

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: P333501-935

Luminaire Tested: **S125RDIP-S375D590U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333501-935
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: S125RDIP-S375D590U935-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3072.8 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

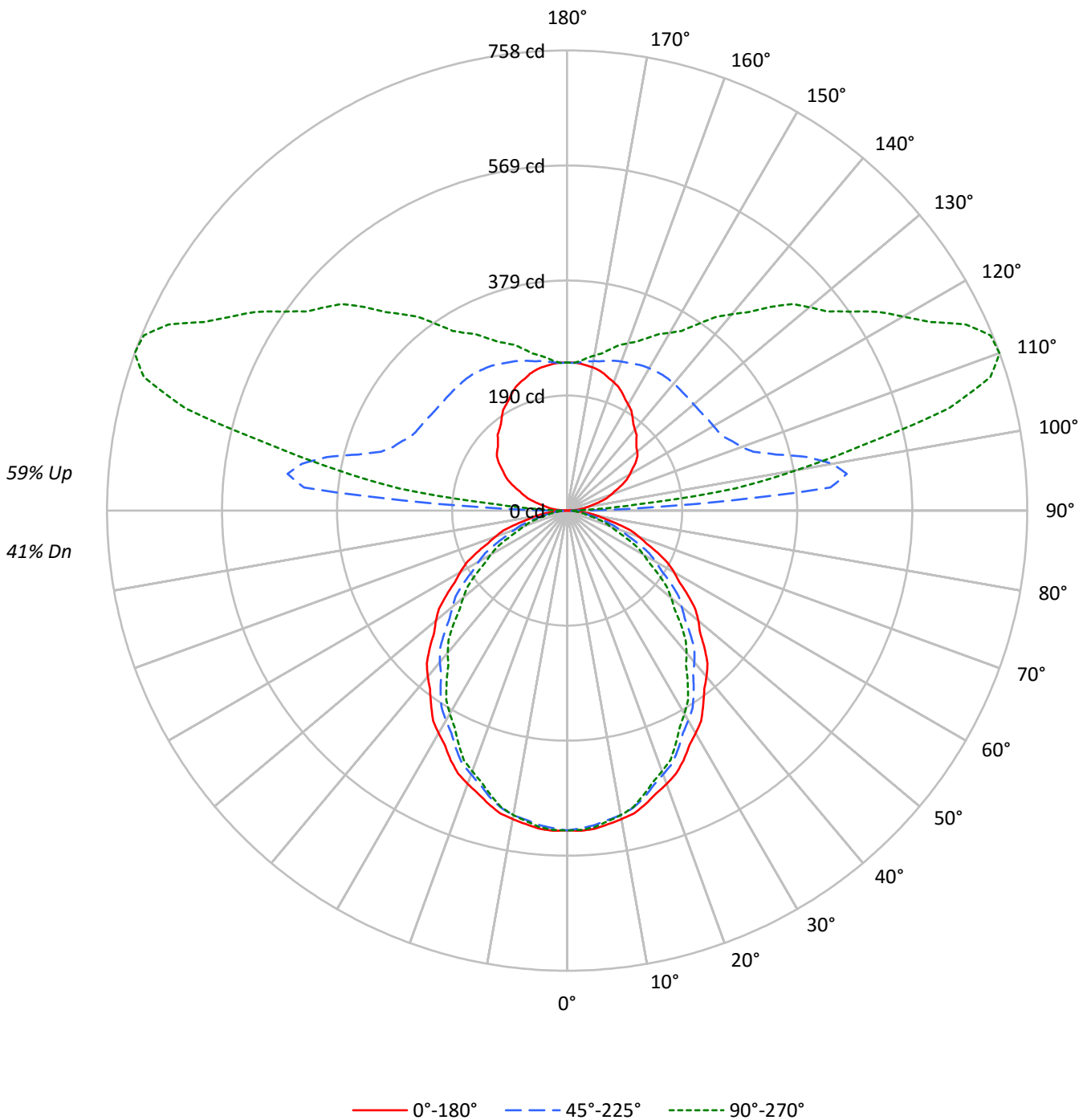
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	50	30	10	50	30	10	0														
RCR																																						
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47	41																				
1	96	92	88	84	87	84	80	78	69	66	64	55	53	52	42	41	40	35																				
2	87	80	74	69	79	73	68	64	60	57	54	48	46	44	37	36	34	29																				
3	80	71	63	58	72	65	58	54	53	49	45	43	40	37	33	31	29	25																				
4	73	63	55	49	66	57	51	45	47	42	39	38	35	32	30	27	25	21																				
5	67	56	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19																				
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	20	17																				
7	57	45	37	32	52	41	35	30	35	29	26	28	24	21	22	20	17	15																				
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	20	18	16	13																				
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12																				
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13	11																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3402	3402	3402
5°	3411	3371	3392
10°	3385	3341	3341
15°	3344	3273	3245
20°	3293	3178	3140
25°	3233	3085	3017
30°	3157	2976	2882
35°	3080	2864	2730
40°	3010	2748	2580
45°	2922	2617	2417
50°	2834	2475	2247
55°	2733	2339	2066
60°	2631	2174	1870
65°	2512	1984	1647
70°	2374	1743	1420
75°	2186	1470	1183
80°	1923	1153	993
85°	1623	941	889



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.5	1.6
10°-20°	138.4	4.5
20°-30°	200.8	6.5
30°-40°	228.8	7.4
40°-50°	223.0	7.3
50°-60°	187.7	6.1
60°-70°	131.6	4.3
70°-80°	67.6	2.2
80°-90°	18.4	0.6
90°-100°	176.6	5.7
100°-110°	379.6	12.4
110°-120°	356.2	11.6
120°-130°	288.7	9.4
130°-140°	231.7	7.5
140°-150°	174.8	5.7
150°-160°	123.1	4.0
160°-170°	72.5	2.4
170°-180°	23.6	0.8
0°-30°	388.7	12.7
0°-40°	617.6	20.1
0°-60°	1028.3	33.5
0°-90°	1246.0	40.5
90°-120°	912.4	29.7
90°-150°	1607.6	52.3
90°-180°	1827.0	59.5
0°-180°	3072.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	526	524	520	524	523	50
