

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: P332538-930

Luminaire Tested: **SA4XXDIP-C575D365U930-4F0-1E-UDD-D**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332538-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C575D365U930-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

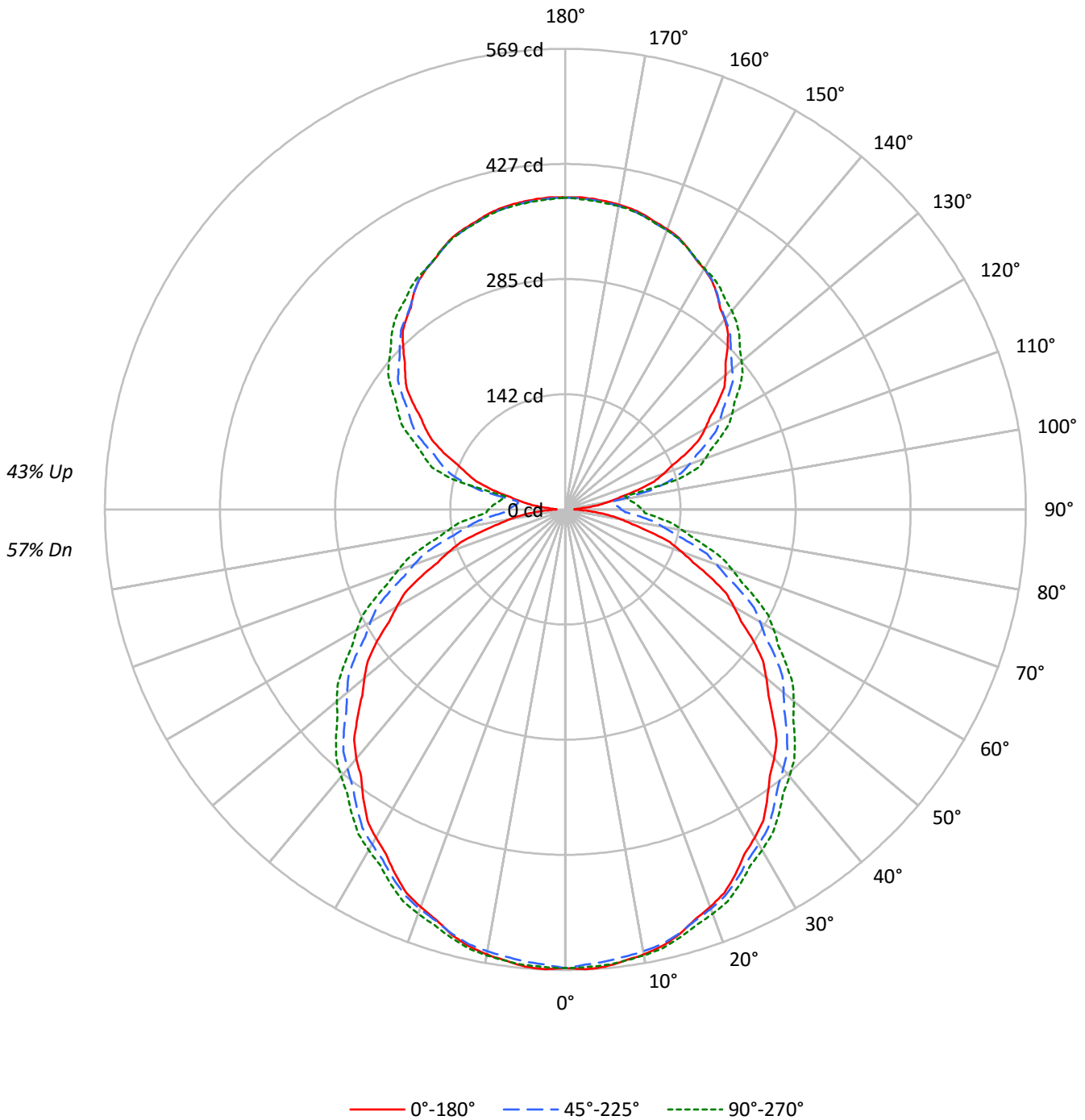
Lumens per Lamp: N/A
Luminaire Lumens: 3124.0 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: General Diffuse

Input Watts (W): 27.5
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	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57
1	98	93	89	85	91	87	83	80	75	72	69	64	62	60	54	52	51	46
2	89	81	74	68	82	75	69	64	65	60	56	55	52	49	46	44	42	37
3	81	71	63	56	75	66	59	53	57	51	47	49	44	41	41	38	35	31
4	74	62	54	47	68	58	51	45	50	44	40	43	38	35	36	33	30	26
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	32	29	26	23
6	62	50	41	35	58	46	39	33	40	34	30	35	30	26	29	26	23	20
7	58	45	36	31	53	42	34	29	37	30	26	31	27	23	27	23	20	17
8	53	41	32	27	49	38	31	26	33	27	23	29	24	20	25	21	18	15
9	50	37	29	24	46	35	28	23	30	25	21	26	22	18	23	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4574	4574	4574
5°	4588	4470	4482
10°	4560	4397	4393
15°	4519	4312	4289
20°	4458	4219	4187
25°	4388	4114	4074
30°	4313	4011	3959
35°	4227	3903	3858
40°	4160	3802	3753
45°	4059	3708	3663
50°	3973	3600	3567
55°	3884	3499	3454
60°	3746	3369	3353
65°	3597	3231	3227
70°	3414	3072	3080
75°	3157	2896	2948
80°	2873	2730	2819
85°	2514	2579	2742



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	1.7
10°-20°	153.7	4.9
20°-30°	232.4	7.4
30°-40°	281.2	9.0
40°-50°	297.3	9.5
50°-60°	279.8	9.0
60°-70°	232.1	7.4
70°-80°	163.1	5.2
80°-90°	93.3	3.0
90°-100°	67.9	2.2
100°-110°	124.5	4.0
110°-120°	187.9	6.0
120°-130°	219.4	7.0
130°-140°	224.9	7.2
140°-150°	205.5	6.6
150°-160°	164.6	5.3
160°-170°	106.2	3.4
170°-180°	36.6	1.2
0°-30°	439.8	14.1
0°-40°	721.0	23.1
0°-60°	1298.1	41.6
0°-90°	1786.6	57.2
90°-120°	380.3	12.2
90°-150°	1030.1	33.0
90°-180°	1337.0	42.8
0°-180°	3124.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	567	567	567	567	567	
5°	567	565	561	566	565	54
15°	544	544	542	548	548	153
25°	497	501	503	510	511	229
35°	435	443	449	458	460	272
45°	363	375	387	397	401	280
55°	284	298	317	329	333	253
65°	197	217	239	254	260	195
75°	109	133	159	176	183	116
85°	34	60	89	107	114	36
90°	11	40	69	88	95	7
