

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: P333524-927

Luminaire Tested: **S125RDIP-S610D365U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333524-927
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: S125RDIP-S610D365U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2887.4 lumens
Efficiency: N/A
Efficacy: 105.0 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: Semi-Direct

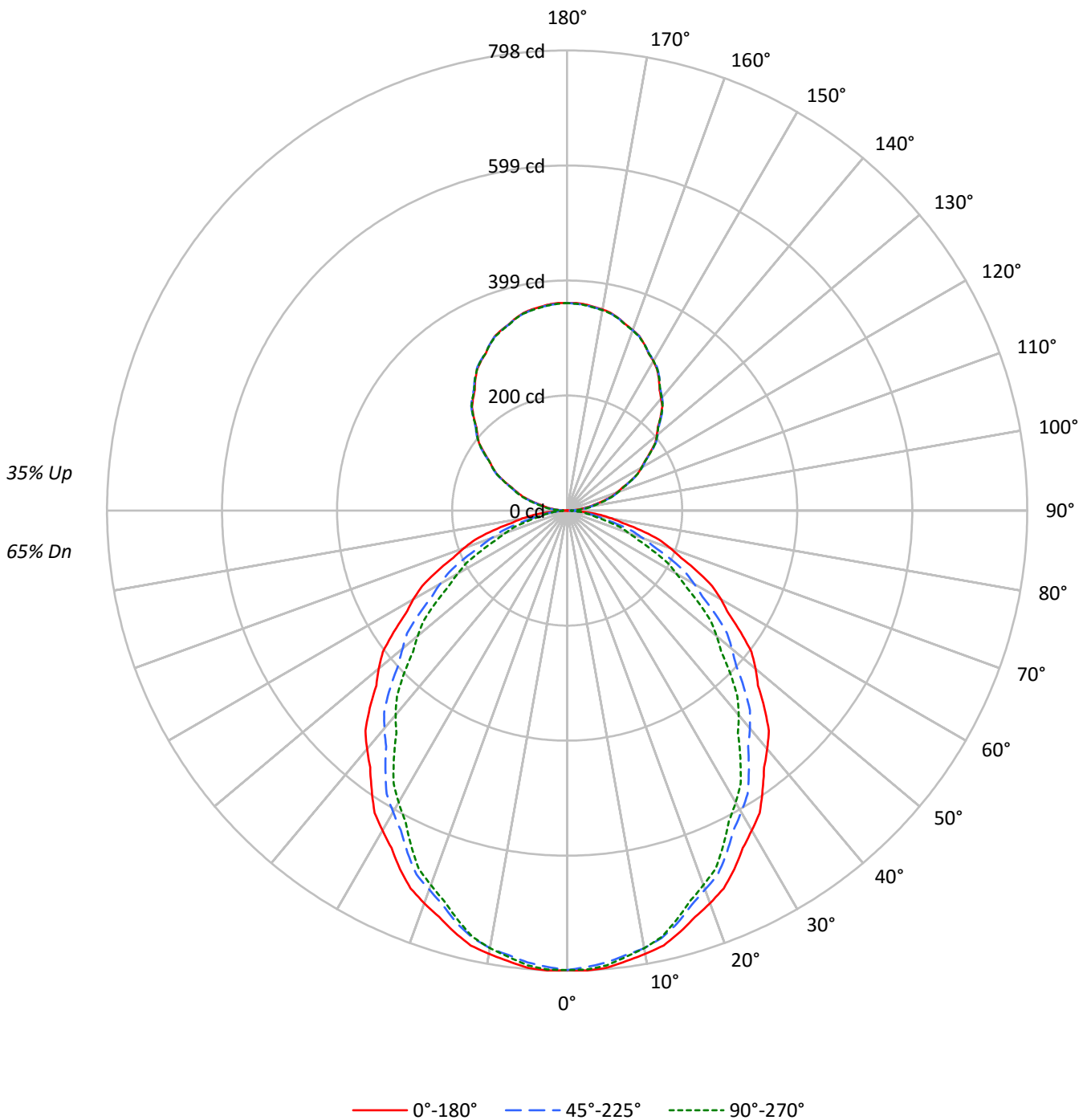
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	80	80	80	70	70	70	65
1	102	97	93	90	95	92	88	85	81	78	76	71	69	68	62	61	60	56
2	93	85	79	74	87	80	75	70	71	67	64	63	60	57	55	53	51	47
3	85	75	68	62	79	71	64	59	63	58	54	56	52	49	49	46	44	40
4	78	67	59	53	73	63	56	50	56	51	46	50	46	42	44	41	38	35
5	71	60	51	45	67	57	49	44	51	45	40	45	40	36	40	36	33	30
6	66	54	46	40	62	51	44	38	46	40	35	41	36	32	36	32	29	27
7	61	49	41	35	57	46	39	34	42	36	31	37	32	29	33	29	26	24
8	57	44	36	31	53	42	35	30	38	32	28	34	29	26	31	27	23	21
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	28	24	21	19
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5147	5147	5147
5°	5159	5100	5131
10°	5119	5052	5052
15°	5059	4950	4910
20°	4981	4807	4748
25°	4890	4666	4563
30°	4776	4502	4359
35°	4660	4332	4128
40°	4552	4156	3903
45°	4420	3958	3656
50°	4287	3744	3399
55°	4135	3538	3125
60°	3981	3289	2830
65°	3799	2998	2492
70°	3592	2638	2149
75°	3306	2221	1787
80°	2912	1748	1499
85°	2453	1430	1341



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	2.6
10°-20°	209.4	7.3
20°-30°	303.7	10.5
30°-40°	346.1	12.0
40°-50°	337.4	11.7
50°-60°	284.0	9.8
60°-70°	199.1	6.9
70°-80°	102.3	3.5
80°-90°	26.6	0.9
90°-100°	24.1	0.8
100°-110°	71.2	2.5
110°-120°	120.5	4.2
120°-130°	158.6	5.5
130°-140°	177.7	6.2
140°-150°	174.2	6.0
150°-160°	146.3	5.1
160°-170°	97.3	3.4
170°-180°	34.0	1.2
0°-30°	588.0	20.4
0°-40°	934.1	32.4
0°-60°	1555.4	53.9
0°-90°	1883.4	65.2
90°-120°	215.8	7.5
90°-150°	726.3	25.2
90°-180°	1004.0	34.8
0°-180°	2887.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	796	793	787	792	792	75
15°	757	752	740	739	734	213
25°	686	676	655	647	640	316
35°	591	576	550	533	524	370
45°	484	466	433	410	400	373
55°	367	347	314	288	278	328
65°	249	228	196	173	163	246
75°	132	114	89	76	72	140
85°	33	23	19	19	18	37
90°	0	3	4	6	7	3
