

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: P333727-935

Luminaire Tested: **S125RDIW-S1270D770U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333727-935
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-S1270D770U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6492.5 lumens
Efficiency: N/A
Efficacy: 108.6 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-Direct

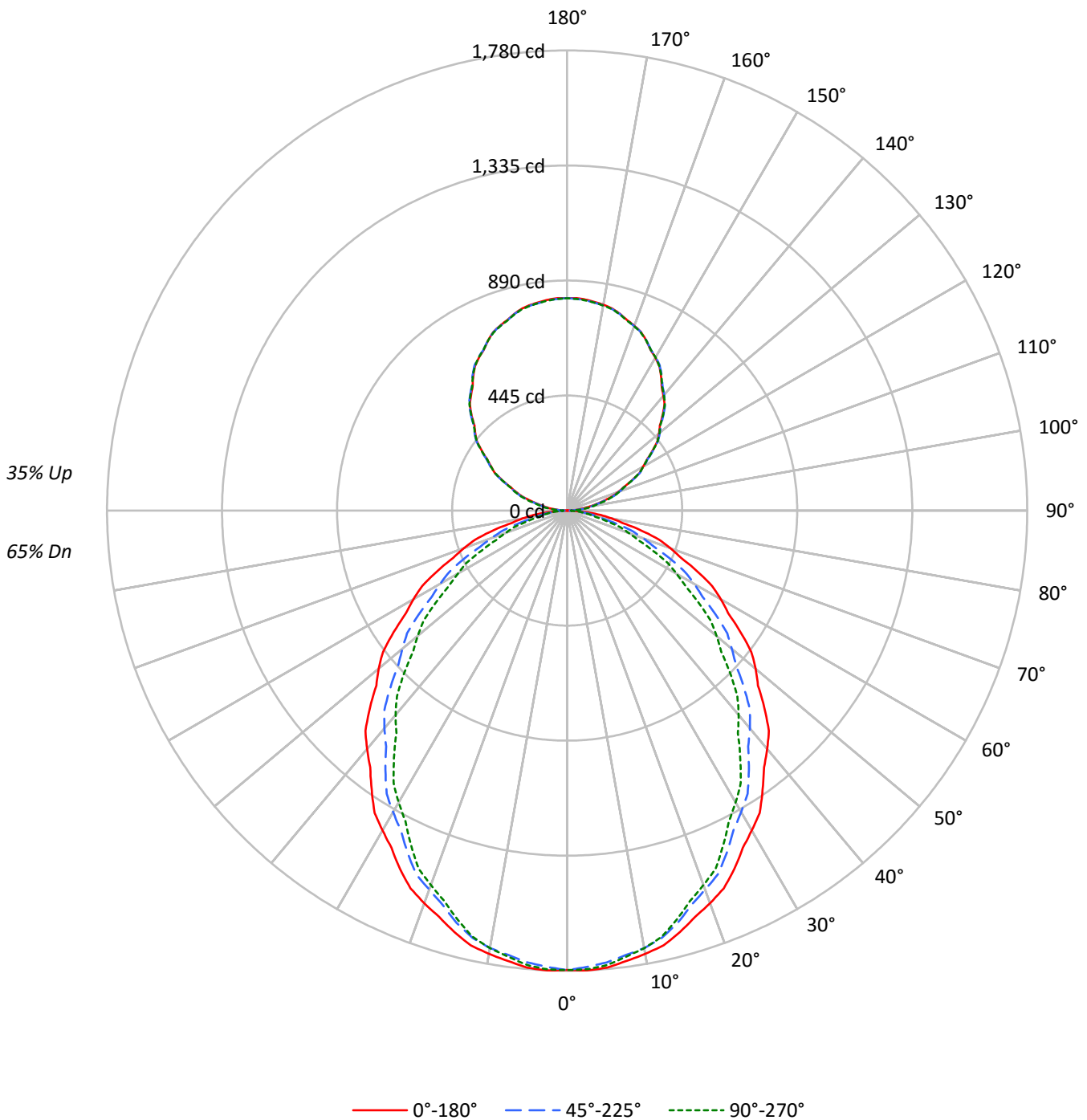
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	67	62	61	59	55
2	93	85	79	74	87	80	75	70	71	67	63	63	60	57	55	53	50	47
3	85	75	68	62	79	71	64	59	63	58	54	56	52	48	49	46	43	40
4	78	67	59	53	73	63	56	50	56	50	46	50	45	42	44	40	37	34
5	71	60	51	45	67	56	49	43	50	44	40	45	40	36	40	36	33	30
6	66	54	45	40	62	51	43	38	46	39	35	41	36	32	36	32	29	26
7	61	49	41	35	57	46	39	34	41	35	31	37	32	28	33	29	26	23
8	57	44	36	31	53	42	35	30	38	32	28	34	29	25	30	26	23	21
9	53	41	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21	19
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11479	11479	11479
5°	11505	11374	11444
10°	11418	11269	11269
15°	11282	11040	10950
20°	11109	10721	10592
25°	10905	10408	10178
30°	10651	10041	9721
35°	10394	9663	9208
40°	10151	9269	8703
45°	9858	8828	8153
50°	9562	8349	7580
55°	9221	7891	6969
60°	8878	7334	6311
65°	8472	6687	5559
70°	8010	5880	4791
75°	7369	4956	3985
80°	6490	3894	3347
85°	5476	3186	2986



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.1	2.6
10°-20°	467.1	7.2
20°-30°	677.3	10.4
30°-40°	771.9	11.9
40°-50°	752.4	11.6
50°-60°	633.3	9.8
60°-70°	444.0	6.8
70°-80°	228.2	3.5
80°-90°	59.4	0.9
90°-100°	55.0	0.8
100°-110°	162.4	2.5
110°-120°	275.1	4.2
120°-130°	362.1	5.6
130°-140°	405.7	6.2
140°-150°	397.7	6.1
150°-160°	334.0	5.1
160°-170°	222.0	3.4
170°-180°	77.7	1.2
0°-30°	1311.5	20.2
0°-40°	2083.3	32.1
0°-60°	3469.1	53.4
0°-90°	4200.7	64.7
90°-120°	492.6	7.6
90°-150°	1658.1	25.5
90°-180°	2292.0	35.3
0°-180°	6492.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1777	1777	1777	1777	1777	
5°	1775	1769	1754	1767	1765	168
15°	1687	1678	1651	1649	1638	475
25°	1530	1509	1460	1443	1428	704
35°	1318	1284	1226	1188	1168	825
45°	1079	1038	967	915	893	832
55°	819	774	701	642	619	732
65°	554	507	438	386	364	549
75°	295	254	199	170	160	313
85°	74	51	43	42	40	83
90°	1	6	10	13	15	6
95°	42	43	49	54	55	44
105°	146	149	153	156	158	156
115°	276	278	279	279	278	272
125°	402	406	406	405	405	360