95°	24	36	62	80	86	27
105°	92	108	132	149	145	97
115°	166	173	192	206	211	163
125°	230	232	246	258	263	206
135°	284	284	289	299	304	219
145°	326	326	326	330	334	204
155°	357	357	356	357	357	165
165°	377	375	375	377	375	106
175°	385	384	384	386	383	37
180°	385	385	385	385	385	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	566.6	566.6	566.6	566.6	566.6	566.6	566.6	566.6	566.6	566.6	566.6
2.5°	568.6	568.3	567.9	567.5	567.2	566.6	565.7	564.8	563.9	563.0	563.8
5°	567.2	566.8	566.3	565.9	565.5	564.8	563.8	562.8	561.8	560.8	562.0
7.5°	562.4	562.1	561.8	561.6	561.3	560.8	560.0	559.2	558.3	557.5	558.8
10°	558.3	558.2	558.0	557.9	557.7	557.3	556.6	555.9	555.2	554.5	555.8
12.5°	552.7	552.7	552.7	552.6	552.6	552.4	551.9	551.4	550.9	550.4	551.5
15°	543.7	543.9	544.0	544.1	544.3	544.1	543.7	543.3	542.8	542.4	543.7
17.5°	531.4	531.8	532.2	532.6	533.1	533.3	533.2	533.1	533.0	533.0	534.2
20°	522.8	523.2	523.6	524.1	524.5	524.7	524.9	525.1	525.1	525.3	526.7
22.5°	513.1	513.6	514.2	514.7	515.3	515.7	515.9	516.2	516.4	516.7	518.1
25°	497.4	498.2	499.1	499.9	500.8	501.4	501.8	502.2	502.7	503.1	504.7
27.5°	479.9	481.1	482.3	483.6	484.9	485.8	486.4	487.1	487.7	488.4	489.8
30°	468.2	469.4	470.4	471.6	472.7	473.8	474.7	475.7	476.7	477.8	479.3
32.5°	455.5	456.9	458.2	459.6	461.0	462.2	463.3	464.4	465.5	466.6	468.3
35°	435.2	436.9	438.6	440.3	442.0	443.5	444.9	446.4	447.8	449.1	451.2
37.5°	414.8	416.7	418.7	420.6	422.6	424.4	426.2	428.0	429.7	431.4	433.4
40°	401.6	403.4	405.3	407.1	409.0	410.8	412.8	414.7	416.8	418.7	420.9
42.5°	386.4	388.4	390.4	392.6	394.6	396.8	399.1	401.4	403.7	406.0	408.4
45°	362.9	365.6	368.3	371.0	373.6	376.3	379.0	381.6	384.3	387.0	389.4
47.5°	340.5	343.2	345.9	348.7	351.5	354.4	357.5	360.6	363.7	366.8	369.3
50°	324.2	327.3	330.4	333.5	336.6	339.7	342.8	345.9	349.0	352.1	354.9
52.5°	307.9	311.0	314.1	317.2	320.3	323.7	327.3	330.8	334.4	337.9	340.7
55°	284.2	287.1	290.2	293.1	296.0	299.6	303.9	308.1	312.3	316.6	319.4
57.5°	257.7	261.4	265.1	268.7	272.4	276.3	280.5	284.7	288.9	293.1	296.4
60°	240.4	244.1	247.8	251.4	255.1	259.3	263.9	268.6	273.2	277.9	281.1
62.5°	223.7	227.7	231.7	235.7	239.7	244.0	248.7	253.3	258.0	262.7	265.9
65°	196.7	201.2	205.7	210.2	214.7	219.4	224.1	228.9	233.7	238.6	242.1
67.5°	170.6	175.5	180.3	185.1	189.8	194.8	199.9	205.0	210.2	215.3	218.9
70°	152.9	157.7	162.5	167.3	172.1	177.2	182.5	187.8	193.2	198.6	202.4
