

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: P333445-830

Luminaire Tested: **S125DIW-S1090D1050U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333445-830
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: S125DIW-S1090D1050U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 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: 7447.0 lumens
Efficiency: N/A
Efficacy: 121.7 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: General Diffuse

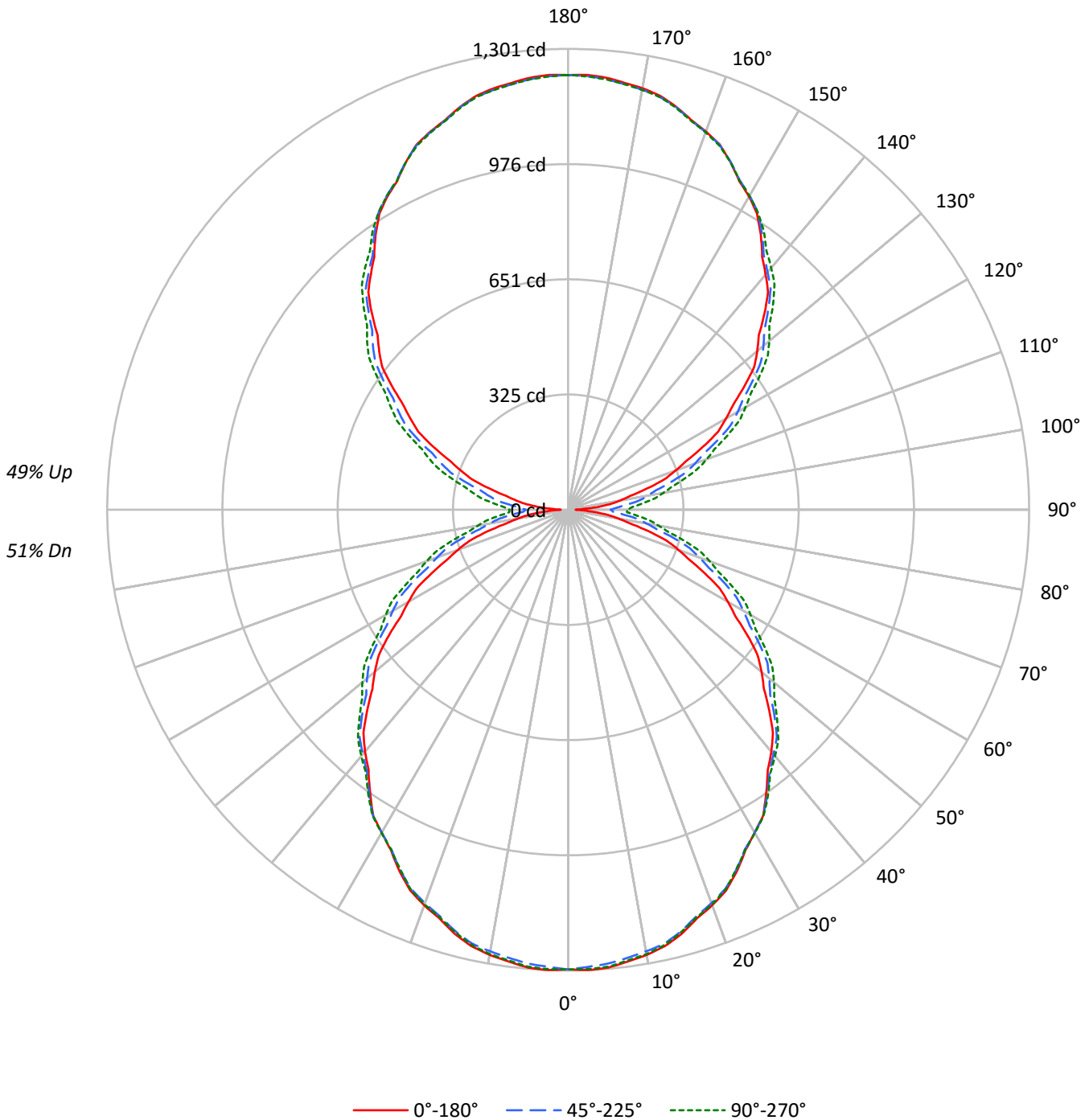
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51						51														
1	97	93	88	85	89	85	82	79	72	70	67	60	58	56	49	48	46	41						41														
2	88	80	74	68	81	74	69	64	63	59	55	52	49	47	43	40	39	34						34														
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	32	28						28														
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	33	30	28	24						24														
5	67	55	47	41	62	51	44	38	44	38	33	37	32	29	30	27	24	21						21														
6	62	49	41	35	57	46	39	33	39	33	29	33	29	25	27	24	21	18						18														
7	57	45	37	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16						16														
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14						14														
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	18	15	13						13														
10	46	34	27	22	43	32	25	20	27	22	18	23	19	16	19	16	14	12						12														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8382	8382	8382
5°	8399	8227	8253
10°	8339	8080	8068
15°	8240	7905	7833
20°	8107	7687	7597
25°	7947	7455	7307
30°	7754	7199	7044
35°	7574	6964	6802
40°	7390	6715	6559
45°	7184	6503	6343
50°	6986	6274	6153
55°	6748	6056	5928
60°	6488	5808	5700
65°	6217	5549	5444
70°	5908	5194	5179
75°	5420	4854	4854
80°	4780	4442	4501
85°	4183	4164	4388



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.7	1.6
10°-20°	348.4	4.7
20°-30°	518.1	7.0
30°-40°	613.7	8.2
40°-50°	634.5	8.5
50°-60°	584.5	7.8
60°-70°	472.5	6.3
70°-80°	316.4	4.2
80°-90°	166.8	2.2
90°-100°	174.3	2.3
100°-110°	310.6	4.2
110°-120°	456.6	6.1
120°-130°	566.9	7.6
130°-140°	617.6	8.3
