

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: P333355-940

Luminaire Tested: **S125DIW-S375D1050U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333355-940
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-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP 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: 4544.3 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

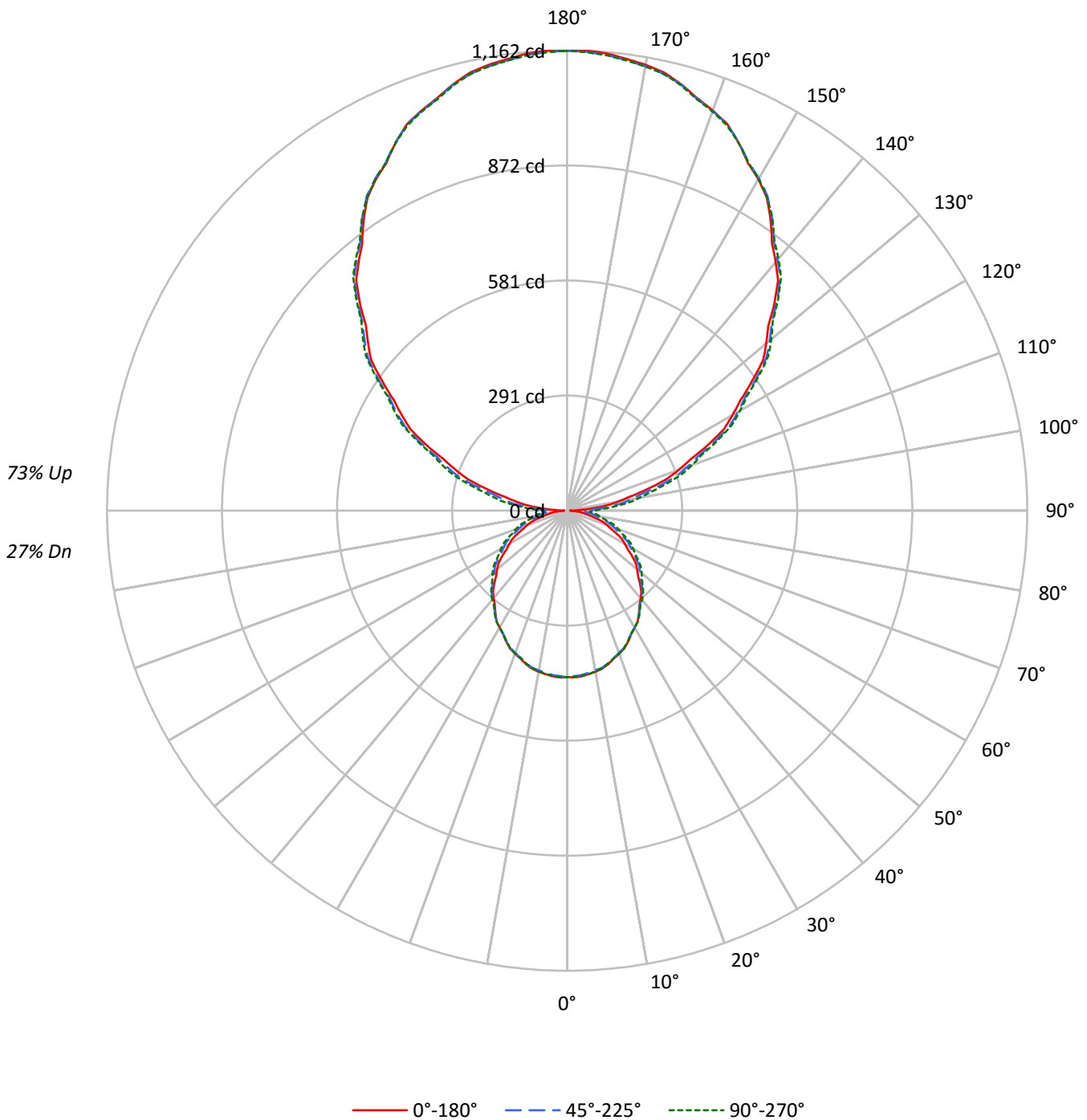
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	52	52	52	35	35	35	27
1	92	88	84	80	82	79	75	72	61	59	57	45	44	42	30	29	29	22
2	84	76	70	65	74	68	63	59	53	50	47	39	37	35	26	25	24	18
3	76	67	60	54	68	60	54	49	47	42	39	35	32	29	23	21	20	15
4	70	59	51	45	62	53	46	41	41	37	33	31	27	25	21	19	17	13
5	64	52	45	39	57	47	40	35	37	32	28	27	24	21	18	16	15	11
6	59	47	39	33	52	42	35	30	33	28	24	25	21	19	17	15	13	10
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11	9
8	50	38	31	25	44	34	28	23	27	22	19	20	17	14	14	12	10	8
9	46	35	27	22	41	31	25	20	25	20	17	19	15	13	13	11	9	7
10	43	32	25	20	39	28	22	18	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2715	2715	2715
5°	2721	2664	2673
10°	2700	2617	2613
15°	2669	2561	2537
20°	2626	2489	2461
25°	2574	2414	2367
30°	2511	2331	2282
35°	2453	2256	2203
40°	2394	2175	2125
45°	2326	2106	2054
50°	2263	2032	1993
55°	2185	1961	1921
60°	2101	1881	1846
65°	2014	1797	1764
70°	1915	1682	1678
75°	1755	1572	1572
80°	1547	1438	1457
85°	1353	1346	1421



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	0.9
10°-20°	112.8	2.5
20°-30°	167.8	3.7
30°-40°	198.8	4.4
40°-50°	205.5	4.5
50°-60°	189.3	4.2
60°-70°	153.0	3.4
70°-80°	102.5	2.3
80°-90°	55.7	1.2
90°-100°	107.6	2.4
100°-110°	251.6	5.5
110°-120°	403.7	8.9
120°-130°	520.3	11.4
130°-140°	577.2	12.7
140°-150°	562.9	12.4
150°-160°	472.2	10.4
160°-170°	313.9	6.9
170°-180°	109.8	2.4
0°-30°	320.4	7.1
0°-40°	519.2	11.4
0°-60°	914.0	20.1
0°-90°	1225.2	27.0
90°-120°	762.9	16.8
90°-150°	2423.3	53.3
90°-180°	3319.0	73.0
0°-180°	4544.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	417	420	420	40
