

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: P333128-840

Luminaire Tested: **S125DIP-S375D590U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333128-840
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: S125DIP-S375D590U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3541.8 lumens
Efficiency: N/A
Efficacy: 138.4 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-Indirect

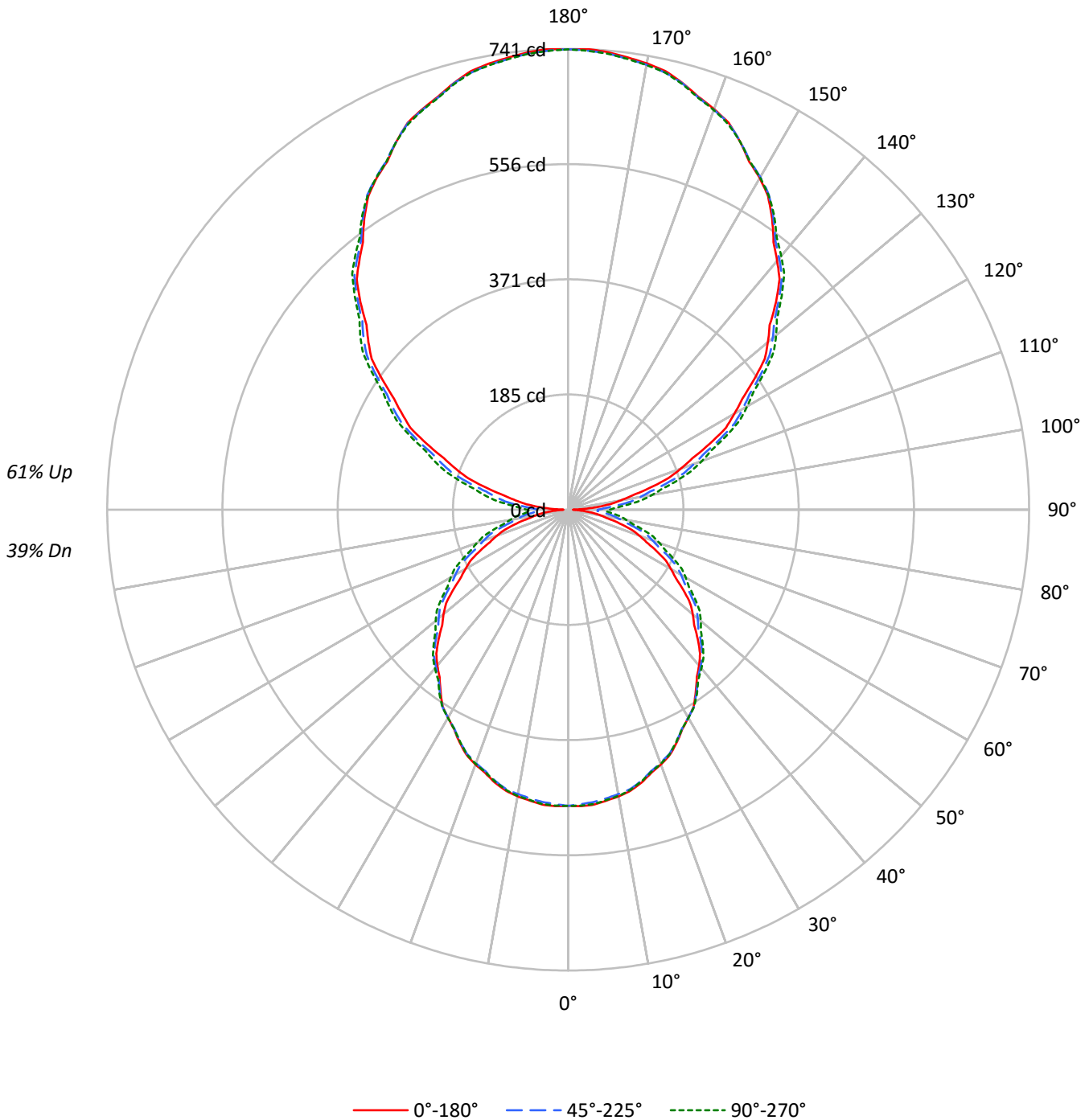
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	90	86	83	86	82	79	76	67	64	62	53	51	50	40	39	38	32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26
3	78	69	61	55	71	63	56	51	51	46	43	40	37	34	31	28	26	22
4	72	61	53	47	65	55	48	43	45	40	36	36	32	29	27	25	23	19
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	24	22	20	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	52	39	32	26	47	36	29	24	30	25	21	24	20	17	18	16	14	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	26	21	41	30	24	19	25	20	17	20	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3075	3075	3075
5°	3081	3017	3027
10°	3059	2963	2960
15°	3022	2899	2873
20°	2974	2819	2786
25°	2915	2734	2680
30°	2844	2641	2584
35°	2778	2554	2494
40°	2711	2463	2406
45°	2635	2385	2327
50°	2563	2302	2256
55°	2474	2222	2175
60°	2380	2130	2090
65°	2281	2035	1997
70°	2168	1905	1900
75°	1987	1780	1780
80°	1753	1629	1650
85°	1538	1527	1610



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	1.3
10°-20°	127.8	3.6
20°-30°	190.0	5.4
30°-40°	225.1	6.4
40°-50°	232.7	6.6
50°-60°	214.4	6.1
60°-70°	173.3	4.9
70°-80°	116.1	3.3
80°-90°	61.8	1.7
90°-100°	83.4	2.4
100°-110°	171.3	4.8
110°-120°	264.7	7.5
120°-130°	335.9	9.5
130°-140°	369.8	10.4
140°-150°	359.3	10.1
150°-160°	301.1	8.5
160°-170°	200.1	5.7
170°-180°	70.0	2.0
0°-30°	362.8	10.2
0°-40°	587.9	16.6
0°-60°	1035.1	29.2
0°-90°	1386.3	39.1
90°-120°	519.4	14.7
90°-150°	1584.3	44.7
90°-180°	2156.0	60.9
0°-180°	3541.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	475	45
15°	454	455	452	454	453	128
25°	413	414	412	413	411	190
35°	358	360	359	361	361	224
45°	294	299	302	305	306	227
55°	226	234	241	246	248	202
65°	156	167	178	184	187	155
75°	86	98	113	122	125	91
85°	26	41	57	67	71	27
90°	8	28	48	61	66	7
95°	44	57	78	92	97	45
105°	136	146	163	176	181	145
115°	251	257	270	277	280	248
125°	364	368	377	383	385	326
