

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: P333168-927

Luminaire Tested: **S125DIP-S610D365U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333168-927
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-S610D365U927-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3021.8 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

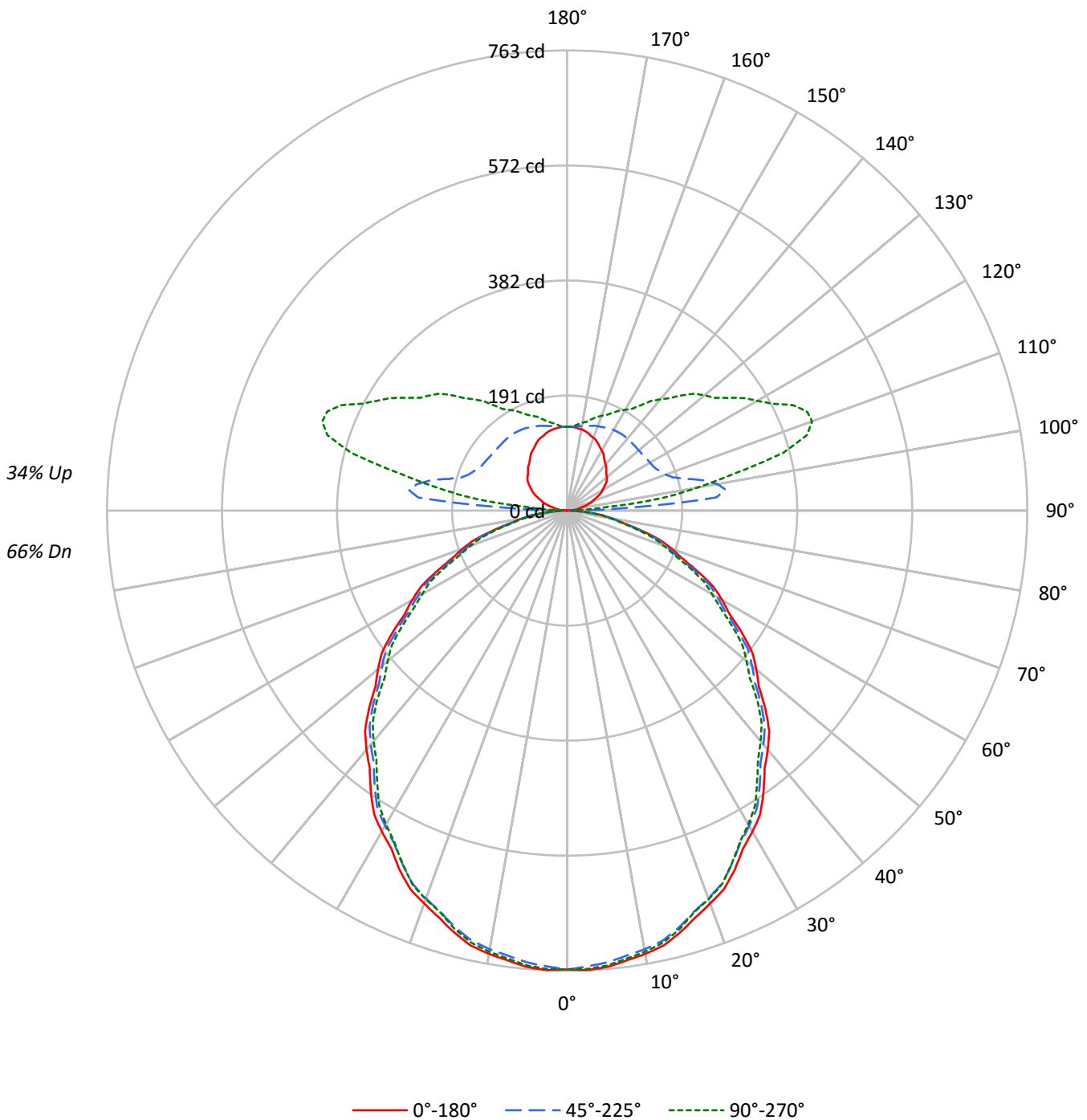
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66
1	101	97	93	89	95	91	88	84	81	78	76	71	69	67	62	61	59	55
2	92	84	78	73	86	80	74	69	71	66	62	62	59	56	55	52	50	46
3	84	74	67	61	79	70	63	58	62	57	53	55	51	47	48	45	42	39
4	77	66	58	51	72	62	55	49	55	49	45	49	44	41	43	40	37	33
5	71	59	50	44	66	56	48	42	50	43	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	35	31	28	25
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	25	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	22	28	23	20	25	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4914	4914	4914
5°	4924	4877	4909
10°	4894	4844	4871
15°	4841	4785	4805
20°	4766	4704	4712
25°	4684	4606	4603
30°	4583	4502	4480
35°	4475	4389	4328
40°	4364	4268	4207
45°	4244	4156	4074
50°	4112	4022	3900
55°	3985	3869	3762
60°	3834	3716	3584
65°	3651	3533	3412
70°	3478	3320	3206
75°	3169	3064	2959
80°	2819	2775	2708
85°	2453	2497	2364



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	2.4
10°-20°	202.6	6.7
20°-30°	299.2	9.9
30°-40°	349.1	11.6
40°-50°	350.6	11.6
50°-60°	307.8	10.2
60°-70°	229.3	7.6
70°-80°	131.1	4.3
80°-90°	38.9	1.3
90°-100°	100.7	3.3
100°-110°	216.4	7.2
110°-120°	203.1	6.7
120°-130°	164.6	5.4
130°-140°	132.1	4.4
140°-150°	99.7	3.3
150°-160°	70.1	2.3
160°-170°	41.4	1.4
170°-180°	13.5	0.4
0°-30°	573.6	19.0
0°-40°	922.7	30.5
0°-60°	1581.1	52.3
0°-90°	1980.5	65.5
90°-120°	520.1	17.2
90°-150°	916.4	30.3
90°-180°	1041.0	34.4
0°-180°	3021.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	761	761	761	761	761	
5°	760	758	752	757	757	72
15°	724	722	716	719	719	204
25°	657	654	646	648	646	302
35°	568	565	557	554	549	355
45°	465	462	455	448	446	358
55°	354	352	344	338	334	316
65°	239	237	231	226	223	237
75°	127	126	123	121	119	135
85°	33	34	34	33	32	37
90°	0	2	4	6	6	2
95°	9	27	248	113	66	10
105°	32	44	203	400	371	33
115°	57	68	163	351	413	56
125°	78	92	156	279	326	70
