

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: P333715-927

Luminaire Tested: **S125RDIW-S1090D1340U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333715-927
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-S1090D1340U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7032.5 lumens
Efficiency: N/A
Efficacy: 100.8 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: General Diffuse

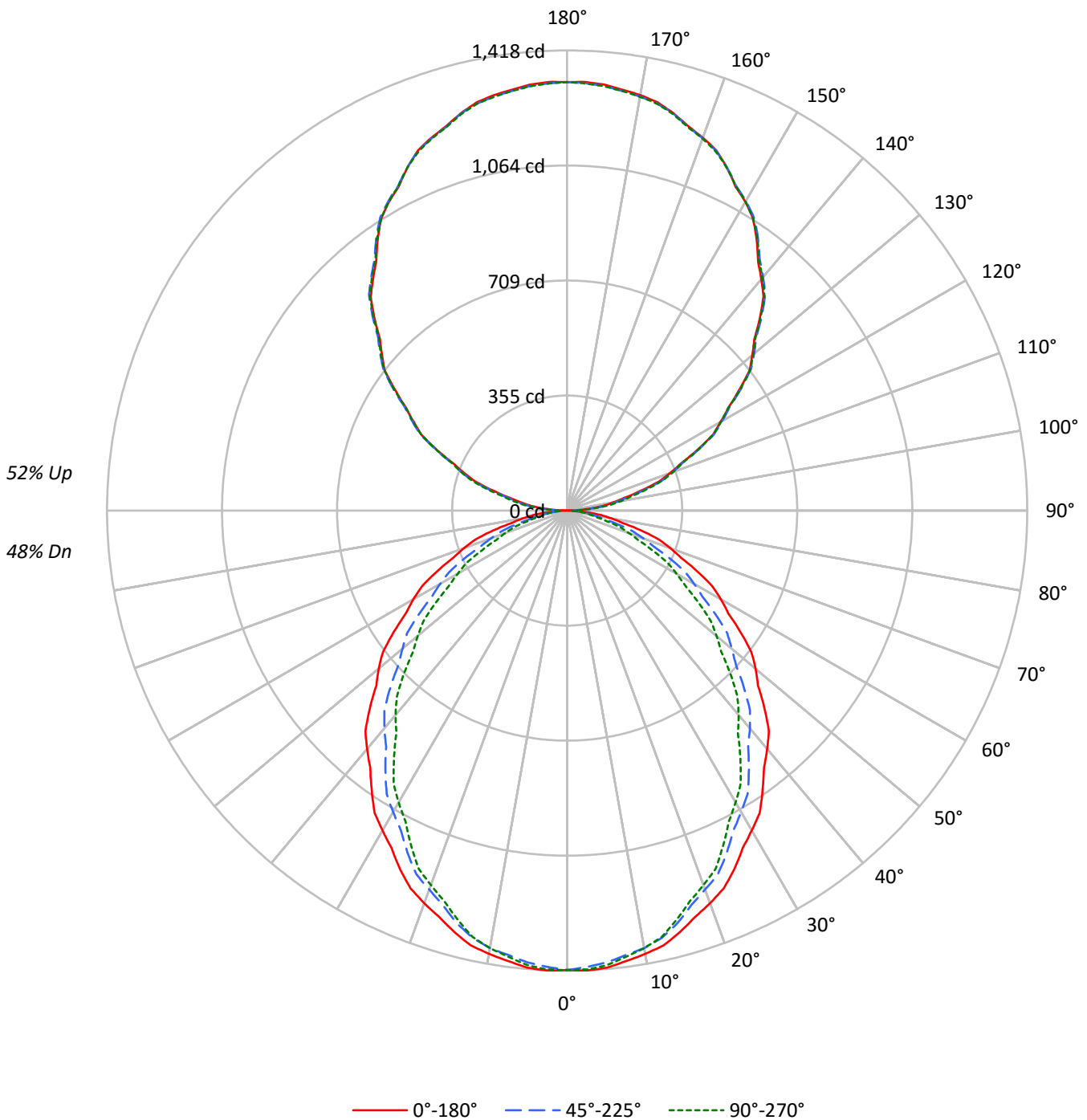
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41
2	89	82	76	71	82	75	70	66	63	60	56	53	50	47	42	41	39	34
3	81	72	65	59	74	66	60	55	56	51	48	47	43	40	38	35	33	29
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29	25
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	27	28	25	22	19
7	58	46	38	33	53	43	36	31	37	31	27	31	27	24	25	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18	16
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	18	16	14
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9144	9144	9144
5°	9166	9061	9117
10°	9096	8977	8977
15°	8988	8795	8723
20°	8849	8541	8438
25°	8688	8292	8109
30°	8486	7999	7744
35°	8280	7698	7335
40°	8088	7384	6933
45°	7853	7033	6495
50°	7618	6650	6038
55°	7346	6286	5551
60°	7073	5842	5028
65°	6748	5327	4429
70°	6381	4685	3816
75°	5871	3950	3174
80°	5170	3102	2663
85°	4357	2534	2379



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	1.9
10°-20°	372.1	5.3
20°-30°	539.6	7.7
30°-40°	614.9	8.7
40°-50°	599.4	8.5
50°-60°	504.6	7.2
60°-70°	353.7	5.0
70°-80°	181.8	2.6
80°-90°	48.8	0.7
90°-100°	88.4	1.3
100°-110°	261.2	3.7
110°-120°	442.4	6.3
120°-130°	582.2	8.3
130°-140°	652.3	9.3
140°-150°	639.3	9.1
150°-160°	537.0	7.6
160°-170°	357.0	5.1
170°-180°	124.9	1.8
0°-30°	1044.8	14.9
0°-40°	1659.7	23.6
0°-60°	2763.6	39.3
0°-90°	3347.9	47.6
90°-120°	792.0	11.3
90°-150°	2665.8	37.9
90°-180°	3685.0	52.4
0°-180°	7032.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1416	1416	1416	1416	1416	
5°	1414	1409	1398	1408	1406	134
15°	1344	1337	1315	1314	1305	379
25°	1219	1202	1164	1150	1138	561
35°	1050	1023	976	946	930	657
45°	860	827	770	729	711	663
55°	652	617	558	512	493	583
65°	442	404	349	307	290	437
75°	235	202	158	136	127	249
85°	59	40	34	33	32	66
90°	1	9	16	21	25	6
95°	67	69	79	86	88	71
105°	234	239	246	252	255	250
115°	443	447	449	448	447	438
125°	646	652	654	652	650	579
135°	841	846	848	848	844	648
145°	1018	1022	1026	1025	1022	636
155°	1165	1165	1166	1170	1165	536