95°	18	19	22	23	24	19
105°	64	65	67	69	70	68
115°	121	122	122	122	122	119
125°	176	178	178	178	177	158
135°	229	231	231	231	230	176
145°	278	279	279	279	279	173
155°	318	318	318	319	318	146
165°	345	345	345	346	344	97
175°	359	358	358	359	358	34
180°	360	360	360	360	360	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	798.4	798.0	797.7	797.4	797.1	796.4	795.3	794.2	793.1	792.1	793.1
5°	795.7	795.2	794.6	794.1	793.5	792.6	791.1	789.6	788.1	786.6	788.0
7.5°	787.9	787.3	786.9	786.3	785.8	784.7	782.9	781.2	779.4	777.6	778.6
10°	780.6	780.2	779.8	779.4	779.0	777.9	776.0	774.2	772.3	770.4	770.8
12.5°	772.5	772.0	771.4	771.0	770.4	768.9	766.4	763.9	761.4	758.8	759.1
15°	756.6	755.7	754.9	754.2	753.4	751.5	748.8	745.9	743.1	740.3	740.2
17.5°	738.6	737.4	736.2	735.0	733.7	731.3	727.8	724.3	720.7	717.2	716.5
20°	724.7	723.3	722.0	720.6	719.3	716.5	712.3	708.0	703.7	699.4	698.7
22.5°	709.2	707.9	706.6	705.3	703.9	701.0	696.5	692.1	687.5	683.0	681.8
25°	686.2	684.1	682.1	680.2	678.1	674.6	669.7	664.7	659.8	654.8	653.2
27.5°	659.7	657.3	654.8	652.4	649.9	646.1	640.8	635.5	630.2	624.9	622.4
30°	640.4	637.9	635.3	632.8	630.3	626.1	620.5	615.0	609.3	603.7	600.6
32.5°	621.6	618.7	615.7	612.8	609.7	605.4	599.7	594.0	588.2	582.5	579.1
35°	591.0	587.9	584.6	581.5	578.2	573.6	567.6	561.6	555.6	549.5	545.7
37.5°	561.1	557.1	553.3	549.4	545.5	540.4	534.2	528.0	521.8	515.6	511.0
40°	539.9	535.9	531.9	527.8	523.9	518.6	512.2	505.8	499.4	493.0	487.9
42.5°	517.8	513.7	509.5	505.4	501.3	495.9	489.3	482.6	476.0	469.4	464.5
45°	483.9	480.1	476.2	472.3	468.4	462.8	455.4	448.1	440.7	433.3	428.0
47.5°	448.9	444.8	440.7	436.7	432.5	426.7	419.4	411.9	404.6	397.1	391.7
50°	426.7	422.3	417.9	413.5	409.1	403.1	395.5	387.9	380.2	372.6	366.9
52.5°	402.7	398.2	393.6	389.1	384.6	378.7	371.5	364.3	357.1	349.9	343.9
55°	367.2	362.9	358.6	354.3	350.1	344.1	336.7	329.2	321.7	314.2	308.2
57.5°	331.3	326.7	322.1	317.6	313.0	307.0	299.8	292.6	285.4	278.2	272.3
60°	308.2	303.5	298.8	294.1	289.5	283.5	276.2	269.0	261.8	254.6	248.7
62.5°	283.6	279.2	274.6	270.2	265.8	259.8	252.5	245.2	237.9	230.5	225.1
65°	248.6	244.1	239.5	235.0	230.4	224.6	217.5	210.4	203.3	196.2	190.8
67.5°	213.8	209.2	204.7	200.2	195.6	190.0	183.2	176.3	169.5	162.7	157.9
70°	190.2	185.7	181.1	176.6	172.0	166.4	159.7	153.0	146.3	139.7	135.5