72.5°	135.7	140.6	145.4	150.3	155.2	160.5	166.2	171.9	177.7	183.4	187.0
75°	109.1	114.3	119.5	124.7	130.0	135.6	141.5	147.4	153.4	159.2	163.2
77.5°	84.4	89.9	95.5	100.9	106.5	112.3	118.5	124.7	130.9	137.1	141.1
80°	69.1	74.8	80.5	86.1	91.7	97.6	103.9	110.1	116.3	122.5	126.7
82.5°	53.9	59.8	65.6	71.5	77.4	83.4	89.6	95.8	102.0	108.3	112.6
85°	33.6	39.5	45.5	51.4	57.3	63.4	69.8	76.1	82.5	88.8	93.0
87.5°	18.9	24.9	30.7	36.6	42.6	48.6	54.9	61.1	67.4	73.7	77.9
90°	11.0	17.4	23.7	30.1	36.4	42.9	49.4	56.0	62.5	69.1	73.6
92.5°	13.3	18.4	23.5	28.6	33.8	39.5	46.1	52.7	59.3	65.9	70.2
95°	24.1	26.6	29.0	31.6	34.0	38.2	44.0	49.8	55.7	61.6	65.7
97.5°	41.2	46.5	51.9	57.2	62.6	64.6	63.1	61.7	60.3	58.9	62.6
100°	54.2	59.0	63.8	68.6	73.5	74.3	70.9	67.6	64.2	60.9	63.6
102.5°	69.5	73.5	77.5	81.6	85.7	89.8	94.1	98.3	102.6	106.8	98.7
105°	92.5	95.6	98.8	102.1	105.3	109.7	115.2	120.7	126.2	131.8	135.9
107.5°	114.9	117.3	119.8	122.4	124.8	128.8	134.2	139.5	144.9	150.3	154.0
110°	129.6	131.8	133.9	136.1	138.2	141.9	147.2	152.6	157.9	163.2	166.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	143.8	145.9	148.0	150.1	152.1	155.6	160.5	165.4	170.3	175.2	178.3
115°	165.8	167.2	168.7	170.2	171.6	174.6	179.0	183.4	187.8	192.3	195.6
117.5°	186.1	187.1	188.1	189.1	190.1	192.8	197.1	201.5	205.9	210.2	213.1
120°	199.4	200.1	200.7	201.5	202.1	204.5	208.5	212.5	216.5	220.5	223.5
122.5°	212.3	212.5	212.8	213.0	213.3	215.3	219.3	223.2	227.2	231.1	234.1
125°	230.2	230.3	230.4	230.5	230.6	232.4	235.8	239.2	242.6	246.0	248.8
127.5°	247.5	247.4	247.4	247.4	247.3	248.7	251.7	254.7	257.7	260.7	263.2
130°	258.4	258.3	258.2	258.1	258.0	259.2	261.7	264.2	266.6	269.0	271.6
132.5°	268.7	268.7	268.6	268.6	268.6	269.6	271.7	273.7	275.7	277.9	280.3
135°	283.6	283.6	283.5	283.5	283.4	284.0	285.2	286.5	287.7	288.9	291.3
137.5°	297.4	297.3	297.2	297.1	296.9	297.3	298.1	298.8	299.5	300.4	302.6
140°	306.4	306.4	306.4	306.4	306.4	306.5	306.7	307.0	307.3	307.5	309.6
142.5°	314.0	314.1	314.4	314.5	314.8	314.9	314.9	314.9	314.9	314.9	316.6
145°	326.2	326.3	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	327.3
147.5°	336.1	336.3	336.6	336.7	337.0	337.0	337.0	336.9	336.8	336.8	337.0
150°	343.2	343.3	343.5	343.6	343.7	343.7	343.6	343.6	343.5	343.5	343.5
152.5°	348.7	348.9	349.0	349.3	349.4	349.4	349.4	349.2	349.1	349.0	349.1