15°	401	402	399	401	400	113
25°	365	366	364	365	363	168
35°	316	318	317	318	318	197
45°	260	264	267	269	270	201
55°	200	206	213	217	219	179
65°	138	147	157	163	165	137
75°	76	87	100	108	110	80
85°	23	36	51	59	63	24
90°	8	28	48	62	68	8
95°	64	77	100	114	120	67
105°	210	221	239	252	258	224
115°	392	399	411	417	419	387
125°	570	575	584	589	590	510
135°	740	745	749	754	752	570
145°	896	899	902	904	903	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°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	421.3	421.2	421.1	420.9	420.8	420.4	419.9	419.4	418.9	418.4	418.9
5°	420.4	420.2	420.0	419.8	419.6	419.2	418.6	417.9	417.3	416.6	417.4
7.5°	416.6	416.6	416.5	416.4	416.3	416.0	415.4	414.6	414.0	413.3	414.0
10°	413.3	413.3	413.3	413.3	413.3	413.0	412.2	411.5	410.8	410.0	410.7
12.5°	408.8	408.8	408.8	408.9	409.0	408.8	408.2	407.6	407.0	406.4	406.9
15°	401.4	401.4	401.5	401.7	401.8	401.4	400.8	400.2	399.6	399.0	399.5
17.5°	391.8	392.0	392.2	392.4	392.5	392.4	391.7	391.0	390.4	389.8	390.2
20°	385.0	385.1	385.3	385.5	385.7	385.4	384.8	384.1	383.5	382.8	383.2
22.5°	377.0	377.4	377.6	378.0	378.4	378.1	377.4	376.7	375.9	375.2	375.6
25°	364.7	365.0	365.2	365.5	365.8	365.7	365.2	364.6	364.0	363.5	363.8
27.5°	351.1	351.4	351.9	352.2	352.7	352.6	352.0	351.3	350.7	350.1	350.3
30°	340.8	341.3	341.9	342.5	343.0	343.0	342.5	341.9	341.3	340.8	341.0
32.5°	331.6	332.1	332.5	333.1	333.5	333.5	333.1	332.7	332.3	331.9	332.1
35°	315.7	316.3	317.0	317.6	318.3	318.4	318.2	317.9	317.6	317.4	317.6
37.5°	299.8	300.3	301.0	301.5	302.1	302.4	302.3	302.2	302.1	302.0	302.4
40°	288.9	289.6	290.3	291.1	291.9	292.1	292.0	291.9	291.9	291.8	292.1
42.5°	277.1	277.9	278.9	279.9	280.8	281.4	281.6	281.8	282.0	282.2	282.7
45°	260.0	261.1	262.1	263.1	264.0	264.8	265.3	265.7	266.2	266.6	267.2
47.5°	242.6	243.6	244.5	245.5	246.4	247.3	248.1	248.8	249.6	250.4	251.4
50°	230.8	231.8	232.8	233.8	234.8	235.9	236.8	237.8	238.8	239.9	240.9
52.5°	218.3	219.5	220.7	221.9	223.2	224.4	225.6	226.9	228.1	229.3	230.4