15°	500	498	490	489	485	141
25°	454	447	433	428	423	209
35°	391	381	363	352	346	245
45°	320	308	286	271	265	247
55°	243	230	208	190	184	217
65°	164	150	130	114	108	163
75°	88	75	59	50	47	93
85°	22	15	13	12	12	25
90°	0	4	8	10	11	2
95°	16	48	435	197	116	17
105°	56	78	356	701	651	59
115°	99	120	286	616	725	98
125°	138	161	274	490	571	122
135°	161	194	272	411	474	125
145°	188	215	273	340	374	118
155°	214	230	266	301	314	99
165°	234	240	255	271	275	66
175°	243	243	245	248	247	23
180°	244	244	244	244	244	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8
2.5°	527.8	527.6	527.4	527.2	526.9	526.5	525.8	525.0	524.3	523.7	524.3
5°	526.1	525.7	525.4	525.0	524.6	524.0	523.0	522.0	521.1	520.0	521.0
7.5°	520.9	520.6	520.2	519.9	519.5	518.8	517.6	516.4	515.3	514.1	514.7
10°	516.1	515.8	515.6	515.3	515.1	514.3	513.1	511.8	510.6	509.4	509.6
12.5°	510.7	510.3	510.1	509.7	509.4	508.3	506.7	505.1	503.3	501.7	501.9
15°	500.2	499.6	499.1	498.6	498.1	496.9	495.0	493.2	491.3	489.5	489.4
17.5°	488.4	487.5	486.7	485.9	485.1	483.5	481.1	478.8	476.5	474.2	473.7
20°	479.1	478.2	477.3	476.5	475.5	473.7	470.9	468.0	465.2	462.4	461.9
22.5°	468.9	468.0	467.2	466.2	465.4	463.5	460.5	457.5	454.5	451.6	450.7
25°	453.7	452.3	451.0	449.6	448.3	446.0	442.7	439.5	436.2	432.9	431.8
27.5°	436.1	434.5	432.9	431.3	429.6	427.1	423.6	420.1	416.6	413.1	411.5
30°	423.4	421.7	420.0	418.4	416.6	414.0	410.3	406.6	402.9	399.1	397.1
32.5°	411.0	409.0	407.1	405.1	403.1	400.3	396.5	392.7	388.9	385.1	382.9
35°	390.7	388.7	386.5	384.4	382.3	379.2	375.2	371.3	367.3	363.3	360.8
37.5°	370.9	368.3	365.8	363.2	360.6	357.2	353.2	349.0	345.0	340.9	337.8
40°	357.0	354.3	351.6	349.0	346.3	342.9	338.6	334.4	330.1	325.9	322.5
42.5°	342.2	339.6	336.8	334.2	331.4	327.9	323.5	319.1	314.7	310.3	307.1
45°	319.9	317.4	314.8	312.2	309.7	305.9	301.1	296.3	291.4	286.5	282.9
47.5°	296.8	294.0	291.4	288.6	285.9	282.1	277.2	272.3	267.4	262.5	258.9
50°	282.1	279.2	276.3	273.4	270.4	266.5	261.4	256.4	251.3	246.3	242.6
52.5°	266.2	263.2	260.2	257.3	254.3	250.4	245.6	240.8	236.1	231.4	227.4
55°	242.7	239.9	237.0	234.3	231.4	227.6	222.6	217.6	212.7	207.7	203.7
57.5°	219.0	216.0	212.9	209.9	206.9	203.0	198.2	193.5	188.7	183.9	180.0
60°	203.7	200.6	197.5	194.4	191.3	187.4	182.6	177.9	173.1	168.3	164.5
62.5°	187.5	184.5	181.6	178.7	175.6	171.8	166.9	162.1	157.2	152.4	148.8
