

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

Luminaire Tested: **S125RDIP-S610D365U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333524
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-S610D365U835-4F0-1E-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: 3644.9 lumens
Efficiency: N/A
Efficacy: 132.5 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

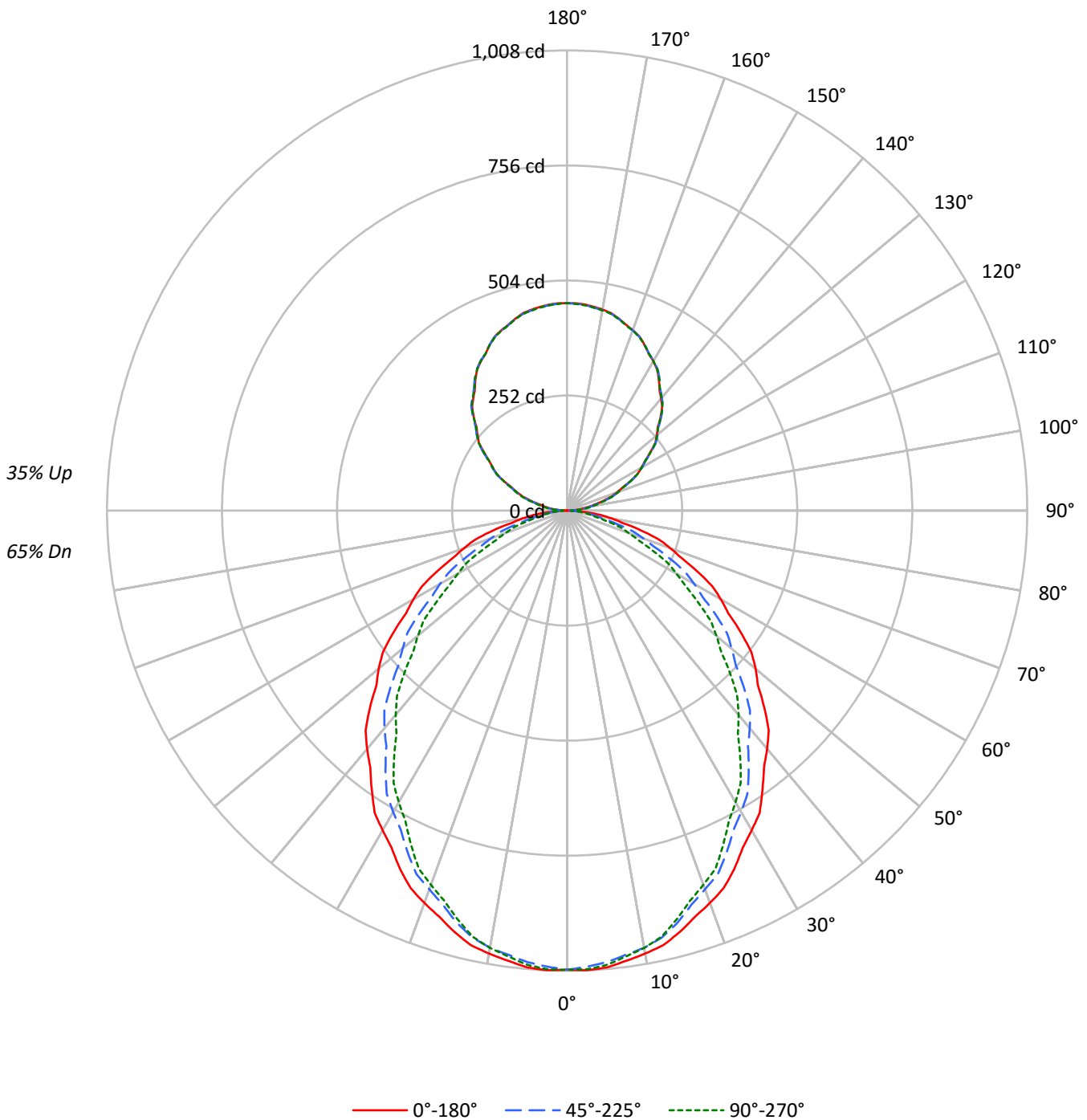
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	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°	6497	6497	6497
5°	6512	6438	6477
10°	6462	6378	6378
15°	6386	6248	6197
20°	6287	6068	5994
25°	6173	5890	5761
30°	6029	5683	5502
35°	5882	5469	5211
40°	5746	5246	4926
45°	5580	4996	4615
50°	5413	4725	4290
55°	5219	4466	3944
60°	5025	4151	3573
65°	4795	3785	3147
70°	4534	3329	2712
75°	4172	2805	2256
80°	3675	2205	1893
85°	3097	1801	1690



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	2.6
10°-20°	264.3	7.3
20°-30°	383.3	10.5
30°-40°	436.9	12.0
40°-50°	425.9	11.7
50°-60°	358.5	9.8
60°-70°	251.3	6.9
70°-80°	129.2	3.5
80°-90°	33.6	0.9
90°-100°	30.4	0.8
100°-110°	89.8	2.5
110°-120°	152.1	4.2
120°-130°	200.2	5.5
130°-140°	224.4	6.2
140°-150°	219.9	6.0
150°-160°	184.7	5.1
160°-170°	122.8	3.4
170°-180°	43.0	1.2
0°-30°	742.3	20.4
0°-40°	1179.2	32.4
0°-60°	1963.5	53.9
0°-90°	2377.5	65.2
90°-120°	272.4	7.5
90°-150°	916.9	25.2
90°-180°	1267.0	34.8
0°-180°	3644.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	1004	1001	993	1000	999	95
15°	955	950	934	933	927	269
25°	866	854	827	817	808	398
35°	746	727	694	672	661	467
45°	611	588	547	518	505	471
55°	464	438	397	364	350	414
65°	314	287	248	218	206	311
75°	167	144	112	96	90	177
85°	42	29	24	24	23	47
90°	0	3	6	7	8	3
95°	23	24	27	30	30	25
105°	81	82	84	87	88	86
115°	152	154	154	154	154	151
125°	222	224	225	224	224	199
135°	289	291	292	292	290	223
145°	350	352	353	353	352	219
155°	401	401	401	402	401	185
165°	436	435	435	437	435	123
175°	453	452	452	454	451	43
180°	454	454	454	454	454	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1007.8	1007.4	1007.0	1006.6	1006.2	1005.3	1003.9	1002.6	1001.2	999.9	1001.2
5°	1004.4	1003.8	1003.1	1002.4	1001.7	1000.5	998.6	996.8	994.9	993.0	994.7