55°	199.8	201.3	202.8	204.3	205.7	207.2	208.7	210.1	211.6	213.0	214.1
57.5°	181.1	182.8	184.6	186.4	188.2	189.8	191.5	193.2	194.9	196.5	197.7
60°	168.5	170.4	172.2	174.1	175.8	177.7	179.5	181.4	183.2	185.0	186.4
62.5°	156.3	158.2	160.1	161.8	163.7	165.6	167.6	169.5	171.6	173.5	175.0
65°	137.7	139.7	141.9	143.9	146.1	148.2	150.4	152.7	154.8	157.0	158.4
67.5°	120.0	122.1	124.0	126.1	128.1	130.3	132.5	134.7	137.0	139.2	140.9
70°	107.2	109.2	111.4	113.4	115.6	117.8	120.2	122.6	124.9	127.3	129.1
72.5°	94.6	96.8	99.0	101.1	103.3	105.8	108.3	110.9	113.5	116.1	118.1
75°	75.8	78.2	80.6	82.9	85.3	88.0	91.0	93.9	96.8	99.7	101.6
77.5°	57.8	60.5	63.3	66.0	68.8	71.5	74.4	77.2	80.0	82.8	84.9
80°	46.5	49.3	52.1	54.8	57.5	60.5	63.6	66.7	69.8	72.9	75.0
82.5°	36.4	39.2	42.2	45.0	47.9	51.0	54.1	57.3	60.5	63.7	65.6
85°	22.6	25.7	28.7	31.7	34.8	37.9	41.1	44.3	47.5	50.6	52.7
87.5°	13.0	16.3	19.5	22.8	26.0	29.3	32.7	36.2	39.6	43.0	45.3
90°	7.5	12.0	16.6	21.1	25.7	30.1	34.7	39.2	43.7	48.2	51.4
92.5°	27.8	31.7	35.5	39.3	43.2	47.5	52.4	57.3	62.2	67.1	70.5
95°	64.1	66.9	69.6	72.4	75.3	79.2	84.3	89.4	94.5	99.7	103.1
97.5°	102.5	104.8	107.1	109.3	111.6	115.7	121.5	127.2	133.0	138.8	142.0
100°	131.0	133.0	134.9	136.8	138.8	142.5	148.0	153.6	159.1	164.6	168.4
102.5°	161.8	164.3	166.9	169.5	172.1	175.5	179.7	183.9	188.1	192.3	196.0
105°	209.7	212.2	214.6	217.1	219.6	222.8	226.8	230.7	234.7	238.6	241.7
107.5°	262.7	264.9	267.2	269.5	271.7	274.6	278.2	281.7	285.3	288.8	291.2
110°	299.3	301.3	303.4	305.6	307.6	310.3	313.4	316.6	319.8	323.0	325.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	336.8	338.2	339.7	341.1	342.4	344.7	348.0	351.2	354.5	357.8	359.7
115°	391.9	393.3	394.8	396.2	397.7	399.8	402.6	405.4	408.1	410.9	412.3
117.5°	447.1	447.9	448.7	449.5	450.3	452.0	454.6	457.2	459.9	462.4	464.1
120°	481.9	483.1	484.4	485.7	487.0	488.7	491.1	493.4	495.7	497.9	499.5
122.5°	519.1	519.6	520.0	520.6	521.0	522.5	525.1	527.7	530.2	532.8	534.1
125°	570.0	571.1	572.2	573.3	574.4	576.0	578.0	580.1	582.1	584.2	585.2