72.5°	167.1	162.6	158.2	153.8	149.3	143.9	137.7	131.4	125.2	118.9	115.1
75°	132.5	128.4	124.4	120.4	116.4	111.5	105.9	100.3	94.7	89.0	86.1
77.5°	98.0	94.7	91.6	88.3	85.2	81.3	76.8	72.3	67.8	63.3	61.2
80°	78.3	75.0	71.9	68.6	65.4	61.9	58.1	54.4	50.7	47.0	45.7
82.5°	59.0	56.1	53.2	50.3	47.5	44.7	42.1	39.5	37.0	34.5	33.9
85°	33.1	30.7	28.3	25.9	23.4	21.9	21.2	20.6	20.0	19.3	19.1
87.5°	11.2	10.5	9.8	9.2	8.6	8.2	8.2	8.2	8.2	8.1	8.2
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°	6.8	7.1	7.4	7.8	8.2	8.6	9.1	9.7	10.2	10.8	11.2
95°	18.2	18.3	18.5	18.5	18.7	19.1	19.7	20.3	20.9	21.5	22.0
97.5°	30.3	30.3	30.3	30.4	30.4	30.9	31.8	32.6	33.4	34.3	34.8
100°	39.2	39.2	39.2	39.2	39.2	39.6	40.4	41.2	42.1	42.9	43.4
102.5°	48.8	49.1	49.4	49.6	49.8	50.1	50.5	50.9	51.4	51.8	52.4
105°	63.8	64.2	64.5	64.8	65.1	65.4	65.8	66.1	66.5	66.9	67.3
107.5°	80.4	80.7	81.0	81.4	81.7	82.0	82.2	82.5	82.8	83.1	83.3
110°	91.8	92.1	92.4	92.8	93.1	93.3	93.5	93.7	93.9	94.1	94.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	103.5	103.6	103.8	103.9	104.1	104.3	104.6	104.8	105.0	105.3	105.4
115°	120.6	120.9	121.2	121.4	121.7	121.8	122.0	122.1	122.2	122.4	122.3
117.5°	137.9	138.0	138.2	138.2	138.4	138.5	138.6	138.7	138.8	138.9	138.9
120°	148.7	149.0	149.3	149.6	149.9	150.1	150.2	150.2	150.3	150.4	150.4
122.5°	160.3	160.4	160.6	160.7	160.7	160.9	161.1	161.2	161.4	161.5	161.5
125°	176.1	176.5	176.9	177.2	177.6	177.8	177.9	177.9	178.0	178.1	177.9
127.5°	192.9	193.1	193.4	193.5	193.8	193.9	194.0	194.1	194.2	194.2	194.2
130°	203.0	203.3	203.6	203.9	204.2	204.5	204.5	204.7	204.9	204.9	204.9
132.5°	213.1	213.6	214.1	214.6	215.1	215.4	215.3	215.3	215.3	215.2	215.2
135°	229.0	229.4	229.8	230.1	230.5	230.8	230.8	230.8	230.9	231.0	231.0
137.5°	244.1	244.4	244.8	245.1	245.5	245.7	245.9	246.0	246.1	246.3	246.4
140°	253.7	254.0	254.3	254.6	254.9	255.2	255.3	255.6	255.7	255.9	256.0
142.5°	263.3	263.6	263.8	264.1	264.4	264.6	264.8	265.1	265.3	265.5	265.6
145°	277.5	277.7	278.0	278.2	278.5	278.7	278.8	279.1	279.2	279.4	279.4
147.5°	290.6	290.7	290.8	291.0	291.1	291.3	291.4	291.6	291.7	291.8	292.0
150°	299.3	299.3	299.2	299.1	299.0	299.1	299.4	299.7	299.9	300.2	300.2
152.5°	306.5	306.6	306.7	306.7	306.8	306.9	307.0	307.1	307.2	307.3	307.4
