

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: P333167-830

Luminaire Tested: **S125DIP-S610D365U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333167-830
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: S125DIP-S610D365U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3550.9 lumens
Efficiency: N/A
Efficacy: 129.1 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

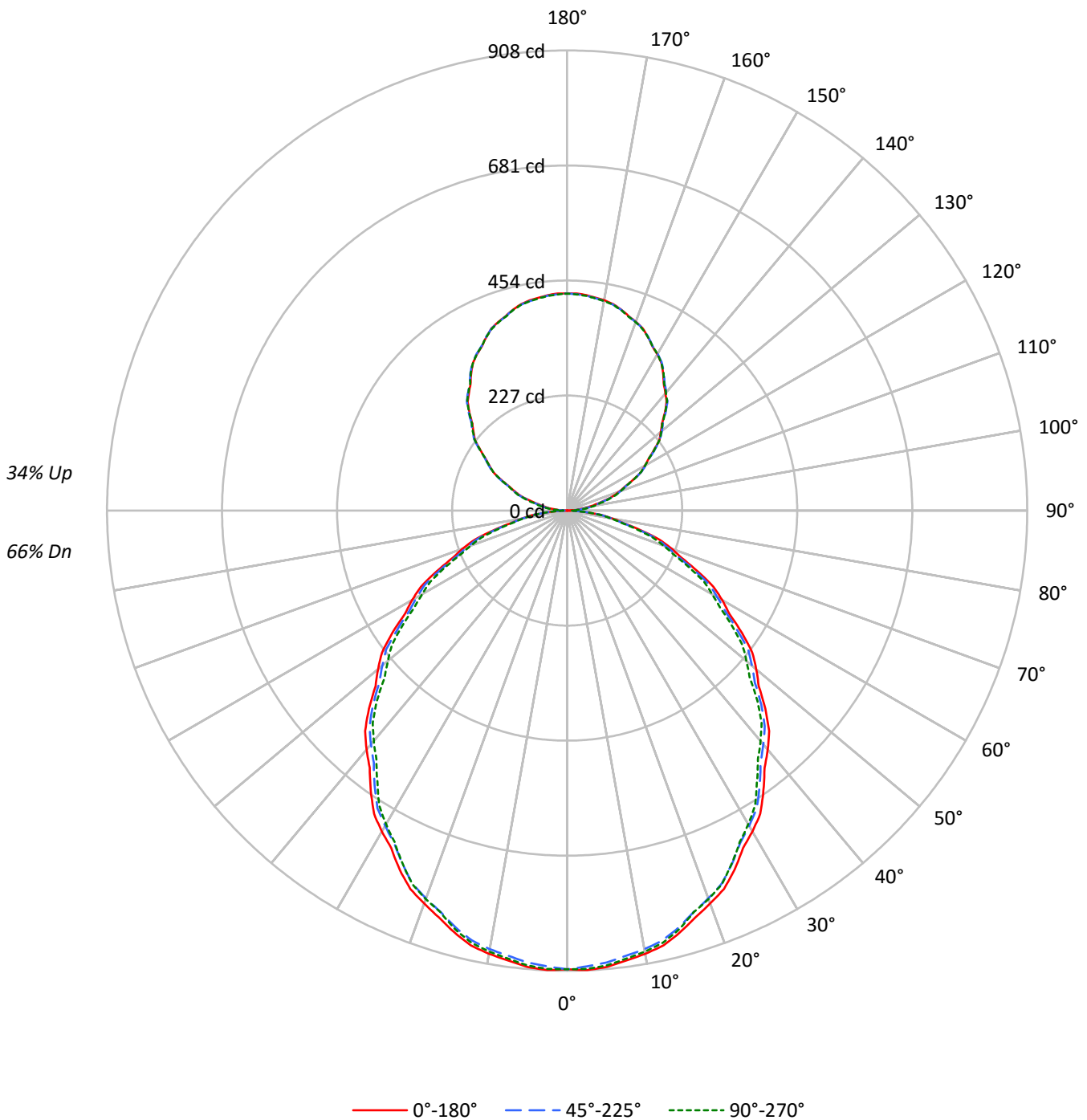
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	78	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	56	55	53	50	47
3	84	74	67	61	79	70	64	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	36	39	35	32	29
6	65	53	44	38	61	50	43	37	45	39	34	40	35	31	36	32	28	26
7	60	48	40	34	57	45	38	33	41	35	30	37	31	28	33	28	25	23
8	56	43	36	30	53	41	34	29	37	31	27	34	28	25	30	26	23	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	20	18
10	49	37	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5846	5846	5846
5°	5859	5803	5841
10°	5823	5762	5795
15°	5760	5693	5717
20°	5670	5597	5606
25°	5573	5481	5476
30°	5452	5357	5330
35°	5324	5222	5149
40°	5193	5078	5005
45°	5050	4945	4847
50°	4893	4786	4641
55°	4741	4604	4476
60°	4561	4421	4265
65°	4345	4202	4060
70°	4137	3950	3814
75°	3770	3646	3521
80°	3355	3303	3221
85°	2920	2971	2816



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.3	2.4
10°-20°	241.1	6.8
20°-30°	356.0	10.0
30°-40°	415.4	11.7
40°-50°	417.2	11.7
50°-60°	366.2	10.3
60°-70°	272.9	7.7
70°-80°	156.0	4.4
80°-90°	46.3	1.3
90°-100°	28.7	0.8
100°-110°	84.7	2.4
110°-120°	143.4	4.0
120°-130°	188.7	5.3
130°-140°	211.5	6.0
140°-150°	207.3	5.8
150°-160°	174.1	4.9
160°-170°	115.7	3.3
170°-180°	40.5	1.1
0°-30°	682.4	19.2
0°-40°	1097.8	30.9
0°-60°	1881.2	53.0
0°-90°	2356.4	66.4
90°-120°	256.8	7.2
90°-150°	864.2	24.3
90°-180°	1195.0	33.7
0°-180°	3550.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	904	902	895	901	901	86
15°	862	859	852	855	855	243
25°	782	778	769	770	768	360
35°	675	672	662	659	653	422
45°	553	550	541	533	531	426
55°	421	418	409	403	398	376
65°	284	282	275	269	266	282
75°	151	150	146	144	141	161
85°	39	40	40	39	38	44
90°	0	3	5	7	8	3
95°	22	22	26	28	29	23
105°	76	78	80	82	83	81
115°	144	145	146	145	145	142
125°	210	211	212	211	211	188
135°	272	274	275	275	274	210