65°	164.4	161.4	158.3	155.3	152.3	148.4	143.8	139.1	134.4	129.8	126.2
67.5°	141.4	138.4	135.3	132.3	129.3	125.5	121.1	116.6	112.1	107.6	104.4
70°	125.7	122.8	119.8	116.8	113.7	110.0	105.6	101.2	96.8	92.3	89.5
72.5°	110.5	107.5	104.6	101.7	98.8	95.1	91.0	86.9	82.7	78.6	76.1
75°	87.6	84.9	82.2	79.6	77.0	73.8	70.0	66.3	62.6	58.9	56.9
77.5°	64.7	62.7	60.5	58.4	56.3	53.7	50.8	47.8	44.9	41.8	40.5
80°	51.7	49.6	47.5	45.4	43.2	41.0	38.5	36.0	33.5	31.0	30.2
82.5°	39.0	37.1	35.2	33.2	31.3	29.5	27.9	26.2	24.5	22.7	22.4
85°	21.9	20.3	18.7	17.1	15.5	14.5	14.0	13.6	13.2	12.7	12.7
87.5°	7.4	7.1	6.7	6.5	6.1	6.0	6.0	6.2	6.2	6.4	6.5
90°	0.5	0.9	2.0	2.9	4.0	4.9	5.4	6.4	6.9	7.8	8.4
92.5°	6.0	7.2	11.4	17.5	25.9	40.3	67.1	112.1	160.9	158.3	128.2
95°	16.2	16.7	20.7	26.0	36.9	59.0	111.5	219.6	355.1	435.1	425.9
97.5°	26.9	27.5	30.2	35.6	45.4	61.3	96.1	175.2	317.1	464.7	538.8
100°	34.4	35.4	37.4	42.7	52.1	66.8	95.3	159.1	282.9	443.5	566.3
102.5°	42.6	43.2	44.8	50.6	59.2	73.4	98.8	152.5	256.9	406.1	549.7
105°	55.5	55.5	57.9	62.9	70.7	84.5	106.1	149.8	231.8	356.1	497.1
107.5°	68.1	69.1	71.4	75.4	83.6	96.0	116.9	154.3	221.2	321.6	443.2
110°	77.1	78.1	80.1	84.5	91.9	104.6	124.8	158.6	218.1	305.5	412.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	86.2	87.1	88.7	93.2	100.5	112.9	132.2	164.1	218.1	296.1	389.8
115°	99.2	100.2	101.7	106.1	113.5	125.7	143.9	172.4	219.6	285.9	364.9
117.5°	111.0	112.4	114.1	118.5	126.8	138.7	155.9	181.8	222.7	280.9	350.1
120°	118.8	120.4	122.3	126.7	135.1	147.3	164.5	188.1	225.9	278.4	341.8
122.5°	127.1	128.2	129.8	134.1	143.4	155.6	172.8	195.2	228.7	276.6	334.8
125°	137.5	138.5	140.9	145.3	154.7	167.5	183.7	204.8	233.3	274.1	325.1
127.5°	145.7	147.1	150.3	155.9	165.8	178.6	194.2	213.6	238.5	272.9	316.3
130°	150.8	152.2	156.2	162.6	172.9	185.6	200.9	219.6	241.7	272.1	310.4
132.5°	154.7	156.6	161.3	168.5	179.2	191.9	207.2	224.6	245.2	272.1	305.7
135°	161.1	163.1	168.9	176.8	187.1	200.4	215.6	231.8	249.9	272.1	300.1
137.5°	169.2	170.7	176.2	184.0	194.1	207.8	221.6	237.1	254.4	272.7	295.1
140°	173.8	175.3	181.2	189.1	198.5	211.7	225.9	240.6	256.4	273.1	292.7
142.5°	179.3	180.5	186.0	193.8	202.8	215.2	228.7	242.6	257.5	273.5	290.8
145°	187.6	188.6	193.5	200.4	209.2	220.5	233.3	245.6	258.8	273.1	287.8
147.5°	196.2	196.8	201.0	207.4	215.1	225.1	236.3	247.4	259.3	271.8	284.7
150°	201.4	202.3	205.8	212.2	219.0	227.4	238.2	248.5	259.3	270.6	282.4
