

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: P333409-927

Luminaire Tested: **S125DIW-S850D770U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333409-927
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-S850D770U927-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 850 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: 4709.5 lumens
Efficiency: N/A
Efficacy: 104.7 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

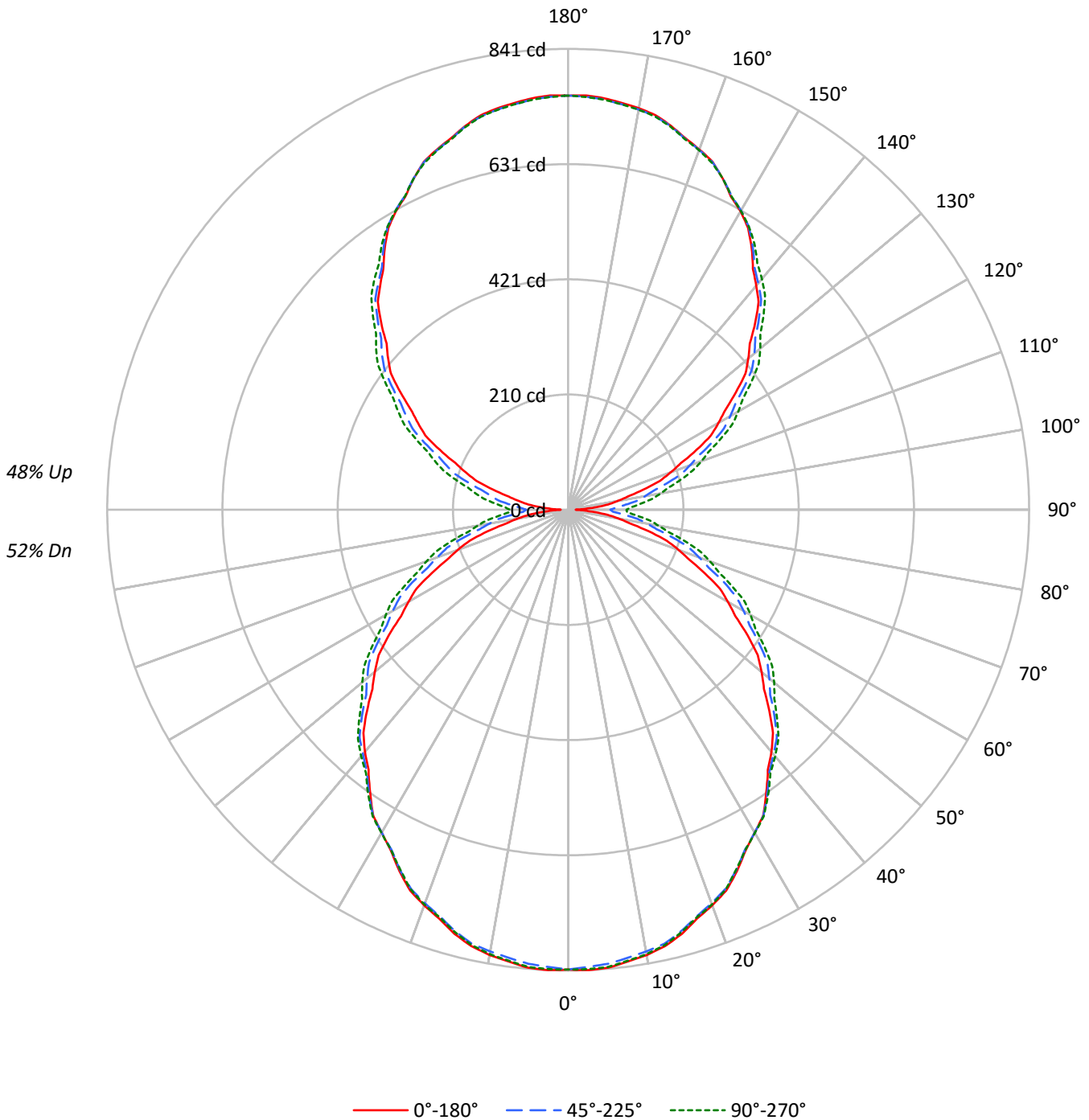
Input Watts (W): 45
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	108	108	108	99	99	99	99	84	84	84	71	71	71	58	58	58	52
1	97	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	42
2	88	81	74	69	81	75	69	64	63	59	55	53	50	47	43	41	39	35
3	80	71	63	57	74	65	59	53	56	50	46	47	43	40	38	35	33	29
4	73	62	54	48	68	58	51	45	49	44	39	41	37	34	34	31	28	25
5	67	55	47	41	62	51	44	38	44	38	34	37	33	29	31	27	25	21
6	62	50	41	35	57	46	39	33	40	34	29	33	29	25	28	24	21	19
7	57	45	37	31	53	42	34	29	36	30	26	30	26	22	25	22	19	16
8	53	41	33	27	49	38	31	26	33	27	23	28	23	20	23	20	17	15
9	50	37	29	24	46	35	28	23	30	24	20	26	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	28	22	18	24	19	16	20	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5420	5420	5420
5°	5431	5320	5337
10°	5392	5225	5217
15°	5329	5111	5064
20°	5241	4970	4912
25°	5139	4820	4724
30°	5014	4654	4554
35°	4897	4502	4398
40°	4778	4342	4241
45°	4644	4205	4102
50°	4517	4056	3979
55°	4363	3916	3833
60°	4195	3756	3686
65°	4020	3589	3520
70°	3820	3359	3349
75°	3505	3139	3139
80°	3093	2872	2910
85°	2705	2693	2839



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.4	1.7
10°-20°	225.3	4.8
20°-30°	335.0	7.1
30°-40°	396.8	8.4
40°-50°	410.3	8.7
50°-60°	377.9	8.0
60°-70°	305.5	6.5
70°-80°	204.6	4.3
80°-90°	107.8	2.3
90°-100°	110.1	2.3
100°-110°	193.4	4.1
110°-120°	282.6	6.0
120°-130°	349.9	7.4
130°-140°	380.6	8.1
140°-150°	367.4	7.8
150°-160°	307.3	6.5
160°-170°	204.3	4.3
170°-180°	71.5	1.5
0°-30°	639.6	13.6
0°-40°	1036.4	22.0
0°-60°	1824.7	38.7
0°-90°	2442.5	51.9
90°-120°	586.1	12.4
90°-150°	1683.9	35.8
90°-180°	2267.0	48.1
0°-180°	4709.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	839	837	832	838	838	80
15°	801	802	796	801	798	226
25°	728	730	726	729	725	335
35°	630	636	634	636	636	394
45°	519	528	532	538	539	400
55°	399	412	425	434	438	357
65°	275	294	314	325	329	273