140°-150°	596.5	8.0
150°-160°	499.1	6.7
160°-170°	331.7	4.5
170°-180°	116.1	1.6
0°-30°	989.2	13.3
0°-40°	1602.9	21.5
0°-60°	2821.9	37.9
0°-90°	3777.6	50.7
90°-120°	941.5	12.6
90°-150°	2722.4	36.6
90°-180°	3669.0	49.3
0°-180°	7447.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1298	1295	1286	1296	1295	123
15°	1239	1240	1232	1239	1234	349
25°	1126	1129	1122	1127	1121	518
35°	975	983	980	983	984	610
45°	803	816	823	832	833	619
55°	617	637	658	671	677	551
65°	425	454	485	503	509	422
75°	234	268	308	332	340	248
85°	70	112	156	183	195	75
90°	21	70	120	152	165	17
95°	79	115	166	200	212	79
105°	229	255	298	328	341	245
115°	419	433	467	488	496	415
125°	606	611	637	654	660	542
135°	784	789	798	814	817	604
145°	948	950	953	959	962	592
155°	1083	1083	1084	1087	1083	499
165°	1178	1176	1177	1180	1175	332
175°	1224	1221	1220	1226	1220	116
180°	1227	1227	1227	1227	1227	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9
2.5°	1300.9	1300.4	1300.0	1299.6	1299.1	1298.1	1296.5	1294.9	1293.4	1291.8	1293.4
5°	1297.9	1297.3	1296.8	1296.2	1295.6	1294.3	1292.3	1290.3	1288.4	1286.4	1288.6
7.5°	1286.4	1286.2	1285.9	1285.7	1285.5	1284.4	1282.3	1280.3	1278.3	1276.2	1278.2
10°	1276.2	1276.2	1276.2	1276.2	1276.2	1275.1	1272.8	1270.5	1268.3	1266.0	1268.0
12.5°	1262.0	1262.2	1262.4	1262.6	1262.9	1262.1	1260.3	1258.5	1256.7	1254.8	1256.4
15°	1239.3	1239.6	1239.9	1240.2	1240.5	1239.6	1237.7	1235.7	1233.7	1231.7	1233.4
17.5°	1209.8	1210.3	1210.9	1211.4	1212.0	1211.4	1209.4	1207.4	1205.4	1203.4	1204.8
20°	1188.5	1189.0	1189.6	1190.1	1190.7	1190.0	1188.0	1186.0	1184.0	1182.0	1182.9
22.5°	1163.9	1165.0	1166.0	1167.1	1168.1	1167.4	1165.3	1163.1	1160.8	1158.7	1159.7
25°	1126.1	1126.9	1127.8	1128.6	1129.4	1129.1	1127.4	1125.7	1124.0	1122.3	1123.4
27.5°	1083.8	1085.1	1086.3	1087.6	1088.8	1088.4	1086.6	1084.6	1082.7	1080.8	1081.6
30°	1052.3	1054.0	1055.6	1057.3	1059.0	1059.0	1057.3	1055.6	1054.0	1052.3	1052.8
32.5°	1023.8	1025.2	1026.7	1028.2	1029.6	1029.7	1028.5	1027.3	1026.1	1024.8	1025.4
35°	974.7	976.7	978.6	980.6	982.6	983.2	982.3	981.5	980.6	979.8	980.6