135°	92	110	155	234	270	71
145°	107	122	156	194	213	67
155°	122	131	152	171	179	56
165°	133	137	146	154	157	38
175°	139	139	140	141	141	13
180°	139	139	139	139	139	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8
2.5°	762.7	762.4	762.1	761.8	761.4	760.7	759.7	758.6	757.6	756.5	757.6
5°	759.6	759.3	759.1	758.8	758.5	757.7	756.4	755.0	753.7	752.3	753.6
7.5°	752.6	752.3	752.1	751.8	751.5	750.7	749.2	747.7	746.2	744.8	745.9
10°	746.3	746.1	745.8	745.5	745.3	744.4	742.9	741.5	740.0	738.6	739.6
12.5°	738.6	738.2	737.7	737.2	736.7	735.8	734.4	733.1	731.7	730.3	731.2
15°	724.1	723.7	723.3	722.9	722.5	721.5	720.1	718.6	717.1	715.7	716.3
17.5°	707.3	706.8	706.2	705.6	705.0	703.9	702.4	700.8	699.3	697.8	698.6
20°	693.4	693.1	692.8	692.6	692.3	691.3	689.6	687.9	686.1	684.4	685.3
22.5°	679.4	678.9	678.4	677.9	677.5	676.4	674.8	673.2	671.5	669.9	670.5
25°	657.3	656.6	655.9	655.3	654.6	653.4	651.6	649.9	648.2	646.4	646.7
27.5°	631.4	631.0	630.6	630.2	629.8	628.7	626.9	625.1	623.3	621.5	621.5
30°	614.5	614.1	613.7	613.3	612.9	611.7	609.7	607.7	605.7	603.7	603.4
32.5°	596.2	595.6	595.0	594.4	593.7	592.6	590.8	589.0	587.2	585.4	584.9
35°	567.6	567.0	566.5	566.0	565.5	564.3	562.4	560.5	558.6	556.7	556.1
37.5°	537.8	537.2	536.5	535.8	535.2	533.9	532.2	530.4	528.6	526.9	525.9
40°	517.6	517.0	516.3	515.6	514.9	513.7	511.8	509.9	508.0	506.2	505.0
42.5°	496.0	495.4	494.8	494.2	493.7	492.5	490.6	488.8	486.9	485.0	483.9
45°	464.7	464.1	463.6	463.0	462.6	461.4	459.9	458.3	456.6	455.0	453.4
47.5°	430.9	430.9	431.0	431.0	431.0	430.1	428.2	426.3	424.4	422.4	420.8
50°	409.3	408.8	408.4	408.1	407.7	406.7	405.0	403.5	401.9	400.3	398.5
52.5°	387.1	386.8	386.6	386.3	386.0	384.9	383.3	381.5	379.9	378.1	376.6
55°	353.9	353.5	353.1	352.7	352.3	351.2	349.3	347.5	345.5	343.6	342.5
57.5°	318.9	318.7	318.5	318.2	318.1	317.1	315.5	313.9	312.4	310.9	309.3
60°	296.8	296.2	295.6	295.1	294.6	293.6	292.2	290.7	289.1	287.7	286.4
62.5°	273.6	273.2	272.7	272.4	271.9	271.1	269.8	268.5	267.3	266.0	264.6
65°	238.9	238.7	238.4	238.1	237.9	237.0	235.5	234.1	232.6	231.2	229.9
67.5°	205.3	204.8	204.2	203.7	203.1	202.3	201.2	200.1	199.0	197.9	196.9
70°	184.2	183.5	182.8	182.2	181.5	180.5	179.4	178.2	177.0	175.8	174.9
72.5°	161.1	160.6	160.2	159.7	159.2	158.6	157.9	157.1	156.3	155.5	154.6