75°	151	173	199	215	220	161
85°	45	72	101	119	126	48
90°	14	45	77	98	106	11
95°	49	72	105	127	134	49
105°	142	158	186	205	213	151
115°	258	267	289	303	308	256
125°	373	377	393	404	408	334
135°	483	486	492	502	504	372
145°	584	585	587	591	593	364
155°	667	667	668	670	667	307
165°	725	724	724	726	723	204
175°	754	752	752	755	751	72
180°	756	756	756	756	756	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	841.1	840.9	840.6	840.3	840.0	839.3	838.3	837.3	836.2	835.2	836.2
5°	839.2	838.8	838.4	838.0	837.7	836.9	835.6	834.3	833.1	831.8	833.2
7.5°	831.8	831.6	831.5	831.3	831.2	830.4	829.2	827.8	826.5	825.2	826.5
10°	825.2	825.2	825.2	825.2	825.2	824.5	823.0	821.6	820.1	818.6	819.9
12.5°	815.9	816.1	816.3	816.4	816.6	816.0	814.9	813.7	812.5	811.4	812.4
15°	801.4	801.5	801.7	801.8	802.1	801.5	800.3	799.0	797.6	796.4	797.5
17.5°	782.3	782.6	783.0	783.3	783.7	783.2	782.0	780.7	779.4	778.2	779.0
20°	768.4	768.8	769.1	769.5	769.9	769.4	768.2	766.9	765.6	764.3	764.9
22.5°	752.7	753.3	753.9	754.6	755.3	754.9	753.4	752.0	750.6	749.2	749.9
25°	728.1	728.6	729.2	729.8	730.3	730.0	729.0	727.9	726.7	725.6	726.4
27.5°	700.8	701.6	702.4	703.2	704.0	703.8	702.6	701.3	700.1	698.9	699.3
30°	680.4	681.5	682.6	683.7	684.8	684.8	683.7	682.6	681.5	680.4	680.8
32.5°	661.9	662.9	663.8	664.8	665.7	665.8	665.0	664.2	663.5	662.7	663.0
35°	630.2	631.5	632.8	634.1	635.3	635.7	635.2	634.6	634.1	633.5	634.1
37.5°	598.4	599.6	600.8	602.0	603.2	603.6	603.4	603.2	603.1	602.9	603.6
40°	576.7	578.2	579.6	581.1	582.6	583.2	583.0	582.9	582.7	582.5	583.2
42.5°	553.0	554.9	556.8	558.7	560.6	561.8	562.2	562.6	563.0	563.4	564.3
45°	519.1	521.2	523.2	525.1	527.2	528.6	529.6	530.4	531.4	532.3	533.6
47.5°	484.4	486.3	488.1	490.0	491.9	493.6	495.2	496.8	498.3	499.9	501.8
50°	460.7	462.7	464.8	466.8	468.7	470.8	472.8	474.8	476.8	478.8	480.9
52.5°	435.7	438.2	440.6	443.1	445.5	448.0	450.4	452.9	455.3	457.8	459.9
55°	399.0	402.0	404.9	407.8	410.7	413.7	416.6	419.5	422.4	425.3	427.4
57.5°	361.5	365.0	368.5	372.0	375.6	379.0	382.4	385.7	389.0	392.4	394.7
60°	336.5	340.2	343.8	347.5	351.1	354.8	358.5	362.1	365.8	369.4	372.2
62.5°	312.1	315.8	319.5	323.1	326.8	330.6	334.5	338.5	342.4	346.3	349.4
65°	274.8	279.0	283.2	287.4	291.6	295.9	300.3	304.7	309.1	313.5	316.2
67.5°	239.6	243.7	247.7	251.8	255.8	260.1	264.5	269.0	273.5	277.9	281.2
70°	213.9	218.1	222.3	226.6	230.8	235.2	240.0	244.7	249.5	254.2	257.7