7.5°	994.6	993.9	993.3	992.6	992.0	990.6	988.3	986.1	983.9	981.6	982.8
10°	985.4	984.9	984.4	983.9	983.4	982.0	979.6	977.3	974.9	972.5	973.0
12.5°	975.1	974.5	973.8	973.2	972.5	970.6	967.5	964.3	961.1	957.9	958.3
15°	955.1	954.0	953.0	952.0	951.0	948.7	945.2	941.6	938.1	934.5	934.4
17.5°	932.4	930.9	929.3	927.8	926.2	923.2	918.7	914.3	909.8	905.4	904.5
20°	914.8	913.1	911.4	909.7	908.0	904.5	899.1	893.7	888.3	882.9	882.0
22.5°	895.3	893.6	892.0	890.3	888.6	884.9	879.2	873.6	867.9	862.2	860.6
25°	866.2	863.6	861.1	858.6	856.0	851.6	845.4	839.1	832.9	826.6	824.5
27.5°	832.7	829.7	826.6	823.5	820.4	815.6	808.9	802.2	795.5	788.8	785.7
30°	808.4	805.2	802.0	798.8	795.6	790.4	783.3	776.3	769.2	762.1	758.2
32.5°	784.7	781.0	777.2	773.5	769.7	764.2	757.0	749.8	742.5	735.3	731.0
35°	746.1	742.1	738.0	734.0	729.9	724.1	716.5	708.9	701.3	693.7	688.8
37.5°	708.3	703.3	698.4	693.5	688.6	682.2	674.3	666.5	658.7	650.8	645.0
40°	681.5	676.5	671.4	666.3	661.3	654.7	646.6	638.5	630.4	622.3	615.9
42.5°	653.6	648.4	643.2	638.0	632.8	626.0	617.6	609.2	600.9	592.5	586.3
45°	610.9	606.0	601.1	596.2	591.3	584.2	574.9	565.6	556.3	547.0	540.3
47.5°	566.7	561.5	556.3	551.2	546.0	538.7	529.4	520.0	510.7	501.3	494.4
50°	538.7	533.1	527.5	522.0	516.4	508.8	499.2	489.6	479.9	470.3	463.2
52.5°	508.3	502.6	496.9	491.2	485.5	478.1	469.0	459.9	450.8	441.7	434.1
55°	463.5	458.1	452.7	447.3	441.9	434.4	425.0	415.5	406.1	396.6	389.0
57.5°	418.2	412.4	406.6	400.9	395.1	387.6	378.5	369.4	360.3	351.2	343.7
60°	389.0	383.1	377.2	371.3	365.4	357.9	348.7	339.6	330.5	321.4	314.0
62.5°	358.0	352.4	346.7	341.1	335.5	328.0	318.8	309.5	300.3	291.0	284.1
65°	313.8	308.1	302.3	296.6	290.8	283.5	274.5	265.6	256.6	247.7	240.9
67.5°	269.9	264.1	258.4	252.7	246.9	239.8	231.2	222.6	214.0	205.4	199.3
70°	240.1	234.4	228.6	222.9	217.1	210.0	201.6	193.2	184.7	176.3	171.0
72.5°	210.9	205.3	199.7	194.1	188.5	181.7	173.8	165.9	158.0	150.1	145.3
75°	167.2	162.1	157.0	152.0	146.9	140.8	133.7	126.6	119.5	112.4	108.7
77.5°	123.7	119.6	115.6	111.5	107.5	102.6	96.9	91.3	85.6	79.9	77.3
80°	98.8	94.7	90.7	86.6	82.6	78.2	73.4	68.7	64.0	59.3	57.7
82.5°	74.5	70.8	67.2	63.5	59.9	56.4	53.2	49.9	46.7	43.5	42.8