145°	330	331	332	332	332	206
155°	378	378	378	379	378	174
165°	411	410	410	412	410	116
175°	427	426	426	427	425	41
180°	428	428	428	428	428	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2
2.5°	907.5	907.1	906.7	906.3	906.0	905.1	903.9	902.6	901.4	900.0	901.4
5°	903.8	903.4	903.1	902.8	902.5	901.5	899.9	898.3	896.7	895.1	896.6
7.5°	895.4	895.1	894.8	894.5	894.2	893.2	891.4	889.7	887.9	886.2	887.5
10°	888.0	887.7	887.4	887.0	886.7	885.7	883.9	882.2	880.4	878.7	880.0
12.5°	878.8	878.3	877.7	877.1	876.6	875.4	873.8	872.2	870.5	868.9	870.0
15°	861.5	861.0	860.5	860.1	859.6	858.5	856.8	855.0	853.2	851.5	852.2
17.5°	841.6	840.9	840.2	839.5	838.8	837.5	835.8	833.9	832.1	830.3	831.2
20°	825.0	824.6	824.3	824.1	823.7	822.6	820.5	818.4	816.3	814.3	815.4
22.5°	808.3	807.8	807.2	806.6	806.1	804.8	802.9	801.0	799.0	797.0	797.8
25°	782.0	781.2	780.4	779.7	778.8	777.4	775.3	773.3	771.2	769.1	769.5
27.5°	751.2	750.7	750.3	749.8	749.3	748.0	745.8	743.8	741.6	739.5	739.5
30°	731.1	730.7	730.2	729.7	729.2	727.8	725.5	723.0	720.7	718.3	717.9
32.5°	709.4	708.7	707.9	707.2	706.4	705.0	702.9	700.8	698.6	696.5	696.0
35°	675.3	674.7	674.0	673.4	672.8	671.4	669.1	666.8	664.7	662.4	661.7
37.5°	639.9	639.1	638.4	637.5	636.8	635.3	633.2	631.1	629.0	626.9	625.8
40°	615.9	615.1	614.3	613.5	612.7	611.1	609.0	606.7	604.5	602.3	600.9
42.5°	590.1	589.5	588.7	588.1	587.4	586.0	583.7	581.5	579.3	577.0	575.8
45°	552.9	552.2	551.6	550.9	550.4	549.0	547.1	545.3	543.3	541.4	539.5
47.5°	512.7	512.7	512.8	512.8	512.8	511.7	509.4	507.2	504.9	502.6	500.7
50°	487.0	486.4	486.0	485.5	485.0	483.9	481.9	480.0	478.2	476.3	474.2
52.5°	460.6	460.2	460.0	459.6	459.2	458.0	456.0	453.9	451.9	449.9	448.1
55°	421.1	420.6	420.1	419.6	419.1	417.8	415.6	413.4	411.1	408.9	407.5
57.5°	379.4	379.2	378.9	378.6	378.4	377.3	375.4	373.5	371.6	369.9	368.0
60°	353.1	352.4	351.8	351.1	350.5	349.3	347.6	345.8	344.0	342.3	340.7
62.5°	325.6	325.1	324.5	324.0	323.5	322.5	321.0	319.5	318.0	316.5	314.8
65°	284.3	284.0	283.7	283.3	283.0	282.0	280.2	278.5	276.7	275.0	273.5
67.5°	244.3	243.6	243.0	242.3	241.7	240.7	239.4	238.1	236.8	235.4	234.2
70°	219.1	218.4	217.5	216.8	215.9	214.8	213.4	212.0	210.6	209.2	208.1
72.5°	191.6	191.1	190.6	190.0	189.5	188.7	187.8	186.9	186.0	185.0	184.0