165°	1267	1265	1266	1270	1264	357
175°	1317	1314	1313	1319	1312	125
180°	1320	1320	1320	1320	1320	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1418.5	1417.9	1417.4	1416.7	1416.2	1415.0	1413.1	1411.2	1409.3	1407.4	1409.3
5°	1413.8	1412.9	1411.9	1411.0	1410.0	1408.2	1405.6	1403.0	1400.3	1397.7	1400.1
7.5°	1399.9	1399.0	1398.0	1397.2	1396.2	1394.2	1391.1	1388.0	1384.8	1381.7	1383.4
10°	1387.0	1386.3	1385.6	1384.9	1384.2	1382.2	1378.9	1375.5	1372.2	1368.9	1369.6
12.5°	1372.5	1371.6	1370.7	1369.8	1368.9	1366.2	1361.8	1357.2	1352.8	1348.3	1348.8
15°	1344.3	1342.8	1341.4	1340.0	1338.6	1335.4	1330.4	1325.4	1320.4	1315.4	1315.2
17.5°	1312.4	1310.2	1308.1	1305.8	1303.6	1299.4	1293.2	1286.9	1280.6	1274.3	1273.1
20°	1287.6	1285.2	1282.9	1280.5	1278.1	1273.1	1265.5	1257.9	1250.3	1242.7	1241.5
22.5°	1260.2	1257.8	1255.5	1253.1	1250.7	1245.5	1237.5	1229.5	1221.5	1213.5	1211.2
25°	1219.2	1215.6	1212.0	1208.5	1204.9	1198.7	1189.9	1181.1	1172.4	1163.6	1160.5
27.5°	1172.1	1167.8	1163.4	1159.1	1154.8	1148.0	1138.5	1129.1	1119.7	1110.2	1106.0
30°	1137.9	1133.4	1128.9	1124.3	1119.8	1112.5	1102.6	1092.6	1082.6	1072.6	1067.1
32.5°	1104.5	1099.2	1093.9	1088.7	1083.4	1075.7	1065.5	1055.3	1045.1	1035.0	1029.0
35°	1050.2	1044.5	1038.8	1033.1	1027.4	1019.1	1008.4	997.8	987.1	976.4	969.5
37.5°	996.9	990.0	983.0	976.1	969.2	960.2	949.1	938.1	927.1	916.1	907.8
40°	959.3	952.1	945.0	937.9	930.7	921.5	910.1	898.7	887.2	875.8	866.8
42.5°	919.9	912.6	905.3	897.9	890.7	881.1	869.3	857.5	845.7	833.9	825.3
45°	859.8	852.9	846.1	839.2	832.3	822.3	809.2	796.1	783.1	770.0	760.5
47.5°	797.6	790.3	783.0	775.8	768.5	758.3	745.1	731.9	718.7	705.6	695.8
50°	758.2	750.4	742.5	734.7	726.8	716.1	702.6	689.0	675.5	661.9	652.0
52.5°	715.4	707.4	699.3	691.3	683.3	672.9	660.1	647.3	634.5	621.8	611.0
55°	652.4	644.8	637.2	629.5	621.9	611.5	598.2	584.9	571.6	558.3	547.6
57.5°	588.6	580.5	572.4	564.2	556.1	545.7	532.8	520.0	507.2	494.3	483.9
60°	547.6	539.2	530.9	522.6	514.3	503.7	490.8	478.0	465.2	452.3	441.9
62.5°	503.9	496.0	488.1	480.1	472.1	461.7	448.7	435.6	422.6	409.6	399.9
65°	441.6	433.6	425.5	417.4	409.3	399.0	386.4	373.8	361.2	348.6	339.1
67.5°	379.9	371.8	363.7	355.6	347.5	337.5	325.3	313.3	301.3	289.1	280.5
70°	337.9	329.9	321.8	313.7	305.6	295.6	283.8	271.9	260.0	248.1	240.7
72.5°	296.9	289.0	281.1	273.2	265.3	255.8	244.7	233.5	222.4	211.4	204.5
75°	235.3	228.1	221.0	213.9	206.8	198.2	188.2	178.2	168.3	158.3	153.0
