

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: P333165-830

Luminaire Tested: **S125DIP-S610D365U830-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333165-830
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-S610D365U830-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3502.4 lumens
Efficiency: N/A
Efficacy: 127.4 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: Semi-Direct

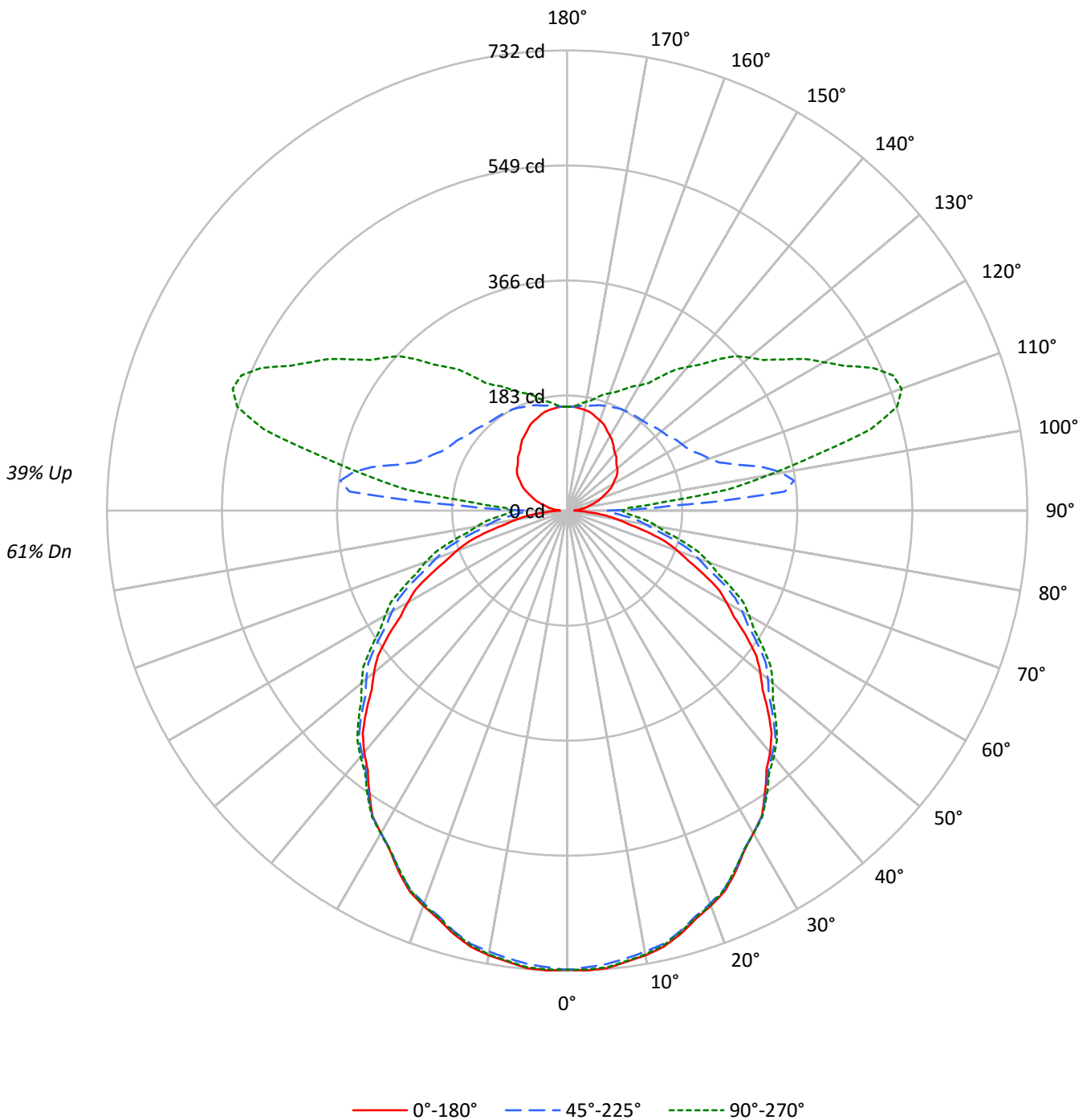
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66	61
1	99	94	90	86	93	88	85	81	77	74	72	67	64	62	57	55	54	49
2	90	82	75	70	84	77	71	66	67	62	59	58	54	51	50	47	45	41
3	82	72	64	58	76	67	60	55	59	53	49	51	47	43	44	40	38	34
4	75	63	55	49	70	60	52	46	52	46	41	45	41	37	39	35	32	29
5	69	56	48	42	64	53	45	40	47	40	36	41	36	32	35	31	28	25
6	63	51	42	36	59	48	40	34	42	36	31	37	32	28	32	28	25	22
7	59	46	37	32	54	43	35	30	38	32	27	33	28	24	29	25	22	19
8	54	42	33	28	51	39	32	27	35	29	24	30	25	22	26	22	19	17
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	24	20	18	15
10	47	35	27	22	44	33	26	21	29	24	20	26	21	18	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4718	4718	4718
5°	4727	4630	4645
10°	4693	4548	4541
15°	4638	4449	4409
20°	4562	4326	4276
25°	4473	4195	4112
30°	4364	4051	3964
35°	4263	3919	3829
40°	4160	3779	3691
45°	4043	3661	3570
50°	3932	3531	3463
55°	3798	3408	3337
60°	3652	3269	3208
65°	3499	3124	3063
70°	3326	2924	2915
75°	3052	2732	2732
80°	2694	2501	2532
85°	2358	2344	2469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	2.0
10°-20°	196.1	5.6
20°-30°	291.6	8.3
30°-40°	345.4	9.9
40°-50°	357.1	10.2
50°-60°	329.0	9.4
60°-70°	265.9	7.6
70°-80°	178.1	5.1
80°-90°	93.3	2.7
90°-100°	171.6	4.9
100°-110°	295.7	8.4
110°-120°	267.2	7.6
120°-130°	210.3	6.0
130°-140°	163.5	4.7
140°-150°	119.9	3.4
150°-160°	83.5	2.4
160°-170°	49.2	1.4
170°-180°	16.0	0.5
0°-30°	556.7	15.9
0°-40°	902.2	25.8
0°-60°	1588.2	45.3
0°-90°	2125.5	60.7
90°-120°	734.4	21.0
90°-150°	1228.2	35.1
90°-180°	1377.0	39.3
0°-180°	3502.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	730	729	724	729	729	69
15°	698	698	693	697	695	196
25°	634	636	632	634	631	292
35°	549	553	551	554	554	343
45°	452	460	463	468	469	349
55°	347	359	370	378	381	310
65°	239	256	273	283	286	237
75°	132	151	173	187	191	140
85°	39	63	88	103	110	42
90°	12	37	64	82	88	8