155°	317.5	317.5	317.5	317.5	317.5	317.5	317.6	317.7	317.7	317.8	318.1
157.5°	327.3	327.3	327.1	326.9	326.9	326.8	326.9	326.9	326.9	327.0	327.3
160°	333.2	333.0	332.8	332.6	332.5	332.4	332.5	332.5	332.6	332.6	332.9
162.5°	338.3	338.2	338.1	337.9	337.8	337.7	337.7	337.8	337.8	337.8	338.1
165°	345.2	345.1	345.0	344.8	344.8	344.7	344.8	344.8	344.9	344.9	345.2
167.5°	351.0	350.8	350.5	350.3	350.1	349.9	349.9	349.9	349.9	349.9	350.3
170°	354.2	353.9	353.7	353.5	353.2	353.1	353.1	353.1	353.1	353.1	353.5
172.5°	356.4	356.2	355.9	355.7	355.5	355.3	355.3	355.3	355.3	355.3	355.7
175°	358.9	358.7	358.5	358.2	358.0	357.8	357.8	357.8	357.8	357.8	358.2
177.5°	360.2	360.0	359.8	359.7	359.4	359.3	359.3	359.3	359.2	359.1	359.4
180°	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	794.2	795.3	796.4	796.9	796.8	796.6	796.5	796.5
5°	789.3	790.7	792.0	792.6	792.3	792.0	791.8	791.5
7.5°	779.5	780.5	781.4	781.7	781.4	781.1	780.9	780.5
10°	771.2	771.6	772.1	772.1	771.6	771.2	770.8	770.4
12.5°	759.5	759.8	760.0	759.9	759.2	758.7	758.0	757.4
15°	740.1	739.9	739.8	739.1	737.9	736.7	735.5	734.3
17.5°	715.9	715.2	714.5	713.7	712.7	711.7	710.7	709.7
20°	698.1	697.4	696.7	695.8	694.6	693.4	692.2	690.9
22.5°	680.4	679.1	677.8	676.6	675.7	674.6	673.7	672.6
25°	651.4	649.7	647.9	646.3	644.8	643.3	641.9	640.4
27.5°	620.0	617.6	615.1	613.2	611.8	610.4	609.0	607.5
30°	597.5	594.5	591.4	589.2	588.0	586.8	585.7	584.5
32.5°	575.7	572.4	568.9	566.5	564.9	563.4	561.9	560.4
35°	541.8	537.9	534.0	531.2	529.3	527.4	525.5	523.6
37.5°	506.3	501.6	496.9	493.7	491.9	490.1	488.3	486.5
40°	482.8	477.7	472.6	469.3	467.7	466.0	464.5	462.9
42.5°	459.6	454.7	449.9	446.2	443.9	441.6	439.2	436.9
45°	422.6	417.3	411.9	408.3	406.3	404.3	402.3	400.3
47.5°	386.1	380.6	375.1	371.2	369.0	366.8	364.6	362.3
50°	361.3	355.7	350.1	346.3	344.3	342.3	340.2	338.3
52.5°	337.9	331.8	325.7	321.7	319.7	317.7	315.7	313.7
55°	302.1	296.1	290.1	286.1	283.9	281.8	279.6	277.5
57.5°	266.4	260.5	254.7	250.7	248.8	246.9	245.1	243.2
60°	242.8	236.9	231.1	227.1	225.1	223.1	221.1	219.1
62.5°	219.6	214.1	208.7	204.9	203.0	201.0	198.9	196.9
65°	185.5	180.1	174.8	171.1	169.1	167.2	165.1	163.1
67.5°	153.0	148.1	143.1	139.9	138.3	136.7	135.1	133.5
70°	131.3	127.2	123.0	120.2	118.6	117.0	115.3	113.8
72.5°	111.3	107.4	103.6	101.2	100.1	99.0	98.0	96.9