72.5°	188.9	193.2	197.6	201.9	206.3	211.0	216.3	221.5	226.6	231.9	235.6
75°	151.4	156.1	160.9	165.6	170.4	175.7	181.6	187.4	193.2	199.1	202.7
77.5°	115.3	120.8	126.4	131.8	137.3	142.8	148.5	154.1	159.7	165.4	169.4
80°	93.0	98.5	103.9	109.4	114.9	120.7	127.0	133.2	139.4	145.6	149.6
82.5°	72.6	78.3	84.1	89.9	95.7	101.7	108.1	114.5	120.8	127.2	131.1
85°	45.2	51.3	57.4	63.4	69.4	75.6	82.0	88.4	94.8	101.2	105.2
87.5°	25.8	31.8	37.9	44.0	50.0	56.2	62.7	69.1	75.4	81.8	86.2
90°	13.8	20.7	27.6	34.5	41.4	48.3	55.5	62.6	69.7	76.8	81.8
92.5°	26.1	32.2	38.3	44.5	50.6	57.4	65.0	72.4	79.9	87.4	92.4
95°	49.0	53.9	58.9	63.9	69.0	75.3	82.8	90.3	97.8	105.4	110.3
97.5°	73.2	77.6	82.0	86.3	90.8	96.8	104.6	112.4	120.3	128.0	132.8
100°	91.4	95.2	99.0	102.9	106.7	112.4	120.0	127.5	135.1	142.6	147.7
102.5°	111.0	115.0	119.1	123.2	127.2	132.5	139.1	145.7	152.3	158.8	163.8
105°	141.5	145.0	148.6	152.3	155.8	160.7	167.0	173.3	179.5	185.8	190.2
107.5°	175.3	178.5	181.6	184.7	187.9	192.3	198.2	204.1	210.0	215.9	219.8
110°	198.7	201.5	204.3	207.2	210.0	214.2	219.8	225.2	230.8	236.2	240.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	223.1	225.2	227.3	229.4	231.5	235.3	240.7	246.2	251.7	257.1	260.6
115°	258.4	260.2	262.0	263.8	265.6	269.0	274.0	279.0	284.1	289.1	292.2
117.5°	293.8	294.9	296.0	297.0	298.1	301.0	305.7	310.5	315.2	320.0	323.1
120°	316.4	317.6	318.8	320.0	321.2	323.9	328.3	332.6	337.0	341.3	344.4
122.5°	340.2	340.6	341.2	341.7	342.1	344.6	349.0	353.4	357.8	362.2	365.0
125°	373.2	373.8	374.4	375.0	375.6	377.8	381.6	385.4	389.1	392.9	395.6
127.5°	407.7	407.9	408.2	408.4	408.7	410.4	413.6	416.7	419.9	423.0	425.6
130°	428.8	429.3	429.8	430.2	430.7	432.4	435.1	438.0	440.8	443.6	446.1
132.5°	449.3	450.4	451.4	452.4	453.4	455.0	456.9	458.8	460.7	462.6	465.1
135°	482.7	483.3	483.9	484.5	485.1	486.1	487.5	488.9	490.4	491.7	494.1
137.5°	514.0	514.7	515.2	515.9	516.5	517.2	518.2	519.0	520.0	520.9	523.2
140°	533.6	534.2	535.0	535.6	536.2	536.9	537.4	538.0	538.6	539.2	541.5
142.5°	553.8	554.3	554.7	555.1	555.5	556.0	556.4	557.0	557.5	558.1	559.9
145°	583.6	583.9	584.3	584.6	584.9	585.3	585.7	586.1	586.5	586.9	587.8
147.5°	610.3	610.6	610.9	611.2	611.5	611.7	612.0	612.4	612.7	613.0	613.6
150°	628.7	628.5	628.4	628.3	628.1	628.4	628.8	629.4	629.9	630.4	630.4
152.5°	643.7	643.9	644.0	644.3	644.4	644.6	644.8	645.1	645.2	645.5	645.8
