

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: P333651-940

Luminaire Tested: **S125RDIW-S375D1050U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333651-940
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: S125RDIW-S375D1050U940-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4531.4 lumens
Efficiency: N/A
Efficacy: 119.2 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-Indirect

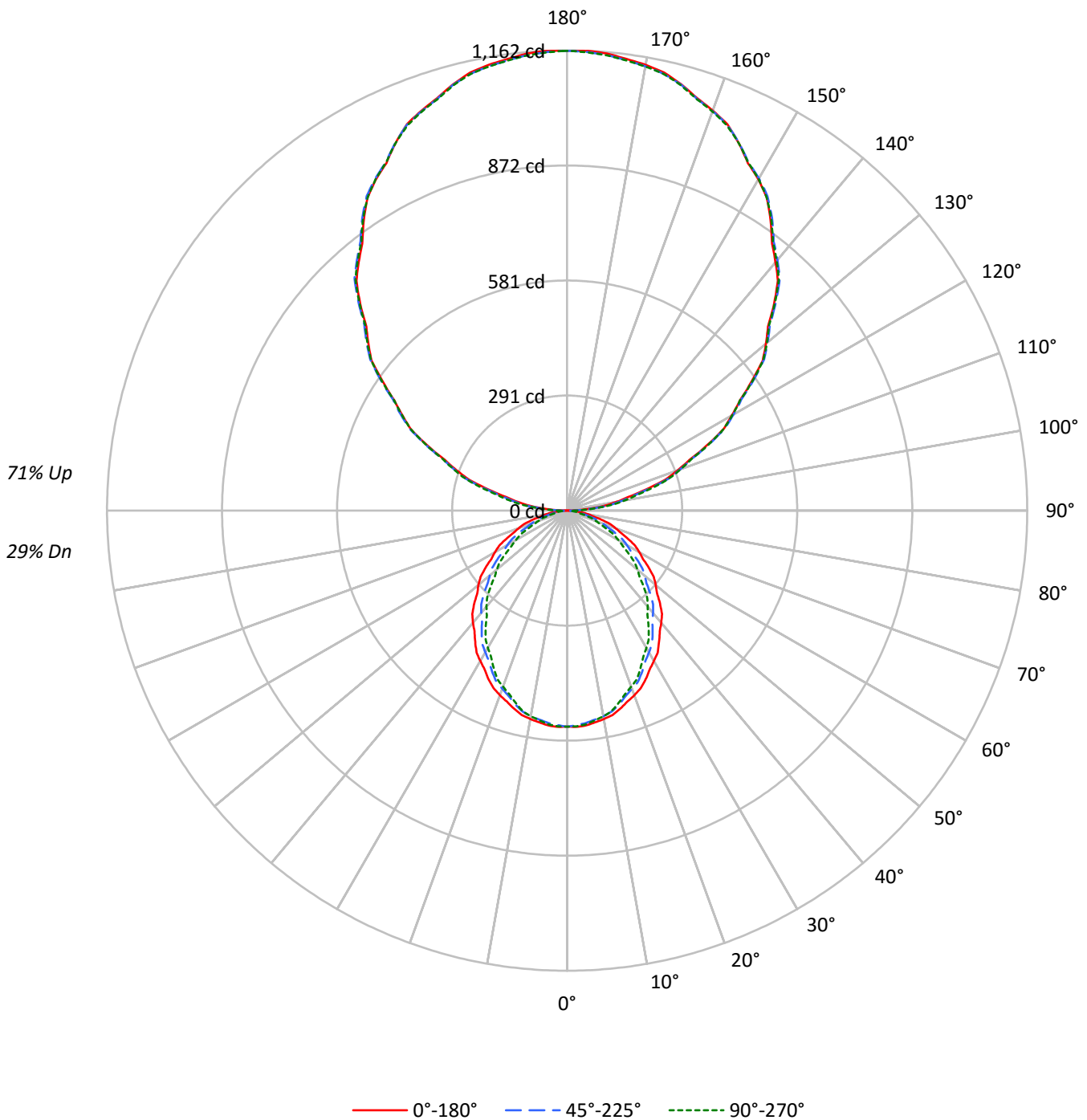
Input Watts (W): 38
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
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	91	91	91	91	71	71	71	53	53	53	36	36	36	29
1	93	89	85	82	83	80	77	74	63	61	59	47	46	44	32	32	31	24
2	85	78	72	67	76	70	65	61	55	52	49	41	39	37	29	27	26	20
3	77	68	61	56	69	61	56	51	49	44	41	37	34	32	25	24	22	17
4	71	60	53	47	63	54	48	43	43	39	35	33	29	27	23	21	19	15
5	65	54	46	40	58	48	42	37	38	34	30	29	26	23	20	18	17	13
6	60	48	40	35	53	43	37	32	35	30	26	26	23	20	19	17	15	12
7	55	43	36	30	49	39	33	28	31	26	23	24	21	18	17	15	13	10
8	51	39	32	27	46	36	29	25	28	24	20	22	18	16	16	13	12	9
9	47	36	29	24	42	32	26	22	26	21	18	20	17	14	14	12	11	8
10	44	33	26	21	40	30	24	19	24	19	16	18	15	13	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3524	3524	3524
5°	3532	3492	3513
10°	3505	3459	3459
15°	3463	3389	3361
20°	3410	3291	3252
25°	3348	3195	3125
30°	3270	3082	2984
35°	3191	2967	2827
40°	3117	2845	2672
45°	3027	2711	2503
50°	2936	2563	2327
55°	2831	2422	2139
60°	2725	2251	1938
65°	2601	2054	1705
70°	2459	1805	1469
75°	2263	1522	1223
80°	1993	1194	1027
85°	1675	978	919



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.3	1.1
10°-20°	143.4	3.2
20°-30°	207.9	4.6
30°-40°	237.0	5.2
40°-50°	231.0	5.1
50°-60°	194.4	4.3
60°-70°	136.3	3.0
70°-80°	70.1	1.5
80°-90°	20.2	0.4
90°-100°	77.8	1.7
100°-110°	229.6	5.1
110°-120°	388.9	8.6
120°-130°	511.9	11.3
130°-140°	573.6	12.7
140°-150°	562.1	12.4
150°-160°	472.2	10.4
160°-170°	313.9	6.9
170°-180°	109.8	2.4
0°-30°	402.6	8.9
0°-40°	639.6	14.1
0°-60°	1065.0	23.5
0°-90°	1291.6	28.5
90°-120°	696.4	15.4
90°-150°	2344.0	51.7
90°-180°	3240.0	71.5
0°-180°	4531.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	545	543	539	542	542	52
15°	518	515	507	506	503	146
25°	470	463	448	443	438	216
35°	405	394	376	365	359	253
45°	331	319	297	281	274	256
