

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: P333357-940

Luminaire Tested: **S125DIW-S375D1050U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333357-940
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: S125DIW-S375D1050U940-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4597.8 lumens
Efficiency: N/A
Efficacy: 121.0 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-Indirect

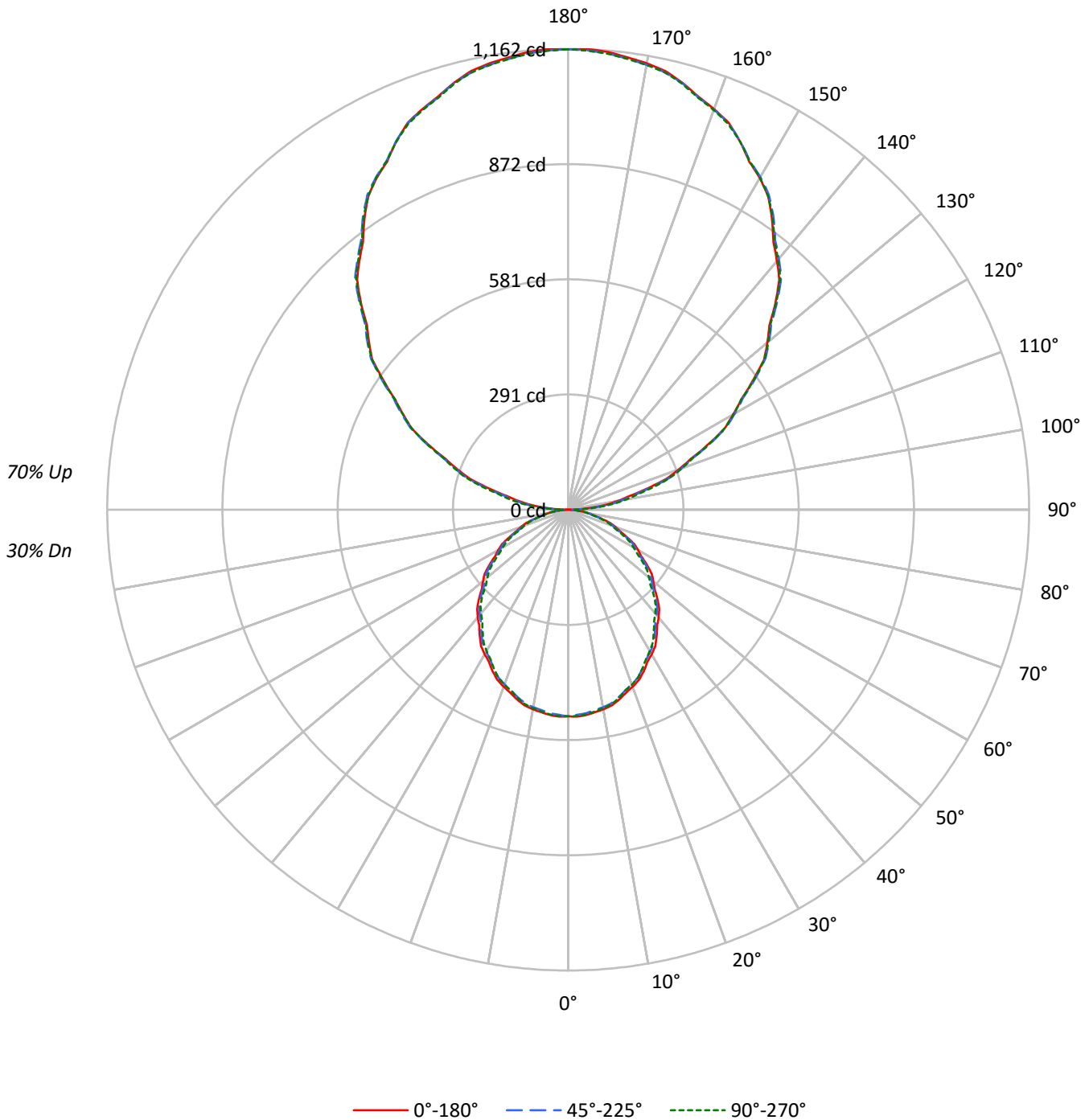
Input Watts (W): 38
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	93	89	85	82	83	80	77	74	63	61	59	47	46	45	33	32	31	25
2	85	78	72	67	76	70	65	60	55	52	49	41	39	37	29	28	26	21
3	77	68	61	55	69	61	55	50	48	44	41	37	34	31	26	24	22	18
4	71	60	53	47	63	54	48	43	43	38	35	33	29	27	23	21	19	15
5	65	53	46	40	58	48	41	36	38	33	30	29	26	23	21	18	17	13
6	59	48	40	34	53	43	36	31	34	29	26	26	23	20	19	16	15	11
7	55	43	35	30	49	39	32	27	31	26	23	24	20	18	17	15	13	10
8	51	39	31	26	45	35	29	24	28	23	20	22	18	16	16	13	12	9
9	47	35	28	23	42	32	26	21	26	21	18	20	17	14	14	12	10	8
10	44	32	25	21	39	29	23	19	24	19	16	18	15	13	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3364	3364	3364
5°	3371	3339	3361
10°	3351	3316	3335
15°	3315	3276	3290
20°	3263	3221	3226
25°	3207	3154	3151
30°	3138	3082	3067
35°	3064	3005	2964
40°	2989	2922	2880
45°	2906	2846	2789
50°	2816	2753	2671
55°	2728	2649	2575
60°	2623	2545	2454
65°	2500	2419	2337
70°	2381	2274	2194
75°	2168	2099	2024
80°	1930	1901	1852
85°	1675	1712	1615



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	1.1
10°-20°	138.7	3.0
20°-30°	204.9	4.5
30°-40°	239.0	5.2
40°-50°	240.1	5.2
50°-60°	210.7	4.6
60°-70°	157.0	3.4
70°-80°	89.8	2.0
80°-90°	28.6	0.6
90°-100°	77.8	1.7
100°-110°	229.6	5.0
110°-120°	388.9	8.5
120°-130°	511.9	11.1
130°-140°	573.6	12.5
140°-150°	562.1	12.2
150°-160°	472.2	10.3
160°-170°	313.9	6.8
170°-180°	109.8	2.4
0°-30°	392.7	8.5
0°-40°	631.7	13.7
0°-60°	1082.6	23.5
0°-90°	1358.0	29.5
90°-120°	696.4	15.1
90°-150°	2344.0	51.0
90°-180°	3240.0	70.5
0°-180°	4597.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	520	519	515	519	518	49
15°	496	494	490	492	492	140
25°	450	448	443	443	442	207
35°	389	387	381	379	376	243
45°	318	316	312	307	305	245
55°	242	241	235	232	229	216
65°	164	163	158	155	153	162
75°	87	86	84	83	81	93
85°	23	23	23	23	22	25
90°	1	8	14	19	22	4
95°	59	61	70	76	78	63
105°	206	211	216	221	224	220
