

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: P333127-830

Luminaire Tested: **S125DIP-S375D590U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333127-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S375D590U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3605.4 lumens
Efficiency: N/A
Efficacy: 140.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

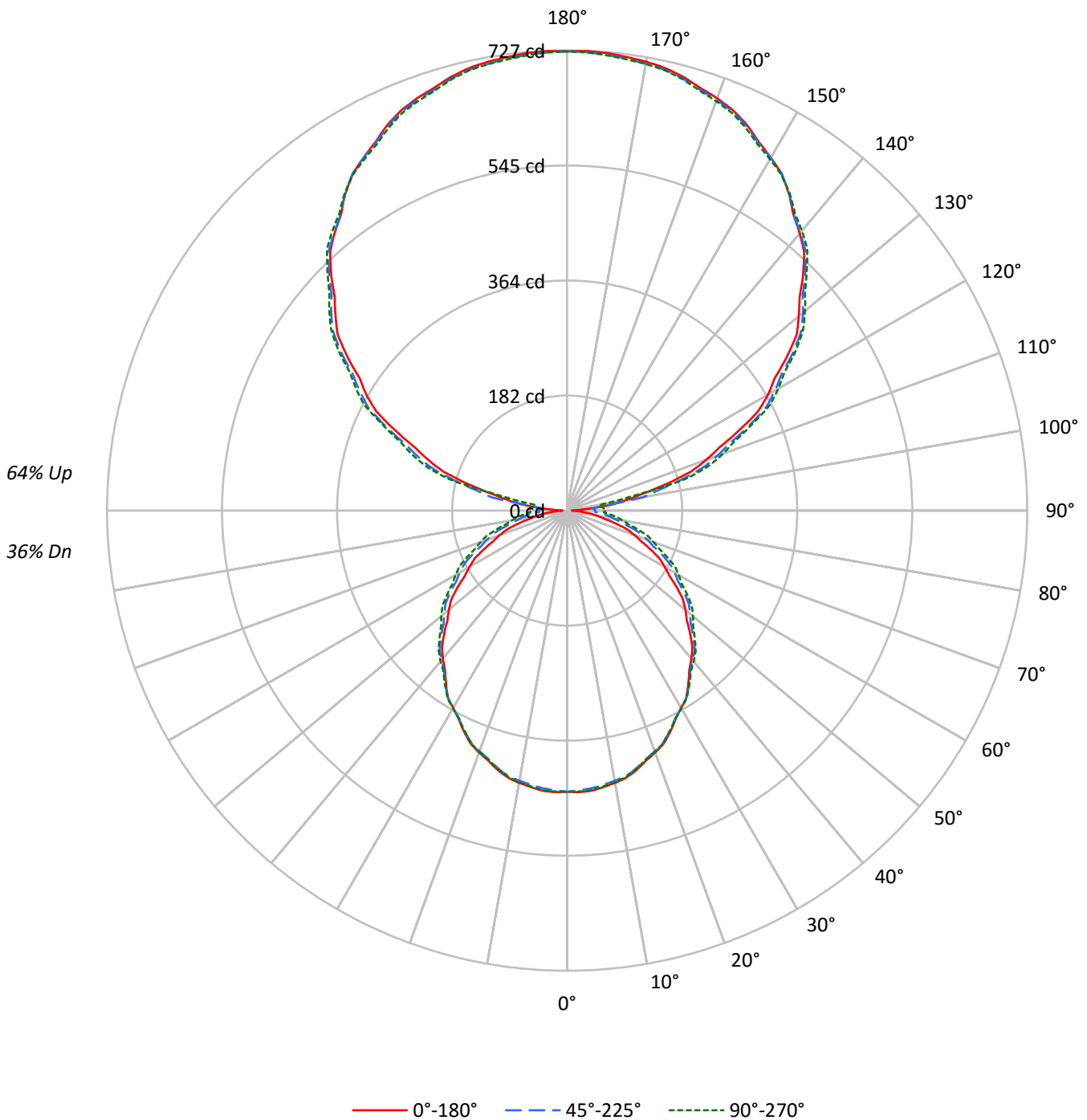
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333127-830