85°	41.8	38.7	35.7	32.7	29.6	27.7	26.8	26.0	25.2	24.3	24.1
87.5°	14.1	13.2	12.4	11.6	10.8	10.3	10.3	10.3	10.3	10.2	10.3
90°	0.4	1.0	1.6	2.2	2.9	3.5	4.0	4.6	5.1	5.7	6.0
92.5°	8.6	9.0	9.4	9.9	10.3	10.9	11.5	12.2	12.9	13.6	14.1
95°	23.0	23.1	23.3	23.4	23.6	24.1	24.9	25.6	26.4	27.2	27.8
97.5°	38.2	38.2	38.3	38.4	38.4	39.0	40.1	41.2	42.2	43.3	43.9
100°	49.5	49.5	49.5	49.5	49.5	50.0	51.0	52.0	53.1	54.1	54.8
102.5°	61.6	62.0	62.3	62.6	62.9	63.3	63.8	64.3	64.9	65.4	66.2
105°	80.6	81.0	81.4	81.8	82.2	82.6	83.1	83.5	84.0	84.5	84.9
107.5°	101.5	101.9	102.3	102.7	103.1	103.5	103.8	104.2	104.5	104.9	105.1
110°	115.9	116.3	116.7	117.1	117.5	117.8	118.0	118.3	118.5	118.8	119.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	130.6	130.8	131.0	131.2	131.4	131.7	132.0	132.3	132.6	132.9	133.0
115°	152.3	152.6	153.0	153.3	153.6	153.8	154.0	154.1	154.3	154.5	154.4
117.5°	174.1	174.2	174.4	174.5	174.7	174.8	175.0	175.1	175.2	175.4	175.4
120°	187.7	188.1	188.5	188.9	189.2	189.5	189.6	189.6	189.7	189.8	189.8
122.5°	202.4	202.5	202.7	202.8	202.9	203.1	203.3	203.5	203.7	203.9	203.9
125°	222.3	222.8	223.3	223.7	224.2	224.5	224.6	224.6	224.7	224.8	224.6
127.5°	243.5	243.8	244.1	244.3	244.6	244.8	244.9	245.0	245.1	245.1	245.1
130°	256.2	256.6	257.0	257.4	257.8	258.1	258.2	258.4	258.6	258.7	258.6
132.5°	269.0	269.6	270.3	270.9	271.5	271.9	271.8	271.8	271.8	271.7	271.6
135°	289.1	289.6	290.1	290.5	291.0	291.3	291.4	291.4	291.5	291.6	291.6
137.5°	308.1	308.5	309.0	309.4	309.9	310.2	310.4	310.5	310.7	310.9	311.0
140°	320.2	320.6	321.0	321.4	321.8	322.1	322.3	322.6	322.8	323.0	323.2
142.5°	332.4	332.7	333.0	333.4	333.7	334.0	334.3	334.6	334.9	335.2	335.3
145°	350.3	350.6	350.9	351.2	351.5	351.8	352.0	352.3	352.5	352.7	352.7
147.5°	366.8	367.0	367.1	367.3	367.5	367.7	367.9	368.1	368.2	368.4	368.6
150°	377.8	377.8	377.7	377.6	377.5	377.6	377.9	378.3	378.6	378.9	378.9
152.5°	386.9	387.0	387.1	387.2	387.3	387.4	387.6	387.7	387.8	387.9	388.1
155°	400.8	400.8	400.8	400.8	400.8	400.8	400.9	401.0	401.1	401.2	401.5
157.5°	413.2	413.1	412.9	412.7	412.6	412.5	412.6	412.7	412.7	412.8	413.1
160°	420.6	420.4	420.1	419.9	419.7	419.6	419.7	419.7	419.8	419.9	420.2
162.5°	427.1	426.9	426.8	426.6	426.4	426.3	426.3	426.4	426.4	426.4	426.8