75°	127.0	126.7	126.4	126.2	126.0	125.5	124.8	124.1	123.4	122.8	122.4
77.5°	95.6	95.5	95.4	95.2	95.1	94.9	94.5	94.2	93.8	93.4	93.2
80°	75.8	75.8	75.8	75.8	75.8	75.7	75.4	75.2	74.9	74.6	74.5
82.5°	58.5	58.3	58.1	57.8	57.7	57.5	57.4	57.4	57.4	57.3	57.0
85°	33.1	33.3	33.4	33.5	33.7	33.7	33.7	33.7	33.7	33.7	33.6
87.5°	13.1	13.2	13.2	13.3	13.5	13.5	13.5	13.5	13.4	13.4	13.5
90°	0.3	0.6	1.1	1.7	2.2	2.8	3.1	3.6	3.9	4.5	4.8
92.5°	3.4	4.1	6.5	10.0	14.8	23.0	38.3	63.8	91.7	90.2	73.0
95°	9.3	9.5	11.7	14.8	21.0	33.6	63.5	125.2	202.4	248.0	242.7
97.5°	15.4	15.7	17.3	20.4	25.9	34.9	54.7	99.9	180.8	264.9	307.1
100°	19.6	20.1	21.3	24.3	29.7	38.1	54.3	90.7	161.3	252.8	322.8
102.5°	24.3	24.6	25.5	28.8	33.7	41.9	56.3	86.9	146.5	231.6	313.4
105°	31.6	31.6	33.0	35.8	40.3	48.2	60.4	85.4	132.1	203.0	283.4
107.5°	38.8	39.4	40.7	43.0	47.7	54.7	66.6	87.9	126.1	183.3	252.6
110°	44.0	44.5	45.6	48.2	52.4	59.7	71.1	90.5	124.3	174.1	235.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	49.1	49.7	50.5	53.1	57.3	64.3	75.3	93.6	124.3	168.7	222.2
115°	56.6	57.1	58.0	60.4	64.6	71.7	82.1	98.2	125.2	163.0	208.0
117.5°	63.3	64.1	65.0	67.5	72.3	79.1	88.9	103.6	127.0	160.1	199.6
120°	67.7	68.6	69.7	72.2	77.0	84.0	93.8	107.3	128.8	158.8	194.9
122.5°	72.5	73.0	74.0	76.5	81.7	88.7	98.5	111.2	130.3	157.6	190.8
125°	78.4	79.0	80.3	82.9	88.2	95.5	104.7	116.8	133.0	156.2	185.4
127.5°	83.0	83.9	85.6	88.9	94.5	101.8	110.7	121.8	135.9	155.6	180.3
130°	86.0	86.8	89.0	92.7	98.5	105.8	114.5	125.2	137.8	155.1	177.0
132.5°	88.2	89.3	92.0	96.0	102.1	109.4	118.1	128.1	139.7	155.1	174.3
135°	91.8	92.9	96.3	100.8	106.7	114.2	122.9	132.1	142.5	155.1	171.0
137.5°	96.4	97.3	100.4	104.9	110.7	118.4	126.4	135.1	145.0	155.4	168.2
140°	99.1	100.0	103.3	107.8	113.1	120.6	128.8	137.2	146.2	155.7	166.8
142.5°	102.3	102.8	106.0	110.5	115.6	122.7	130.3	138.3	146.8	155.9	165.7
145°	106.9	107.5	110.3	114.2	119.3	125.7	133.0	140.0	147.5	155.7	164.1
147.5°	111.9	112.2	114.6	118.3	122.6	128.3	134.7	141.0	147.8	155.0	162.3
150°	114.8	115.3	117.3	121.0	124.8	129.6	135.8	141.6	147.8	154.2	161.0
152.5°	118.0	118.3	120.0	123.2	126.9	131.2	136.9	142.1	147.6	153.4	159.4
155°	122.1	122.1	123.7	126.5	129.4	133.2	138.0	142.5	146.9	151.8	156.8
157.5°	125.8	125.7	127.1	129.4	131.9	134.9	138.9	142.8	146.2	150.0	154.3