135°	472	475	479	485	485	364
145°	571	573	575	577	577	357
155°	653	653	654	656	653	301
165°	710	709	710	712	709	200
175°	738	736	736	739	736	70
180°	740	740	740	740	740	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	477.2	477.0	476.9	476.7	476.6	476.2	475.5	474.9	474.4	473.8	474.4
5°	476.1	475.8	475.6	475.4	475.2	474.7	474.0	473.3	472.6	471.8	472.7
7.5°	471.8	471.8	471.7	471.6	471.5	471.1	470.4	469.6	468.9	468.1	468.9
10°	468.1	468.1	468.1	468.1	468.1	467.7	466.9	466.1	465.2	464.3	465.1
12.5°	462.9	463.0	463.0	463.1	463.2	462.9	462.3	461.6	460.9	460.3	460.8
15°	454.5	454.6	454.7	454.9	455.0	454.6	453.9	453.2	452.5	451.8	452.4
17.5°	443.7	443.9	444.1	444.3	444.5	444.3	443.6	442.8	442.1	441.4	441.9
20°	436.0	436.2	436.4	436.6	436.8	436.5	435.8	435.0	434.3	433.5	433.9
22.5°	427.0	427.4	427.7	428.1	428.5	428.2	427.4	426.6	425.8	425.0	425.4
25°	413.0	413.3	413.6	413.9	414.2	414.1	413.5	412.9	412.2	411.6	412.0
27.5°	397.6	398.0	398.5	398.9	399.4	399.3	398.6	397.9	397.2	396.5	396.7
30°	386.0	386.6	387.2	387.9	388.5	388.5	387.9	387.2	386.6	386.0	386.2
32.5°	375.6	376.1	376.6	377.2	377.7	377.7	377.3	376.8	376.4	375.9	376.1
35°	357.5	358.2	359.0	359.7	360.4	360.6	360.3	360.0	359.7	359.4	359.7
37.5°	339.5	340.1	340.8	341.4	342.1	342.4	342.3	342.2	342.1	342.0	342.4
40°	327.2	328.0	328.8	329.6	330.5	330.8	330.7	330.6	330.5	330.4	330.8
42.5°	313.8	314.8	315.9	317.0	318.0	318.7	318.9	319.1	319.4	319.6	320.1
45°	294.5	295.7	296.8	297.9	299.0	299.9	300.4	300.9	301.4	301.9	302.7
47.5°	274.8	275.9	276.9	278.0	279.0	280.0	280.9	281.8	282.7	283.6	284.7
50°	261.4	262.5	263.7	264.8	265.9	267.1	268.2	269.3	270.4	271.7	272.8
52.5°	247.2	248.5	249.9	251.4	252.8	254.1	255.5	256.9	258.3	259.6	260.9
55°	226.3	228.0	229.6	231.4	233.0	234.7	236.3	237.9	239.6	241.3	242.5
57.5°	205.1	207.0	209.0	211.1	213.1	215.0	216.9	218.8	220.8	222.6	223.9
60°	190.9	193.0	195.0	197.1	199.1	201.3	203.3	205.4	207.5	209.5	211.1
62.5°	177.0	179.2	181.3	183.3	185.4	187.5	189.8	192.0	194.3	196.5	198.2
65°	155.9	158.2	160.7	163.0	165.4	167.8	170.4	172.9	175.3	177.8	179.4
67.5°	135.9	138.3	140.5	142.8	145.1	147.5	150.1	152.6	155.1	157.6	159.6
70°	121.4	123.7	126.1	128.5	130.9	133.4	136.1	138.9	141.5	144.2	146.2
72.5°	107.1	109.7	112.1	114.5	117.0	119.8	122.7	125.6	128.6	131.5	133.7
