

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: P333524-935

Luminaire Tested: **S125RDIP-S610D365U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333524-935
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-S610D365U935-4F0-1E-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: 3138.2 lumens
Efficiency: N/A
Efficacy: 114.1 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

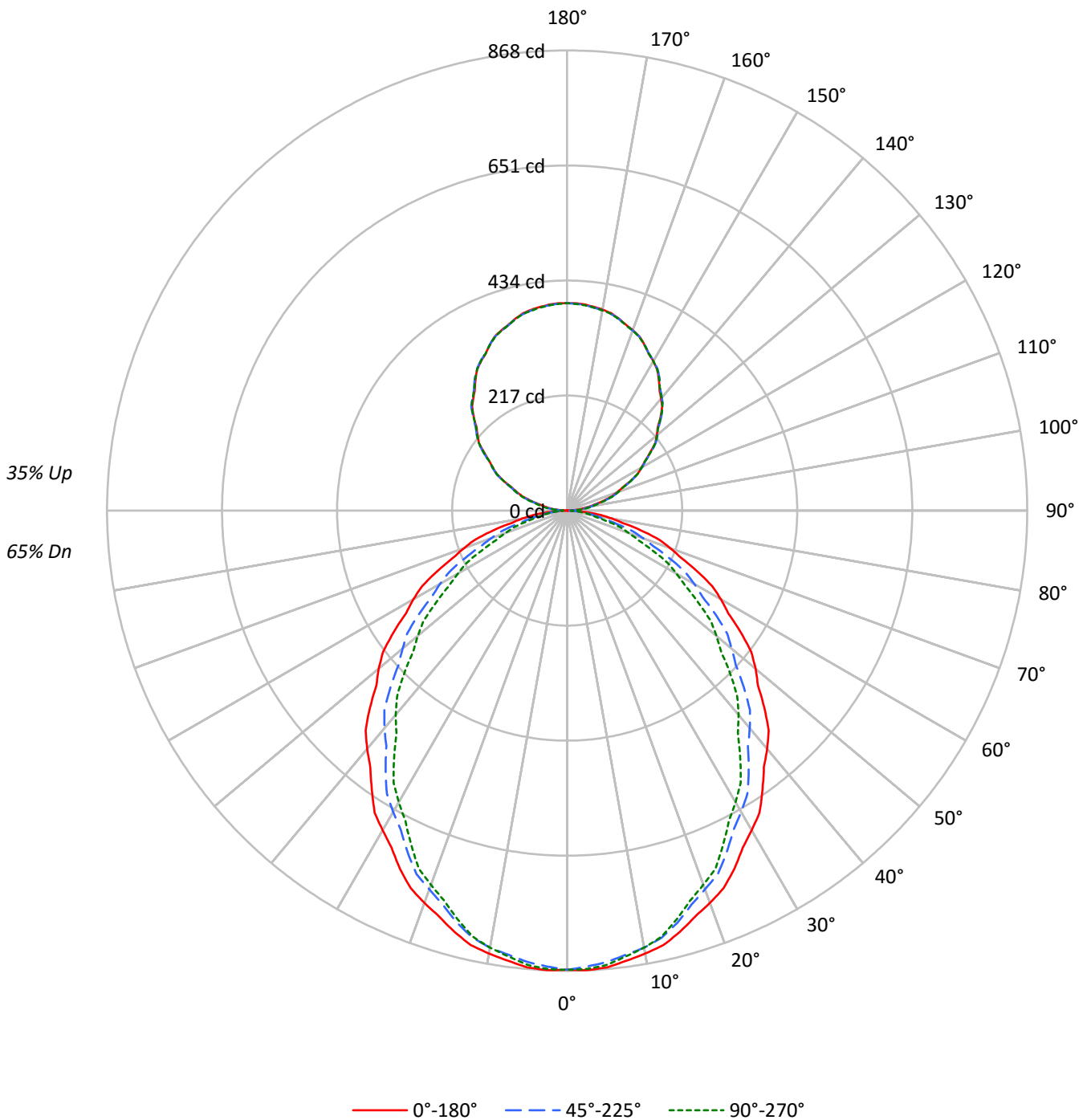
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5594	5594	5594
5°	5607	5543	5577
10°	5564	5491	5491
15°	5498	5380	5336
20°	5413	5225	5161
25°	5315	5072	4960
30°	5190	4894	4737
35°	5065	4709	4487
40°	4947	4517	4242
45°	4804	4302	3974
50°	4660	4068	3693
55°	4494	3845	3396
60°	4326	3574	3077
65°	4129	3260	2709
70°	3903	2866	2334
75°	3593	2415	1941
80°	3165	1901	1629
85°	2668	1549	1452



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	2.6
10°-20°	227.6	7.3
20°-30°	330.1	10.5
30°-40°	376.2	12.0
40°-50°	366.7	11.7
50°-60°	308.6	9.8
60°-70°	216.4	6.9
70°-80°	111.2	3.5
80°-90°	29.0	0.9
90°-100°	26.2	0.8
100°-110°	77.3	2.5
110°-120°	131.0	4.2
120°-130°	172.4	5.5
130°-140°	193.2	6.2
140°-150°	189.3	6.0
150°-160°	159.0	5.1
160°-170°	105.7	3.4
170°-180°	37.0	1.2
0°-30°	639.1	20.4
0°-40°	1015.3	32.4
0°-60°	1690.5	53.9
0°-90°	2047.1	65.2
90°-120°	234.5	7.5
90°-150°	789.5	25.2
90°-180°	1091.0	34.8
0°-180°	3138.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	865	862	855	861	860	82
15°	822	818	805	804	798	232
25°	746	735	712	703	696	343
35°	642	626	597	579	569	402
45°	526	506	471	446	435	406
55°	399	377	342	313	302	357
65°	270	247	213	188	177	268
75°	144	124	97	83	78	152
85°	36	25	21	20	20	40
90°	0	3	5	6	7	3
95°	20	21	23	26	26	21
105°	69	71	73	74	76	74
115°	131	132	133	133	132	130
125°	191	193	194	193	193	171
135°	249	251	251	251	250	192
145°	302	303	304	304	303	188
155°	345	345	345	346	345	159
165°	375	375	375	376	374	106
175°	390	389	389	390	389	37
180°	391	391	391	391	391	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	867.7	867.4	867.0	866.7	866.3	865.6	864.4	863.2	862.0	860.9	862.0
5°	864.8	864.3	863.7	863.1	862.5	861.4	859.8	858.2	856.6	855.0	856.4
