

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: P333354-840

Luminaire Tested: **S125DIW-S375D1050U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333354-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S375D1050U840-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5708.3 lumens
Efficiency: N/A
Efficacy: 150.2 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

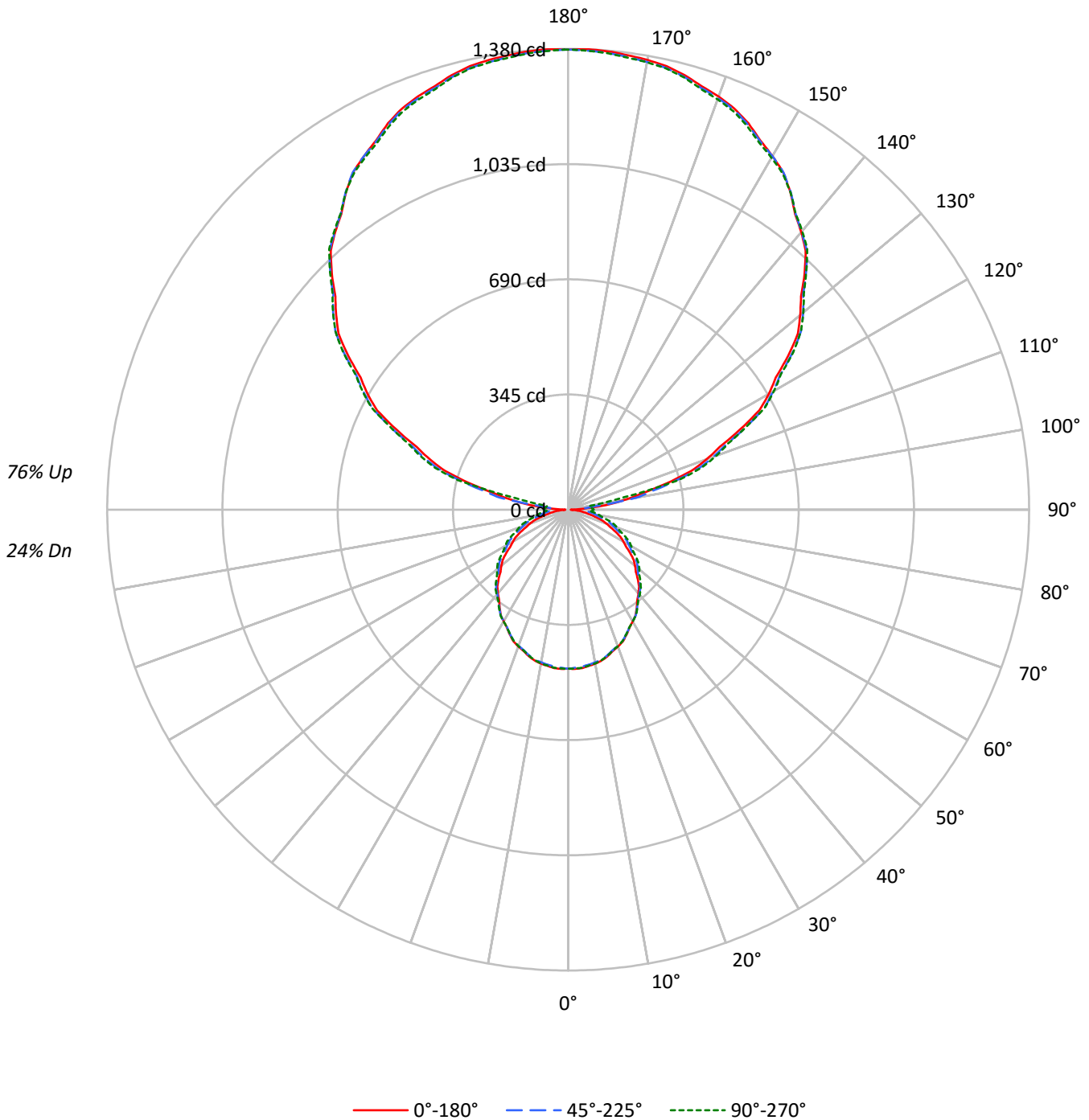
Input Watts (W): 38
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	87	83	80	81	78	75	72	60	58	56	43	42	41	28	27	27	20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16
3	76	67	59	54	67	59	53	49	46	42	38	33	31	28	22	20	19	14
4	69	59	51	45	61	52	46	41	41	36	32	29	26	24	19	17	16	12
5	63	52	44	38	56	47	40	35	36	31	28	26	23	21	17	15	14	10
6	58	47	39	33	51	42	35	30	32	28	24	24	20	18	16	14	12	9
7	54	42	34	29	48	37	31	26	29	24	21	21	18	16	14	12	11	8
8	50	38	30	25	44	34	27	23	26	22	18	20	16	14	13	11	9	7
9	46	34	27	22	41	31	25	20	24	20	16	18	15	12	12	10	9	6
10	43	31	24	20	38	28	22	18	22	18	15	16	13	11	11	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3075	3075	3075
5°	3081	3017	3027
10°	3059	2963	2960
15°	3022	2899	2873
20°	2974	2819	2786
25°	2915	2734	2680
30°	2844	2641	2584
35°	2778	2554	2494
40°	2711	2463	2406
45°	2635	2385	2327
50°	2563	2302	2256
55°	2474	2222	2175
60°	2380	2130	2090
65°	2281	2035	1997
70°	2168	1905	1900
75°	1987	1780	1780
80°	1753	1629	1650
85°	1538	1527	1610



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	0.8
10°-20°	127.8	2.2
20°-30°	190.0	3.3
30°-40°	225.1	3.9
40°-50°	232.7	4.1
50°-60°	214.4	3.8
60°-70°	173.3	3.0
70°-80°	116.1	2.0
80°-90°	63.1	1.1
90°-100°	83.8	1.5
100°-110°	333.5	5.8
110°-120°	576.4	10.1
120°-130°	727.7	12.7
130°-140°	776.7	13.6
140°-150°	726.0	12.7
150°-160°	586.6	10.3
160°-170°	379.4	6.6
170°-180°	130.8	2.3
0°-30°	362.8	6.4
0°-40°	587.9	10.3
