

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: P333166-927

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333166-927
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-S610D365U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3140.5 lumens
Efficiency: N/A
Efficacy: 114.2 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

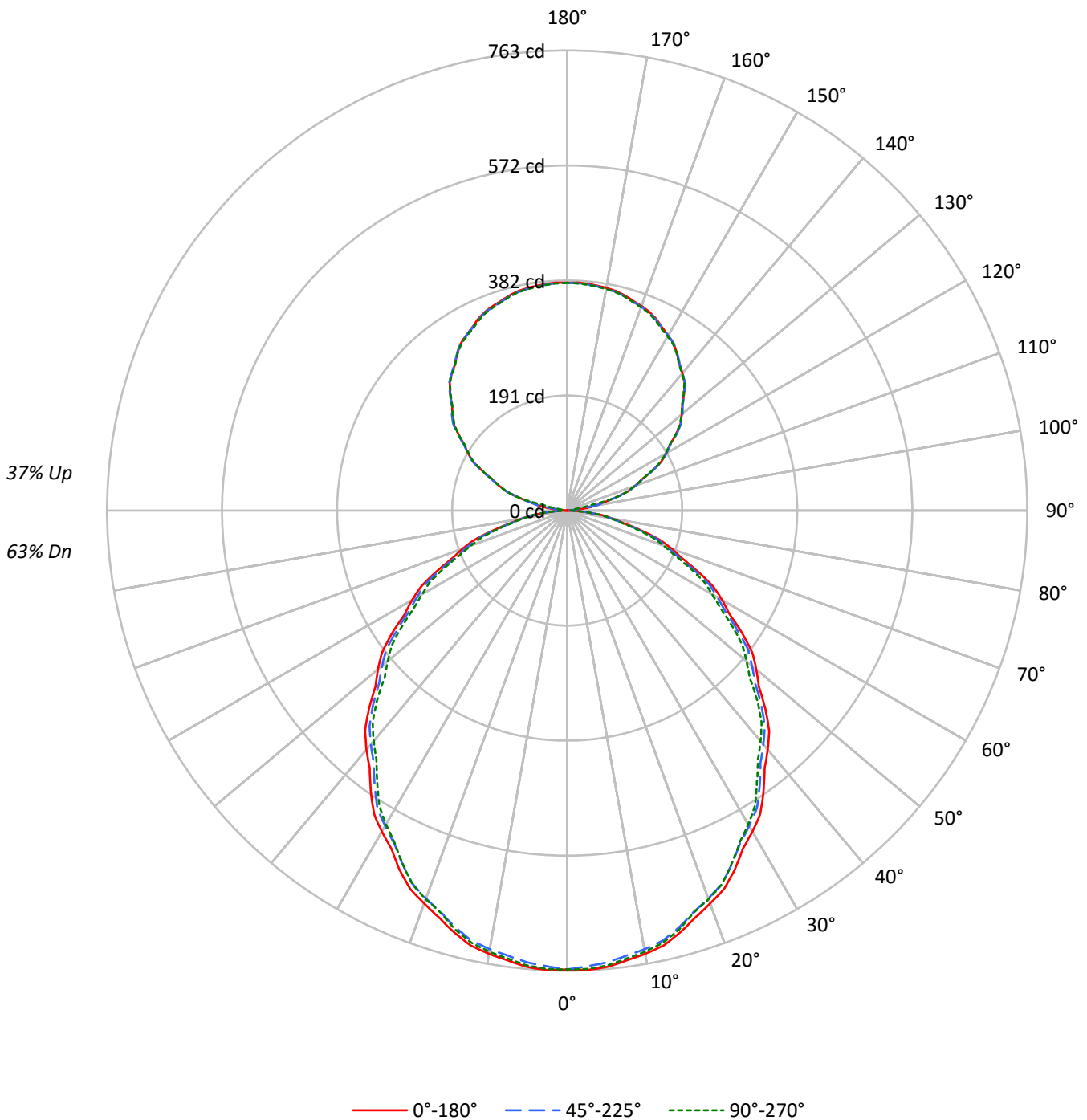
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	110	103	103	103	103	91	91	91	79	79	79	68	68	68	63
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	59	57	53
2	92	84	78	72	86	79	73	69	70	65	62	61	58	55	53	50	48	44
3	84	74	66	60	78	69	63	57	61	56	52	54	50	46	47	44	41	37
4	76	65	57	51	71	62	54	49	55	49	44	48	43	40	42	38	35	32
5	70	58	50	44	66	55	48	42	49	43	38	43	38	34	38	34	31	28
6	65	52	44	38	61	50	42	36	44	38	33	39	34	30	34	30	27	24
7	60	47	39	33	56	45	37	32	40	34	29	35	30	27	31	27	24	22
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22	19
9	52	39	32	27	49	37	30	26	34	28	24	30	25	22	27	23	20	17
10	49	36	29	24	46	34	28	23	31	25	21	28	23	20	25	21	18	16