37.5°	925.6	927.4	929.2	930.9	932.7	933.6	933.3	933.0	932.7	932.5	933.6
40°	891.9	894.2	896.5	898.7	901.0	902.0	901.7	901.4	901.2	900.9	902.0
42.5°	855.3	858.3	861.2	864.1	867.0	868.8	869.5	870.1	870.7	871.4	872.7
45°	802.9	806.0	809.1	812.2	815.3	817.6	819.0	820.4	821.8	823.2	825.2
47.5°	749.2	752.1	755.0	757.8	760.7	763.4	765.8	768.3	770.7	773.1	776.0
50°	712.6	715.7	718.8	721.9	725.0	728.1	731.2	734.3	737.4	740.6	743.7
52.5°	673.8	677.7	681.5	685.2	689.0	692.8	696.6	700.4	704.2	707.9	711.3
55°	617.1	621.6	626.1	630.7	635.2	639.7	644.2	648.8	653.3	657.8	660.9
57.5°	559.1	564.5	570.0	575.4	580.8	586.2	591.4	596.5	601.7	606.9	610.5
60°	520.4	526.0	531.7	537.3	543.0	548.7	554.3	560.0	565.6	571.3	575.5
62.5°	482.8	488.4	494.1	499.7	505.4	511.2	517.4	523.5	529.6	535.6	540.4
65°	425.0	431.5	438.0	444.5	451.0	457.6	464.4	471.2	478.0	484.7	489.0
67.5°	370.5	376.8	383.0	389.4	395.6	402.2	409.2	416.0	422.9	429.8	435.0
70°	330.8	337.3	343.8	350.3	356.8	363.7	371.1	378.4	385.8	393.1	398.5
72.5°	292.2	298.9	305.6	312.4	319.1	326.4	334.5	342.5	350.5	358.5	364.4
75°	234.1	241.5	248.8	256.2	263.5	271.7	280.8	289.8	298.9	307.9	313.6
77.5°	178.4	186.9	195.4	203.9	212.4	220.9	229.6	238.4	247.0	255.7	261.9
80°	143.7	152.2	160.7	169.2	177.7	186.7	196.3	205.9	215.6	225.2	231.4
82.5°	112.3	121.1	130.1	139.0	148.0	157.3	167.2	177.0	186.9	196.7	202.7
85°	69.9	79.3	88.6	97.9	107.3	116.9	126.8	136.7	146.6	156.5	162.7
87.5°	39.9	49.3	58.6	68.1	77.5	87.1	97.0	106.9	116.8	126.8	133.5
90°	21.3	32.0	42.8	53.5	64.3	75.2	86.3	97.5	108.5	119.6	127.1
92.5°	41.5	51.0	60.5	70.1	79.6	90.3	102.0	113.6	125.3	137.0	144.6
95°	78.6	86.4	94.2	102.0	109.7	119.5	131.2	143.0	154.7	166.5	174.1
97.5°	118.2	125.0	131.8	138.6	145.3	154.8	167.0	179.2	191.4	203.6	210.9
100°	147.7	153.6	159.6	165.5	171.4	180.3	192.1	204.0	215.7	227.5	235.4
102.5°	179.6	185.9	192.2	198.5	204.9	213.1	223.4	233.6	243.8	254.0	261.8
105°	229.2	234.8	240.3	246.0	251.6	259.2	269.0	278.7	288.5	298.2	305.2
107.5°	284.2	289.1	294.0	299.0	303.9	310.9	320.0	329.1	338.2	347.3	353.5