0°-60°	1035.1	18.1
0°-90°	1387.5	24.3
90°-120°	993.7	17.4
90°-150°	3224.0	56.5
90°-180°	4321.0	75.7
0°-180°	5708.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	475	45
15°	454	455	452	454	453	128
25°	413	414	412	413	411	190
35°	358	360	359	361	361	224
45°	294	299	302	305	306	227
55°	226	234	241	246	248	202
65°	156	167	178	184	187	155
75°	86	98	113	122	125	91
85°	26	41	57	67	71	27
90°	8	32	55	70	77	7
95°	64	72	50	65	69	79
105°	304	316	330	339	342	323
115°	567	575	588	592	589	561
125°	804	810	820	823	822	717
135°	1001	1006	1008	1011	1008	771
145°	1160	1161	1161	1164	1160	725
155°	1277	1271	1273	1275	1268	588
165°	1347	1341	1342	1347	1340	380
175°	1378	1372	1373	1380	1372	131
180°	1378	1378	1378	1378	1378	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	477.2	477.0	476.9	476.7	476.6	476.2	475.5	474.9	474.4	473.8	474.4
5°	476.1	475.8	475.6	475.4	475.2	474.7	474.0	473.3	472.6	471.8	472.7
7.5°	471.8	471.8	471.7	471.6	471.5	471.1	470.4	469.6	468.9	468.1	468.9
10°	468.1	468.1	468.1	468.1	468.1	467.7	466.9	466.1	465.2	464.3	465.1
12.5°	462.9	463.0	463.0	463.1	463.2	462.9	462.3	461.6	460.9	460.3	460.8
15°	454.5	454.6	454.7	454.9	455.0	454.6	453.9	453.2	452.5	451.8	452.4
17.5°	443.7	443.9	444.1	444.3	444.5	444.3	443.6	442.8	442.1	441.4	441.9
20°	436.0	436.2	436.4	436.6	436.8	436.5	435.8	435.0	434.3	433.5	433.9
22.5°	427.0	427.4	427.7	428.1	428.5	428.2	427.4	426.6	425.8	425.0	425.4
25°	413.0	413.3	413.6	413.9	414.2	414.1	413.5	412.9	412.2	411.6	412.0
27.5°	397.6	398.0	398.5	398.9	399.4	399.3	398.6	397.9	397.2	396.5	396.7
30°	386.0	386.6	387.2	387.9	388.5	388.5	387.9	387.2	386.6	386.0	386.2
32.5°	375.6	376.1	376.6	377.2	377.7	377.7	377.3	376.8	376.4	375.9	376.1
35°	357.5	358.2	359.0	359.7	360.4	360.6	360.3	360.0	359.7	359.4	359.7
37.5°	339.5	340.1	340.8	341.4	342.1	342.4	342.3	342.2	342.1	342.0	342.4