75°	85.8	88.6	91.3	93.9	96.6	99.7	103.0	106.3	109.7	112.9	115.0
77.5°	65.4	68.6	71.7	74.7	77.9	81.0	84.2	87.5	90.6	93.8	96.1
80°	52.7	55.8	59.0	62.1	65.1	68.5	72.0	75.5	79.1	82.6	84.9
82.5°	41.2	44.4	47.8	51.0	54.2	57.8	61.3	64.9	68.6	72.1	74.3
85°	25.7	29.1	32.5	36.0	39.4	42.9	46.6	50.2	53.8	57.4	59.7
87.5°	14.6	18.2	21.7	25.2	28.8	32.4	36.1	39.8	43.5	47.2	49.7
90°	8.1	12.4	16.8	21.1	25.4	29.8	34.2	38.7	43.0	47.5	50.5
92.5°	20.7	24.4	28.3	32.0	35.9	40.1	44.7	49.5	54.2	58.9	62.0
95°	43.5	46.5	49.4	52.4	55.3	59.2	64.0	68.8	73.6	78.5	81.6
97.5°	67.8	70.3	72.8	75.3	77.9	81.7	86.8	92.0	97.1	102.4	105.4
100°	85.7	88.0	90.2	92.3	94.5	98.1	103.1	108.1	113.0	118.1	121.4
102.5°	105.2	107.8	110.3	112.8	115.3	118.7	122.7	126.8	130.9	134.9	138.4
105°	135.5	137.8	140.2	142.5	144.7	147.8	151.7	155.6	159.5	163.4	166.2
107.5°	169.1	171.2	173.2	175.2	177.3	180.2	183.7	187.2	190.9	194.4	196.8
110°	192.3	194.1	196.0	197.8	199.8	202.4	205.6	208.9	212.2	215.5	217.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	216.2	217.5	218.8	220.2	221.5	223.8	227.1	230.5	233.8	237.0	239.1
115°	251.1	252.4	253.6	254.8	256.1	258.1	261.1	264.1	267.0	269.9	271.7
117.5°	286.1	286.8	287.5	288.2	288.9	290.7	293.5	296.3	299.0	301.8	303.7
120°	308.2	309.2	310.1	311.1	312.0	313.8	316.3	318.8	321.3	323.9	325.6
122.5°	331.8	332.2	332.5	333.0	333.4	334.9	337.5	340.1	342.7	345.4	347.0
125°	364.3	364.9	365.6	366.2	366.9	368.3	370.5	372.7	375.0	377.2	378.5
127.5°	398.3	398.7	399.0	399.3	399.7	400.7	402.6	404.5	406.3	408.2	409.6
130°	419.1	419.6	420.1	420.7	421.2	422.3	424.0	425.8	427.5	429.2	430.5
132.5°	439.4	440.5	441.5	442.5	443.5	444.6	445.7	446.8	447.8	448.9	450.2
135°	472.2	472.8	473.5	474.1	474.8	475.6	476.5	477.3	478.2	479.0	480.4
137.5°	503.0	503.6	504.3	504.9	505.6	506.2	506.9	507.6	508.2	508.8	510.2
140°	522.4	523.0	523.7	524.3	524.9	525.5	526.0	526.5	527.0	527.5	528.9
142.5°	542.2	542.7	543.1	543.6	544.0	544.5	545.0	545.5	546.0	546.5	547.6
145°	571.4	571.8	572.2	572.6	573.0	573.4	573.8	574.2	574.6	574.9	575.4
147.5°	597.8	598.1	598.4	598.7	599.1	599.3	599.6	600.0	600.3	600.6	601.0
150°	615.8	615.7	615.6	615.5	615.3	615.5	616.0	616.5	617.0	617.5	617.5
152.5°	630.6	630.8	631.0	631.2	631.3	631.5	631.7	631.9	632.1	632.4	632.7
155°	653.3	653.3	653.3	653.3	653.3	653.4	653.5	653.6	653.8	653.9	654.4