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	2.3
10°-20°	202.6	6.5
20°-30°	299.2	9.5
30°-40°	349.1	11.1
40°-50°	350.6	11.2
50°-60°	307.8	9.8
60°-70°	229.3	7.3
70°-80°	131.1	4.2
80°-90°	38.9	1.2
90°-100°	13.7	0.4
100°-110°	84.6	2.7
110°-120°	153.4	4.9
120°-130°	196.9	6.3
130°-140°	211.8	6.7
140°-150°	198.8	6.3
150°-160°	160.8	5.1
160°-170°	104.0	3.3
170°-180°	35.9	1.1
0°-30°	573.6	18.3
0°-40°	922.7	29.4
0°-60°	1581.1	50.3
0°-90°	1980.5	63.1
90°-120°	251.8	8.0
90°-150°	859.3	27.4
90°-180°	1160.0	36.9
0°-180°	3140.5	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	3	4	6	7	2
95°	16	15	4	6	6	20
105°	82	83	83	83	83	87
115°	155	156	156	155	153	153
125°	220	222	222	221	220	196
135°	274	276	275	275	273	211
145°	318	318	318	319	317	199
155°	350	348	349	350	348	161
165°	369	368	368	369	367	104
175°	378	376	376	378	376	36
180°	378	378	378	378	378	



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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	13.4	13.5	13.5	13.5	13.5	13.5	13.4	13.5
90°	0.3	0.8	1.3	1.7	2.3	2.8	3.2	3.6	4.0	4.5	4.8
92.5°	4.3	4.0	3.6	3.2	2.9	2.9	3.3	3.7	4.1	4.5	4.8
95°	15.9	15.8	15.6	15.4	15.2	13.9	11.6	9.2	6.8	4.5	4.8
97.5°	33.4	33.7	34.0	34.3	34.7	32.5	27.8	23.1	18.5	13.8	12.0
100°	46.7	47.0	47.1	47.3	47.5	47.7	48.0	48.2	48.5	48.7	39.5
102.5°	60.4	60.7	60.9	61.2	61.4	61.6	61.7	61.9	62.0	62.2	60.4
105°	82.3	82.5	82.9	83.1	83.3	83.4	83.4	83.4	83.4	83.4	83.4
107.5°	105.0	105.0	105.0	105.0	105.0	105.1	105.3	105.4	105.5	105.6	105.6
110°	119.9	119.9	119.9	119.9	119.9	119.9	120.0	120.2	120.3	120.4	120.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	133.7	133.9	134.0	134.2	134.4	134.4	134.5	134.6	134.7	134.8	134.5
115°	154.6	154.9	155.2	155.5	155.8	156.0	156.1	156.1	156.2	156.2	156.0
117.5°	176.1	176.1	176.1	176.1	176.1	176.2	176.4	176.7	176.9	177.1	176.8
120°	189.6	189.5	189.5	189.4	189.3	189.4	189.6	189.7	190.0	190.1	190.0
122.5°	201.5	201.7	201.9	202.2	202.4	202.6	202.6	202.7	202.8	202.9	202.8
125°	219.8	220.2	220.7	221.1	221.6	221.8	221.8	221.8	221.8	221.8	221.5
127.5°	237.3	237.7	238.0	238.3	238.6	238.8	238.7	238.7	238.6	238.6	238.4
130°	248.1	248.4	248.7	249.1	249.4	249.5	249.6	249.6	249.7	249.8	249.6
132.5°	258.9	259.2	259.6	259.9	260.3	260.4	260.3	260.2	260.0	259.8	259.8
135°	274.2	274.5	274.9	275.3	275.6	275.8	275.6	275.5	275.4	275.3	275.1
137.5°	288.2	288.5	288.8	289.1	289.5	289.6	289.5	289.4	289.2	289.1	289.1
140°	297.4	297.5	297.6	297.8	297.9	297.9	297.9	297.8	297.7	297.7	297.8
142.5°	305.7	305.8	305.9	305.9	305.9	306.0	306.2	306.3	306.3	306.4	306.4
145°	317.8	318.0	318.1	318.2	318.3	318.4	318.4	318.4	318.4	318.4	318.5
147.5°	328.4	328.4	328.4	328.4	328.4	328.4	328.4	328.5	328.6	328.7	328.8
150°	335.2	335.1	334.9	334.8	334.7	334.7	334.8	334.9	335.1	335.2	335.3
152.5°	341.7	341.4	341.1	340.9	340.6	340.5	340.6	340.8	340.9	341.0	341.1
155°	350.1	349.7	349.3	348.9	348.6	348.4	348.6	348.6	348.8	348.9	349.1
157.5°	356.5	356.2	356.0	355.8	355.6	355.5	355.5	355.5	355.5	355.5	355.7
160°	360.9	360.6	360.2	359.8	359.5	359.3	359.3	359.4	359.5	359.6	359.8
162.5°	364.6	364.2	363.8	363.4	363.1	362.9	363.0	363.0	363.1	363.1	363.5
165°	369.3	369.0	368.6	368.2	367.9	367.7	367.7	367.8	367.9	368.0	368.3
167.5°	373.0	372.6	372.2	371.8	371.4	371.2	371.3	371.4	371.5	371.5	371.9
170°	374.9	374.5	374.1	373.7	373.2	373.0	373.1	373.1	373.2	373.3	373.8
172.5°	376.3	375.9	375.4	375.0	374.5	374.4	374.5	374.6	374.7	374.9	375.3
175°	377.7	377.4	377.0	376.6	376.3	376.1	376.1	376.2	376.3	376.4	376.8
177.5°	378.4	378.1	377.8	377.6	377.2	377.1	377.2	377.2	377.2	377.3	377.6
180°	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7



