

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: P333379-930

Luminaire Tested: **S125DIW-S610D770U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333379-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S610D770U930-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4128.9 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

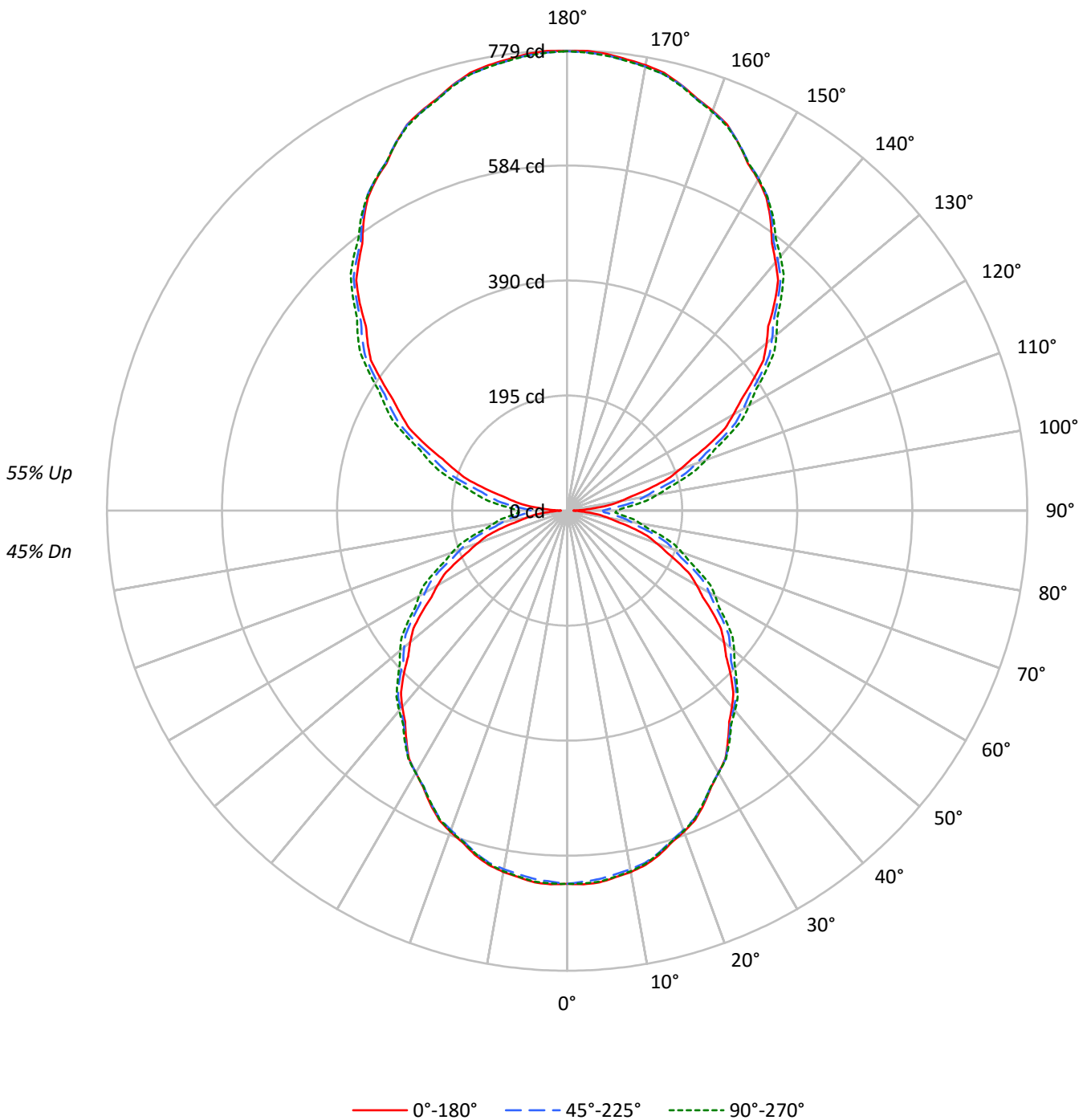
Input Watts (W): 37.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	91	87	83	88	84	80	77	69	67	64	56	54	53	44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	31	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	27	25	21
5	66	55	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	24	21	19	16
7	56	44	36	30	51	41	33	28	34	29	24	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	20	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	14	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	18	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4081	4081	4081
5°	4089	4005	4018
10°	4060	3934	3927
15°	4011	3849	3813
20°	3946	3742	3698
25°	3869	3629	3558
30°	3775	3505	3429
35°	3687	3390	3311
40°	3598	3269	3193
45°	3497	3166	3089
50°	3401	3054	2996
55°	3285	2948	2886
60°	3159	2827	2775
65°	3027	2702	2650
70°	2876	2529	2521
75°	2639	2363	2363
80°	2328	2164	2190
85°	2041	2028	2136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	1.4
10°-20°	169.6	4.1
20°-30°	252.2	6.1
30°-40°	298.8	7.2
40°-50°	308.9	7.5
50°-60°	284.6	6.9
60°-70°	230.0	5.6
70°-80°	154.0	3.7
80°-90°	81.6	2.0
90°-100°	96.9	2.3
100°-110°	186.9	4.5
110°-120°	282.7	6.8
120°-130°	355.5	8.6
130°-140°	389.7	9.4
140°-150°	377.7	9.1
150°-160°	316.3	7.7
160°-170°	210.2	5.1
170°-180°	73.6	1.8
0°-30°	481.6	11.7
0°-40°	780.4	18.9
0°-60°	1373.8	33.3
0°-90°	1839.5	44.6
90°-120°	566.5	13.7
90°-150°	1689.3	40.9
90°-180°	2289.0	55.4
0°-180°	4128.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	632	630	626	631	631	60
15°	603	604	600	603	601	170
25°	548	550	546	548	546	252
35°	474	478	477	479	479	297
45°	391	398	401	405	406	302
55°	300	310	320	327	330	268
65°	207	221	236	245	248	205
75°	114	130	150	162	165	121
85°	34	55	76	89	95	36
90°	10	35	60	77	84	9
95°	47	65	92	109	115	48
105°	144	157	179	194	201	153
115°	265	272	289	299	302	262
125°	383	387	399	408	410	343
135°	496	499	504	512	513	382