95°	20	61	347	201	151	19
105°	44	71	281	529	500	47
115°	72	91	222	458	537	70
125°	96	112	202	360	419	85
135°	111	132	190	293	340	86
145°	128	146	185	234	260	80
155°	145	156	181	204	213	67
165°	158	163	173	184	186	45
175°	165	165	166	168	168	16
180°	165	165	165	165	165	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	732.2	731.9	731.7	731.4	731.1	730.6	729.7	728.8	727.9	727.0	727.9
5°	730.5	730.1	729.8	729.5	729.2	728.5	727.4	726.2	725.1	724.0	725.3
7.5°	724.0	723.9	723.8	723.6	723.5	722.8	721.7	720.6	719.4	718.3	719.3
10°	718.3	718.3	718.3	718.3	718.3	717.7	716.3	715.1	713.8	712.6	713.7
12.5°	710.3	710.4	710.5	710.7	710.8	710.3	709.3	708.3	707.3	706.2	707.1
15°	697.5	697.7	697.9	698.0	698.1	697.7	696.5	695.4	694.4	693.2	694.2
17.5°	680.9	681.2	681.6	681.8	682.2	681.7	680.7	679.6	678.4	677.3	678.1
20°	668.8	669.2	669.5	669.9	670.1	669.8	668.6	667.5	666.4	665.2	665.7
22.5°	655.2	655.7	656.3	656.9	657.4	657.0	655.8	654.6	653.4	652.1	652.7
25°	633.8	634.2	634.7	635.2	635.7	635.5	634.5	633.6	632.5	631.6	632.3
27.5°	610.0	610.7	611.4	612.1	612.8	612.7	611.5	610.5	609.4	608.3	608.7
30°	592.2	593.2	594.2	595.1	596.1	596.1	595.1	594.2	593.2	592.2	592.6
32.5°	576.2	577.0	577.9	578.7	579.5	579.6	578.9	578.2	577.5	576.7	577.1
35°	548.6	549.7	550.8	551.9	553.0	553.4	552.9	552.3	551.9	551.4	551.9
37.5°	520.9	522.0	522.9	524.0	525.0	525.4	525.3	525.1	524.9	524.8	525.4
40°	502.0	503.3	504.5	505.9	507.1	507.7	507.5	507.4	507.2	507.0	507.7
42.5°	481.4	483.1	484.7	486.4	488.0	489.0	489.4	489.7	490.0	490.4	491.2
45°	451.9	453.6	455.3	457.1	458.9	460.1	461.0	461.8	462.5	463.4	464.5
47.5°	421.7	423.3	424.9	426.5	428.2	429.6	431.0	432.3	433.8	435.1	436.8
50°	401.1	402.7	404.5	406.3	408.0	409.8	411.5	413.3	415.0	416.8	418.6
52.5°	379.3	381.4	383.5	385.7	387.8	389.9	392.1	394.2	396.3	398.4	400.3
55°	347.3	349.9	352.4	355.0	357.5	360.1	362.6	365.1	367.7	370.2	372.0
57.5°	314.7	317.7	320.7	323.9	326.9	329.9	332.8	335.7	338.7	341.6	343.6
60°	292.9	296.1	299.3	302.5	305.7	308.8	312.0	315.2	318.4	321.5	324.0
62.5°	271.7	274.8	278.1	281.3	284.5	287.8	291.2	294.6	298.0	301.5	304.2
65°	239.2	242.9	246.5	250.2	253.8	257.6	261.4	265.2	269.0	272.9	275.2
67.5°	208.6	212.1	215.6	219.1	222.6	226.4	230.3	234.1	238.0	242.0	244.8
70°	186.2	189.8	193.5	197.2	200.9	204.7	208.9	213.0	217.2	221.3	224.3