75°	151.1	150.8	150.4	150.1	149.9	149.3	148.5	147.7	146.8	146.1	145.6
77.5°	113.8	113.6	113.5	113.3	113.2	112.9	112.4	112.1	111.6	111.1	110.8
80°	90.2	90.2	90.2	90.2	90.2	90.1	89.7	89.4	89.2	88.8	88.6
82.5°	69.7	69.4	69.1	68.8	68.6	68.4	68.3	68.3	68.2	68.1	67.9
85°	39.4	39.6	39.7	39.9	40.1	40.1	40.1	40.1	40.1	40.1	40.0
87.5°	15.6	15.6	15.7	15.9	16.0	16.0	16.0	16.0	16.0	15.9	16.0
90°	0.4	0.9	1.5	2.1	2.7	3.3	3.8	4.3	4.8	5.4	5.7
92.5°	8.1	8.5	8.9	9.3	9.7	10.3	10.8	11.5	12.2	12.8	13.3
95°	21.7	21.8	22.0	22.1	22.2	22.7	23.5	24.1	24.9	25.6	26.2
97.5°	36.0	36.0	36.1	36.2	36.2	36.8	37.8	38.8	39.8	40.8	41.4
100°	46.7	46.7	46.7	46.7	46.7	47.1	48.1	49.0	50.0	51.0	51.7
102.5°	58.1	58.4	58.7	59.0	59.3	59.7	60.1	60.6	61.2	61.6	62.4
105°	76.0	76.3	76.7	77.1	77.5	77.9	78.3	78.7	79.2	79.6	80.0
107.5°	95.7	96.0	96.4	96.8	97.2	97.6	97.8	98.2	98.5	98.9	99.1
110°	109.2	109.6	110.0	110.4	110.7	111.0	111.2	111.5	111.7	112.0	112.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	123.1	123.3	123.5	123.7	123.9	124.1	124.4	124.7	125.0	125.3	125.4
115°	143.5	143.8	144.2	144.5	144.8	145.0	145.2	145.2	145.4	145.6	145.5
117.5°	164.1	164.2	164.4	164.5	164.7	164.8	164.9	165.0	165.1	165.3	165.3
120°	176.9	177.3	177.7	178.0	178.3	178.6	178.7	178.7	178.8	178.9	178.9
122.5°	190.8	190.9	191.1	191.1	191.2	191.4	191.6	191.8	192.0	192.2	192.2
125°	209.5	210.0	210.5	210.8	211.3	211.6	211.7	211.7	211.8	211.9	211.7
127.5°	229.5	229.8	230.1	230.3	230.5	230.7	230.8	230.9	231.0	231.0	231.0
130°	241.5	241.9	242.2	242.6	243.0	243.3	243.4	243.6	243.7	243.8	243.7
132.5°	253.5	254.1	254.8	255.3	255.9	256.3	256.2	256.2	256.2	256.1	256.0
135°	272.5	273.0	273.4	273.8	274.3	274.6	274.7	274.7	274.8	274.8	274.8
137.5°	290.4	290.8	291.2	291.6	292.1	292.4	292.6	292.7	292.8	293.0	293.1
140°	301.8	302.2	302.6	302.9	303.3	303.6	303.8	304.1	304.3	304.4	304.6
142.5°	313.3	313.6	313.9	314.2	314.5	314.8	315.1	315.4	315.7	315.9	316.0
145°	330.2	330.5	330.7	331.0	331.3	331.6	331.8	332.1	332.2	332.4	332.4
147.5°	345.7	345.9	346.0	346.2	346.4	346.6	346.8	346.9	347.0	347.2	347.4
150°	356.1	356.1	356.0	355.9	355.8	355.9	356.2	356.6	356.8	357.1	357.1
152.5°	364.7	364.8	364.9	365.0	365.0	365.1	365.3	365.4	365.5	365.6	365.8
155°	377.8	377.8	377.8	377.8	377.8	377.8	377.9	378.0	378.1	378.1	378.4