135°	523	526	527	527	525	403
145°	633	636	638	638	636	396
155°	725	725	726	728	725	334
165°	788	787	788	790	786	222
175°	819	817	817	820	816	78
180°	821	821	821	821	821	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4
2.5°	1780.5	1779.9	1779.1	1778.4	1777.7	1776.2	1773.7	1771.3	1769.0	1766.6	1769.0
5°	1774.7	1773.5	1772.3	1771.1	1769.9	1767.6	1764.4	1761.1	1757.8	1754.5	1757.5
7.5°	1757.2	1756.1	1755.0	1753.8	1752.7	1750.2	1746.2	1742.2	1738.4	1734.4	1736.5
10°	1741.1	1740.2	1739.3	1738.4	1737.5	1735.0	1730.8	1726.6	1722.4	1718.3	1719.2
12.5°	1722.9	1721.7	1720.5	1719.4	1718.3	1714.9	1709.3	1703.7	1698.1	1692.5	1693.2
15°	1687.4	1685.6	1683.9	1682.0	1680.2	1676.2	1669.9	1663.7	1657.4	1651.1	1650.9
17.5°	1647.4	1644.7	1641.9	1639.2	1636.4	1631.1	1623.2	1615.3	1607.5	1599.6	1598.1
20°	1616.3	1613.3	1610.2	1607.3	1604.3	1598.0	1588.5	1579.0	1569.4	1559.9	1558.4
22.5°	1581.9	1578.9	1575.9	1573.0	1569.9	1563.5	1553.4	1543.4	1533.4	1523.4	1520.4
25°	1530.3	1525.9	1521.4	1516.9	1512.4	1504.7	1493.7	1482.6	1471.5	1460.5	1456.6
27.5°	1471.3	1465.9	1460.4	1455.0	1449.6	1441.0	1429.1	1417.3	1405.5	1393.7	1388.3
30°	1428.3	1422.6	1416.9	1411.4	1405.7	1396.5	1384.0	1371.5	1358.9	1346.4	1339.5
32.5°	1386.5	1379.8	1373.2	1366.6	1359.9	1350.2	1337.5	1324.7	1311.9	1299.2	1291.6
35°	1318.3	1311.0	1303.9	1296.8	1289.6	1279.3	1265.8	1252.5	1239.1	1225.6	1216.9
37.5°	1251.4	1242.7	1234.0	1225.3	1216.5	1205.2	1191.5	1177.6	1163.7	1149.9	1139.5
40°	1204.1	1195.2	1186.2	1177.2	1168.4	1156.7	1142.4	1128.1	1113.7	1099.4	1088.1
42.5°	1154.8	1145.6	1136.3	1127.1	1118.0	1106.0	1091.2	1076.4	1061.6	1046.8	1036.0
45°	1079.3	1070.7	1062.0	1053.3	1044.7	1032.2	1015.7	999.4	982.9	966.6	954.6
47.5°	1001.2	992.0	982.9	973.8	964.7	951.8	935.3	918.8	902.2	885.7	873.4
50°	951.7	941.9	932.0	922.2	912.4	899.0	881.9	865.0	847.9	831.0	818.4
52.5°	898.0	887.9	877.9	867.8	857.7	844.6	828.6	812.6	796.5	780.5	767.0
55°	818.9	809.3	799.8	790.2	780.7	767.6	750.9	734.2	717.5	700.8	687.3
57.5°	738.8	728.7	718.4	708.3	698.0	684.9	668.8	652.6	636.5	620.4	607.3
60°	687.3	676.8	666.4	656.0	645.6	632.2	616.1	600.0	583.9	567.8	554.7
62.5°	632.6	622.6	612.6	602.6	592.7	579.5	563.2	546.8	530.5	514.1	502.0
65°	554.4	544.2	534.2	524.0	513.8	500.8	485.1	469.2	453.4	437.6	425.7
67.5°	476.8	466.7	456.5	446.4	436.3	423.6	408.5	393.3	378.2	363.0	352.1