72.5°	164.4	168.2	172.0	175.8	179.6	183.7	188.2	192.7	197.3	201.8	205.1
75°	131.8	135.9	140.1	144.2	148.4	153.0	158.1	163.2	168.2	173.3	176.4
77.5°	100.4	105.2	110.0	114.7	119.5	124.3	129.2	134.1	139.0	143.9	147.4
80°	81.0	85.7	90.5	95.3	100.0	105.1	110.6	115.9	121.3	126.8	130.3
82.5°	63.2	68.1	73.2	78.2	83.3	88.6	94.1	99.6	105.2	110.7	114.0
85°	39.4	44.7	49.9	55.1	60.4	65.8	71.4	76.9	82.5	88.1	91.6
87.5°	22.4	27.5	32.8	38.0	43.3	48.6	54.1	59.7	65.1	70.7	74.4
90°	11.8	17.2	23.0	28.7	34.5	40.4	46.2	52.2	58.0	64.1	68.1
92.5°	14.4	20.0	27.4	36.3	46.8	61.5	85.3	121.4	160.0	163.8	146.9
95°	20.3	24.8	31.6	39.4	50.8	70.6	111.7	190.4	287.7	347.4	344.6
97.5°	26.7	30.8	36.4	43.8	54.1	69.4	98.2	157.1	258.5	363.9	417.5
100°	31.2	35.2	39.9	46.8	56.6	70.8	95.2	143.5	232.6	346.7	433.3
102.5°	36.2	39.7	43.8	50.9	59.8	73.5	95.7	137.0	212.8	319.1	419.6
105°	44.1	46.7	50.8	56.7	64.6	77.6	97.0	131.4	191.8	280.9	379.7
107.5°	51.7	54.6	58.3	63.2	71.0	82.7	101.5	131.5	181.4	254.1	339.7
110°	57.3	59.9	63.2	68.1	74.9	86.8	104.9	132.3	177.1	240.8	316.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	63.4	65.6	68.2	72.8	79.3	90.6	108.0	134.0	174.9	232.1	298.6
115°	71.5	73.3	75.5	79.6	85.7	96.6	113.1	136.6	172.7	221.8	278.3
117.5°	78.9	80.6	82.4	86.1	92.6	102.9	118.5	140.0	171.6	215.0	264.7
120°	84.2	85.7	87.5	91.0	97.1	107.4	122.8	142.4	171.7	211.0	256.7
122.5°	89.3	90.2	91.4	94.7	101.1	111.3	126.5	145.2	171.4	207.5	249.5
125°	96.1	96.6	98.1	100.9	107.2	117.3	131.5	149.0	171.5	202.4	239.5
127.5°	100.9	101.8	103.8	107.4	114.0	123.9	137.0	152.9	172.3	198.2	230.1
130°	104.4	105.3	107.7	112.0	118.8	128.5	141.0	155.9	173.1	196.0	224.2
132.5°	106.5	107.7	110.9	115.7	123.0	132.4	144.5	158.1	173.7	193.7	218.8
135°	110.7	111.9	115.7	120.8	127.7	137.1	148.6	160.7	174.2	190.3	211.3
137.5°	116.0	116.9	120.5	125.7	132.4	141.9	151.8	162.9	175.1	188.1	205.2
140°	118.7	119.6	123.7	128.9	135.3	144.4	154.2	164.4	175.1	186.6	201.7
142.5°	122.3	123.0	126.6	131.8	137.7	146.1	155.3	164.8	174.9	185.8	199.0
145°	128.0	128.5	131.7	136.1	141.9	149.6	158.3	166.5	175.5	185.2	196.0
147.5°	133.1	133.5	136.4	140.7	145.9	152.6	160.2	167.8	175.9	184.4	193.4
150°	136.6	137.2	139.6	143.9	148.5	154.2	161.6	168.5	175.9	183.5	191.5
152.5°	140.3	140.7	142.8	146.6	151.0	156.1	162.9	169.1	175.6	182.5	189.6
155°	145.2	145.2	147.2	150.5	153.9	158.5	164.2	169.6	174.8	180.6	186.5