110°	322.2	326.6	331.1	335.5	340.0	346.5	355.1	363.6	372.1	380.7	386.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	361.9	365.1	368.4	371.6	374.9	380.9	389.4	397.8	406.3	414.8	420.3
115°	419.2	422.1	424.9	427.7	430.6	435.8	443.7	451.4	459.2	466.9	471.8
117.5°	476.8	478.5	480.2	481.8	483.5	488.0	495.4	502.8	510.1	517.4	522.4
120°	513.5	515.4	517.3	519.2	521.1	525.5	532.2	538.9	545.5	552.3	557.1
122.5°	552.2	553.0	553.7	554.5	555.3	559.1	565.9	572.8	579.6	586.4	590.9
125°	605.8	606.8	607.8	608.8	609.7	613.2	619.1	624.9	630.8	636.7	640.7
127.5°	661.9	662.3	662.7	663.2	663.5	666.3	671.2	676.1	680.9	685.8	689.8
130°	696.3	697.0	697.8	698.5	699.4	701.9	706.3	710.7	715.1	719.4	723.2
132.5°	729.6	731.2	732.9	734.6	736.3	738.7	741.6	744.6	747.5	750.5	754.2
135°	783.7	784.8	785.7	786.7	787.8	789.3	791.5	793.7	795.9	798.1	801.7
137.5°	834.7	835.8	836.7	837.7	838.8	839.9	841.4	842.8	844.2	845.6	849.2
140°	866.6	867.6	868.6	869.7	870.8	871.8	872.7	873.6	874.5	875.4	879.0
142.5°	899.4	900.0	900.7	901.4	902.0	902.9	903.7	904.6	905.4	906.3	909.2
145°	947.7	948.3	948.9	949.4	950.0	950.6	951.2	951.9	952.5	953.1	954.5
147.5°	991.2	991.6	992.1	992.5	993.0	993.5	994.0	994.5	995.0	995.5	996.5
150°	1021.0	1020.8	1020.5	1020.3	1020.1	1020.4	1021.2	1022.1	1022.9	1023.8	1023.8
152.5°	1045.4	1045.7	1045.9	1046.3	1046.6	1046.9	1047.3	1047.5	1047.9	1048.3	1048.8
155°	1083.0	1083.0	1083.0	1083.0	1083.0	1083.1	1083.4	1083.5	1083.7	1084.0	1084.9
157.5°	1116.6	1116.2	1115.7	1115.2	1114.7	1114.7	1114.8	1115.0	1115.3	1115.5	1116.3
160°	1136.5	1135.9	1135.2	1134.6	1134.0	1133.8	1134.0	1134.2	1134.3	1134.6	1135.5
162.5°	1154.0	1153.6	1153.1	1152.6	1152.2	1152.0	1152.1	1152.1	1152.2	1152.2	1153.2
165°	1177.6	1177.1	1176.7	1176.3	1175.8	1175.7	1176.0	1176.2	1176.4	1176.6	1177.4
167.5°	1197.4	1196.6	1195.7	1194.9	1194.0	1193.6	1193.6	1193.6	1193.6	1193.6	1194.9
170°	1208.2	1207.3	1206.5	1205.6	1204.8	1204.3	1204.3	1204.3	1204.3	1204.3	1205.6
172.5°	1215.8	1214.9	1214.1	1213.2	1212.4	1211.9	1211.9	1211.9	1211.9	1211.9	1213.2
175°	1224.4	1223.5	1222.7	1221.8	1221.0	1220.5	1220.5	1220.5	1220.5	1220.5	1221.8
177.5°	1228.8	1228.0	1227.4	1226.7	1226.1	1225.6	1225.4	1225.3	1225.1	1224.9	1226.0