145°	600	602	604	607	608	375
155°	686	686	687	689	686	316
165°	746	745	746	748	744	210
175°	776	774	774	777	773	74
180°	778	778	778	778	778	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	633.3	633.1	632.9	632.7	632.4	631.9	631.2	630.4	629.7	628.8	629.7
5°	631.9	631.5	631.3	631.0	630.7	630.1	629.2	628.2	627.2	626.2	627.4
7.5°	626.2	626.1	626.1	625.9	625.8	625.3	624.3	623.3	622.3	621.3	622.2
10°	621.3	621.3	621.3	621.3	621.3	620.8	619.6	618.6	617.4	616.4	617.3
12.5°	614.4	614.5	614.6	614.7	614.8	614.4	613.5	612.7	611.8	610.9	611.6
15°	603.3	603.5	603.6	603.7	603.9	603.5	602.5	601.5	600.6	599.7	600.5
17.5°	589.0	589.2	589.5	589.8	590.1	589.7	588.8	587.8	586.9	585.9	586.5
20°	578.5	578.9	579.1	579.4	579.7	579.4	578.4	577.4	576.4	575.4	575.8
22.5°	566.7	567.2	567.7	568.2	568.7	568.3	567.3	566.2	565.2	564.1	564.6
25°	548.2	548.6	549.0	549.4	549.8	549.7	548.9	548.0	547.1	546.3	546.9
27.5°	527.7	528.2	528.9	529.5	530.1	529.9	529.0	528.1	527.1	526.2	526.5
30°	512.3	513.1	514.0	514.8	515.6	515.6	514.8	514.0	513.1	512.3	512.6
32.5°	498.4	499.1	499.9	500.6	501.2	501.3	500.8	500.1	499.5	498.9	499.2
35°	474.5	475.5	476.5	477.4	478.3	478.7	478.3	477.8	477.4	477.0	477.4
37.5°	450.6	451.5	452.3	453.2	454.1	454.4	454.4	454.2	454.0	454.0	454.4
40°	434.2	435.4	436.4	437.6	438.6	439.1	439.0	438.9	438.7	438.5	439.1
42.5°	416.4	417.8	419.2	420.7	422.2	423.0	423.3	423.6	423.9	424.2	424.9
45°	390.9	392.4	393.9	395.4	397.0	398.0	398.8	399.4	400.1	400.8	401.8
47.5°	364.8	366.2	367.5	368.9	370.4	371.6	372.8	374.0	375.2	376.3	377.8
50°	346.9	348.4	349.9	351.5	352.9	354.5	356.0	357.5	359.0	360.5	362.1
52.5°	328.1	329.9	331.7	333.6	335.4	337.3	339.2	341.0	342.8	344.6	346.3
55°	300.4	302.6	304.8	307.0	309.2	311.4	313.6	315.8	318.0	320.2	321.8
57.5°	272.2	274.8	277.4	280.1	282.7	285.4	287.9	290.4	292.9	295.5	297.2
60°	253.4	256.1	258.9	261.6	264.4	267.1	269.9	272.6	275.4	278.1	280.2
62.5°	235.1	237.7	240.5	243.3	246.1	248.9	251.8	254.9	257.8	260.8	263.1
65°	206.9	210.1	213.2	216.4	219.6	222.8	226.1	229.4	232.7	236.0	238.1
67.5°	180.4	183.4	186.5	189.6	192.6	195.8	199.2	202.5	205.9	209.3	211.7
70°	161.0	164.2	167.4	170.6	173.7	177.1	180.7	184.3	187.8	191.4	194.0
72.5°	142.2	145.5	148.8	152.1	155.3	158.9	162.8	166.7	170.6	174.6	177.4
75°	114.0	117.6	121.2	124.7	128.3	132.3	136.7	141.1	145.5	149.9	152.6