77.5°	174.1	168.4	162.7	157.0	151.3	144.4	136.5	128.5	120.5	112.5	108.8
80°	139.0	133.3	127.6	121.9	116.2	110.0	103.4	96.7	90.1	83.4	81.3
82.5°	104.8	99.7	94.5	89.4	84.3	79.5	74.9	70.3	65.8	61.2	60.2
85°	58.8	54.5	50.2	45.9	41.7	39.0	37.8	36.6	35.4	34.2	34.0
87.5°	19.9	18.9	18.0	17.0	16.0	15.6	15.8	15.8	16.0	16.2	16.3
90°	1.0	2.9	4.7	6.5	8.3	10.1	11.6	13.2	14.8	16.5	17.6
92.5°	24.9	26.1	27.4	28.7	29.9	31.6	33.6	35.6	37.5	39.5	41.0
95°	66.8	67.3	67.7	68.1	68.6	70.0	72.2	74.5	76.8	79.1	80.7
97.5°	111.0	111.1	111.4	111.5	111.7	113.4	116.5	119.7	122.9	126.0	127.5
100°	143.9	143.9	143.9	143.9	143.9	145.4	148.3	151.3	154.2	157.2	159.3
102.5°	179.2	180.1	181.0	182.0	182.8	184.1	185.6	187.1	188.6	190.1	192.3
105°	234.3	235.4	236.5	237.7	238.8	240.1	241.5	242.9	244.2	245.6	247.0
107.5°	295.1	296.3	297.4	298.6	299.7	300.8	301.8	302.9	304.0	305.0	305.7
110°	337.1	338.2	339.4	340.5	341.6	342.5	343.3	343.9	344.6	345.2	345.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	379.8	380.4	381.0	381.6	382.1	382.9	383.7	384.6	385.5	386.3	386.7
115°	442.9	443.8	444.7	445.6	446.6	447.3	447.7	448.1	448.6	449.1	448.9
117.5°	506.2	506.6	507.0	507.4	507.9	508.3	508.7	509.1	509.5	509.9	510.1
120°	545.7	546.8	548.0	549.1	550.2	550.9	551.1	551.4	551.6	551.8	551.8
122.5°	588.4	588.8	589.2	589.6	590.0	590.6	591.1	591.8	592.3	592.9	592.7
125°	646.3	647.7	649.1	650.5	651.8	652.6	652.8	653.1	653.3	653.6	653.1
127.5°	708.0	708.8	709.6	710.3	711.1	711.6	711.9	712.2	712.5	712.7	712.5
130°	745.0	746.2	747.3	748.5	749.6	750.4	750.8	751.3	751.7	752.2	751.9
132.5°	782.0	783.9	785.8	787.6	789.5	790.4	790.3	790.2	790.1	790.0	789.8
135°	840.6	841.9	843.3	844.7	846.1	846.8	847.1	847.3	847.6	847.8	847.8
137.5°	895.6	897.0	898.3	899.6	900.9	901.8	902.4	902.9	903.4	903.9	904.1
140°	931.0	932.2	933.3	934.5	935.6	936.4	937.2	937.9	938.5	939.2	939.7
142.5°	966.4	967.3	968.3	969.2	970.2	971.1	971.9	972.8	973.7	974.5	974.9
145°	1018.4	1019.2	1020.2	1021.0	1022.0	1022.8	1023.5	1024.1	1024.8	1025.6	1025.6
147.5°	1066.4	1066.9	1067.5	1067.9	1068.4	1069.0	1069.5	1070.1	1070.6	1071.2	1071.7
150°	1098.5	1098.3	1098.0	1097.8	1097.6	1097.9	1098.8	1099.8	1100.7	1101.6	1101.6
152.5°	1124.8	1125.1	1125.5	1125.8	1126.1	1126.4	1126.8	1127.1	1127.5	1127.9	1128.5
155°	1165.3	1165.3	1165.3	1165.3	1165.3	1165.4	1165.6	1165.9	1166.1	1166.3	1167.2
157.5°	1201.4	1200.9	1200.5	1199.9	1199.4	1199.3	1199.5	1199.8	1200.0	1200.2	1201.1