CATALOG NUMBER: S125DIP-S375D590U830-4F0-1E-UDD-D

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	104	104	104	104	94	94	94	94	75	75	75	59	59	59	43	43	43	36
1	94	90	86	82	85	81	78	75	65	63	61	51	49	48	37	36	35	29
2	85	78	72	66	77	71	65	61	57	53	50	44	42	39	32	31	29	24
3	78	68	61	55	70	62	56	50	50	45	42	39	36	33	29	27	25	20
4	71	60	52	46	64	55	48	43	44	39	35	34	31	28	25	23	21	17
5	65	53	45	39	59	49	42	36	39	34	30	31	27	24	23	20	18	15
6	60	48	40	34	54	44	36	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	30	50	39	32	27	32	27	23	25	21	19	19	16	14	11
8	51	39	31	26	46	36	29	24	29	24	20	23	19	16	17	15	13	10
9	48	35	28	23	43	32	26	21	27	22	18	21	17	15	16	13	11	9
10	44	32	25	21	40	30	23	19	24	19	16	19	16	13	15	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2869	2869	2869
5°	2875	2817	2826
10°	2855	2766	2762
15°	2821	2706	2681
20°	2776	2631	2601
25°	2721	2552	2502
30°	2654	2464	2411
35°	2593	2384	2329
40°	2531	2299	2245
45°	2459	2226	2171
50°	2391	2147	2106
55°	2309	2073	2030
60°	2220	1989	1951
65°	2128	1900	1864
70°	2024	1779	1773
75°	1855	1662	1662
80°	1636	1521	1540
85°	1430	1424	1502



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.0	1.2
10°-20°	119.3	3.3
20°-30°	177.4	4.9
30°-40°	210.1	5.8
40°-50°	217.2	6.0
50°-60°	200.1	5.6
60°-70°	161.8	4.5
70°-80°	108.3	3.0
80°-90°	57.7	1.6
90°-100°	57.9	1.6
100°-110°	185.7	5.2
110°-120°	310.2	8.6
120°-130°	387.0	10.7
130°-140°	410.6	11.4
140°-150°	382.6	10.6
150°-160°	308.8	8.6
160°-170°	199.7	5.5
170°-180°	68.9	1.9
0°-30°	338.7	9.4
0°-40°	548.8	15.2
0°-60°	966.1	26.8
0°-90°	1293.9	35.9
90°-120°	553.9	15.4
90°-150°	1734.1	48.1
90°-180°	2312.0	64.1
0°-180°	3605.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	444	444	42
15°	424	424	422	424	422	119
25°	386	387	384	386	384	177
35°	334	336	336	337	337	209
45°	275	280	282	285	285	212
55°	211	218	225	230	232	189
65°	146	156	166	172	174	144
75°	80	92	105	114	116	85
85°	24	38	54	63	67	26
90°	8	26	44	57	62	6
95°	36	45	40	52	56	43
105°	162	171	184	193	195	172
115°	299	306	317	322	322	297
125°	424	428	436	440	441	378
135°	527	530	532	536	536	406
145°	611	611	611	614	613	382
155°	672	669	670	671	667	310
165°	709	706	707	709	706	200
175°	726	722	723	727	722	69
180°	726	726	726	726	726	