115°	389	393	395	394	393	385
125°	568	573	575	573	572	509
135°	739	744	745	745	742	569
145°	895	899	902	902	899	560
155°	1025	1025	1026	1029	1025	472
165°	1114	1112	1113	1116	1111	314
175°	1158	1155	1155	1160	1154	110
180°	1161	1161	1161	1161	1161	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9
2.5°	522.2	522.0	521.8	521.6	521.4	520.8	520.1	519.4	518.7	517.9	518.7
5°	520.0	519.9	519.7	519.5	519.3	518.8	517.9	517.0	516.0	515.1	515.9
7.5°	515.3	515.1	515.0	514.8	514.6	514.0	513.0	511.9	511.0	510.0	510.8
10°	511.0	510.9	510.7	510.5	510.3	509.7	508.7	507.7	506.7	505.7	506.4
12.5°	505.8	505.4	505.1	504.8	504.4	503.8	502.8	501.9	501.0	500.1	500.6
15°	495.8	495.5	495.3	495.0	494.6	494.0	493.0	492.0	491.0	490.0	490.4
17.5°	484.3	483.9	483.5	483.1	482.7	482.0	480.9	479.9	478.8	477.8	478.4
20°	474.7	474.6	474.4	474.2	474.0	473.3	472.2	470.9	469.8	468.6	469.2
22.5°	465.2	464.8	464.5	464.2	463.9	463.2	462.0	460.9	459.8	458.7	459.1
25°	450.0	449.6	449.1	448.6	448.2	447.4	446.2	445.0	443.8	442.6	442.8
27.5°	432.3	432.0	431.8	431.5	431.2	430.4	429.3	428.0	426.8	425.5	425.6
30°	420.8	420.5	420.2	419.9	419.6	418.8	417.5	416.1	414.7	413.3	413.1
32.5°	408.2	407.8	407.4	407.0	406.5	405.7	404.5	403.2	402.1	400.8	400.5
35°	388.6	388.3	387.9	387.5	387.2	386.3	385.0	383.8	382.5	381.2	380.8
37.5°	368.3	367.8	367.4	366.8	366.4	365.6	364.4	363.2	361.9	360.8	360.1
40°	354.5	353.9	353.5	353.0	352.6	351.7	350.4	349.2	347.9	346.6	345.8
42.5°	339.6	339.2	338.9	338.4	338.0	337.2	335.9	334.7	333.3	332.1	331.4
45°	318.2	317.8	317.4	317.1	316.6	315.9	314.9	313.8	312.6	311.6	310.5
47.5°	295.1	295.1	295.1	295.2	295.2	294.5	293.2	291.9	290.5	289.2	288.1
50°	280.3	280.0	279.7	279.4	279.1	278.5	277.3	276.3	275.2	274.0	272.9
52.5°	265.1	264.8	264.7	264.5	264.3	263.6	262.4	261.3	260.0	258.9	257.9
55°	242.3	242.0	241.7	241.5	241.2	240.4	239.2	237.9	236.6	235.3	234.5
57.5°	218.4	218.2	218.0	217.9	217.8	217.1	216.1	215.0	213.9	212.9	211.8
60°	203.1	202.8	202.4	202.1	201.7	201.0	200.0	199.0	198.0	197.0	196.1
62.5°	187.3	187.1	186.7	186.5	186.2	185.6	184.8	183.9	183.0	182.2	181.2
65°	163.6	163.5	163.3	163.1	162.9	162.3	161.3	160.2	159.3	158.3	157.4
67.5°	140.6	140.3	139.8	139.5	139.1	138.5	137.8	137.0	136.3	135.5	134.8
70°	126.1	125.6	125.2	124.8	124.3	123.6	122.8	122.0	121.2	120.4	119.8
72.5°	110.3	109.9	109.7	109.3	109.1	108.6	108.1	107.5	107.0	106.5	105.8