160°	1222.8	1222.2	1221.5	1220.8	1220.1	1219.9	1220.1	1220.4	1220.5	1220.8	1221.7
162.5°	1241.7	1241.3	1240.7	1240.2	1239.8	1239.5	1239.5	1239.6	1239.6	1239.7	1240.8
165°	1267.0	1266.5	1266.1	1265.7	1265.2	1265.1	1265.3	1265.5	1265.7	1266.0	1266.9
167.5°	1288.4	1287.5	1286.6	1285.6	1284.8	1284.3	1284.3	1284.3	1284.3	1284.3	1285.6
170°	1299.9	1299.0	1298.1	1297.2	1296.2	1295.8	1295.8	1295.8	1295.8	1295.8	1297.2
172.5°	1308.1	1307.2	1306.3	1305.4	1304.5	1304.0	1304.0	1304.0	1304.0	1304.0	1305.4
175°	1317.4	1316.4	1315.6	1314.6	1313.8	1313.3	1313.3	1313.3	1313.3	1313.3	1314.6
177.5°	1322.1	1321.4	1320.6	1319.9	1319.1	1318.7	1318.5	1318.3	1318.2	1318.0	1319.1
180°	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1411.2	1413.1	1415.0	1415.8	1415.6	1415.5	1415.2	1415.1
5°	1402.5	1404.9	1407.2	1408.2	1407.7	1407.2	1406.8	1406.3
7.5°	1385.1	1386.7	1388.4	1388.9	1388.4	1387.9	1387.3	1386.8
10°	1370.3	1371.0	1371.7	1371.7	1371.0	1370.3	1369.6	1368.9
12.5°	1349.4	1349.9	1350.4	1350.1	1349.0	1348.0	1346.9	1345.8
15°	1314.9	1314.7	1314.5	1313.3	1311.1	1309.0	1306.9	1304.7
17.5°	1271.9	1270.7	1269.6	1268.1	1266.3	1264.6	1262.8	1261.1
20°	1240.3	1239.1	1237.9	1236.3	1234.1	1232.0	1229.9	1227.7
22.5°	1208.9	1206.6	1204.3	1202.2	1200.5	1198.7	1196.9	1195.2
25°	1157.4	1154.3	1151.2	1148.3	1145.7	1143.1	1140.5	1137.9
27.5°	1101.6	1097.3	1093.0	1089.6	1087.0	1084.5	1082.0	1079.5
30°	1061.7	1056.2	1050.8	1046.9	1044.8	1042.7	1040.5	1038.4
32.5°	1022.9	1016.8	1010.8	1006.5	1003.8	1001.1	998.3	995.6
35°	962.6	955.7	948.8	943.7	940.4	937.1	933.7	930.4
37.5°	899.5	891.3	883.0	877.3	874.0	870.8	867.5	864.3
40°	857.8	848.7	839.7	833.8	830.9	828.1	825.2	822.4
42.5°	816.7	807.9	799.3	792.9	788.7	784.6	780.4	776.2
45°	751.0	741.5	732.0	725.4	721.8	718.3	714.7	711.1
47.5°	686.0	676.2	666.5	659.6	655.6	651.6	647.8	643.8
50°	642.0	632.0	622.0	615.3	611.7	608.2	604.6	601.0
52.5°	600.3	589.5	578.8	571.6	568.1	564.5	560.9	557.4
55°	536.9	526.2	515.5	508.2	504.4	500.6	496.8	493.0
57.5°	473.4	463.0	452.5	445.5	442.2	438.8	435.4	432.1
60°	431.4	421.0	410.5	403.5	400.0	396.4	392.8	389.3
62.5°	390.2	380.5	370.8	364.2	360.6	357.0	353.5	349.9
65°	329.6	320.1	310.6	304.0	300.5	296.9	293.3	289.8
67.5°	271.8	263.1	254.4	248.6	245.7	242.9	240.0	237.2
70°	233.4	226.0	218.6	213.5	210.6	207.8	204.9	202.1
72.5°	197.7	190.9	184.1	179.7	177.8	175.9	174.0	172.1