70°	424.2	414.1	403.9	393.7	383.7	371.1	356.2	341.3	326.3	311.4	302.2
72.5°	372.6	362.7	352.8	342.9	333.0	321.1	307.1	293.2	279.2	265.3	256.8
75°	295.3	286.4	277.4	268.5	259.5	248.8	236.3	223.8	211.2	198.6	192.1
77.5°	218.5	211.4	204.2	197.1	189.9	181.3	171.3	161.3	151.3	141.2	136.6
80°	174.5	167.4	160.2	153.0	145.9	138.1	129.8	121.4	113.0	104.7	102.0
82.5°	131.6	125.1	118.6	112.2	105.8	99.7	93.9	88.3	82.5	76.8	75.5
85°	73.9	68.4	63.1	57.7	52.3	48.9	47.4	46.0	44.4	43.0	42.6
87.5°	24.8	23.4	22.0	20.5	19.0	18.3	18.3	18.3	18.2	18.2	18.3
90°	0.6	1.8	2.9	4.0	5.2	6.3	7.2	8.3	9.2	10.2	10.9
92.5°	15.5	16.3	17.0	17.8	18.7	19.6	20.9	22.1	23.3	24.5	25.5
95°	41.6	41.8	42.1	42.4	42.7	43.6	44.9	46.4	47.8	49.2	50.2
97.5°	69.1	69.1	69.2	69.4	69.5	70.5	72.5	74.5	76.4	78.4	79.3
100°	89.5	89.5	89.5	89.5	89.5	90.4	92.2	94.1	95.9	97.8	99.1
102.5°	111.5	112.0	112.6	113.1	113.7	114.5	115.5	116.4	117.3	118.2	119.7
105°	145.8	146.5	147.1	147.8	148.6	149.4	150.2	151.0	151.9	152.7	153.6
107.5°	183.6	184.3	185.0	185.7	186.4	187.1	187.8	188.4	189.1	189.7	190.1
110°	209.7	210.3	211.0	211.8	212.5	213.0	213.4	213.9	214.3	214.7	215.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	236.3	236.6	236.9	237.4	237.7	238.2	238.7	239.3	239.8	240.3	240.6
115°	275.5	276.0	276.6	277.2	277.8	278.2	278.4	278.7	279.1	279.3	279.1
117.5°	314.9	315.1	315.4	315.6	315.9	316.2	316.4	316.7	316.9	317.2	317.3
120°	339.4	340.1	340.8	341.6	342.2	342.7	342.8	342.9	343.1	343.2	343.2
122.5°	366.0	366.3	366.5	366.8	367.0	367.3	367.6	368.1	368.4	368.8	368.7
125°	402.0	402.9	403.7	404.6	405.4	406.0	406.0	406.2	406.4	406.5	406.2
127.5°	440.4	440.8	441.3	441.9	442.3	442.6	442.8	443.0	443.2	443.3	443.2
130°	463.4	464.1	464.9	465.5	466.2	466.7	467.0	467.3	467.6	467.9	467.7
132.5°	486.4	487.6	488.7	489.9	491.0	491.6	491.5	491.5	491.5	491.4	491.3
135°	522.8	523.7	524.5	525.4	526.2	526.8	526.8	527.0	527.2	527.3	527.3
137.5°	557.1	557.9	558.7	559.6	560.4	560.9	561.3	561.5	561.9	562.2	562.4
140°	579.1	579.8	580.5	581.2	581.9	582.5	582.9	583.3	583.8	584.2	584.4
142.5°	601.1	601.7	602.3	602.9	603.5	604.0	604.6	605.1	605.6	606.1	606.3
145°	633.4	634.0	634.6	635.1	635.7	636.2	636.6	637.1	637.5	637.9	637.9
147.5°	663.3	663.7	663.9	664.3	664.6	664.9	665.2	665.6	665.9	666.2	666.6
150°	683.3	683.1	682.9	682.9	682.7	682.9	683.5	684.1	684.6	685.2	685.2
152.5°	699.6	699.8	700.0	700.3	700.4	700.6	700.9	701.1	701.3	701.5	701.9