55°	251	238	215	197	190	225
65°	170	156	134	118	112	169
75°	91	78	61	52	49	96
85°	23	16	13	13	12	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°	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6
2.5°	546.6	546.4	546.2	546.0	545.7	545.3	544.6	543.8	543.1	542.3	543.1
5°	544.8	544.5	544.1	543.7	543.3	542.7	541.6	540.6	539.7	538.6	539.6
7.5°	539.5	539.1	538.8	538.4	538.1	537.3	536.1	534.8	533.7	532.4	533.1
10°	534.5	534.2	534.0	533.7	533.4	532.6	531.4	530.0	528.8	527.5	527.8
12.5°	528.9	528.5	528.2	527.9	527.5	526.5	524.8	523.1	521.3	519.6	519.8
15°	518.0	517.5	516.9	516.4	515.9	514.6	512.6	510.8	508.8	506.9	506.8
17.5°	505.8	504.9	504.1	503.2	502.4	500.8	498.3	495.9	493.5	491.1	490.6
20°	496.1	495.3	494.4	493.5	492.5	490.6	487.7	484.7	481.8	478.8	478.4
22.5°	485.6	484.7	483.8	482.9	482.0	480.0	476.9	473.9	470.7	467.7	466.8
25°	469.8	468.4	467.1	465.7	464.3	461.9	458.5	455.1	451.7	448.4	447.2
27.5°	451.7	450.0	448.4	446.7	445.0	442.4	438.7	435.1	431.5	427.8	426.1
30°	438.5	436.8	435.0	433.3	431.5	428.7	424.9	421.1	417.2	413.3	411.3
32.5°	425.6	423.6	421.6	419.5	417.5	414.6	410.6	406.7	402.8	398.9	396.5
35°	404.7	402.5	400.3	398.1	395.9	392.7	388.6	384.5	380.4	376.3	373.6
37.5°	384.1	381.5	378.8	376.1	373.4	370.0	365.8	361.5	357.3	353.0	349.8
40°	369.7	366.9	364.2	361.4	358.6	355.1	350.7	346.3	341.9	337.5	334.0
42.5°	354.5	351.7	348.8	346.1	343.2	339.6	335.0	330.5	325.9	321.4	318.1
45°	331.4	328.7	326.0	323.3	320.7	316.8	311.8	306.8	301.8	296.8	293.0
47.5°	307.4	304.5	301.8	298.9	296.1	292.2	287.1	282.0	277.0	271.9	268.1
50°	292.2	289.2	286.1	283.1	280.1	276.0	270.7	265.6	260.3	255.1	251.3
52.5°	275.7	272.6	269.5	266.4	263.3	259.3	254.4	249.4	244.5	239.6	235.5
55°	251.4	248.4	245.5	242.6	239.7	235.7	230.5	225.3	220.3	215.1	211.0
57.5°	226.9	223.7	220.5	217.4	214.3	210.3	205.3	200.4	195.5	190.5	186.5
60°	211.0	207.8	204.6	201.3	198.1	194.1	189.1	184.2	179.2	174.3	170.3
62.5°	194.2	191.1	188.1	185.0	181.9	177.9	172.9	167.9	162.8	157.8	154.1
65°	170.2	167.1	164.0	160.9	157.7	153.7	148.9	144.1	139.2	134.4	130.7
67.5°	146.4	143.3	140.2	137.1	133.9	130.0	125.4	120.7	116.1	111.5	108.1
70°	130.2	127.2	124.0	120.9	117.8	114.0	109.3	104.8	100.2	95.6	92.7
72.5°	114.4	111.4	108.3	105.3	102.3	98.5	94.3	90.0	85.7	81.4	78.8
75°	90.7	87.9	85.2	82.4	79.7	76.4	72.5	68.7	64.8	61.0	58.9