155°	357.0	357.1	357.1	357.2	357.3	357.2	357.0	356.8	356.6	356.4	356.7
157.5°	364.1	364.0	364.0	363.9	363.9	363.8	363.6	363.4	363.1	363.0	363.3
160°	368.3	368.0	367.9	367.7	367.5	367.4	367.3	367.2	367.1	367.0	367.5
162.5°	371.9	371.7	371.5	371.2	371.0	370.8	370.7	370.6	370.6	370.6	371.0
165°	376.6	376.3	375.9	375.6	375.3	375.1	375.1	375.1	375.1	375.1	375.7
167.5°	380.3	379.9	379.6	379.3	379.0	378.8	378.7	378.7	378.6	378.6	379.2
170°	382.4	382.0	381.6	381.2	380.8	380.7	380.7	380.8	380.8	380.9	381.4
172.5°	383.8	383.4	382.9	382.6	382.2	382.0	382.1	382.2	382.2	382.3	382.8
175°	385.2	384.8	384.5	384.1	383.7	383.5	383.6	383.7	383.8	383.8	384.4
177.5°	386.0	385.6	385.2	384.8	384.5	384.3	384.5	384.6	384.7	384.7	385.2
180°	385.2	385.2	385.2	385.2	385.2	385.2	385.2	385.2	385.2	385.2	385.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	566.6	566.6	566.6	566.6	566.6	566.6	566.6	566.6
2.5°	564.6	565.3	566.1	566.5	566.4	566.2	566.1	566.1
5°	563.1	564.2	565.3	565.8	565.7	565.6	565.4	565.2
7.5°	560.1	561.3	562.6	563.2	563.0	562.9	562.7	562.6
10°	557.0	558.3	559.5	560.1	560.0	559.9	559.7	559.5
12.5°	552.8	553.9	555.1	555.6	555.6	555.5	555.5	555.5
15°	544.9	546.3	547.5	548.0	548.0	547.8	547.6	547.5
17.5°	535.5	536.8	538.1	538.7	538.6	538.5	538.3	538.3
20°	528.2	529.5	530.9	531.7	531.7	531.7	531.7	531.7
22.5°	519.5	520.9	522.3	523.2	523.3	523.6	523.8	524.1
25°	506.2	507.8	509.3	510.1	510.3	510.5	510.5	510.7
27.5°	491.3	492.7	494.2	495.0	495.1	495.3	495.5	495.6
30°	480.9	482.4	484.0	484.9	485.1	485.4	485.7	486.0
32.5°	470.1	471.9	473.7	474.7	475.0	475.2	475.6	475.8
35°	453.1	455.1	457.1	458.3	458.7	459.1	459.5	460.0
37.5°	435.5	437.4	439.4	440.7	441.1	441.6	442.0	442.5
40°	423.0	425.1	427.2	428.5	429.1	429.7	430.2	430.8
42.5°	410.7	413.0	415.4	416.8	417.3	417.7	418.2	418.6
45°	391.8	394.2	396.6	398.1	398.8	399.6	400.2	401.0
47.5°	371.8	374.3	376.7	378.4	379.3	380.1	381.0	381.8
50°	357.8	360.6	363.4	365.3	366.1	366.9	367.8	368.6
52.5°	343.6	346.3	349.2	351.0	351.9	352.7	353.5	354.4
55°	322.2	325.1	327.8	329.7	330.5	331.4	332.2	333.0
57.5°	299.8	303.2	306.6	308.6	309.4	310.1	311.0	311.8
60°	284.4	287.6	290.8	293.0	294.2	295.3	296.4	297.6
62.5°	269.1	272.4	275.7	277.8	278.9	280.1	281.2	282.3
65°	245.6	249.2	252.7	254.9	256.1	257.2	258.4	259.5
67.5°	222.5	226.1	229.7	232.0	233.1	234.2	235.3	236.4
70°	206.2	210.0	213.8	216.2	217.2	218.2	219.2	220.1