77.5°	86.8	91.0	95.1	99.2	103.4	107.5	111.8	116.0	120.3	124.5	127.5
80°	70.0	74.1	78.3	82.4	86.5	90.9	95.6	100.3	104.9	109.7	112.7
82.5°	54.6	58.9	63.3	67.7	72.1	76.6	81.4	86.2	91.0	95.8	98.7
85°	34.1	38.6	43.1	47.7	52.3	56.9	61.7	66.5	71.3	76.2	79.2
87.5°	19.5	24.1	28.7	33.3	37.9	42.6	47.5	52.4	57.3	62.1	65.5
90°	10.5	16.0	21.4	27.0	32.4	38.0	43.6	49.2	54.9	60.5	64.3
92.5°	23.6	28.4	33.2	38.1	42.9	48.3	54.2	60.2	66.1	72.1	76.0
95°	47.4	51.2	55.1	58.9	62.8	67.8	73.8	79.7	85.8	91.8	95.8
97.5°	72.6	76.0	79.3	82.7	86.0	90.8	97.2	103.5	110.0	116.3	120.1
100°	91.6	94.4	97.3	100.2	103.1	107.6	113.8	119.9	126.1	132.2	136.3
102.5°	111.9	115.1	118.3	121.5	124.7	128.9	134.1	139.3	144.5	149.6	153.8
105°	143.6	146.4	149.3	152.2	155.1	159.0	163.9	168.8	173.8	178.7	182.3
107.5°	178.6	181.2	183.8	186.3	188.8	192.4	197.0	201.5	206.1	210.8	213.9
110°	202.8	205.2	207.5	209.9	212.1	215.4	219.7	224.0	228.2	232.4	235.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	228.0	229.7	231.4	233.0	234.7	237.7	241.9	246.2	250.5	254.7	257.4
115°	264.6	266.1	267.6	269.0	270.6	273.3	277.1	281.0	284.8	288.6	291.0
117.5°	301.3	302.1	303.0	303.9	304.8	307.0	310.6	314.2	317.9	321.5	323.9
120°	324.5	325.5	326.6	327.8	328.8	331.0	334.3	337.6	340.9	344.2	346.6
122.5°	349.2	349.6	350.0	350.5	350.9	352.8	356.2	359.6	363.1	366.5	368.6
125°	383.2	383.8	384.5	385.1	385.9	387.6	390.5	393.4	396.3	399.2	401.1
127.5°	418.9	419.1	419.5	419.8	420.1	421.5	424.0	426.3	428.8	431.2	433.1
130°	440.7	441.2	441.7	442.2	442.8	444.2	446.4	448.6	450.8	453.0	454.8
132.5°	461.9	463.0	464.1	465.2	466.3	467.5	469.0	470.3	471.8	473.2	475.0
135°	496.4	497.0	497.7	498.3	499.0	499.9	501.0	502.1	503.2	504.3	506.1
137.5°	528.6	529.3	529.9	530.7	531.3	532.1	532.8	533.5	534.3	535.1	536.9
140°	548.9	549.7	550.3	551.0	551.6	552.3	552.8	553.3	553.9	554.4	556.2
142.5°	569.8	570.2	570.7	571.1	571.6	572.1	572.7	573.2	573.7	574.2	575.7
145°	600.4	600.8	601.2	601.6	602.0	602.4	602.8	603.2	603.6	604.1	604.7
147.5°	628.1	628.4	628.7	629.0	629.3	629.6	629.9	630.2	630.6	630.9	631.4
150°	647.0	646.9	646.7	646.6	646.5	646.7	647.2	647.8	648.2	648.8	648.8
152.5°	662.5	662.7	662.8	663.1	663.2	663.4	663.7	663.9	664.1	664.3	664.6
155°	686.3	686.3	686.3	686.3	686.3	686.4	686.6	686.6	686.8	687.0	687.5