157.5°	389.5	389.4	389.2	389.0	388.9	388.8	388.9	389.0	389.0	389.1	389.4
160°	396.4	396.2	396.0	395.8	395.6	395.5	395.6	395.6	395.7	395.8	396.1
162.5°	402.6	402.4	402.3	402.1	401.9	401.8	401.8	401.9	401.9	401.9	402.3
165°	410.8	410.6	410.5	410.3	410.2	410.1	410.2	410.3	410.4	410.4	410.8
167.5°	417.6	417.4	417.1	416.8	416.5	416.3	416.3	416.3	416.3	416.3	416.8
170°	421.4	421.1	420.8	420.6	420.2	420.1	420.1	420.1	420.1	420.1	420.6
172.5°	424.0	423.8	423.5	423.2	422.9	422.7	422.7	422.7	422.7	422.7	423.2
175°	427.1	426.8	426.5	426.2	425.9	425.7	425.7	425.7	425.7	425.7	426.2
177.5°	428.6	428.4	428.1	427.9	427.6	427.5	427.4	427.4	427.3	427.3	427.6
180°	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2
2.5°	902.6	903.9	905.1	905.7	905.6	905.4	905.3	905.2
5°	898.1	899.5	900.9	901.5	901.4	901.3	901.1	900.9
7.5°	888.9	890.3	891.7	892.4	892.2	892.0	891.9	891.7
10°	881.3	882.5	883.8	884.4	884.2	884.0	883.8	883.7
12.5°	871.0	872.0	873.0	873.5	873.5	873.5	873.5	873.4
15°	853.1	853.8	854.7	855.1	855.1	855.1	855.1	855.1
17.5°	832.3	833.2	834.2	834.3	833.5	832.7	832.0	831.1
20°	816.4	817.6	818.7	818.9	818.0	817.3	816.4	815.7
22.5°	798.5	799.3	800.0	800.1	799.6	799.0	798.4	798.0
25°	769.8	770.1	770.4	770.3	769.9	769.4	768.9	768.5
27.5°	739.6	739.7	739.7	739.5	739.0	738.6	738.1	737.6
30°	717.7	717.4	717.0	716.6	716.1	715.7	715.2	714.7
32.5°	695.4	694.7	694.2	693.5	692.7	691.8	690.9	690.0
35°	660.8	660.1	659.2	658.2	657.0	655.6	654.4	653.1
37.5°	624.5	623.4	622.2	621.2	620.5	619.8	619.1	618.3
40°	599.4	597.9	596.5	595.6	595.1	594.7	594.2	593.7
42.5°	574.5	573.2	571.8	570.8	570.0	569.4	568.6	567.9
45°	537.5	535.6	533.8	532.5	532.1	531.6	531.1	530.7
47.5°	498.7	496.7	494.8	493.3	492.2	491.1	489.9	488.8
50°	472.1	470.0	468.0	466.4	465.2	464.1	463.0	461.9
52.5°	446.2	444.4	442.6	441.1	439.9	438.6	437.3	436.1
55°	406.0	404.6	403.2	401.9	400.8	399.6	398.6	397.5
57.5°	366.1	364.3	362.4	361.2	360.6	360.0	359.4	358.8
60°	339.1	337.5	335.9	334.6	333.5	332.3	331.2	330.2
62.5°	313.1	311.4	309.6	308.4	307.6	306.6	305.8	304.9
65°	272.1	270.7	269.3	268.2	267.6	266.9	266.4	265.7
67.5°	233.1	231.9	230.6	229.8	229.4	229.0	228.7	228.3
70°	207.2	206.2	205.3	204.5	203.9	203.2	202.6	202.0
72.5°	182.9	181.8	180.7	179.8	179.2	178.6	178.0	177.3
75°	145.2	144.7	144.2	143.6	143.0	142.3	141.8	141.1