75°	86.9	86.8	86.6	86.4	86.2	85.9	85.4	85.0	84.5	84.1	83.8
77.5°	65.5	65.4	65.3	65.2	65.2	65.0	64.7	64.5	64.2	63.9	63.8
80°	51.9	51.9	51.9	51.9	51.9	51.8	51.6	51.5	51.3	51.1	51.0
82.5°	40.0	39.9	39.8	39.6	39.5	39.4	39.3	39.3	39.2	39.2	39.1
85°	22.6	22.7	22.8	22.9	23.0	23.1	23.1	23.1	23.1	23.1	23.0
87.5°	9.1	9.4	9.7	10.1	10.3	10.6	10.9	11.1	11.2	11.5	11.7
90°	0.9	2.5	4.1	5.7	7.3	8.8	10.3	11.7	13.0	14.4	15.4
92.5°	21.8	23.0	24.1	25.2	26.4	27.8	29.5	31.2	33.0	34.7	36.0
95°	58.8	59.1	59.6	59.9	60.4	61.5	63.6	65.5	67.6	69.6	71.0
97.5°	97.6	97.7	97.9	98.1	98.3	99.7	102.5	105.2	108.0	110.8	112.1
100°	126.5	126.5	126.5	126.5	126.5	127.8	130.4	133.0	135.6	138.2	140.1
102.5°	157.6	158.4	159.2	160.0	160.8	161.8	163.2	164.5	165.9	167.2	169.2
105°	206.0	207.0	208.0	209.0	210.0	211.2	212.3	213.6	214.7	216.0	217.1
107.5°	259.5	260.5	261.5	262.5	263.5	264.5	265.4	266.4	267.2	268.1	268.8
110°	296.3	297.4	298.4	299.3	300.4	301.2	301.8	302.4	303.0	303.6	304.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	333.9	334.5	335.0	335.6	336.0	336.7	337.4	338.2	338.9	339.7	340.0
115°	389.4	390.2	391.0	391.8	392.6	393.2	393.6	394.0	394.4	394.8	394.7
117.5°	445.1	445.4	445.8	446.1	446.6	446.9	447.3	447.6	448.0	448.4	448.5
120°	479.7	480.8	481.8	482.8	483.8	484.4	484.6	484.8	485.0	485.2	485.2
122.5°	517.4	517.7	518.1	518.4	518.8	519.2	519.8	520.3	520.8	521.4	521.2
125°	568.3	569.5	570.7	571.9	573.1	573.8	574.1	574.3	574.4	574.6	574.3
127.5°	622.5	623.2	623.9	624.6	625.3	625.7	626.0	626.2	626.4	626.7	626.5
130°	655.1	656.0	657.1	658.1	659.1	659.8	660.2	660.6	661.0	661.4	661.2
132.5°	687.6	689.2	690.9	692.5	694.2	695.0	694.9	694.8	694.7	694.6	694.5
135°	739.0	740.3	741.5	742.7	744.0	744.6	744.8	745.0	745.2	745.4	745.4
137.5°	787.6	788.7	789.9	791.0	792.2	793.0	793.4	793.9	794.3	794.8	795.0
140°	818.6	819.6	820.6	821.6	822.6	823.4	824.0	824.7	825.2	825.8	826.3
142.5°	849.7	850.5	851.4	852.2	853.1	853.9	854.6	855.4	856.1	856.9	857.1
145°	895.4	896.2	897.0	897.8	898.6	899.3	899.9	900.5	901.2	901.7	901.7
147.5°	937.7	938.2	938.6	939.0	939.4	940.0	940.4	940.8	941.4	941.8	942.4
150°	965.9	965.7	965.5	965.3	965.1	965.4	966.2	967.0	967.8	968.6	968.6
152.5°	989.0	989.3	989.5	989.9	990.2	990.4	990.8	991.0	991.4	991.8	992.2
155°	1024.6	1024.6	1024.6	1024.6	1024.6	1024.7	1024.9	1025.1	1025.3	1025.6	1026.4
157.5°	1056.4	1056.0	1055.5	1055.1	1054.6	1054.5	1054.7	1054.9	1055.2	1055.3	1056.1