TEST NUMBER: P333127-830

CATALOG NUMBER: S125DIP-S375D590U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	445.4	445.2	445.1	444.9	444.8	444.4	443.8	443.3	442.8	442.2	442.8
5°	444.3	444.1	443.9	443.7	443.6	443.1	442.4	441.8	441.1	440.4	441.2
7.5°	440.4	440.4	440.3	440.2	440.1	439.7	439.0	438.3	437.6	436.9	437.6
10°	436.9	436.9	436.9	436.9	436.9	436.5	435.7	435.0	434.2	433.4	434.1
12.5°	432.1	432.2	432.2	432.3	432.3	432.1	431.5	430.8	430.2	429.6	430.1
15°	424.2	424.3	424.4	424.6	424.7	424.3	423.7	423.0	422.4	421.7	422.3
17.5°	414.2	414.3	414.5	414.7	414.9	414.7	414.1	413.3	412.6	412.0	412.5
20°	406.9	407.1	407.3	407.5	407.6	407.4	406.7	406.0	405.4	404.6	405.0
22.5°	398.5	398.9	399.2	399.5	399.9	399.6	398.9	398.1	397.4	396.6	397.0
25°	385.5	385.8	386.1	386.3	386.6	386.5	386.0	385.4	384.7	384.2	384.6
27.5°	371.1	371.5	371.9	372.3	372.8	372.7	372.0	371.4	370.7	370.0	370.2
30°	360.2	360.8	361.4	362.0	362.6	362.6	362.0	361.4	360.8	360.2	360.4
32.5°	350.5	351.0	351.5	352.0	352.5	352.5	352.1	351.7	351.3	350.8	351.0
35°	333.7	334.3	335.1	335.7	336.4	336.6	336.3	336.0	335.7	335.5	335.7
37.5°	316.9	317.4	318.1	318.7	319.3	319.6	319.5	319.4	319.3	319.2	319.6
40°	305.4	306.1	306.9	307.6	308.5	308.8	308.7	308.6	308.5	308.4	308.8
42.5°	292.8	293.8	294.8	295.9	296.8	297.5	297.7	297.8	298.1	298.3	298.8
45°	274.8	276.0	277.0	278.1	279.1	279.9	280.4	280.9	281.3	281.8	282.5
47.5°	256.5	257.5	258.4	259.5	260.4	261.4	262.2	263.0	263.8	264.7	265.7
50°	243.9	245.0	246.1	247.1	248.2	249.3	250.3	251.4	252.4	253.5	254.6
52.5°	230.7	232.0	233.3	234.6	235.9	237.1	238.5	239.8	241.1	242.3	243.6
55°	211.2	212.8	214.3	215.9	217.4	219.0	220.6	222.1	223.7	225.2	226.3
57.5°	191.4	193.2	195.1	197.0	198.9	200.7	202.5	204.2	206.0	207.7	209.0
60°	178.1	180.1	182.0	184.0	185.9	187.8	189.7	191.7	193.7	195.6	197.0
62.5°	165.2	167.2	169.2	171.1	173.1	175.0	177.1	179.2	181.3	183.4	185.0
65°	145.5	147.7	150.0	152.1	154.4	156.7	159.0	161.4	163.6	166.0	167.4
67.5°	126.9	129.0	131.1	133.3	135.4	137.7	140.1	142.4	144.8	147.1	148.9
70°	113.3	115.5	117.7	119.9	122.2	124.5	127.1	129.6	132.1	134.6	136.5
72.5°	100.0	102.4	104.6	106.9	109.2	111.8	114.5	117.3	120.0	122.7	124.8
75°	80.1	82.7	85.2	87.7	90.2	93.0	96.1	99.2	102.4	105.4	107.4
77.5°	61.1	64.0	66.9	69.7	72.7	75.6	78.6	81.6	84.5	87.6	89.7
80°	49.2	52.1	55.0	58.0	60.8	63.9	67.2	70.5	73.8	77.1	79.3
82.5°	38.5	41.5	44.6	47.6	50.6	53.9	57.2	60.6	64.0	67.3	69.4
85°	23.9	27.1	30.3	33.6	36.8	40.1	43.5	46.8	50.2	53.5	55.7
87.5°	13.7	17.0	20.3	23.6	26.9	30.3	33.6	37.1	40.6	44.0	46.4
90°	7.5	11.6	15.6	19.7	23.8	27.8	32.0	36.1	40.2	44.3	47.1
92.5°	14.5	16.8	18.9	21.1	23.4	26.5	30.6	34.7	38.8	42.9	45.7
95°	36.3	38.5	40.6	42.8	45.0	45.4	44.1	42.9	41.7	40.4	43.2
97.5°	69.1	72.0	74.9	77.9	80.8	79.4	73.5	67.7	61.9	56.1	54.8
100°	94.6	97.0	99.3	101.8	104.2	107.2	110.7	114.3	117.9	121.5	105.7
102.5°	120.5	122.8	125.2	127.5	129.8	132.6	135.9	139.2	142.6	145.9	144.5
105°	162.0	164.0	166.1	168.1	170.1	172.6	175.5	178.4	181.3	184.2	186.2