155°	724.8	724.8	724.8	724.8	724.8	724.9	725.0	725.1	725.3	725.5	726.0
157.5°	747.3	747.0	746.7	746.4	746.1	746.0	746.1	746.2	746.4	746.6	747.1
160°	760.6	760.2	759.7	759.3	758.9	758.7	758.9	759.1	759.1	759.3	759.9
162.5°	772.4	772.1	771.7	771.5	771.1	770.9	771.0	771.0	771.0	771.1	771.8
165°	788.1	787.8	787.6	787.2	787.0	786.9	787.0	787.1	787.3	787.5	788.0
167.5°	801.4	800.8	800.2	799.7	799.1	798.8	798.8	798.8	798.8	798.8	799.7
170°	808.6	808.0	807.4	806.8	806.2	806.0	806.0	806.0	806.0	806.0	806.8
172.5°	813.6	813.0	812.5	811.9	811.4	811.1	811.1	811.1	811.1	811.1	811.9
175°	819.4	818.8	818.3	817.7	817.1	816.8	816.8	816.8	816.8	816.8	817.7
177.5°	822.3	821.9	821.4	821.0	820.5	820.3	820.1	820.0	819.9	819.8	820.4
180°	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4
2.5°	1771.3	1773.7	1776.2	1777.2	1777.0	1776.8	1776.5	1776.2
5°	1760.5	1763.5	1766.4	1767.6	1767.0	1766.4	1765.8	1765.2
7.5°	1738.5	1740.7	1742.8	1743.4	1742.8	1742.1	1741.5	1740.9
10°	1720.0	1721.0	1721.8	1721.8	1721.0	1720.0	1719.2	1718.3
12.5°	1693.8	1694.4	1695.1	1694.8	1693.4	1692.0	1690.7	1689.3
15°	1650.5	1650.3	1649.9	1648.5	1645.8	1643.1	1640.4	1637.7
17.5°	1596.6	1595.1	1593.6	1591.8	1589.6	1587.3	1585.2	1582.9
20°	1556.9	1555.4	1553.9	1551.8	1549.1	1546.4	1543.8	1541.1
22.5°	1517.5	1514.6	1511.7	1509.1	1506.9	1504.7	1502.4	1500.3
25°	1452.8	1448.9	1445.0	1441.4	1438.1	1434.9	1431.6	1428.3
27.5°	1382.9	1377.4	1372.0	1367.7	1364.5	1361.3	1358.1	1355.0
30°	1332.7	1325.9	1319.0	1314.2	1311.6	1308.8	1306.1	1303.5
32.5°	1284.0	1276.4	1268.9	1263.3	1260.0	1256.5	1253.2	1249.7
35°	1208.3	1199.6	1191.0	1184.6	1180.4	1176.2	1172.1	1167.9
37.5°	1129.1	1118.8	1108.4	1101.1	1097.1	1093.0	1089.0	1084.9
40°	1076.8	1065.4	1054.1	1046.6	1043.0	1039.5	1035.9	1032.3
42.5°	1025.1	1014.3	1003.4	995.3	990.1	984.8	979.6	974.3
45°	942.6	930.7	918.8	910.6	906.1	901.6	897.2	892.7
47.5°	861.2	848.9	836.5	827.9	822.9	818.0	813.0	808.1
50°	805.9	793.3	780.8	772.3	767.8	763.4	758.9	754.4
52.5°	753.5	740.0	726.5	717.6	713.1	708.6	704.1	699.6
55°	673.9	660.5	647.0	637.9	633.2	628.4	623.6	618.9
57.5°	594.2	581.1	567.9	559.3	555.0	550.8	546.6	542.3
60°	541.6	528.5	515.3	506.5	502.0	497.6	493.1	488.6
62.5°	489.8	477.6	465.5	457.1	452.6	448.2	443.7	439.2
65°	413.8	401.8	389.9	381.7	377.2	372.7	368.2	363.8
67.5°	341.1	330.2	319.3	312.0	308.5	304.9	301.4	297.7
70°	292.9	283.7	274.5	268.0	264.4	260.9	257.3	253.7