165°	435.8	435.6	435.5	435.3	435.2	435.1	435.2	435.3	435.4	435.4	435.8
167.5°	443.1	442.8	442.5	442.2	441.9	441.7	441.7	441.7	441.7	441.7	442.2
170°	447.1	446.8	446.5	446.2	445.8	445.7	445.7	445.7	445.7	445.7	446.2
172.5°	449.9	449.6	449.3	449.0	448.7	448.5	448.5	448.5	448.5	448.5	449.0
175°	453.1	452.8	452.5	452.2	451.9	451.7	451.7	451.7	451.7	451.7	452.2
177.5°	454.7	454.5	454.2	454.0	453.7	453.6	453.5	453.5	453.4	453.3	453.7
180°	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1002.6	1003.9	1005.3	1005.9	1005.8	1005.6	1005.5	1005.4
5°	996.4	998.1	999.8	1000.5	1000.1	999.8	999.5	999.1
7.5°	984.0	985.2	986.4	986.8	986.4	986.0	985.7	985.3
10°	973.5	974.0	974.6	974.6	974.0	973.5	973.0	972.5
12.5°	958.7	959.1	959.4	959.2	958.4	957.7	956.9	956.1
15°	934.2	934.0	933.9	933.0	931.5	930.0	928.5	926.9
17.5°	903.7	902.8	902.0	900.9	899.7	898.4	897.2	895.9
20°	881.2	880.3	879.5	878.3	876.8	875.3	873.8	872.2
22.5°	858.9	857.2	855.6	854.1	852.9	851.6	850.4	849.1
25°	822.3	820.1	817.9	815.8	814.0	812.1	810.3	808.4
27.5°	782.7	779.6	776.5	774.1	772.3	770.5	768.7	766.9
30°	754.3	750.4	746.5	743.8	742.3	740.8	739.3	737.8
32.5°	726.7	722.5	718.2	715.1	713.1	711.2	709.3	707.4
35°	683.9	679.0	674.1	670.5	668.1	665.7	663.4	661.0
37.5°	639.1	633.2	627.3	623.2	620.9	618.7	616.4	614.1
40°	609.4	603.0	596.6	592.4	590.4	588.3	586.3	584.3
42.5°	580.2	574.0	567.9	563.3	560.4	557.4	554.4	551.5
45°	533.5	526.8	520.0	515.4	512.9	510.3	507.8	505.3
47.5°	487.4	480.4	473.5	468.6	465.8	463.0	460.2	457.4
50°	456.1	449.0	441.9	437.1	434.6	432.1	429.5	427.0
52.5°	426.5	418.8	411.2	406.1	403.6	401.1	398.5	396.0
55°	381.4	373.8	366.2	361.1	358.4	355.7	353.0	350.3
57.5°	336.3	328.9	321.5	316.5	314.1	311.7	309.4	307.0
60°	306.5	299.1	291.7	286.7	284.2	281.6	279.1	276.6
62.5°	277.2	270.3	263.4	258.7	256.2	253.7	251.1	248.6
65°	234.2	227.4	220.7	216.0	213.5	211.0	208.4	205.9
67.5°	193.1	186.9	180.7	176.6	174.6	172.6	170.5	168.5
70°	165.8	160.6	155.3	151.7	149.7	147.7	145.6	143.6
72.5°	140.5	135.6	130.8	127.7	126.4	125.0	123.7	122.3
75°	105.0	101.3	97.6	95.1	94.0	92.8	91.6	90.4
77.5°	74.7	72.1	69.5	67.8	66.9	66.0	65.2	64.3
80°	56.2	54.7	53.2	52.3	51.9	51.6	51.2	50.9