180°	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9
2.5°	1294.9	1296.5	1298.1	1298.7	1298.5	1298.3	1298.1	1297.9
5°	1290.9	1293.2	1295.4	1296.5	1296.2	1295.9	1295.6	1295.3
7.5°	1280.2	1282.1	1284.1	1285.0	1284.7	1284.4	1284.1	1283.8
10°	1270.0	1272.0	1273.9	1274.8	1274.5	1274.2	1273.9	1273.7
12.5°	1257.9	1259.4	1260.9	1261.3	1260.7	1259.9	1259.1	1258.4
15°	1235.1	1236.8	1238.5	1238.8	1237.7	1236.5	1235.4	1234.3
17.5°	1206.1	1207.3	1208.6	1208.9	1208.2	1207.6	1206.9	1206.3
20°	1183.7	1184.6	1185.4	1185.9	1185.9	1185.9	1185.9	1185.9
22.5°	1160.8	1161.9	1162.9	1163.1	1162.4	1161.8	1161.1	1160.5
25°	1124.5	1125.7	1126.8	1126.6	1125.2	1123.8	1122.4	1121.0
27.5°	1082.3	1083.2	1083.9	1084.1	1083.5	1083.1	1082.5	1082.0
30°	1053.4	1054.0	1054.5	1054.7	1054.4	1054.1	1053.9	1053.6
32.5°	1026.0	1026.5	1027.1	1027.2	1026.9	1026.6	1026.3	1026.1
35°	981.5	982.3	983.2	983.5	983.5	983.5	983.5	983.5
37.5°	934.7	935.9	937.0	937.5	937.4	937.3	937.1	937.0
40°	903.1	904.3	905.4	906.3	906.8	907.4	908.0	908.5
42.5°	874.0	875.4	876.8	877.5	877.6	877.7	877.9	878.0
45°	827.2	829.2	831.1	832.3	832.5	832.8	833.1	833.4
47.5°	778.9	781.7	784.7	786.4	787.0	787.7	788.2	788.9
50°	746.8	749.9	753.0	755.0	755.8	756.7	757.5	758.4
52.5°	714.6	717.9	721.3	723.3	723.9	724.5	725.2	725.8
55°	664.0	667.1	670.2	672.4	673.5	674.7	675.8	676.9
57.5°	614.1	617.6	621.2	623.4	624.2	625.1	625.9	626.8
60°	579.8	584.0	588.2	590.8	591.6	592.5	593.3	594.2
62.5°	545.1	549.8	554.5	557.3	558.5	559.5	560.5	561.7
65°	493.2	497.5	501.7	504.4	505.6	506.7	507.8	509.0
67.5°	440.1	445.3	450.4	453.7	455.2	456.7	458.1	459.6
70°	403.9	409.3	414.6	418.2	419.9	421.6	423.3	425.0
72.5°	370.2	376.1	381.8	385.4	386.6	387.9	389.1	390.4
75°	319.2	324.9	330.5	334.0	335.5	336.9	338.3	339.7
77.5°	268.2	274.4	280.6	284.3	285.4	286.5	287.7	288.8
80°	237.6	243.8	250.1	253.7	254.9	256.0	257.1	258.3
82.5°	208.7	214.7	220.6	224.7	226.8	228.8	230.8	232.8
85°	168.9	175.1	181.3	185.6	187.8	190.1	192.4	194.6
87.5°	140.2	146.8	153.6	158.0	160.1	162.2	164.3	166.5
90°	134.8	142.3	149.9	155.0	157.6	160.2	162.8	165.4