7.5°	856.4	855.7	855.2	854.6	854.1	852.9	850.9	849.0	847.1	845.2	846.2
10°	848.4	848.0	847.6	847.1	846.7	845.5	843.4	841.5	839.4	837.3	837.8
12.5°	839.6	839.0	838.4	837.9	837.3	835.7	833.0	830.3	827.5	824.8	825.1
15°	822.3	821.4	820.5	819.7	818.8	816.8	813.8	810.7	807.7	804.6	804.5
17.5°	802.8	801.5	800.1	798.8	797.5	794.9	791.0	787.2	783.3	779.5	778.8
20°	787.6	786.2	784.7	783.3	781.8	778.8	774.1	769.5	764.8	760.2	759.4
22.5°	770.9	769.4	768.0	766.5	765.1	761.9	757.0	752.2	747.3	742.4	741.0
25°	745.8	743.6	741.4	739.3	737.0	733.2	727.9	722.5	717.1	711.7	709.9
27.5°	717.0	714.4	711.7	709.0	706.4	702.2	696.5	690.7	684.9	679.2	676.5
30°	696.0	693.3	690.5	687.8	685.0	680.5	674.4	668.4	662.3	656.2	652.8
32.5°	675.6	672.4	669.2	666.0	662.7	658.0	651.8	645.6	639.3	633.1	629.4
35°	642.4	638.9	635.4	632.0	628.4	623.5	616.9	610.4	603.8	597.3	593.1
37.5°	609.8	605.5	601.3	597.1	592.9	587.4	580.6	573.9	567.1	560.3	555.3
40°	586.8	582.5	578.1	573.7	569.4	563.7	556.7	549.7	542.8	535.8	530.3
42.5°	562.7	558.3	553.8	549.3	544.8	539.0	531.8	524.5	517.4	510.1	504.8
45°	526.0	521.8	517.5	513.3	509.1	503.0	495.0	487.0	479.0	471.0	465.2
47.5°	487.9	483.5	479.0	474.6	470.1	463.8	455.8	447.7	439.7	431.6	425.7
50°	463.8	459.0	454.2	449.4	444.6	438.1	429.8	421.5	413.2	404.9	398.8
52.5°	437.6	432.7	427.8	422.9	418.0	411.6	403.8	396.0	388.1	380.3	373.8
55°	399.1	394.4	389.8	385.1	380.5	374.0	365.9	357.7	349.7	341.5	334.9
57.5°	360.1	355.1	350.1	345.2	340.2	333.7	325.9	318.1	310.2	302.4	295.9
60°	334.9	329.8	324.8	319.7	314.6	308.2	300.2	292.4	284.6	276.7	270.4
62.5°	308.2	303.4	298.5	293.7	288.9	282.4	274.5	266.5	258.6	250.6	244.6
65°	270.2	265.3	260.3	255.4	250.4	244.1	236.3	228.7	220.9	213.3	207.4
67.5°	232.4	227.4	222.5	217.6	212.6	206.5	199.1	191.7	184.3	176.8	171.6
70°	206.7	201.8	196.8	191.9	186.9	180.8	173.6	166.3	159.0	151.8	147.2
72.5°	181.6	176.8	171.9	167.1	162.3	156.4	149.6	142.8	136.0	129.2	125.1
75°	144.0	139.6	135.2	130.9	126.5	121.2	115.1	109.0	102.9	96.8	93.6
77.5°	106.5	103.0	99.5	96.0	92.6	88.3	83.4	78.6	73.7	68.8	66.6
80°	85.1	81.5	78.1	74.6	71.1	67.3	63.2	59.2	55.1	51.1	49.7
82.5°	64.1	61.0	57.9	54.7	51.6	48.6	45.8	43.0	40.2	37.5	36.9