127.5°	623.8	624.4	624.9	625.5	626.2	627.3	629.0	630.8	632.5	634.3	635.4
130°	656.3	657.2	658.1	659.1	660.0	661.2	662.9	664.6	666.3	668.0	669.1
132.5°	688.5	690.1	691.8	693.4	695.0	696.2	697.2	698.1	699.0	699.9	701.0
135°	739.9	741.0	742.2	743.2	744.4	745.4	746.2	747.0	747.9	748.7	749.9
137.5°	788.3	789.3	790.4	791.6	792.6	793.5	794.3	795.0	795.9	796.6	797.9
140°	819.0	820.0	821.0	822.1	823.0	823.9	824.6	825.3	826.0	826.6	828.0
142.5°	850.1	850.9	851.7	852.4	853.2	854.0	854.7	855.5	856.3	857.1	858.2
145°	895.8	896.5	897.2	898.0	898.7	899.3	899.9	900.5	901.2	901.7	902.1
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°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	419.4	419.9	420.4	420.6	420.5	420.5	420.4	420.4
5°	418.1	418.8	419.5	419.9	419.8	419.7	419.6	419.5
7.5°	414.6	415.3	415.9	416.2	416.1	416.0	415.9	415.8
10°	411.3	412.0	412.6	412.9	412.8	412.7	412.6	412.5
12.5°	407.4	407.9	408.4	408.5	408.3	408.0	407.8	407.6
15°	400.0	400.6	401.1	401.2	400.8	400.5	400.1	399.8
17.5°	390.7	391.0	391.5	391.6	391.4	391.1	390.9	390.7
20°	383.4	383.7	384.0	384.1	384.1	384.1	384.1	384.1
22.5°	375.9	376.3	376.7	376.7	376.5	376.3	376.0	375.9
25°	364.2	364.6	365.0	364.9	364.4	364.0	363.6	363.1
27.5°	350.5	350.8	351.1	351.2	351.0	350.8	350.6	350.4
30°	341.2	341.3	341.5	341.6	341.5	341.4	341.3	341.3
32.5°	332.3	332.4	332.6	332.7	332.6	332.5	332.4	332.3
35°	317.9	318.2	318.4	318.5	318.5	318.5	318.5	318.5
37.5°	302.7	303.1	303.4	303.6	303.6	303.5	303.5	303.4
40°	292.5	292.8	293.3	293.6	293.7	293.9	294.1	294.3
42.5°	283.1	283.6	284.0	284.2	284.3	284.3	284.3	284.4
45°	268.0	268.6	269.2	269.6	269.7	269.7	269.8	269.9
47.5°	252.3	253.2	254.1	254.7	254.9	255.1	255.3	255.5
50°	241.8	242.9	243.9	244.5	244.8	245.0	245.3	245.6
52.5°	231.5	232.6	233.6	234.3	234.4	234.7	234.9	235.1
55°	215.1	216.1	217.1	217.8	218.1	218.5	218.9	219.3
57.5°	198.9	200.0	201.2	201.9	202.2	202.4	202.8	203.0
60°	187.8	189.1	190.6	191.4	191.6	191.9	192.2	192.4
62.5°	176.6	178.1	179.6	180.5	180.8	181.2	181.6	181.9