157.5°	149.7	149.6	151.2	154.0	156.9	160.5	165.3	169.8	174.0	178.5	183.6
160°	152.6	152.2	153.5	155.9	158.5	161.6	165.9	169.8	173.2	177.2	181.3
162.5°	155.0	154.7	156.0	158.1	160.1	162.6	166.5	169.7	172.4	175.6	179.1
165°	158.5	157.9	158.9	160.5	161.9	163.9	166.5	169.2	171.3	173.2	175.9
167.5°	161.0	160.6	161.3	162.1	163.1	164.4	166.5	168.4	169.4	170.9	172.8
170°	162.6	162.2	162.6	163.2	163.9	164.9	166.5	167.9	168.5	169.6	170.9
172.5°	163.6	163.1	163.3	164.0	164.4	164.9	166.3	167.4	167.5	168.0	169.0
175°	164.9	164.2	164.6	164.9	164.9	164.9	165.9	166.5	166.3	166.3	166.5
177.5°	165.5	164.9	164.9	165.2	164.9	164.9	165.5	165.8	165.2	165.2	165.5
180°	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	728.8	729.7	730.6	730.9	730.8	730.8	730.6	730.5
5°	726.5	727.8	729.1	729.6	729.5	729.3	729.2	729.1
7.5°	720.5	721.6	722.7	723.2	723.0	722.9	722.7	722.6
10°	714.8	715.9	717.0	717.5	717.4	717.2	717.0	716.8
12.5°	707.9	708.8	709.7	709.9	709.5	709.1	708.7	708.2
15°	695.1	696.1	697.0	697.2	696.5	695.9	695.3	694.7
17.5°	678.8	679.5	680.2	680.4	680.0	679.7	679.3	678.9
20°	666.3	666.8	667.2	667.4	667.4	667.4	667.4	667.4
22.5°	653.3	653.9	654.5	654.6	654.2	653.8	653.5	653.1
25°	632.9	633.6	634.1	634.1	633.3	632.5	631.7	630.9
27.5°	609.2	609.6	610.1	610.1	609.8	609.5	609.3	609.0
30°	592.9	593.2	593.5	593.6	593.4	593.2	593.1	593.0
32.5°	577.4	577.7	578.1	578.2	578.0	577.8	577.7	577.5
35°	552.3	552.9	553.4	553.6	553.6	553.6	553.6	553.6
37.5°	526.0	526.7	527.4	527.6	527.5	527.4	527.4	527.4
40°	508.3	509.0	509.5	510.0	510.4	510.7	511.0	511.3
42.5°	491.9	492.7	493.4	493.9	494.0	494.0	494.1	494.2
45°	465.5	466.7	467.8	468.4	468.6	468.7	468.9	469.1
47.5°	438.4	440.0	441.6	442.6	443.0	443.3	443.7	444.0
50°	420.3	422.1	423.8	424.9	425.4	425.8	426.3	426.8
52.5°	402.2	404.1	406.0	407.1	407.5	407.7	408.1	408.5
55°	373.7	375.5	377.2	378.4	379.1	379.8	380.3	381.0
57.5°	345.6	347.6	349.6	350.8	351.4	351.9	352.3	352.8
60°	326.3	328.7	331.1	332.5	333.0	333.5	333.9	334.4
62.5°	306.8	309.4	312.1	313.7	314.2	314.9	315.5	316.1
65°	277.6	280.0	282.4	283.9	284.6	285.2	285.8	286.4
67.5°	247.7	250.6	253.4	255.3	256.2	257.0	257.9	258.6
70°	227.3	230.4	233.4	235.4	236.3	237.2	238.3	239.2
72.5°	208.4	211.6	214.9	216.9	217.6	218.3	219.0	219.7
75°	179.6	182.9	186.1	188.0	188.8	189.6	190.4	191.2