157.5°	673.6	673.3	673.0	672.8	672.5	672.4	672.5	672.7	672.8	672.9	673.4
160°	685.6	685.2	684.8	684.4	684.0	683.9	684.0	684.2	684.3	684.4	684.9
162.5°	696.2	695.9	695.6	695.3	695.0	694.9	694.9	695.0	695.0	695.0	695.6
165°	710.3	710.0	709.8	709.5	709.3	709.2	709.3	709.5	709.6	709.7	710.2
167.5°	722.4	721.9	721.2	720.7	720.2	720.0	720.0	720.0	720.0	720.0	720.7
170°	728.7	728.2	727.7	727.2	726.7	726.5	726.5	726.5	726.5	726.5	727.2
172.5°	733.4	732.9	732.4	731.8	731.3	731.0	731.0	731.0	731.0	731.0	731.8
175°	738.5	738.0	737.5	737.0	736.5	736.3	736.3	736.3	736.3	736.3	737.0
177.5°	741.2	740.8	740.4	740.0	739.5	739.3	739.2	739.1	739.0	738.9	739.5
180°	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	474.9	475.5	476.2	476.4	476.3	476.3	476.2	476.1
5°	473.5	474.3	475.1	475.5	475.4	475.3	475.2	475.1
7.5°	469.6	470.3	471.0	471.3	471.2	471.1	471.0	470.9
10°	465.9	466.6	467.3	467.6	467.5	467.4	467.3	467.2
12.5°	461.4	461.9	462.5	462.6	462.4	462.1	461.8	461.6
15°	453.0	453.6	454.2	454.3	453.9	453.5	453.1	452.7
17.5°	442.4	442.8	443.3	443.4	443.2	442.9	442.7	442.4
20°	434.2	434.5	434.8	434.9	434.9	434.9	434.9	434.9
22.5°	425.8	426.2	426.6	426.7	426.4	426.2	425.9	425.7
25°	412.4	412.9	413.3	413.2	412.7	412.2	411.7	411.2
27.5°	397.0	397.3	397.6	397.7	397.5	397.3	397.1	396.9
30°	386.4	386.6	386.8	386.9	386.8	386.7	386.6	386.5
32.5°	376.3	376.5	376.7	376.8	376.7	376.6	376.5	376.4
35°	360.0	360.3	360.6	360.7	360.7	360.7	360.7	360.7
37.5°	342.8	343.3	343.7	343.9	343.9	343.8	343.8	343.7
40°	331.2	331.6	332.1	332.4	332.6	332.9	333.1	333.3
42.5°	320.6	321.1	321.6	321.8	321.9	321.9	321.9	322.0
45°	303.5	304.2	304.9	305.3	305.4	305.5	305.6	305.7
47.5°	285.7	286.8	287.8	288.4	288.7	288.9	289.1	289.3
50°	273.9	275.1	276.2	276.9	277.2	277.5	277.8	278.1
52.5°	262.2	263.4	264.6	265.3	265.5	265.8	266.0	266.2
55°	243.6	244.7	245.9	246.6	247.0	247.4	247.9	248.3
57.5°	225.2	226.5	227.8	228.6	228.9	229.2	229.6	229.9
60°	212.7	214.2	215.8	216.7	217.0	217.3	217.6	217.9
62.5°	200.0	201.7	203.4	204.4	204.8	205.2	205.6	206.0
65°	181.0	182.5	184.0	185.0	185.4	185.8	186.3	186.7
67.5°	161.5	163.3	165.2	166.4	166.9	167.5	168.0	168.5
70°	148.1	150.2	152.1	153.4	154.0	154.6	155.2	155.9
72.5°	135.8	137.9	140.1	141.4	141.8	142.3	142.7	143.2
75°	117.1	119.2	121.3	122.5	123.1	123.6	124.1	124.6