155°	666.9	666.9	666.9	666.9	666.9	666.9	667.1	667.2	667.3	667.5	668.0
157.5°	687.6	687.3	687.0	686.7	686.4	686.3	686.5	686.6	686.7	686.9	687.4
160°	699.8	699.4	699.0	698.6	698.2	698.1	698.2	698.4	698.5	698.6	699.2
162.5°	710.7	710.3	710.0	709.8	709.5	709.3	709.4	709.4	709.4	709.5	710.1
165°	725.1	724.8	724.6	724.3	724.1	724.0	724.1	724.2	724.4	724.5	725.0
167.5°	737.4	736.8	736.3	735.8	735.2	735.0	735.0	735.0	735.0	735.0	735.8
170°	743.9	743.4	742.8	742.4	741.8	741.6	741.6	741.6	741.6	741.6	742.4
172.5°	748.6	748.1	747.6	747.0	746.6	746.2	746.2	746.2	746.2	746.2	747.0
175°	753.9	753.4	752.9	752.3	751.8	751.5	751.5	751.5	751.5	751.5	752.3
177.5°	756.6	756.2	755.7	755.3	754.9	754.7	754.6	754.5	754.4	754.2	754.9
180°	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	837.3	838.3	839.3	839.8	839.6	839.5	839.3	839.2
5°	834.7	836.1	837.7	838.3	838.0	837.9	837.7	837.6
7.5°	827.8	829.0	830.3	830.8	830.7	830.5	830.3	830.1
10°	821.2	822.4	823.7	824.3	824.1	823.9	823.7	823.6
12.5°	813.3	814.4	815.3	815.6	815.1	814.6	814.1	813.7
15°	798.6	799.7	800.8	801.0	800.3	799.5	798.8	798.0
17.5°	779.8	780.7	781.5	781.7	781.3	780.9	780.4	780.0
20°	765.4	766.0	766.5	766.8	766.8	766.8	766.8	766.8
22.5°	750.6	751.2	751.9	752.1	751.6	751.2	750.8	750.4
25°	727.1	727.9	728.6	728.5	727.5	726.7	725.7	724.8
27.5°	699.8	700.4	700.8	701.0	700.6	700.3	700.0	699.7
30°	681.1	681.5	681.8	682.0	681.8	681.6	681.4	681.2
32.5°	663.4	663.7	664.1	664.2	664.0	663.8	663.6	663.5
35°	634.6	635.2	635.7	636.0	636.0	636.0	636.0	636.0
37.5°	604.4	605.1	605.8	606.2	606.1	606.0	605.9	605.9
40°	583.9	584.7	585.4	586.0	586.3	586.7	587.1	587.4
42.5°	565.1	566.0	566.9	567.4	567.4	567.5	567.6	567.7
45°	534.9	536.1	537.4	538.1	538.4	538.5	538.7	538.9
47.5°	503.6	505.5	507.3	508.5	508.9	509.3	509.7	510.1
50°	482.8	484.9	486.9	488.1	488.7	489.3	489.8	490.4
52.5°	462.1	464.2	466.4	467.7	468.1	468.5	468.9	469.3
55°	429.4	431.4	433.4	434.7	435.5	436.3	437.0	437.7
57.5°	397.0	399.3	401.6	403.1	403.6	404.2	404.7	405.3
60°	374.9	377.6	380.4	382.0	382.5	383.1	383.7	384.2
62.5°	352.4	355.5	358.5	360.4	361.1	361.8	362.4	363.1
65°	318.9	321.7	324.4	326.1	326.9	327.6	328.4	329.1
67.5°	284.6	287.9	291.2	293.3	294.3	295.2	296.2	297.1
70°	261.2	264.7	268.2	270.4	271.5	272.6	273.7	274.8
72.5°	239.4	243.1	246.9	249.2	250.0	250.8	251.6	252.4
75°	206.4	210.1	213.7	216.0	216.9	217.9	218.7	219.7