160°	128.3	127.9	129.0	131.0	133.2	135.8	139.4	142.8	145.6	148.9	152.3
162.5°	130.2	130.0	131.1	132.8	134.6	136.7	139.9	142.6	144.9	147.6	150.5
165°	133.2	132.7	133.6	134.9	136.1	137.8	140.0	142.2	143.9	145.6	147.8
167.5°	135.3	135.0	135.5	136.3	137.0	138.2	140.0	141.6	142.4	143.6	145.2
170°	136.7	136.3	136.7	137.2	137.8	138.6	140.0	141.1	141.6	142.5	143.6
172.5°	137.5	137.0	137.3	137.8	138.2	138.6	139.7	140.7	140.8	141.2	142.0
175°	138.6	138.0	138.3	138.6	138.6	138.6	139.4	140.0	139.7	139.7	140.0
177.5°	139.1	138.6	138.6	138.9	138.6	138.6	139.1	139.3	138.9	138.9	139.1
180°	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8
2.5°	758.6	759.7	760.7	761.2	761.1	761.0	760.9	760.8
5°	754.8	756.0	757.2	757.7	757.6	757.5	757.3	757.2
7.5°	747.1	748.3	749.5	750.0	749.9	749.7	749.6	749.5
10°	740.7	741.7	742.8	743.3	743.1	743.0	742.8	742.8
12.5°	732.1	732.9	733.7	734.2	734.1	734.1	734.1	734.0
15°	717.0	717.6	718.4	718.7	718.7	718.7	718.7	718.7
17.5°	699.5	700.3	701.2	701.2	700.5	699.9	699.3	698.5
20°	686.2	687.1	688.1	688.2	687.5	686.9	686.2	685.6
22.5°	671.1	671.8	672.4	672.5	672.0	671.5	671.1	670.7
25°	647.0	647.2	647.5	647.5	647.1	646.7	646.3	645.9
27.5°	621.6	621.7	621.7	621.5	621.2	620.8	620.4	620.0
30°	603.2	602.9	602.6	602.3	601.9	601.5	601.1	600.7
32.5°	584.5	583.9	583.4	582.9	582.2	581.5	580.7	580.0
35°	555.4	554.8	554.1	553.2	552.2	551.0	550.0	548.9
37.5°	524.9	523.9	522.9	522.1	521.5	520.9	520.3	519.7
40°	503.7	502.6	501.4	500.6	500.2	499.8	499.4	499.0
42.5°	482.8	481.7	480.6	479.7	479.1	478.6	477.9	477.3
45°	451.8	450.2	448.6	447.6	447.2	446.8	446.4	446.0
47.5°	419.1	417.5	415.9	414.6	413.7	412.7	411.8	410.8
50°	396.8	395.1	393.3	392.0	391.0	390.1	389.1	388.2
52.5°	375.0	373.5	372.0	370.7	369.7	368.6	367.6	366.5
55°	341.3	340.1	338.9	337.8	336.8	335.9	335.0	334.1
57.5°	307.7	306.2	304.6	303.6	303.1	302.5	302.1	301.6
60°	285.0	283.7	282.3	281.2	280.3	279.3	278.4	277.5
62.5°	263.2	261.7	260.2	259.2	258.5	257.7	257.0	256.3
65°	228.7	227.5	226.3	225.5	224.9	224.3	223.9	223.3
67.5°	195.9	194.9	193.8	193.1	192.8	192.5	192.2	191.9
70°	174.1	173.3	172.5	171.9	171.3	170.8	170.2	169.8
72.5°	153.7	152.8	151.9	151.1	150.6	150.1	149.6	149.0
75°	122.0	121.6	121.2	120.7	120.2	119.6	119.1	118.6
77.5°	92.9	92.7	92.4	92.1	91.7	91.4	91.0	90.6