65°	159.8	161.1	162.5	163.4	163.7	164.1	164.5	164.9
67.5°	142.6	144.2	145.9	147.0	147.4	147.9	148.4	148.8
70°	130.8	132.6	134.3	135.5	136.0	136.5	137.1	137.7
72.5°	119.9	121.8	123.7	124.8	125.2	125.6	126.0	126.4
75°	103.4	105.2	107.1	108.2	108.7	109.1	109.6	110.0
77.5°	86.9	88.9	90.9	92.1	92.5	92.8	93.2	93.5
80°	77.0	79.0	81.0	82.2	82.6	82.9	83.3	83.6
82.5°	67.6	69.6	71.5	72.8	73.5	74.1	74.7	75.4
85°	54.8	56.7	58.8	60.1	60.8	61.6	62.3	63.0
87.5°	47.5	49.8	52.2	53.7	54.5	55.2	56.0	56.8
90°	54.5	57.6	60.7	62.9	64.1	65.4	66.6	67.9
92.5°	73.9	77.2	80.6	82.8	83.9	85.0	86.1	87.1
95°	106.5	109.9	113.3	115.6	116.6	117.6	118.7	119.8
97.5°	145.3	148.6	151.8	153.8	154.7	155.6	156.4	157.3
100°	172.1	175.8	179.5	181.9	182.8	183.8	184.8	185.7
102.5°	199.8	203.7	207.5	209.9	211.1	212.1	213.3	214.4
105°	244.7	247.7	250.7	252.9	254.1	255.4	256.6	257.9
107.5°	293.7	296.1	298.5	300.0	300.5	301.0	301.6	302.1
110°	327.6	330.0	332.3	333.7	334.1	334.6	335.0	335.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	361.7	363.6	365.6	366.7	366.9	367.2	367.6	367.8
115°	413.8	415.3	416.7	417.6	417.9	418.3	418.7	419.0
117.5°	465.8	467.6	469.3	470.1	469.8	469.7	469.5	469.3
120°	501.1	502.7	504.2	504.9	504.6	504.4	504.1	503.8
122.5°	535.5	536.8	538.1	538.7	538.6	538.5	538.4	538.3
125°	586.2	587.3	588.4	589.1	589.3	589.6	589.8	590.0
127.5°	636.6	637.8	638.9	639.5	639.6	639.8	639.9	640.1
130°	670.1	671.2	672.3	672.9	673.0	673.0	673.1	673.1
132.5°	702.0	703.1	704.3	704.7	704.5	704.4	704.2	704.0
135°	751.1	752.2	753.5	753.9	753.6	753.2	752.9	752.5
137.5°	799.2	800.5	801.8	802.2	801.6	800.9	800.3	799.6
140°	829.5	830.9	832.3	832.7	832.1	831.4	830.8	830.1
142.5°	859.3	860.4	861.5	861.7	861.0	860.4	859.8	859.2
145°	902.7	903.1	903.6	903.7	903.4	903.2	902.9	902.8
147.5°	943.1	943.7	944.3	944.1	942.9	941.6	940.5	939.2
150°	968.6	968.6	968.6	968.4	968.1	967.8	967.5	967.2
152.5°	992.7	993.2	993.6	993.5	992.8	992.1	991.4	990.7
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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