92.5°	152.3	159.9	167.7	172.7	175.1	177.6	180.0	182.5
95°	181.8	189.5	197.3	202.3	204.7	207.1	209.5	211.9
97.5°	218.3	225.6	233.0	237.7	239.9	242.0	244.2	246.5
100°	243.3	251.1	258.9	263.9	266.1	268.2	270.3	272.4
102.5°	269.7	277.4	285.2	290.2	292.6	294.8	297.1	299.4
105°	312.1	319.1	325.9	330.7	333.4	335.9	338.6	341.2
107.5°	359.8	366.0	372.3	376.3	378.0	379.7	381.4	383.0
110°	392.8	398.7	404.7	408.6	410.4	412.2	414.0	415.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	425.7	431.1	436.6	440.1	441.7	443.3	444.9	446.5
115°	476.7	481.6	486.4	489.7	491.2	492.7	494.1	495.6
117.5°	527.4	532.3	537.3	540.4	541.4	542.5	543.6	544.6
120°	561.9	566.8	571.6	574.4	575.2	576.1	576.9	577.8
122.5°	595.2	599.6	604.1	606.8	607.8	608.8	609.8	610.9
125°	644.9	648.9	653.1	655.7	657.0	658.1	659.3	660.5
127.5°	693.8	697.8	701.7	704.3	705.5	706.7	707.9	709.2
130°	727.0	730.7	734.4	736.8	737.8	738.8	739.8	740.7
132.5°	758.0	761.8	765.5	767.7	768.3	768.8	769.5	770.1
135°	805.4	809.1	812.8	814.9	815.5	816.1	816.6	817.2
137.5°	852.8	856.4	860.0	861.9	862.0	862.0	862.0	862.1
140°	882.5	886.1	889.6	891.4	891.5	891.6	891.6	891.6
142.5°	912.1	915.0	917.9	919.5	919.5	919.5	919.6	919.7
145°	955.9	957.3	958.8	959.7	960.3	960.7	961.2	961.7
147.5°	997.5	998.4	999.4	999.4	998.4	997.5	996.6	995.7
150°	1023.8	1023.8	1023.8	1023.7	1023.6	1023.4	1023.3	1023.1
152.5°	1049.2	1049.8	1050.3	1050.2	1049.5	1048.8	1048.1	1047.4
155°	1085.7	1086.6	1087.4	1087.2	1086.2	1085.1	1084.1	1083.0
157.5°	1117.2	1118.0	1118.9	1118.6	1117.2	1115.8	1114.4	1113.0
160°	1136.3	1137.2	1138.0	1137.8	1136.8	1135.8	1134.7	1133.6
162.5°	1154.2	1155.2	1156.2	1156.1	1154.9	1153.7	1152.4	1151.2
165°	1178.3	1179.1	1180.0	1179.8	1178.6	1177.2	1176.0	1174.7
167.5°	1196.2	1197.4	1198.7	1198.7	1197.4	1196.1	1194.8	1193.4
170°	1206.8	1208.2	1209.4	1209.3	1207.8	1206.4	1204.9	1203.3
172.5°	1214.5	1215.8	1217.0	1217.0	1215.7	1214.4	1213.1	1211.7
175°	1223.0	1224.4	1225.7	1225.5	1224.1	1222.6	1221.1	1219.6
177.5°	1227.0	1228.0	1229.0	1228.9	1227.8	1226.5	1225.4	1224.2
180°	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2

(END OF REPORT)