259.4	259.6	259.2
117.5°	292.6	292.5	292.5	292.5	292.5	292.7	293.1	293.5	293.8	294.2	293.8
120°	315.0	314.8	314.7	314.6	314.5	314.6	315.0	315.2	315.5	315.8	315.6
122.5°	334.6	335.0	335.4	335.8	336.2	336.5	336.6	336.8	336.9	337.0	336.9
125°	365.2	365.9	366.6	367.3	368.0	368.4	368.4	368.4	368.4	368.4	368.0
127.5°	394.3	394.8	395.3	395.8	396.3	396.6	396.5	396.5	396.4	396.3	396.1
130°	412.1	412.6	413.2	413.7	414.2	414.5	414.6	414.7	414.8	414.9	414.6
132.5°	430.0	430.6	431.2	431.8	432.4	432.6	432.4	432.1	431.9	431.7	431.6
135°	455.4	456.0	456.6	457.2	457.9	458.1	457.9	457.6	457.5	457.2	457.1
137.5°	478.7	479.3	479.8	480.4	480.9	481.1	480.9	480.7	480.5	480.3	480.4
140°	494.0	494.2	494.4	494.6	494.8	494.9	494.8	494.6	494.6	494.5	494.6
142.5°	507.8	507.9	508.0	508.2	508.3	508.4	508.6	508.7	508.8	509.0	509.0
145°	528.0	528.2	528.4	528.6	528.8	528.9	528.9	528.9	528.9	528.9	529.0
147.5°	545.6	545.6	545.5	545.5	545.4	545.5	545.6	545.8	545.8	546.0	546.2
150°	556.8	556.6	556.4	556.2	556.0	556.0	556.2	556.4	556.6	556.8	557.0
152.5°	567.6	567.1	566.7	566.2	565.7	565.7	565.8	566.1	566.2	566.5	566.7
155°	581.5	580.8	580.2	579.6	578.9	578.8	578.9	579.2	579.4	579.6	579.9
157.5°	592.2	591.7	591.4	591.0	590.7	590.5	590.5	590.5	590.5	590.6	590.9
160°	599.6	599.0	598.3	597.7	597.1	596.9	597.0	597.0	597.1	597.3	597.7
162.5°	605.5	605.0	604.3	603.6	603.1	602.8	602.9	603.0	603.1	603.2	603.8
165°	613.5	612.9	612.3	611.7	611.1	610.8	610.9	611.0	611.1	611.2	611.8
167.5°	619.5	618.9	618.2	617.6	616.9	616.7	616.8	616.9	616.9	617.1	617.8
170°	622.9	622.2	621.4	620.7	620.0	619.6	619.7	619.9	620.0	620.0	620.9
172.5°	625.1	624.4	623.6	622.9	622.2	621.9	622.1	622.3	622.5	622.6	623.4
175°	627.5	626.9	626.2	625.7	625.0	624.8	624.8	625.0	625.1	625.2	626.0
177.5°	628.6	628.1	627.6	627.1	626.6	626.4	626.5	626.6	626.6	626.7	627.4
180°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5



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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°	9.1	9.2	9.4	9.4	9.3	9.3	9.2	9.1
90°	8.5	9.0	9.5	9.9	10.3	10.5	10.8	11.2
92.5°	8.5	9.0	9.5	9.9	9.9	10.1	10.3	10.4
95°	8.5	9.0	9.5	9.8	9.8	9.8	9.8	9.8
97.5°	17.0	14.1	11.3	9.8	9.8	9.8	9.8	9.8
100°	50.1	34.7	19.3	11.4	11.0	10.6	10.2	9.8
102.5°	97.4	94.5	91.6	86.7	79.6	72.6	65.6	58.5
105°	138.6	138.6	138.6	138.6	138.4	138.4	138.3	138.1
107.5°	175.5	175.5	175.5	175.4	175.1	174.8	174.5	174.1
110°	199.4	199.1	198.8	198.7	198.8	198.9	199.0	199.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	223.1	222.7	222.3	222.0	221.8	221.7	221.6	221.4
115°	258.7	258.3	257.9	257.4	256.7	256.2	255.5	254.9
117.5°	293.2	292.6	292.1	291.7	291.5	291.1	290.9	290.7
120°	315.4	315.2	315.0	314.6	314.1	313.6	313.1	312.6
122.5°	336.6	336.5	336.2	335.8	335.3	334.6	334.0	333.5
125°	367.6	367.1	366.7	366.4	366.1	365.7	365.5	365.2
127.5°	395.8	395.7	395.4	394.9	394.1	393.4	392.6	391.8
130°	414.3	414.0	413.7	413.3	412.8	412.2	411.7	411.2
132.5°	431.5	431.5	431.5	431.1	430.6	430.1	429.6	429.1
135°	456.8	456.6	456.4	456.0	455.4	454.8	454.1	453.6
137.5°	480.4	480.5	480.5	480.2	479.7	479.2	478.7	478.1
140°	494.9	495.0	495.3	495.0	494.5	493.8	493.3	492.6
142.5°	509.1	509.1	509.2	508.8	508.3	507.6	507.0	506.4
145°	529.1	529.2	529.3	529.0	528.4	527.8	527.2	526.5
147.5°	546.3	546.4	546.5	546.2	545.4	544.7	544.0	543.2
150°	557.2	557.4	557.6	557.3	556.5	555.6	554.8	554.0
152.5°	566.9	567.1	567.3	567.0	566.3	565.6	564.8	564.0
155°	580.2	580.5	580.8	580.6	579.8	578.9	578.1	577.2
157.5°	591.3	591.6	591.9	591.7	590.8	590.0	589.1	588.3
160°	598.1	598.5	598.9	598.7	597.9	597.0	596.2	595.4
162.5°	604.4	605.0	605.5	605.4	604.5	603.6	602.7	601.7
165°	612.5	613.1	613.7	613.6	612.8	612.0	611.1	610.3
167.5°	618.6	619.3	620.0	620.0	619.1	618.1	617.2	616.2
170°	621.7	622.6	623.4	623.3	622.4	621.4	620.5	619.6
172.5°	624.1	624.9	625.7	625.6	624.6	623.7	622.7	621.8
175°	626.8	627.6	628.5	628.4	627.5	626.6	625.7	624.7
177.5°	627.9	628.5	629.1	629.0	628.4	627.7	627.0	626.4
180°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5

(END OF REPORT)