85°	36.0	33.3	30.7	28.2	25.5	23.8	23.1	22.4	21.7	20.9	20.8
87.5°	12.1	11.4	10.7	10.0	9.3	8.9	8.9	8.9	8.9	8.8	8.9
90°	0.3	0.9	1.4	1.9	2.5	3.0	3.4	4.0	4.4	4.9	5.2
92.5°	7.4	7.7	8.1	8.5	8.9	9.4	9.9	10.5	11.1	11.7	12.1
95°	19.8	19.9	20.1	20.1	20.3	20.8	21.4	22.0	22.7	23.4	23.9
97.5°	32.9	32.9	33.0	33.1	33.1	33.6	34.5	35.5	36.3	37.3	37.8
100°	42.6	42.6	42.6	42.6	42.6	43.0	43.9	44.8	45.7	46.6	47.2
102.5°	53.0	53.4	53.6	53.9	54.2	54.5	54.9	55.4	55.9	56.3	57.0
105°	69.4	69.7	70.1	70.4	70.8	71.1	71.5	71.9	72.3	72.8	73.1
107.5°	87.4	87.7	88.1	88.4	88.8	89.1	89.4	89.7	90.0	90.3	90.5
110°	99.8	100.1	100.5	100.8	101.2	101.4	101.6	101.9	102.0	102.3	102.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	112.4	112.6	112.8	113.0	113.1	113.4	113.7	113.9	114.2	114.4	114.5
115°	131.1	131.4	131.7	132.0	132.2	132.4	132.6	132.7	132.9	133.0	132.9
117.5°	149.9	150.0	150.2	150.2	150.4	150.5	150.7	150.8	150.8	151.0	151.0
120°	161.6	162.0	162.3	162.6	162.9	163.2	163.2	163.2	163.3	163.4	163.4
122.5°	174.3	174.4	174.5	174.6	174.7	174.9	175.0	175.2	175.4	175.6	175.6
125°	191.4	191.8	192.3	192.6	193.0	193.3	193.4	193.4	193.5	193.6	193.4
127.5°	209.7	209.9	210.2	210.3	210.6	210.8	210.9	210.9	211.0	211.0	211.0
130°	220.6	220.9	221.3	221.6	222.0	222.2	222.3	222.5	222.7	222.7	222.7
132.5°	231.6	232.1	232.7	233.2	233.8	234.1	234.0	234.0	234.0	233.9	233.8
135°	248.9	249.3	249.8	250.1	250.6	250.8	250.9	250.9	251.0	251.1	251.1
137.5°	265.3	265.6	266.0	266.4	266.8	267.1	267.3	267.3	267.5	267.7	267.8
140°	275.7	276.0	276.4	276.7	277.1	277.3	277.5	277.8	277.9	278.1	278.3
142.5°	286.2	286.5	286.7	287.1	287.3	287.6	287.8	288.1	288.3	288.6	288.7
145°	301.6	301.9	302.1	302.4	302.6	302.9	303.1	303.3	303.5	303.7	303.7
147.5°	315.8	316.0	316.1	316.2	316.4	316.6	316.8	316.9	317.0	317.2	317.4
150°	325.3	325.3	325.2	325.1	325.0	325.1	325.4	325.7	326.0	326.2	326.2
152.5°	333.1	333.2	333.3	333.4	333.5	333.6	333.7	333.8	333.9	334.0	334.2
155°	345.1	345.1	345.1	345.1	345.1	345.1	345.2	345.3	345.3	345.4	345.7
157.5°	355.8	355.7	355.5	355.3	355.2	355.2	355.2	355.3	355.3	355.4	355.7
160°	362.1	362.0	361.7	361.5	361.4	361.3	361.4	361.4	361.4	361.5	361.8
162.5°	367.7	367.6	367.5	367.3	367.1	367.0	367.0	367.1	367.1	367.1	367.5