75°	83.2	80.2	77.3	75.3	74.5	73.5	72.6	71.6
77.5°	59.2	57.1	55.1	53.7	53.0	52.3	51.7	50.9
80°	44.5	43.3	42.1	41.4	41.1	40.9	40.6	40.3
82.5°	33.3	32.7	32.2	31.8	31.7	31.5	31.4	31.2
85°	19.0	18.9	18.7	18.6	18.5	18.3	18.2	18.1
87.5°	8.2	8.3	8.4	8.4	8.3	8.2	8.2	8.1
90°	5.1	5.4	5.7	5.9	6.2	6.3	6.5	6.7
92.5°	11.6	12.0	12.4	12.7	12.8	12.9	13.1	13.2
95°	22.4	22.9	23.3	23.6	23.7	23.8	23.9	24.1
97.5°	35.2	35.6	36.0	36.2	36.3	36.4	36.4	36.5
100°	44.0	44.5	45.1	45.4	45.6	45.7	45.8	45.9
102.5°	53.0	53.6	54.3	54.7	54.8	55.0	55.1	55.3
105°	67.7	68.0	68.4	68.7	68.8	69.1	69.2	69.5
107.5°	83.5	83.7	83.8	84.0	83.9	83.9	83.9	83.9
110°	94.4	94.7	94.8	94.9	94.8	94.7	94.7	94.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	105.4	105.5	105.6	105.6	105.5	105.4	105.3	105.2
115°	122.2	122.2	122.1	122.1	122.0	121.9	121.8	121.8
117.5°	139.0	139.1	139.1	139.0	138.8	138.6	138.3	138.0
120°	150.4	150.4	150.4	150.2	150.0	149.7	149.5	149.2
122.5°	161.4	161.4	161.4	161.2	161.1	160.8	160.7	160.4
125°	177.8	177.7	177.6	177.4	177.4	177.4	177.3	177.2
127.5°	194.1	194.0	193.9	193.8	193.8	193.6	193.5	193.4
130°	204.9	204.8	204.7	204.6	204.5	204.4	204.2	204.1
132.5°	215.2	215.1	215.0	214.9	214.7	214.5	214.4	214.2
135°	231.0	231.0	231.0	230.8	230.6	230.4	230.1	229.9
137.5°	246.4	246.5	246.6	246.4	246.1	245.8	245.5	245.2
140°	256.2	256.3	256.4	256.4	256.0	255.7	255.4	255.1
142.5°	265.7	265.8	265.9	265.7	265.4	265.1	264.8	264.5
145°	279.4	279.4	279.4	279.3	279.2	278.9	278.8	278.6
147.5°	292.2	292.3	292.5	292.3	291.9	291.4	291.0	290.7
150°	300.2	300.2	300.2	300.1	300.0	299.8	299.7	299.6
152.5°	307.6	307.8	307.9	307.8	307.7	307.4	307.2	307.0
155°	318.3	318.5	318.8	318.8	318.5	318.1	317.8	317.5
157.5°	327.5	327.8	328.0	328.0	327.6	327.1	326.7	326.3
160°	333.1	333.4	333.6	333.6	333.3	333.0	332.6	332.3
162.5°	338.3	338.7	339.0	339.0	338.6	338.2	337.9	337.5
165°	345.5	345.7	345.9	345.9	345.5	345.2	344.8	344.4
167.5°	350.7	351.0	351.4	351.4	351.0	350.6	350.2	349.9
170°	353.8	354.2	354.6	354.5	354.1	353.6	353.2	352.8
172.5°	356.1	356.4	356.8	356.8	356.4	356.0	355.6	355.2
175°	358.5	358.9	359.3	359.3	358.9	358.4	358.0	357.5
177.5°	359.7	360.0	360.3	360.3	360.0	359.6	359.3	358.9
180°	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8

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