75°	147.8	142.6	137.4	133.9	132.2	130.6	128.9	127.2
77.5°	105.2	101.6	97.8	95.4	94.2	92.9	91.7	90.5
80°	79.1	77.0	74.9	73.5	73.0	72.6	72.1	71.6
82.5°	59.2	58.1	57.2	56.6	56.2	55.9	55.7	55.4
85°	33.7	33.5	33.3	33.0	32.8	32.6	32.3	32.1
87.5°	16.6	16.8	17.0	17.1	17.0	17.0	17.0	16.9
90°	18.7	19.9	21.0	21.9	22.6	23.3	24.0	24.6
92.5°	42.5	44.0	45.5	46.5	47.0	47.5	48.0	48.5
95°	82.3	83.9	85.6	86.5	87.0	87.5	87.9	88.4
97.5°	129.0	130.5	132.0	132.9	133.2	133.5	133.7	134.0
100°	161.4	163.3	165.4	166.7	167.2	167.6	168.1	168.5
102.5°	194.6	196.8	199.1	200.5	201.1	201.8	202.4	203.0
105°	248.3	249.7	251.0	252.1	252.8	253.5	254.1	254.8
107.5°	306.3	307.0	307.8	308.1	308.0	307.9	307.9	307.8
110°	346.7	347.3	348.0	348.2	348.0	347.8	347.5	347.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	387.0	387.3	387.6	387.6	387.2	386.8	386.3	386.0
115°	448.6	448.4	448.1	447.9	447.7	447.4	447.3	447.0
117.5°	510.2	510.4	510.6	510.2	509.4	508.4	507.6	506.6
120°	551.8	551.8	551.8	551.4	550.4	549.5	548.6	547.7
122.5°	592.6	592.4	592.2	591.8	591.0	590.3	589.5	588.8
125°	652.6	652.2	651.7	651.4	651.2	650.9	650.7	650.5
127.5°	712.3	712.0	711.9	711.5	711.1	710.6	710.1	709.6
130°	751.7	751.5	751.3	750.9	750.5	750.0	749.6	749.1
132.5°	789.6	789.3	789.1	788.7	788.1	787.3	786.7	786.1
135°	847.8	847.8	847.8	847.3	846.4	845.5	844.5	843.7
137.5°	904.4	904.7	905.0	904.5	903.4	902.2	901.1	900.0
140°	940.2	940.6	941.0	940.7	939.5	938.4	937.3	936.1
142.5°	975.1	975.4	975.7	975.3	974.1	973.0	971.8	970.7
145°	1025.6	1025.6	1025.6	1025.2	1024.5	1023.8	1023.1	1022.5
147.5°	1072.2	1072.8	1073.3	1072.9	1071.3	1069.8	1068.2	1066.7
150°	1101.6	1101.6	1101.6	1101.4	1100.9	1100.4	1099.9	1099.5
152.5°	1128.9	1129.5	1130.0	1130.0	1129.1	1128.3	1127.4	1126.6
155°	1168.2	1169.0	1170.0	1169.8	1168.7	1167.6	1166.4	1165.3
157.5°	1202.1	1202.9	1203.9	1203.6	1202.1	1200.6	1199.0	1197.5
160°	1222.6	1223.5	1224.4	1224.3	1223.2	1222.0	1220.9	1219.7
162.5°	1241.9	1242.9	1244.0	1244.0	1242.6	1241.3	1240.0	1238.7
165°	1267.8	1268.8	1269.6	1269.4	1268.0	1266.7	1265.3	1263.9
167.5°	1287.1	1288.4	1289.8	1289.8	1288.3	1286.9	1285.5	1284.0
170°	1298.5	1299.9	1301.2	1301.2	1299.6	1298.0	1296.3	1294.7
172.5°	1306.8	1308.1	1309.5	1309.5	1308.1	1306.6	1305.2	1303.8
175°	1316.0	1317.4	1318.7	1318.6	1317.0	1315.4	1313.8	1312.2
177.5°	1320.2	1321.3	1322.4	1322.3	1321.0	1319.7	1318.4	1317.2
180°	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5

(END OF REPORT)