107.5°	205.2	206.5	207.8	209.2	210.5	212.6	215.7	218.7	221.7	224.7	226.7
110°	233.2	234.4	235.5	236.7	237.9	239.9	242.9	245.8	248.7	251.8	253.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	259.9	261.1	262.3	263.5	264.8	266.7	269.5	272.3	275.0	277.9	279.2
115°	299.4	300.8	302.0	303.3	304.5	306.5	309.2	311.8	314.4	317.1	318.3
117.5°	340.4	340.8	341.3	341.7	342.1	343.7	346.6	349.4	352.2	355.1	356.1
120°	366.3	366.4	366.6	366.7	366.9	368.3	370.9	373.4	376.1	378.6	380.0
122.5°	388.7	389.3	389.8	390.5	391.1	392.5	394.8	397.1	399.4	401.8	403.1
125°	423.9	424.6	425.4	426.1	426.9	428.2	430.1	432.1	433.9	435.9	437.0
127.5°	457.1	457.6	458.1	458.6	459.1	460.1	461.7	463.2	464.7	466.2	467.3
130°	477.8	478.2	478.7	479.3	479.8	480.8	482.2	483.7	485.2	486.6	487.7
132.5°	498.0	498.7	499.5	500.1	500.8	501.5	502.3	503.0	503.8	504.6	505.9
135°	527.4	527.9	528.6	529.2	529.8	530.4	530.7	531.2	531.7	532.1	533.1
137.5°	554.2	554.8	555.3	555.9	556.4	556.8	556.9	556.9	557.1	557.2	558.4
140°	571.6	571.7	572.0	572.2	572.5	572.6	572.6	572.6	572.5	572.5	573.8
142.5°	587.5	587.5	587.6	587.7	587.7	587.9	588.1	588.2	588.4	588.6	589.6
145°	610.8	611.0	611.1	611.2	611.3	611.4	611.4	611.4	611.4	611.4	612.0
147.5°	630.7	630.7	630.7	630.7	630.6	630.7	630.7	630.9	631.0	631.2	631.5
150°	643.7	643.5	643.2	643.0	642.7	642.7	643.0	643.2	643.5	643.7	643.9
152.5°	656.2	655.6	655.2	654.6	654.0	653.9	654.1	654.4	654.6	654.9	655.2
155°	672.2	671.5	670.8	670.1	669.3	669.1	669.3	669.6	669.8	670.1	670.4
157.5°	684.6	684.1	683.7	683.2	682.9	682.7	682.7	682.7	682.7	682.8	683.2
160°	693.1	692.5	691.7	691.0	690.3	690.0	690.1	690.2	690.3	690.5	691.0
162.5°	700.0	699.4	698.6	697.9	697.2	696.9	697.0	697.1	697.2	697.4	698.0
165°	709.3	708.6	707.8	707.2	706.4	706.2	706.2	706.3	706.5	706.6	707.3
167.5°	716.1	715.5	714.7	714.0	713.2	712.9	713.0	713.1	713.2	713.4	714.3
170°	720.1	719.3	718.4	717.6	716.7	716.3	716.4	716.6	716.7	716.8	717.7
172.5°	722.6	721.8	721.0	720.1	719.3	719.0	719.2	719.4	719.6	719.8	720.7
175°	725.5	724.7	724.0	723.3	722.6	722.3	722.4	722.6	722.6	722.7	723.7
177.5°	726.7	726.1	725.6	725.0	724.4	724.2	724.2	724.3	724.4	724.5	725.3
180°	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	443.3	443.8	444.4	444.6	444.5	444.5	444.4	444.3
5°	442.0	442.7	443.5	443.8	443.7	443.7	443.6	443.5
7.5°	438.3	438.9	439.6	439.9	439.8	439.7	439.6	439.5
10°	434.8	435.5	436.1	436.4	436.3	436.2	436.1	436.0
12.5°	430.6	431.1	431.7	431.8	431.6	431.3	431.0	430.8
15°	422.8	423.4	424.0	424.0	423.7	423.3	422.9	422.5
17.5°	412.9	413.3	413.8	413.9	413.7	413.4	413.2	412.9
20°	405.3	405.6	405.9	406.0	406.0	406.0	406.0	406.0
22.5°	397.4	397.8	398.1	398.2	397.9	397.8	397.5	397.3
25°	384.9	385.4	385.8	385.7	385.2	384.7	384.3	383.8
27.5°	370.5	370.8	371.1	371.2	371.0	370.8	370.6	370.4
30°	360.6	360.8	361.0	361.1	361.0	360.9	360.8	360.7
32.5°	351.2	351.4	351.6	351.7	351.6	351.5	351.4	351.3
35°	336.0	336.3	336.6	336.7	336.7	336.7	336.7	336.7
37.5°	320.0	320.4	320.7	320.9	320.9	320.8	320.8	320.7
40°	309.2	309.5	310.0	310.3	310.5	310.7	310.9	311.0