152.5°	206.9	207.4	210.5	216.1	222.6	230.1	240.1	249.3	258.9	269.1	279.7
155°	214.1	214.1	217.1	222.0	226.9	233.8	242.1	249.9	257.9	266.2	275.0
157.5°	220.6	220.5	222.9	227.1	231.4	236.6	243.8	250.5	256.6	263.2	270.7
160°	225.0	224.5	226.4	229.9	233.8	238.2	244.6	250.5	255.4	261.3	267.2
162.5°	228.5	228.0	230.0	233.0	236.2	239.8	245.4	250.1	254.3	258.9	264.1
165°	233.8	232.8	234.3	236.7	238.7	241.7	245.6	249.5	252.4	255.4	259.3
167.5°	237.3	236.9	237.7	239.1	240.5	242.3	245.6	248.3	249.7	251.9	254.7
170°	239.7	239.2	239.7	240.6	241.7	243.1	245.6	247.5	248.5	249.9	251.9
172.5°	241.3	240.4	240.8	241.9	242.5	243.1	245.2	246.8	246.9	247.6	249.2
175°	243.1	242.1	242.6	243.1	243.1	243.1	244.6	245.6	245.0	245.0	245.6
177.5°	244.0	243.2	243.2	243.6	243.2	243.2	244.0	244.4	243.6	243.6	244.0
180°	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8
2.5°	525.0	525.8	526.5	526.8	526.8	526.7	526.6	526.5
5°	521.9	522.7	523.6	524.0	523.8	523.6	523.4	523.2
7.5°	515.3	516.0	516.6	516.8	516.6	516.4	516.3	516.0
10°	509.9	510.1	510.4	510.4	510.1	509.9	509.6	509.4
12.5°	502.0	502.3	502.5	502.4	502.0	501.5	501.2	500.8
15°	489.2	489.1	489.0	488.6	487.8	487.1	486.3	485.4
17.5°	473.3	472.9	472.4	471.8	471.2	470.5	469.8	469.2
20°	461.5	461.1	460.6	460.0	459.2	458.4	457.6	456.8
22.5°	449.8	448.9	448.1	447.3	446.7	446.0	445.4	444.7
25°	430.7	429.5	428.3	427.3	426.3	425.3	424.4	423.4
27.5°	409.9	408.3	406.7	405.4	404.5	403.6	402.6	401.7
30°	395.0	393.0	391.0	389.6	388.7	388.0	387.2	386.4
32.5°	380.6	378.4	376.1	374.5	373.5	372.5	371.4	370.5
35°	358.2	355.6	353.0	351.1	349.9	348.7	347.4	346.2
37.5°	334.7	331.7	328.6	326.4	325.2	324.0	322.8	321.6
40°	319.2	315.8	312.5	310.2	309.2	308.2	307.0	306.0
42.5°	303.8	300.7	297.4	295.1	293.5	291.9	290.3	288.8
45°	279.4	275.9	272.3	269.9	268.6	267.3	266.0	264.6
47.5°	255.3	251.6	248.0	245.4	243.9	242.5	241.0	239.5
50°	238.8	235.1	231.4	228.9	227.6	226.3	225.0	223.6
52.5°	223.3	219.4	215.3	212.7	211.4	210.1	208.7	207.4
55°	199.8	195.8	191.8	189.1	187.7	186.2	184.9	183.5
57.5°	176.2	172.3	168.3	165.7	164.5	163.2	162.0	160.7
60°	160.6	156.6	152.7	150.2	148.8	147.5	146.2	144.8
62.5°	145.2	141.5	137.9	135.5	134.1	132.9	131.6	130.2
65°	122.6	119.1	115.5	113.1	111.8	110.5	109.2	107.8
67.5°	101.1	97.9	94.6	92.5	91.4	90.4	89.3	88.3
70°	86.9	84.1	81.4	79.5	78.4	77.3	76.3	75.2
72.5°	73.5	71.0	68.5	66.9	66.2	65.5	64.7	64.1