77.5°	67.1	64.9	62.7	60.5	58.3	55.6	52.6	49.5	46.5	43.3	41.9
80°	53.6	51.4	49.2	47.0	44.8	42.4	39.9	37.3	34.7	32.1	31.3
82.5°	40.4	38.4	36.5	34.4	32.5	30.6	28.9	27.1	25.3	23.5	23.2
85°	22.6	21.0	19.4	17.7	16.1	15.0	14.5	14.1	13.6	13.2	13.1
87.5°	7.8	7.6	7.4	7.2	7.0	7.0	7.2	7.4	7.7	7.8	8.0
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°	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6
2.5°	543.8	544.6	545.3	545.6	545.5	545.5	545.4	545.3
5°	540.5	541.4	542.2	542.7	542.5	542.2	542.1	541.9
7.5°	533.7	534.4	535.0	535.2	535.0	534.8	534.7	534.4
10°	528.1	528.3	528.6	528.6	528.3	528.1	527.8	527.5
12.5°	520.0	520.2	520.4	520.3	519.9	519.4	519.1	518.6
15°	506.7	506.6	506.5	506.0	505.2	504.4	503.6	502.7
17.5°	490.2	489.7	489.3	488.7	488.0	487.3	486.6	486.0
20°	478.0	477.5	477.1	476.4	475.5	474.7	473.9	473.1
22.5°	465.8	464.9	464.0	463.2	462.6	461.9	461.3	460.6
25°	446.0	444.8	443.6	442.6	441.5	440.5	439.5	438.5
27.5°	424.5	422.8	421.2	419.9	418.9	417.9	417.0	416.0
30°	409.1	407.1	404.9	403.5	402.6	401.8	401.0	400.2
32.5°	394.2	391.9	389.5	387.9	386.8	385.8	384.7	383.7
35°	371.0	368.3	365.6	363.6	362.4	361.1	359.8	358.6
37.5°	346.6	343.5	340.3	338.0	336.8	335.6	334.3	333.1
40°	330.6	327.1	323.6	321.3	320.2	319.1	318.0	316.9
42.5°	314.7	311.4	308.0	305.6	304.0	302.3	300.7	299.1
45°	289.4	285.7	282.0	279.6	278.2	276.8	275.4	274.0
47.5°	264.4	260.6	256.8	254.1	252.6	251.1	249.6	248.1
50°	247.4	243.5	239.7	237.1	235.8	234.3	233.0	231.6
52.5°	231.3	227.2	223.0	220.3	218.9	217.6	216.2	214.8
55°	206.9	202.8	198.7	195.8	194.4	192.9	191.5	190.0
57.5°	182.4	178.4	174.3	171.7	170.4	169.1	167.8	166.5
60°	166.3	162.2	158.2	155.5	154.1	152.8	151.4	150.0
62.5°	150.3	146.6	142.9	140.4	138.9	137.6	136.3	134.8
65°	127.0	123.3	119.7	117.2	115.8	114.4	113.1	111.6
67.5°	104.7	101.4	98.0	95.8	94.7	93.6	92.5	91.4
70°	90.0	87.1	84.3	82.3	81.1	80.1	79.0	77.8
72.5°	76.2	73.6	71.0	69.3	68.6	67.9	67.1	66.3
75°	57.0	54.9	53.0	51.6	51.0	50.3	49.7	49.0
77.5°	40.6	39.1	37.7	36.7	36.3	35.8	35.3	34.9
80°	30.5	29.7	28.9	28.4	28.2	28.0	27.8	27.6
82.5°	22.8	22.4	22.0	21.8	21.7	21.6	21.5	21.3
85°	13.0	12.9	12.8	12.8	12.7	12.6	12.5	12.4
87.5°	8.2	8.5	8.6	8.7	8.8	8.8	8.9	8.9
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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