40°	327.2	328.0	328.8	329.6	330.5	330.8	330.7	330.6	330.5	330.4	330.8
42.5°	313.8	314.8	315.9	317.0	318.0	318.7	318.9	319.1	319.4	319.6	320.1
45°	294.5	295.7	296.8	297.9	299.0	299.9	300.4	300.9	301.4	301.9	302.7
47.5°	274.8	275.9	276.9	278.0	279.0	280.0	280.9	281.8	282.7	283.6	284.7
50°	261.4	262.5	263.7	264.8	265.9	267.1	268.2	269.3	270.4	271.7	272.8
52.5°	247.2	248.5	249.9	251.4	252.8	254.1	255.5	256.9	258.3	259.6	260.9
55°	226.3	228.0	229.6	231.4	233.0	234.7	236.3	237.9	239.6	241.3	242.5
57.5°	205.1	207.0	209.0	211.1	213.1	215.0	216.9	218.8	220.8	222.6	223.9
60°	190.9	193.0	195.0	197.1	199.1	201.3	203.3	205.4	207.5	209.5	211.1
62.5°	177.0	179.2	181.3	183.3	185.4	187.5	189.8	192.0	194.3	196.5	198.2
65°	155.9	158.2	160.7	163.0	165.4	167.8	170.4	172.9	175.3	177.8	179.4
67.5°	135.9	138.3	140.5	142.8	145.1	147.5	150.1	152.6	155.1	157.6	159.6
70°	121.4	123.7	126.1	128.5	130.9	133.4	136.1	138.9	141.5	144.2	146.2
72.5°	107.1	109.7	112.1	114.5	117.0	119.8	122.7	125.6	128.6	131.5	133.7
75°	85.8	88.6	91.3	93.9	96.6	99.7	103.0	106.3	109.7	112.9	115.0
77.5°	65.4	68.6	71.7	74.7	77.9	81.0	84.2	87.5	90.6	93.8	96.1
80°	52.7	55.8	59.0	62.1	65.1	68.5	72.0	75.5	79.1	82.6	84.9
82.5°	41.2	44.4	47.8	51.0	54.2	57.8	61.3	64.9	68.6	72.1	74.3
85°	25.7	29.1	32.5	36.0	39.4	42.9	46.6	50.2	53.8	57.4	59.7
87.5°	14.7	18.5	22.1	25.9	29.5	33.2	37.1	40.9	44.8	48.7	51.2
90°	8.5	13.6	18.8	23.9	29.0	34.1	39.3	44.3	49.5	54.6	58.2
92.5°	22.4	24.2	26.1	27.9	29.7	33.0	38.1	43.1	48.1	53.1	56.6
95°	64.3	66.3	68.3	70.3	72.3	70.8	65.7	60.6	55.5	50.4	53.8
97.5°	127.0	130.7	134.3	138.0	141.7	136.6	123.0	109.4	95.6	82.0	77.8
100°	175.7	178.5	181.4	184.3	187.1	190.7	194.9	199.1	203.4	207.6	175.9
102.5°	225.2	228.0	231.0	233.8	236.7	239.9	243.8	247.5	251.4	255.1	250.9
105°	304.5	307.0	309.6	312.1	314.8	317.6	320.7	323.8	326.9	330.0	332.1
107.5°	386.9	388.3	389.7	391.1	392.5	395.0	398.4	401.8	405.3	408.7	410.8