72.5°	190.7	194.4	198.1	200.5	201.6	202.7	203.8	204.9
75°	167.1	171.0	175.0	177.7	178.9	180.2	181.5	182.7
77.5°	145.2	149.2	153.2	155.9	157.2	158.6	159.9	161.3
80°	130.9	135.1	139.3	142.0	143.2	144.3	145.4	146.6
82.5°	116.9	121.2	125.6	128.4	129.6	130.9	132.1	133.4
85°	97.3	101.5	105.7	108.6	110.0	111.4	112.8	114.2
87.5°	82.0	86.2	90.4	93.1	94.3	95.6	96.9	98.2
90°	78.1	82.6	87.1	89.9	91.2	92.5	93.7	94.9
92.5°	74.6	78.9	83.3	86.1	87.2	88.4	89.5	90.7
95°	70.0	74.1	78.3	81.0	82.4	83.7	85.0	86.4
97.5°	66.4	70.0	73.8	76.3	77.6	78.8	80.1	81.4
100°	66.4	69.1	71.7	73.6	74.7	75.7	76.8	77.9
102.5°	90.7	82.6	74.6	71.1	72.2	73.3	74.4	75.6
105°	140.0	144.1	148.1	149.6	148.5	147.2	146.1	145.0
107.5°	157.8	161.5	165.3	167.8	169.0	170.3	171.5	172.8
110°	170.0	173.3	176.7	179.0	180.3	181.7	183.0	184.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	181.4	184.5	187.6	189.9	191.3	192.6	194.0	195.3
115°	198.8	202.0	205.2	207.3	208.3	209.4	210.3	211.3
117.5°	216.0	218.9	221.8	223.8	224.9	226.0	227.1	228.2
120°	226.5	229.4	232.4	234.3	235.3	236.4	237.3	238.3
122.5°	236.9	239.9	242.7	244.7	245.5	246.4	247.3	248.2
125°	251.7	254.6	257.5	259.3	260.2	261.1	262.0	263.0
127.5°	265.7	268.2	270.7	272.4	273.3	274.3	275.2	276.1
130°	274.2	276.8	279.4	281.1	282.0	282.8	283.6	284.5
132.5°	282.8	285.3	287.8	289.4	290.2	291.0	291.8	292.6
135°	293.8	296.1	298.5	300.2	301.2	302.1	303.0	304.0
137.5°	304.8	307.0	309.1	310.5	311.2	311.9	312.6	313.2
140°	311.6	313.6	315.7	317.1	317.8	318.6	319.4	320.2
142.5°	318.4	320.1	321.8	323.0	323.6	324.2	324.8	325.5
145°	328.2	329.2	330.1	330.9	331.6	332.3	333.0	333.7
147.5°	337.1	337.3	337.5	337.8	338.3	338.8	339.3	339.8
150°	343.5	343.5	343.5	343.5	343.6	343.6	343.6	343.7
152.5°	349.2	349.3	349.4	349.4	349.4	349.4	349.4	349.3
155°	356.9	357.2	357.4	357.5	357.3	357.1	356.9	356.7
157.5°	363.6	363.9	364.3	364.3	363.9	363.6	363.3	363.0
160°	367.9	368.3	368.6	368.6	368.3	367.9	367.5	367.0
162.5°	371.3	371.7	372.1	372.0	371.6	371.2	370.7	370.3
165°	376.2	376.7	377.2	377.2	376.6	376.0	375.4	374.9
167.5°	379.8	380.3	380.8	380.8	380.2	379.5	378.9	378.3
170°	382.0	382.5	382.9	382.9	382.3	381.6	381.0	380.3
172.5°	383.4	383.8	384.3	384.3	383.6	382.9	382.2	381.5
175°	385.0	385.6	386.1	386.0	385.2	384.5	383.7	382.9
177.5°	385.6	386.0	386.5	386.3	385.7	385.1	384.5	383.8
180°	385.2	385.2	385.2	385.2	385.2	385.2	385.2	385.2

(END OF REPORT)