165°	375.2	375.1	375.0	374.8	374.7	374.6	374.7	374.8	374.9	374.9	375.2
167.5°	381.5	381.3	381.0	380.7	380.5	380.3	380.3	380.3	380.3	380.3	380.7
170°	385.0	384.7	384.4	384.2	383.8	383.7	383.7	383.7	383.7	383.7	384.2
172.5°	387.4	387.1	386.8	386.6	386.3	386.2	386.2	386.2	386.2	386.2	386.6
175°	390.1	389.9	389.6	389.3	389.1	388.9	388.9	388.9	388.9	388.9	389.3
177.5°	391.5	391.3	391.1	390.9	390.6	390.5	390.5	390.5	390.4	390.3	390.6
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	863.2	864.4	865.6	866.1	866.0	865.8	865.7	865.6
5°	857.9	859.4	860.8	861.4	861.1	860.8	860.6	860.2
7.5°	847.2	848.3	849.3	849.6	849.3	848.9	848.7	848.3
10°	838.2	838.6	839.1	839.1	838.6	838.2	837.8	837.3
12.5°	825.4	825.8	826.0	825.9	825.2	824.6	823.9	823.2
15°	804.3	804.2	804.1	803.3	802.0	800.7	799.4	798.1
17.5°	778.1	777.3	776.6	775.7	774.6	773.5	772.5	771.4
20°	758.7	757.9	757.2	756.2	754.9	753.6	752.3	751.0
22.5°	739.5	738.0	736.7	735.4	734.3	733.2	732.2	731.1
25°	708.0	706.1	704.2	702.4	700.9	699.2	697.7	696.0
27.5°	673.9	671.2	668.6	666.5	665.0	663.4	661.9	660.3
30°	649.5	646.1	642.7	640.4	639.1	637.8	636.5	635.2
32.5°	625.7	622.1	618.4	615.7	614.0	612.3	610.7	609.1
35°	588.8	584.6	580.4	577.3	575.2	573.2	571.2	569.1
37.5°	550.3	545.2	540.1	536.6	534.6	532.7	530.7	528.7
40°	524.7	519.2	513.7	510.1	508.3	506.5	504.8	503.1
42.5°	499.6	494.2	489.0	485.0	482.5	479.9	477.3	474.8
45°	459.3	453.6	447.7	443.8	441.6	439.4	437.2	435.1
47.5°	419.7	413.6	407.7	403.5	401.1	398.6	396.2	393.8
50°	392.7	386.6	380.5	376.3	374.2	372.0	369.8	367.6
52.5°	367.2	360.6	354.0	349.7	347.5	345.3	343.1	341.0
55°	328.4	321.8	315.3	310.9	308.6	306.3	303.9	301.6
57.5°	289.6	283.2	276.8	272.5	270.4	268.4	266.4	264.3
60°	263.9	257.5	251.2	246.8	244.7	242.5	240.3	238.2
62.5°	238.7	232.7	226.8	222.7	220.6	218.4	216.2	214.0
65°	201.6	195.8	190.0	186.0	183.8	181.7	179.4	177.3
67.5°	166.3	160.9	155.6	152.1	150.3	148.6	146.8	145.1
70°	142.8	138.3	133.7	130.6	128.9	127.2	125.4	123.6
72.5°	121.0	116.8	112.6	109.9	108.8	107.6	106.5	105.3
75°	90.4	87.2	84.0	81.9	80.9	79.9	78.9	77.8
77.5°	64.3	62.1	59.8	58.4	57.6	56.8	56.1	55.4
80°	48.4	47.1	45.8	45.0	44.7	44.4	44.1	43.8