160°	1075.2	1074.6	1074.0	1073.4	1072.8	1072.6	1072.8	1073.0	1073.2	1073.4	1074.2
162.5°	1091.8	1091.4	1090.9	1090.5	1090.0	1089.8	1089.9	1089.9	1090.0	1090.0	1091.0
165°	1114.1	1113.7	1113.2	1112.9	1112.4	1112.3	1112.6	1112.8	1112.9	1113.1	1113.9
167.5°	1132.8	1132.0	1131.2	1130.4	1129.6	1129.3	1129.3	1129.3	1129.3	1129.3	1130.4
170°	1143.0	1142.2	1141.4	1140.6	1139.8	1139.3	1139.3	1139.3	1139.3	1139.3	1140.6
172.5°	1150.2	1149.4	1148.6	1147.8	1147.0	1146.6	1146.6	1146.6	1146.6	1146.6	1147.8
175°	1158.3	1157.5	1156.7	1155.9	1155.1	1154.7	1154.7	1154.7	1154.7	1154.7	1155.9
177.5°	1162.5	1161.8	1161.2	1160.6	1159.9	1159.5	1159.3	1159.2	1159.0	1158.9	1159.8
180°	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9
2.5°	519.4	520.1	520.8	521.2	521.1	521.0	521.0	520.9
5°	516.7	517.6	518.4	518.8	518.7	518.6	518.5	518.4
7.5°	511.6	512.4	513.2	513.5	513.4	513.4	513.3	513.2
10°	507.1	507.8	508.6	508.9	508.8	508.7	508.6	508.5
12.5°	501.2	501.9	502.4	502.7	502.7	502.7	502.7	502.6
15°	490.9	491.3	491.9	492.0	492.0	492.0	492.0	492.0
17.5°	478.9	479.5	480.1	480.1	479.7	479.2	478.8	478.3
20°	469.8	470.5	471.1	471.3	470.7	470.3	469.8	469.4
22.5°	459.5	459.9	460.4	460.4	460.1	459.8	459.5	459.1
25°	443.0	443.2	443.4	443.3	443.0	442.7	442.5	442.2
27.5°	425.6	425.6	425.7	425.6	425.3	425.0	424.7	424.5
30°	413.0	412.8	412.6	412.4	412.1	411.9	411.5	411.3
32.5°	400.2	399.8	399.5	399.1	398.6	398.1	397.6	397.1
35°	380.3	379.9	379.3	378.8	378.1	377.3	376.6	375.9
37.5°	359.4	358.7	358.0	357.5	357.0	356.7	356.2	355.8
40°	344.9	344.1	343.3	342.8	342.5	342.1	341.9	341.6
42.5°	330.6	329.8	329.0	328.5	328.1	327.6	327.3	326.8
45°	309.3	308.3	307.2	306.5	306.2	305.9	305.7	305.4
47.5°	287.0	285.9	284.7	283.8	283.2	282.6	282.0	281.3
50°	271.7	270.5	269.3	268.4	267.7	267.1	266.4	265.8
52.5°	256.8	255.7	254.7	253.9	253.2	252.4	251.7	251.0
55°	233.6	232.8	232.0	231.3	230.7	230.0	229.3	228.7
57.5°	210.7	209.6	208.6	207.9	207.5	207.1	206.8	206.4
60°	195.2	194.2	193.3	192.5	191.9	191.3	190.6	190.0
62.5°	180.2	179.1	178.2	177.5	177.0	176.5	175.9	175.5
65°	156.6	155.8	155.0	154.4	154.0	153.6	153.3	152.9
67.5°	134.1	133.4	132.7	132.2	132.1	131.8	131.6	131.3
70°	119.2	118.7	118.2	117.7	117.3	117.0	116.5	116.2
72.5°	105.2	104.6	104.0	103.5	103.2	102.8	102.4	102.0
75°	83.6	83.3	82.9	82.7	82.3	81.9	81.6	81.1
77.5°	63.7	63.5	63.3	63.1	62.9	62.6	62.3	62.1