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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	13.6	13.6	13.6	13.5	13.2	13.1	12.9
90°	5.1	5.4	5.7	5.9	6.2	6.3	6.5	6.7
92.5°	5.1	5.4	5.7	5.9	6.0	6.1	6.2	6.3
95°	5.1	5.4	5.7	5.9	5.9	5.9	5.9	5.9
97.5°	10.3	8.5	6.7	5.9	5.9	5.9	5.9	5.9
100°	30.2	20.9	11.6	6.9	6.7	6.4	6.1	5.9
102.5°	58.6	56.9	55.1	52.1	47.9	43.7	39.5	35.3
105°	83.4	83.4	83.4	83.4	83.3	83.3	83.3	83.2
107.5°	105.7	105.7	105.7	105.6	105.4	105.2	105.0	104.8
110°	120.0	119.9	119.7	119.6	119.7	119.7	119.8	119.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	134.3	134.0	133.8	133.6	133.6	133.5	133.4	133.3
115°	155.7	155.5	155.3	155.0	154.6	154.2	153.8	153.4
117.5°	176.5	176.2	175.9	175.6	175.5	175.3	175.2	175.0
120°	189.9	189.7	189.6	189.4	189.1	188.8	188.5	188.1
122.5°	202.6	202.6	202.4	202.2	201.8	201.5	201.1	200.7
125°	221.3	221.0	220.8	220.5	220.4	220.2	220.0	219.8
127.5°	238.3	238.1	238.1	237.7	237.3	236.8	236.4	235.9
130°	249.4	249.2	249.1	248.7	248.5	248.2	247.9	247.6
132.5°	259.8	259.8	259.7	259.5	259.2	258.9	258.6	258.3
135°	275.0	274.9	274.7	274.5	274.2	273.8	273.4	273.0
137.5°	289.2	289.2	289.2	289.1	288.8	288.4	288.1	287.8
140°	297.9	298.0	298.2	298.0	297.7	297.3	296.9	296.5
142.5°	306.4	306.5	306.5	306.3	305.9	305.5	305.2	304.8
145°	318.5	318.5	318.6	318.5	318.1	317.7	317.3	317.0
147.5°	328.8	328.9	329.0	328.8	328.4	327.9	327.5	327.0
150°	335.4	335.6	335.6	335.5	335.0	334.5	334.0	333.5
152.5°	341.3	341.4	341.5	341.4	340.9	340.5	340.0	339.5
155°	349.3	349.4	349.7	349.5	349.0	348.5	348.0	347.5
157.5°	355.9	356.1	356.3	356.2	355.7	355.1	354.7	354.2
160°	360.0	360.3	360.5	360.4	359.9	359.4	358.9	358.5
162.5°	363.8	364.2	364.6	364.4	363.8	363.3	362.8	362.3
165°	368.7	369.1	369.5	369.4	368.9	368.4	367.9	367.4
167.5°	372.4	372.8	373.3	373.2	372.6	372.1	371.5	371.0
170°	374.2	374.8	375.3	375.3	374.7	374.1	373.5	373.0
172.5°	375.7	376.2	376.6	376.6	376.0	375.4	374.9	374.3
175°	377.3	377.9	378.3	378.3	377.7	377.2	376.6	376.0
177.5°	378.0	378.3	378.7	378.7	378.3	377.9	377.5	377.1
180°	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7

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