157.5°	707.7	707.4	707.0	706.8	706.5	706.4	706.5	706.6	706.8	706.9	707.4
160°	720.2	719.8	719.4	719.0	718.6	718.4	718.6	718.8	718.8	719.0	719.6
162.5°	731.4	731.1	730.8	730.5	730.2	730.0	730.1	730.1	730.1	730.2	730.8
165°	746.2	746.0	745.8	745.4	745.2	745.1	745.3	745.3	745.5	745.7	746.2
167.5°	758.9	758.3	757.7	757.2	756.7	756.4	756.4	756.4	756.4	756.4	757.2
170°	765.6	765.1	764.5	764.0	763.4	763.2	763.2	763.2	763.2	763.2	764.0
172.5°	770.5	769.9	769.4	768.8	768.3	768.0	768.0	768.0	768.0	768.0	768.8
175°	775.9	775.3	774.9	774.3	773.7	773.5	773.5	773.5	773.5	773.5	774.3
177.5°	778.7	778.3	777.8	777.4	777.0	776.7	776.6	776.5	776.4	776.2	776.9
180°	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	630.4	631.2	631.9	632.3	632.2	632.1	631.9	631.9
5°	628.4	629.6	630.6	631.1	631.0	630.9	630.7	630.6
7.5°	623.2	624.2	625.2	625.6	625.4	625.3	625.2	625.0
10°	618.3	619.2	620.2	620.6	620.5	620.4	620.2	620.0
12.5°	612.4	613.1	613.9	614.1	613.7	613.3	613.0	612.6
15°	601.3	602.1	602.9	603.1	602.5	601.9	601.4	600.9
17.5°	587.2	587.7	588.4	588.6	588.2	587.9	587.6	587.3
20°	576.3	576.7	577.2	577.3	577.3	577.3	577.3	577.3
22.5°	565.1	565.7	566.1	566.2	565.9	565.6	565.2	564.9
25°	547.5	548.0	548.5	548.5	547.8	547.1	546.4	545.8
27.5°	526.9	527.3	527.7	527.7	527.5	527.3	527.0	526.8
30°	512.8	513.1	513.4	513.5	513.3	513.1	513.1	512.9
32.5°	499.5	499.7	500.0	500.1	499.9	499.8	499.7	499.5
35°	477.8	478.3	478.7	478.8	478.8	478.8	478.8	478.8
37.5°	455.0	455.6	456.2	456.4	456.3	456.2	456.2	456.2
40°	439.7	440.3	440.8	441.2	441.5	441.7	442.1	442.3
42.5°	425.5	426.2	426.8	427.2	427.3	427.3	427.4	427.5
45°	402.7	403.7	404.6	405.2	405.4	405.4	405.6	405.8
47.5°	379.2	380.6	382.0	382.9	383.2	383.4	383.8	384.1
50°	363.5	365.1	366.6	367.5	367.9	368.4	368.8	369.2
52.5°	347.9	349.5	351.1	352.1	352.5	352.7	353.0	353.4
55°	323.3	324.8	326.3	327.3	327.9	328.5	329.0	329.5
57.5°	299.0	300.7	302.4	303.5	303.9	304.4	304.8	305.2
60°	282.3	284.3	286.4	287.6	288.0	288.5	288.9	289.3
62.5°	265.4	267.7	269.9	271.3	271.8	272.4	272.9	273.5
65°	240.1	242.2	244.3	245.6	246.1	246.7	247.2	247.8
67.5°	214.3	216.8	219.2	220.9	221.6	222.3	223.1	223.7
70°	196.7	199.3	201.9	203.6	204.4	205.2	206.1	206.9
72.5°	180.3	183.0	185.9	187.6	188.3	188.8	189.5	190.0
75°	155.4	158.2	160.9	162.7	163.3	164.0	164.7	165.4