80°	50.9	50.8	50.7	50.6	50.4	50.2	50.0	49.8
82.5°	38.9	38.7	38.6	38.4	38.4	38.4	38.3	38.3
85°	22.9	22.8	22.7	22.6	22.4	22.2	22.0	21.8
87.5°	11.9	12.0	12.3	12.4	12.3	12.3	12.3	12.2
90°	16.5	17.5	18.5	19.3	19.9	20.5	21.0	21.7
92.5°	37.4	38.7	40.0	40.8	41.3	41.7	42.2	42.6
95°	72.4	73.7	75.2	76.1	76.5	76.9	77.3	77.7
97.5°	113.4	114.8	116.1	116.8	117.1	117.3	117.6	117.8
100°	141.9	143.7	145.4	146.6	147.0	147.4	147.8	148.2
102.5°	171.1	173.1	175.0	176.3	176.8	177.5	178.0	178.5
105°	218.4	219.5	220.8	221.7	222.3	222.8	223.5	224.1
107.5°	269.4	270.0	270.5	270.9	270.8	270.8	270.7	270.7
110°	304.8	305.4	306.0	306.2	306.0	305.8	305.6	305.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	340.3	340.5	340.8	340.8	340.5	340.1	339.7	339.4
115°	394.4	394.2	394.0	393.9	393.6	393.4	393.2	393.1
117.5°	448.6	448.8	449.0	448.6	447.8	447.0	446.2	445.4
120°	485.2	485.2	485.2	484.8	484.0	483.2	482.4	481.6
122.5°	521.0	520.8	520.7	520.3	519.7	519.0	518.4	517.7
125°	573.8	573.5	573.0	572.7	572.6	572.3	572.1	571.9
127.5°	626.2	626.1	625.9	625.6	625.2	624.8	624.4	624.0
130°	661.0	660.8	660.6	660.3	659.9	659.5	659.1	658.7
132.5°	694.2	694.0	693.8	693.5	692.9	692.3	691.8	691.2
135°	745.4	745.4	745.4	745.0	744.2	743.4	742.6	741.8
137.5°	795.2	795.5	795.7	795.3	794.3	793.4	792.3	791.3
140°	826.6	827.1	827.4	827.2	826.2	825.1	824.1	823.1
142.5°	857.4	857.6	857.9	857.5	856.5	855.5	854.5	853.5
145°	901.7	901.7	901.7	901.4	900.8	900.2	899.6	899.0
147.5°	942.8	943.3	943.8	943.3	942.0	940.6	939.2	937.9
150°	968.6	968.6	968.6	968.4	968.0	967.6	967.1	966.8
152.5°	992.7	993.2	993.6	993.5	992.8	992.1	991.3	990.6
155°	1027.2	1028.0	1028.8	1028.6	1027.6	1026.6	1025.6	1024.6
157.5°	1056.9	1057.7	1058.5	1058.3	1056.9	1055.6	1054.3	1053.0
160°	1075.0	1075.8	1076.7	1076.5	1075.5	1074.5	1073.5	1072.5
162.5°	1092.0	1092.9	1093.9	1093.8	1092.6	1091.5	1090.3	1089.1
165°	1114.7	1115.5	1116.3	1116.2	1115.0	1113.7	1112.6	1111.3
167.5°	1131.7	1132.8	1134.1	1134.1	1132.8	1131.6	1130.3	1129.1
170°	1141.7	1143.0	1144.2	1144.1	1142.6	1141.3	1139.9	1138.4
172.5°	1149.0	1150.2	1151.4	1151.4	1150.1	1148.9	1147.6	1146.4
175°	1157.1	1158.3	1159.6	1159.4	1158.1	1156.6	1155.2	1153.8
177.5°	1160.8	1161.8	1162.7	1162.6	1161.5	1160.4	1159.3	1158.2
180°	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0

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