77.5°	150.9	154.5	158.0	160.0	160.6	161.3	161.9	162.6
80°	133.7	137.2	140.7	142.8	143.5	144.1	144.8	145.3
82.5°	117.4	120.8	124.2	126.5	127.6	128.8	129.9	131.0
85°	95.1	98.6	102.1	104.4	105.8	107.0	108.3	109.5
87.5°	78.1	81.8	85.6	88.1	89.3	90.3	91.5	92.7
90°	72.0	76.1	80.0	83.0	84.2	85.3	86.7	87.8
92.5°	122.5	109.9	102.8	100.2	97.1	97.4	98.0	98.6
95°	298.8	251.7	214.1	188.5	166.0	157.1	155.5	151.4
97.5°	412.1	379.9	343.4	306.6	287.1	269.6	261.0	257.8
100°	462.2	449.2	418.3	385.8	363.7	340.7	329.3	325.0
102.5°	477.6	490.8	477.6	456.2	432.6	416.5	404.1	401.1
105°	462.8	511.6	529.4	527.9	518.4	508.5	502.9	500.1
107.5°	421.7	485.8	526.6	546.0	552.4	553.4	552.1	550.4
110°	391.4	457.8	507.7	538.2	554.2	561.7	565.1	566.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	367.0	430.1	480.4	515.9	538.9	550.8	557.8	561.3
115°	336.1	390.6	439.1	477.3	504.3	521.2	531.5	536.8
117.5°	314.6	361.8	403.9	439.0	466.1	483.7	494.1	497.9
120°	302.7	345.4	384.7	415.9	441.5	458.5	468.4	472.0
122.5°	293.0	332.6	367.9	397.1	420.0	435.6	445.5	448.9
125°	279.1	315.6	347.1	372.8	392.2	406.7	414.8	419.0
127.5°	264.8	298.8	328.2	352.3	370.1	383.1	391.0	393.3
130°	256.1	287.7	315.8	339.0	356.5	368.3	375.7	378.5
132.5°	247.1	276.8	302.7	324.9	342.2	353.9	360.7	363.6
135°	234.7	259.8	283.1	303.6	319.1	330.8	337.6	340.4
137.5°	224.4	244.9	264.5	281.9	295.7	306.2	312.5	315.3
140°	218.5	235.8	253.0	268.2	281.1	290.4	296.1	298.3
142.5°	213.3	228.1	242.8	256.0	267.0	275.0	280.4	282.4
145°	207.1	218.2	229.3	239.0	247.7	254.0	258.4	260.2
147.5°	201.8	210.4	218.6	225.6	232.2	237.1	239.5	240.4
150°	198.9	206.2	212.5	218.6	223.8	227.9	229.4	229.9
152.5°	196.2	202.7	208.5	213.2	217.4	220.6	222.1	222.3
155°	192.2	197.6	202.2	205.9	209.2	211.5	212.5	212.8
157.5°	188.2	192.6	196.2	199.1	201.7	203.6	204.5	204.4
160°	185.6	188.9	192.2	194.5	196.9	198.5	199.2	198.9
162.5°	182.6	185.7	188.5	190.6	192.4	193.7	193.9	193.8
165°	178.5	180.9	182.9	184.5	185.9	186.5	186.5	186.5
167.5°	174.7	176.3	177.8	179.0	179.6	180.2	179.9	179.8
170°	172.6	173.5	174.6	175.2	175.9	176.3	176.3	175.9
172.5°	170.1	171.2	171.9	172.3	172.4	173.1	172.5	172.1
175°	167.6	167.6	168.2	168.2	168.2	168.5	167.9	167.6
177.5°	165.8	166.0	166.0	166.0	165.8	166.0	165.2	165.2
180°	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2

(END OF REPORT)