77.5°	173.4	177.4	181.5	183.9	184.6	185.3	186.0	186.8
80°	153.7	157.7	161.7	164.1	164.9	165.6	166.3	167.0
82.5°	134.9	138.8	142.7	145.3	146.6	147.9	149.2	150.6
85°	109.2	113.3	117.3	120.0	121.5	122.9	124.5	125.9
87.5°	90.5	94.8	99.2	102.0	103.4	104.7	106.2	107.5
90°	86.6	91.4	96.3	99.6	101.2	102.9	104.6	106.2
92.5°	97.3	102.2	107.1	110.4	111.9	113.4	115.0	116.6
95°	115.2	120.2	125.1	128.3	129.8	131.4	132.9	134.5
97.5°	137.4	142.1	146.9	149.9	151.3	152.7	154.1	155.5
100°	152.7	157.6	162.7	165.9	167.2	168.6	169.9	171.3
102.5°	168.7	173.7	178.7	182.0	183.4	184.8	186.3	187.7
105°	194.7	199.2	203.6	206.6	208.3	209.9	211.7	213.3
107.5°	223.9	227.9	231.9	234.5	235.6	236.6	237.7	238.8
110°	244.0	247.9	251.8	254.2	255.4	256.5	257.7	258.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	264.2	267.7	271.2	273.5	274.5	275.5	276.6	277.7
115°	295.4	298.6	301.7	303.8	304.8	305.7	306.7	307.7
117.5°	326.4	329.5	332.8	334.8	335.5	336.2	336.9	337.6
120°	347.5	350.6	353.7	355.6	356.2	356.7	357.3	357.9
122.5°	367.9	370.7	373.6	375.4	376.0	376.8	377.4	378.1
125°	398.2	400.9	403.6	405.3	406.1	406.9	407.7	408.4
127.5°	428.2	430.8	433.3	435.0	435.8	436.7	437.4	438.2
130°	448.5	450.9	453.4	454.9	455.5	456.2	456.9	457.5
132.5°	467.5	469.9	472.4	473.8	474.2	474.6	475.0	475.4
135°	496.5	498.8	501.2	502.6	503.0	503.4	503.8	504.2
137.5°	525.5	527.8	530.1	531.3	531.4	531.5	531.6	531.6
140°	543.7	546.0	548.3	549.4	549.5	549.5	549.6	549.7
142.5°	561.8	563.7	565.5	566.6	566.6	566.7	566.8	566.9
145°	588.7	589.6	590.6	591.2	591.5	591.8	592.2	592.6
147.5°	614.3	614.8	615.4	615.4	614.9	614.3	613.8	613.2
150°	630.4	630.4	630.4	630.3	630.3	630.2	630.1	630.1
152.5°	646.1	646.4	646.7	646.7	646.3	645.8	645.4	644.9
155°	668.5	669.0	669.6	669.5	668.8	668.2	667.5	666.9
157.5°	687.9	688.4	689.0	688.8	687.9	687.1	686.2	685.3
160°	699.7	700.2	700.7	700.7	700.0	699.3	698.7	698.1
162.5°	710.7	711.3	711.9	711.9	711.1	710.3	709.6	708.8
165°	725.6	726.1	726.6	726.4	725.7	724.9	724.1	723.3
167.5°	736.6	737.4	738.1	738.1	737.3	736.5	735.7	734.8
170°	743.1	743.9	744.7	744.7	743.7	742.8	741.9	741.0
172.5°	747.8	748.6	749.4	749.4	748.6	747.7	746.9	746.2
175°	753.1	753.9	754.7	754.6	753.7	752.8	751.9	751.0
177.5°	755.5	756.1	756.8	756.7	756.0	755.3	754.6	753.8
180°	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7

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