77.5°	110.6	110.3	110.0	109.6	109.1	108.8	108.3	107.8
80°	88.5	88.3	88.1	87.9	87.6	87.3	87.0	86.6
82.5°	67.6	67.3	67.0	66.8	66.8	66.7	66.6	66.6
85°	39.8	39.6	39.5	39.2	38.9	38.5	38.3	38.0
87.5°	16.1	16.2	16.2	16.2	16.0	15.7	15.6	15.4
90°	6.0	6.4	6.8	7.1	7.4	7.5	7.7	8.0
92.5°	13.8	14.2	14.7	15.1	15.3	15.4	15.6	15.7
95°	26.7	27.2	27.7	28.1	28.2	28.4	28.5	28.7
97.5°	41.8	42.3	42.8	43.1	43.2	43.3	43.4	43.5
100°	52.3	53.0	53.6	54.0	54.2	54.4	54.5	54.7
102.5°	63.1	63.8	64.6	65.0	65.2	65.4	65.6	65.8
105°	80.5	81.0	81.4	81.7	81.9	82.2	82.4	82.7
107.5°	99.3	99.5	99.7	99.9	99.8	99.8	99.8	99.8
110°	112.4	112.6	112.8	112.9	112.8	112.7	112.6	112.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	125.5	125.5	125.6	125.6	125.5	125.4	125.3	125.2
115°	145.4	145.3	145.2	145.2	145.2	145.1	145.0	144.9
117.5°	165.4	165.5	165.5	165.4	165.1	164.9	164.6	164.2
120°	178.9	178.9	178.9	178.7	178.4	178.1	177.9	177.6
122.5°	192.1	192.0	192.0	191.8	191.6	191.3	191.1	190.9
125°	211.6	211.4	211.3	211.1	211.1	211.0	210.9	210.8
127.5°	230.9	230.8	230.7	230.6	230.5	230.4	230.2	230.1
130°	243.7	243.6	243.6	243.5	243.3	243.2	243.0	242.9
132.5°	256.0	255.9	255.8	255.7	255.4	255.2	255.1	254.9
135°	274.8	274.8	274.8	274.7	274.4	274.1	273.8	273.5
137.5°	293.2	293.3	293.4	293.2	292.8	292.5	292.1	291.7
140°	304.8	304.9	305.1	305.0	304.6	304.3	303.9	303.5
142.5°	316.1	316.2	316.3	316.1	315.8	315.4	315.1	314.7
145°	332.4	332.4	332.4	332.3	332.2	331.9	331.7	331.5
147.5°	347.6	347.8	348.0	347.8	347.3	346.8	346.3	345.8
150°	357.1	357.1	357.1	357.0	356.9	356.8	356.6	356.5
152.5°	366.0	366.2	366.4	366.3	366.1	365.8	365.5	365.2
155°	378.7	379.0	379.3	379.3	378.9	378.5	378.1	377.8
157.5°	389.6	390.0	390.3	390.2	389.7	389.2	388.7	388.2
160°	396.3	396.6	396.9	396.9	396.5	396.2	395.8	395.4
162.5°	402.6	402.9	403.3	403.3	402.8	402.4	402.0	401.5
165°	411.0	411.3	411.6	411.5	411.0	410.7	410.2	409.7
167.5°	417.3	417.6	418.1	418.1	417.6	417.2	416.7	416.3
170°	420.9	421.4	421.9	421.8	421.3	420.8	420.3	419.7
172.5°	423.7	424.0	424.5	424.5	424.0	423.6	423.1	422.6
175°	426.6	427.1	427.5	427.4	427.0	426.4	425.9	425.4
177.5°	428.0	428.4	428.7	428.7	428.3	427.8	427.4	427.0
180°	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1

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