77.5°	98.4	100.7	102.9	104.3	104.7	105.1	105.5	105.9
80°	87.2	89.5	91.7	93.1	93.5	93.9	94.3	94.7
82.5°	76.5	78.8	81.0	82.4	83.2	83.9	84.6	85.4
85°	62.0	64.2	66.6	68.1	68.9	69.8	70.6	71.4
87.5°	52.2	54.7	57.3	58.9	59.7	60.5	61.3	62.1
90°	53.5	56.6	59.6	61.7	62.8	63.9	65.0	66.1
92.5°	65.2	68.4	71.5	73.5	74.5	75.5	76.5	77.6
95°	84.8	88.0	91.2	93.2	94.2	95.2	96.1	97.1
97.5°	108.5	111.4	114.4	116.4	117.2	118.2	119.0	119.9
100°	124.7	128.1	131.4	133.4	134.3	135.2	136.0	136.9
102.5°	141.7	145.0	148.3	150.5	151.5	152.5	153.5	154.4
105°	169.1	171.9	174.7	176.7	177.8	178.9	180.1	181.2
107.5°	199.2	201.8	204.2	205.7	206.3	206.9	207.5	208.1
110°	220.3	222.6	224.9	226.4	227.0	227.6	228.2	228.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	241.2	243.3	245.3	246.6	247.1	247.6	248.1	248.6
115°	273.5	275.2	276.9	278.0	278.5	279.0	279.5	280.0
117.5°	305.6	307.4	309.3	310.3	310.5	310.7	310.9	311.0
120°	327.4	329.1	330.9	331.8	331.9	332.0	332.1	332.2
122.5°	348.5	350.1	351.7	352.5	352.8	353.0	353.3	353.5
125°	379.9	381.3	382.7	383.6	384.1	384.5	384.9	385.2
127.5°	411.0	412.4	413.8	414.7	415.1	415.4	415.8	416.1
130°	431.8	433.1	434.4	435.3	435.6	435.8	436.1	436.4
132.5°	451.5	452.8	454.1	454.8	454.9	455.0	455.1	455.1
135°	481.7	483.0	484.4	485.0	485.1	485.1	485.1	485.1
137.5°	511.5	512.9	514.3	514.8	514.6	514.4	514.2	514.0
140°	530.3	531.7	533.1	533.6	533.4	533.2	533.0	532.8
142.5°	548.9	550.0	551.1	551.5	551.3	551.1	550.9	550.6
145°	576.0	576.5	577.0	577.3	577.3	577.3	577.3	577.4
147.5°	601.5	602.0	602.4	602.3	601.7	601.0	600.3	599.6
150°	617.5	617.5	617.5	617.5	617.3	617.2	617.0	616.9
152.5°	633.0	633.3	633.6	633.5	633.1	632.6	632.2	631.8
155°	654.9	655.4	655.9	655.9	655.2	654.6	653.9	653.3
157.5°	673.9	674.4	674.9	674.8	673.9	673.1	672.3	671.4
160°	685.4	685.9	686.4	686.4	685.8	685.1	684.5	683.9
162.5°	696.2	696.8	697.5	697.4	696.7	695.9	695.2	694.4
165°	710.7	711.2	711.9	711.7	710.9	710.1	709.3	708.6
167.5°	721.5	722.4	723.1	723.1	722.3	721.4	720.6	719.9
170°	728.0	728.7	729.5	729.4	728.6	727.7	726.8	725.9
172.5°	732.7	733.4	734.2	734.2	733.4	732.6	731.7	730.9
175°	737.8	738.5	739.3	739.2	738.4	737.5	736.6	735.7
177.5°	740.1	740.7	741.3	741.3	740.6	739.9	739.1	738.4
180°	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3

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