82.5°	42.0	41.3	40.6	40.2	40.0	39.8	39.6	39.4
85°	24.0	23.8	23.6	23.5	23.3	23.1	23.0	22.8
87.5°	10.4	10.5	10.6	10.6	10.5	10.4	10.3	10.2
90°	6.4	6.8	7.2	7.5	7.8	8.0	8.2	8.5
92.5°	14.6	15.1	15.6	16.0	16.2	16.3	16.5	16.7
95°	28.3	28.9	29.4	29.8	29.9	30.1	30.2	30.4
97.5°	44.4	44.9	45.4	45.7	45.8	45.9	46.0	46.1
100°	55.5	56.2	56.9	57.3	57.5	57.7	57.8	58.0
102.5°	66.9	67.7	68.5	69.0	69.2	69.4	69.6	69.8
105°	85.4	85.9	86.4	86.7	86.9	87.2	87.4	87.7
107.5°	105.4	105.6	105.8	106.0	105.9	105.9	105.9	105.9
110°	119.2	119.5	119.7	119.8	119.7	119.6	119.5	119.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	133.1	133.2	133.3	133.3	133.2	133.0	132.9	132.8
115°	154.3	154.2	154.1	154.1	154.0	153.9	153.8	153.7
117.5°	175.5	175.6	175.6	175.5	175.2	174.9	174.6	174.2
120°	189.8	189.8	189.8	189.6	189.3	189.0	188.7	188.4
122.5°	203.8	203.7	203.7	203.5	203.3	203.0	202.8	202.5
125°	224.5	224.3	224.2	224.0	224.0	223.9	223.8	223.7
127.5°	245.0	244.9	244.8	244.7	244.6	244.4	244.2	244.1
130°	258.6	258.5	258.4	258.3	258.1	258.0	257.8	257.7
132.5°	271.6	271.5	271.4	271.3	271.0	270.8	270.6	270.4
135°	291.6	291.6	291.6	291.4	291.1	290.8	290.5	290.2
137.5°	311.1	311.2	311.3	311.1	310.7	310.3	309.9	309.5
140°	323.4	323.5	323.7	323.6	323.2	322.8	322.4	322.0
142.5°	335.4	335.5	335.6	335.4	335.0	334.6	334.3	333.9
145°	352.7	352.7	352.7	352.6	352.4	352.1	351.9	351.7
147.5°	368.8	369.0	369.2	369.0	368.5	367.9	367.4	366.9
150°	378.9	378.9	378.9	378.8	378.7	378.5	378.3	378.2
152.5°	388.3	388.5	388.7	388.6	388.4	388.1	387.8	387.5
155°	401.8	402.1	402.4	402.4	402.0	401.6	401.2	400.8
157.5°	413.4	413.8	414.1	414.0	413.5	412.9	412.4	411.9
160°	420.5	420.8	421.1	421.1	420.7	420.3	419.9	419.5
162.5°	427.1	427.5	427.9	427.9	427.4	426.9	426.5	426.0
165°	436.1	436.4	436.7	436.6	436.1	435.7	435.2	434.7
167.5°	442.7	443.1	443.6	443.6	443.1	442.6	442.1	441.7
170°	446.6	447.1	447.6	447.5	447.0	446.4	445.9	445.3
172.5°	449.5	449.9	450.4	450.4	449.9	449.4	448.9	448.4
175°	452.6	453.1	453.6	453.5	453.0	452.4	451.9	451.3
177.5°	454.1	454.5	454.8	454.8	454.4	453.9	453.5	453.0
180°	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2

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