82.5°	36.2	35.6	35.0	34.6	34.4	34.3	34.1	33.9
85°	20.7	20.5	20.3	20.2	20.1	19.9	19.8	19.6
87.5°	9.0	9.0	9.1	9.1	9.0	9.0	8.9	8.8
90°	5.5	5.9	6.2	6.5	6.7	6.9	7.1	7.3
92.5°	12.6	13.0	13.4	13.8	13.9	14.0	14.2	14.4
95°	24.4	24.9	25.3	25.7	25.7	25.9	26.0	26.2
97.5°	38.2	38.7	39.1	39.3	39.4	39.5	39.6	39.7
100°	47.8	48.4	49.0	49.3	49.5	49.7	49.8	49.9
102.5°	57.6	58.3	59.0	59.4	59.6	59.8	59.9	60.1
105°	73.5	74.0	74.4	74.6	74.8	75.1	75.3	75.5
107.5°	90.7	90.9	91.1	91.3	91.2	91.2	91.2	91.2
110°	102.6	102.9	103.1	103.1	103.1	103.0	102.9	102.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	114.6	114.7	114.8	114.8	114.7	114.5	114.4	114.3
115°	132.9	132.8	132.7	132.7	132.6	132.5	132.4	132.3
117.5°	151.1	151.2	151.2	151.1	150.8	150.6	150.3	150.0
120°	163.4	163.4	163.4	163.2	163.0	162.7	162.5	162.2
122.5°	175.5	175.4	175.4	175.2	175.0	174.8	174.6	174.4
125°	193.3	193.1	193.0	192.9	192.9	192.8	192.7	192.6
127.5°	210.9	210.9	210.8	210.7	210.6	210.4	210.3	210.2
130°	222.7	222.6	222.5	222.4	222.2	222.1	222.0	221.9
132.5°	233.8	233.8	233.7	233.6	233.3	233.2	233.0	232.8
135°	251.1	251.1	251.1	250.9	250.6	250.4	250.1	249.9
137.5°	267.9	267.9	268.0	267.9	267.5	267.2	266.8	266.5
140°	278.4	278.5	278.7	278.6	278.3	277.9	277.6	277.2
142.5°	288.8	288.9	289.0	288.8	288.4	288.1	287.8	287.5
145°	303.7	303.7	303.7	303.6	303.4	303.2	303.0	302.8
147.5°	317.5	317.7	317.9	317.7	317.3	316.8	316.3	315.9
150°	326.2	326.2	326.2	326.1	326.1	325.9	325.7	325.6
152.5°	334.3	334.5	334.7	334.6	334.4	334.2	333.9	333.6
155°	345.9	346.2	346.5	346.5	346.1	345.8	345.4	345.1
157.5°	355.9	356.3	356.5	356.5	356.0	355.5	355.1	354.6
160°	362.1	362.3	362.6	362.6	362.2	361.9	361.5	361.2
162.5°	367.7	368.1	368.4	368.4	368.0	367.6	367.2	366.8
165°	375.5	375.7	376.0	375.9	375.5	375.1	374.7	374.3
167.5°	381.2	381.5	381.9	381.9	381.5	381.1	380.6	380.3
170°	384.5	385.0	385.4	385.3	384.9	384.4	383.9	383.4
172.5°	387.0	387.4	387.8	387.8	387.4	386.9	386.5	386.1
175°	389.7	390.1	390.5	390.5	390.0	389.5	389.1	388.6
177.5°	391.0	391.3	391.6	391.6	391.2	390.8	390.5	390.0
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1

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