42.5°	299.3	299.7	300.2	300.4	300.5	300.5	300.5	300.6
45°	283.2	283.9	284.6	284.9	285.0	285.1	285.2	285.3
47.5°	266.6	267.7	268.6	269.2	269.5	269.7	269.8	270.0
50°	255.6	256.7	257.8	258.4	258.7	259.0	259.3	259.6
52.5°	244.7	245.8	246.9	247.6	247.8	248.1	248.3	248.5
55°	227.3	228.4	229.5	230.2	230.5	230.9	231.4	231.8
57.5°	210.2	211.4	212.6	213.4	213.7	214.0	214.3	214.6
60°	198.5	199.9	201.4	202.3	202.6	202.8	203.1	203.4
62.5°	186.6	188.2	189.8	190.8	191.1	191.5	191.9	192.3
65°	168.9	170.3	171.7	172.7	173.1	173.4	173.9	174.3
67.5°	150.7	152.4	154.2	155.3	155.8	156.4	156.8	157.3
70°	138.3	140.2	141.9	143.2	143.7	144.3	144.9	145.5
72.5°	126.8	128.8	130.7	132.0	132.3	132.8	133.2	133.7
75°	109.3	111.2	113.2	114.3	114.9	115.4	115.8	116.3
77.5°	91.8	94.0	96.0	97.4	97.7	98.1	98.5	98.9
80°	81.3	83.5	85.6	86.9	87.3	87.7	88.0	88.4
82.5°	71.4	73.5	75.6	76.9	77.7	78.3	79.0	79.7
85°	57.9	59.9	62.1	63.5	64.3	65.1	65.9	66.6
87.5°	48.7	51.1	53.4	55.0	55.7	56.5	57.2	58.0
90°	50.0	52.8	55.6	57.6	58.6	59.7	60.7	61.7
92.5°	48.4	51.2	53.9	55.7	56.6	57.4	58.2	59.1
95°	45.9	48.5	51.3	53.0	53.7	54.4	55.0	55.7
97.5°	53.4	52.0	50.7	50.4	51.1	51.7	52.4	53.1
100°	89.9	74.1	58.3	50.5	50.6	50.7	50.8	50.9
102.5°	143.1	141.7	140.3	135.7	128.2	120.6	113.1	105.6
105°	188.0	190.0	192.0	193.2	193.8	194.4	194.9	195.4
107.5°	228.6	230.5	232.4	233.6	233.8	234.0	234.3	234.5
110°	254.7	256.2	257.6	258.7	259.6	260.3	261.2	261.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	280.5	281.7	283.0	284.0	284.5	285.0	285.5	286.1
115°	319.6	320.8	322.2	322.6	322.5	322.4	322.3	322.2
117.5°	357.1	358.2	359.2	359.9	360.2	360.5	360.9	361.3
120°	381.4	382.9	384.3	384.9	384.9	384.9	384.9	384.9
122.5°	404.4	405.8	407.1	407.6	407.6	407.5	407.4	407.3
125°	438.1	439.1	440.2	440.8	440.9	441.0	441.2	441.3
127.5°	468.5	469.7	470.9	471.3	471.0	470.6	470.3	470.0
130°	488.6	489.7	490.6	491.1	491.0	490.9	490.8	490.6
132.5°	507.2	508.5	509.7	510.3	510.1	509.9	509.7	509.5
135°	534.1	535.2	536.2	536.6	536.3	536.1	535.8	535.6
137.5°	559.6	560.8	561.9	562.4	562.2	561.9	561.8	561.5
140°	575.1	576.5	577.7	578.2	577.9	577.6	577.2	576.9
142.5°	590.5	591.4	592.4	592.8	592.4	592.1	591.7	591.4
145°	612.7	613.2	613.9	614.0	613.7	613.3	613.0	612.7
147.5°	631.8	632.1	632.4	632.3	631.5	630.8	630.2	629.4
150°	644.1	644.4	644.6	644.3	643.5	642.6	641.8	640.9
152.5°	655.3	655.6	655.8	655.5	654.7	653.8	653.0	652.1
155°	670.8	671.1	671.5	671.2	670.2	669.3	668.4	667.3
157.5°	683.5	683.9	684.3	684.0	683.1	682.0	681.1	680.1
160°	691.4	691.9	692.4	692.1	691.2	690.2	689.3	688.3
162.5°	698.7	699.4	700.0	699.8	698.8	697.8	696.7	695.6
165°	708.0	708.8	709.5	709.4	708.4	707.5	706.5	705.5
167.5°	715.1	716.0	716.8	716.7	715.7	714.5	713.5	712.4
170°	718.8	719.7	720.7	720.6	719.5	718.4	717.4	716.3
172.5°	721.5	722.5	723.3	723.2	722.1	721.0	719.9	718.9
175°	724.6	725.6	726.6	726.5	725.5	724.3	723.3	722.2
177.5°	725.9	726.6	727.3	727.2	726.4	725.7	724.9	724.2
180°	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5

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