72.5°	248.2	239.7	231.1	225.7	223.3	220.9	218.5	216.1
75°	185.5	179.0	172.5	168.1	166.0	163.9	161.9	159.7
77.5°	132.0	127.4	122.9	119.8	118.2	116.7	115.1	113.6
80°	99.4	96.7	93.9	92.3	91.7	91.1	90.6	90.0
82.5°	74.3	73.0	71.8	70.9	70.6	70.3	69.9	69.6
85°	42.4	42.1	41.8	41.5	41.2	40.9	40.6	40.3
87.5°	18.4	18.6	18.7	18.7	18.6	18.4	18.3	18.1
90°	11.6	12.4	13.1	13.6	14.0	14.5	14.9	15.3
92.5°	26.4	27.4	28.3	28.9	29.3	29.5	29.9	30.1
95°	51.2	52.2	53.2	53.8	54.2	54.4	54.7	54.9
97.5°	80.2	81.2	82.1	82.7	82.8	83.0	83.2	83.3
100°	100.3	101.6	102.9	103.7	104.0	104.3	104.5	104.8
102.5°	121.1	122.4	123.8	124.7	125.1	125.5	125.9	126.3
105°	154.5	155.3	156.2	156.8	157.2	157.6	158.1	158.5
107.5°	190.5	191.0	191.4	191.6	191.6	191.6	191.5	191.5
110°	215.6	216.0	216.5	216.6	216.5	216.3	216.2	216.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	240.7	240.9	241.1	241.1	240.8	240.6	240.3	240.0
115°	279.1	278.9	278.7	278.6	278.4	278.4	278.2	278.0
117.5°	317.4	317.5	317.6	317.4	316.8	316.2	315.6	315.1
120°	343.2	343.2	343.2	342.9	342.4	341.8	341.2	340.7
122.5°	368.6	368.4	368.3	368.1	367.6	367.1	366.7	366.3
125°	406.0	405.6	405.4	405.2	405.0	404.8	404.8	404.6
127.5°	443.1	442.9	442.7	442.6	442.3	442.0	441.7	441.4
130°	467.6	467.4	467.3	467.1	466.8	466.5	466.2	466.0
132.5°	491.1	490.9	490.9	490.5	490.2	489.7	489.4	489.0
135°	527.3	527.3	527.3	527.0	526.4	525.9	525.3	524.8
137.5°	562.6	562.7	562.9	562.6	561.9	561.2	560.5	559.7
140°	584.8	585.0	585.3	585.1	584.4	583.7	583.0	582.3
142.5°	606.5	606.7	606.8	606.6	605.9	605.2	604.4	603.7
145°	637.9	637.9	637.9	637.7	637.2	636.8	636.4	635.9
147.5°	666.9	667.3	667.6	667.3	666.3	665.4	664.4	663.5
150°	685.2	685.2	685.2	685.0	684.8	684.5	684.2	683.9
152.5°	702.2	702.6	702.9	702.8	702.3	701.8	701.3	700.8
155°	726.6	727.1	727.7	727.6	726.9	726.3	725.5	724.8
157.5°	747.7	748.2	748.8	748.6	747.7	746.7	745.8	744.9
160°	760.4	761.0	761.6	761.6	760.8	760.1	759.4	758.7
162.5°	772.5	773.1	773.8	773.8	772.9	772.1	771.3	770.4
165°	788.6	789.2	789.7	789.5	788.8	787.9	787.0	786.2
167.5°	800.6	801.4	802.2	802.2	801.3	800.5	799.6	798.7
170°	807.7	808.6	809.4	809.3	808.3	807.4	806.3	805.4
172.5°	812.8	813.6	814.5	814.5	813.6	812.7	811.8	811.0
175°	818.6	819.4	820.3	820.2	819.2	818.2	817.2	816.2
177.5°	821.1	821.8	822.5	822.4	821.7	820.9	820.1	819.2
180°	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3

(END OF REPORT)