75°	55.0	53.0	51.1	49.9	49.2	48.6	48.0	47.4
77.5°	39.2	37.8	36.4	35.5	35.0	34.6	34.1	33.7
80°	29.4	28.7	27.9	27.4	27.2	27.0	26.9	26.7
82.5°	22.0	21.6	21.3	21.0	20.9	20.8	20.8	20.6
85°	12.6	12.5	12.4	12.3	12.2	12.1	12.1	12.0
87.5°	6.5	6.6	6.7	6.9	6.8	6.8	6.8	6.7
90°	8.9	9.3	9.8	10.8	10.8	10.8	11.3	11.3
92.5°	87.0	63.2	47.5	40.3	34.0	32.8	32.1	31.3
95°	353.1	278.4	218.1	176.8	142.0	127.2	123.3	115.5
97.5°	525.9	473.6	414.7	357.3	327.0	299.5	285.2	279.0
100°	604.1	580.1	529.4	478.4	444.4	409.1	391.0	383.1
102.5°	630.4	645.2	621.0	586.4	550.2	525.0	505.3	499.4
105°	614.9	682.2	703.8	698.4	682.7	666.5	656.7	650.7
107.5°	559.5	649.3	704.8	730.4	738.4	738.3	735.0	731.1
110°	518.7	612.0	681.2	723.0	745.0	754.4	757.9	757.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	486.5	575.1	645.1	694.3	726.6	742.6	751.1	754.7
115°	445.9	522.1	589.4	642.9	681.2	704.8	718.5	725.0
117.5°	419.8	485.4	543.4	592.5	630.9	655.2	668.8	672.8
120°	405.7	464.6	518.7	561.9	598.2	621.8	635.1	638.9
122.5°	395.1	449.7	497.8	538.3	570.7	592.3	605.5	609.1
125°	379.6	429.7	472.5	507.8	535.4	555.5	566.3	571.2
127.5°	363.9	410.7	450.6	483.7	508.6	526.4	536.6	538.8
130°	354.1	397.4	435.7	467.5	492.1	508.3	518.1	521.1
132.5°	344.3	384.8	419.6	450.3	474.8	491.0	500.1	503.4
135°	331.5	365.4	396.8	424.8	446.4	462.6	471.5	474.4
137.5°	320.7	348.1	374.3	398.0	417.3	432.1	440.2	443.5
140°	314.8	337.9	360.5	381.2	399.3	412.1	419.4	421.9
142.5°	309.7	329.2	348.7	366.6	382.0	392.8	399.8	401.8
145°	303.1	318.2	333.5	346.7	358.5	366.9	372.3	374.3
147.5°	296.8	309.1	320.8	330.8	340.2	346.8	350.0	350.9
150°	293.2	304.0	313.3	322.2	329.6	335.4	337.4	337.9
152.5°	289.3	298.9	307.5	314.4	320.6	325.2	327.2	327.7
155°	283.4	291.3	298.1	303.5	308.4	311.9	313.3	313.8
157.5°	277.5	284.0	289.3	293.5	297.3	300.1	301.5	301.4
160°	273.5	278.4	283.4	286.8	290.2	292.7	293.7	293.2
162.5°	269.2	273.8	277.8	280.9	283.6	285.7	285.9	285.8
165°	263.2	266.7	269.7	272.1	274.1	275.0	275.0	275.0
167.5°	257.5	259.8	262.1	263.8	264.8	265.7	265.3	265.2
170°	254.4	255.9	257.4	258.3	259.3	259.8	259.8	259.3
172.5°	250.9	252.4	253.4	254.0	254.3	255.1	254.3	253.8
175°	247.0	247.0	248.1	248.1	248.1	248.5	247.5	247.0
177.5°	244.4	244.8	244.8	244.8	244.4	244.8	243.6	243.6
180°	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6

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