80°	74.4	74.2	74.1	73.9	73.6	73.4	73.1	72.8
82.5°	56.8	56.6	56.3	56.2	56.2	56.1	56.0	56.0
85°	33.4	33.3	33.2	33.0	32.7	32.4	32.2	31.9
87.5°	13.5	13.5	13.6	13.6	13.5	13.2	13.1	12.8
90°	5.1	5.3	5.6	6.2	6.2	6.2	6.4	6.4
92.5°	49.6	36.0	27.1	23.0	19.4	18.7	18.3	17.8
95°	201.3	158.8	124.3	100.8	80.9	72.5	70.3	65.8
97.5°	299.8	270.0	236.4	203.7	186.4	170.7	162.6	159.0
100°	344.4	330.7	301.8	272.7	253.3	233.2	222.8	218.4
102.5°	359.3	367.8	354.0	334.3	313.6	299.3	288.0	284.7
105°	350.5	388.9	401.2	398.2	389.1	379.9	374.3	371.0
107.5°	318.9	370.1	401.7	416.4	420.9	420.9	419.0	416.8
110°	295.6	348.9	388.3	412.1	424.7	430.0	432.0	432.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	277.3	327.8	367.7	395.8	414.2	423.3	428.2	430.2
115°	254.2	297.6	336.0	366.5	388.3	401.7	409.6	413.2
117.5°	239.3	276.7	309.7	337.8	359.6	373.5	381.3	383.5
120°	231.2	264.8	295.6	320.3	341.0	354.4	362.0	364.2
122.5°	225.2	256.4	283.8	306.8	325.3	337.6	345.2	347.2
125°	216.4	244.9	269.3	289.5	305.1	316.6	322.8	325.6
127.5°	207.5	234.1	256.8	275.7	289.9	300.1	305.9	307.1
130°	201.8	226.5	248.3	266.6	280.5	289.8	295.4	297.1
132.5°	196.2	219.4	239.2	256.7	270.7	279.9	285.0	286.9
135°	189.0	208.3	226.2	242.2	254.5	263.7	268.8	270.5
137.5°	182.8	198.4	213.3	226.9	237.9	246.3	251.0	252.8
140°	179.4	192.6	205.5	217.2	227.6	234.9	239.1	240.5
142.5°	176.6	187.7	198.8	209.0	217.8	223.9	227.9	229.1
145°	172.8	181.4	190.1	197.6	204.4	209.1	212.2	213.3
147.5°	169.1	176.2	182.9	188.6	193.9	197.7	199.5	200.0
150°	167.2	173.3	178.6	183.6	187.8	191.2	192.3	192.6
152.5°	164.9	170.4	175.2	179.2	182.7	185.4	186.5	186.8
155°	161.5	166.0	169.9	173.0	175.8	177.8	178.6	178.9
157.5°	158.2	161.8	164.9	167.3	169.5	171.1	171.9	171.8
160°	156.0	158.8	161.5	163.5	165.5	166.8	167.4	167.2
162.5°	153.4	156.1	158.4	160.2	161.7	162.8	163.0	162.9
165°	150.0	152.0	153.7	155.1	156.2	156.8	156.8	156.8
167.5°	146.8	148.1	149.4	150.4	151.0	151.5	151.2	151.1
170°	145.0	145.8	146.7	147.3	147.8	148.1	148.1	147.8
172.5°	143.0	143.9	144.5	144.8	144.9	145.4	145.0	144.7
175°	140.9	140.9	141.4	141.4	141.4	141.6	141.1	140.9
177.5°	139.3	139.5	139.5	139.5	139.3	139.5	138.9	138.9
180°	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9

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