77.5°	130.5	133.6	136.6	138.4	138.9	139.5	140.1	140.6
80°	115.7	118.7	121.7	123.5	124.1	124.7	125.2	125.7
82.5°	101.6	104.5	107.5	109.4	110.4	111.4	112.3	113.3
85°	82.3	85.3	88.3	90.3	91.5	92.5	93.7	94.7
87.5°	68.7	72.1	75.3	77.5	78.6	79.6	80.6	81.7
90°	68.2	72.0	75.8	78.4	79.8	81.2	82.5	83.9
92.5°	80.0	83.9	87.8	90.4	91.7	92.9	94.2	95.5
95°	99.8	103.7	107.7	110.3	111.5	112.8	114.0	115.2
97.5°	123.8	127.7	131.4	133.9	135.0	136.1	137.1	138.3
100°	140.5	144.6	148.6	151.2	152.4	153.4	154.5	155.6
102.5°	157.8	161.9	166.0	168.7	169.9	171.0	172.3	173.5
105°	185.8	189.4	193.0	195.4	196.8	198.2	199.5	200.9
107.5°	217.0	220.1	223.2	225.2	226.1	226.9	227.7	228.5
110°	238.5	241.5	244.6	246.5	247.3	248.1	249.0	249.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	260.1	262.8	265.5	267.2	267.9	268.6	269.4	270.1
115°	293.3	295.7	298.0	299.5	300.2	300.9	301.6	302.3
117.5°	326.4	328.8	331.3	332.7	333.1	333.5	333.9	334.3
120°	348.9	351.2	353.6	354.9	355.1	355.5	355.7	356.0
122.5°	370.7	372.8	375.0	376.2	376.6	377.0	377.4	377.8
125°	403.1	405.0	406.9	408.1	408.7	409.3	409.9	410.3
127.5°	435.0	436.9	438.8	440.0	440.5	441.1	441.6	442.1
130°	456.6	458.4	460.2	461.2	461.6	462.0	462.4	462.9
132.5°	476.8	478.6	480.4	481.4	481.6	481.8	482.0	482.2
135°	507.8	509.6	511.4	512.4	512.6	512.7	512.8	513.0
137.5°	538.7	540.5	542.3	543.1	542.9	542.8	542.7	542.6
140°	558.0	559.8	561.6	562.4	562.2	562.1	562.0	561.9
142.5°	577.2	578.6	580.1	580.7	580.7	580.5	580.4	580.2
145°	605.4	606.1	606.7	607.2	607.3	607.5	607.6	607.8
147.5°	632.0	632.5	633.1	633.0	632.3	631.7	631.0	630.3
150°	648.8	648.8	648.8	648.7	648.7	648.5	648.3	648.2
152.5°	665.0	665.3	665.6	665.5	665.0	664.6	664.1	663.7
155°	688.0	688.5	689.1	689.0	688.4	687.7	687.0	686.3
157.5°	708.0	708.5	709.1	708.9	708.0	707.1	706.2	705.3
160°	720.1	720.6	721.1	721.1	720.4	719.7	719.1	718.4
162.5°	731.5	732.1	732.7	732.7	731.9	731.1	730.3	729.5
165°	746.7	747.3	747.8	747.6	746.9	746.1	745.3	744.4
167.5°	758.1	758.9	759.6	759.6	758.8	758.0	757.2	756.3
170°	764.8	765.6	766.5	766.4	765.4	764.5	763.5	762.6
172.5°	769.6	770.5	771.3	771.3	770.5	769.6	768.7	767.9
175°	775.1	775.9	776.7	776.7	775.7	774.8	773.8	772.9
177.5°	777.6	778.2	778.9	778.8	778.0	777.3	776.6	775.8
180°	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7

(END OF REPORT)