110°	440.4	441.6	442.9	444.1	445.4	447.7	451.0	454.4	457.8	461.1	462.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	491.1	492.6	494.1	495.6	497.3	499.6	502.6	505.7	508.9	511.9	512.9
115°	566.6	568.5	570.3	572.2	574.0	576.4	579.4	582.3	585.2	588.1	589.1
117.5°	644.8	645.2	645.6	646.0	646.5	648.4	651.9	655.2	658.6	662.1	662.7
120°	693.8	693.9	694.0	694.1	694.1	695.7	698.7	701.9	704.9	707.9	709.2
122.5°	736.7	737.7	738.7	739.7	740.7	742.6	745.2	747.8	750.4	753.1	754.3
125°	803.7	805.1	806.6	808.1	809.6	811.3	813.4	815.5	817.6	819.6	820.4
127.5°	867.1	868.1	869.2	870.2	871.2	872.5	874.0	875.7	877.2	878.8	879.8
130°	906.4	907.4	908.4	909.4	910.4	911.8	913.5	915.1	916.9	918.5	919.3
132.5°	945.1	946.4	947.8	949.1	950.4	951.3	951.9	952.5	953.2	953.8	955.1
135°	1000.9	1002.1	1003.3	1004.6	1005.8	1006.6	1006.9	1007.1	1007.4	1007.7	1008.7
137.5°	1052.0	1053.1	1054.2	1055.3	1056.4	1056.9	1056.8	1056.8	1056.7	1056.7	1058.0
140°	1085.1	1085.6	1086.0	1086.5	1086.9	1087.1	1087.0	1086.9	1086.7	1086.6	1088.2
142.5°	1115.4	1115.6	1115.8	1115.9	1116.1	1116.4	1116.7	1117.1	1117.4	1117.7	1118.8
145°	1159.7	1160.0	1160.4	1160.7	1161.1	1161.2	1161.2	1161.2	1161.2	1161.2	1162.1
147.5°	1198.0	1198.0	1197.9	1197.8	1197.7	1197.8	1198.0	1198.3	1198.6	1198.8	1199.3
150°	1222.5	1222.1	1221.6	1221.2	1220.7	1220.7	1221.2	1221.6	1222.1	1222.5	1223.0
152.5°	1246.3	1245.3	1244.3	1243.2	1242.2	1242.0	1242.4	1242.9	1243.3	1243.7	1244.3
155°	1276.7	1275.4	1273.9	1272.6	1271.2	1270.8	1271.2	1271.7	1272.1	1272.6	1273.2
157.5°	1300.2	1299.4	1298.6	1297.8	1296.9	1296.6	1296.6	1296.6	1296.7	1296.7	1297.5
160°	1316.6	1315.1	1313.8	1312.4	1311.1	1310.5	1310.7	1311.0	1311.2	1311.4	1312.3
162.5°	1329.6	1328.3	1326.9	1325.5	1324.1	1323.5	1323.8	1324.0	1324.2	1324.4	1325.8
165°	1347.2	1345.8	1344.4	1343.1	1341.7	1341.1	1341.4	1341.6	1341.8	1342.0	1343.4
167.5°	1360.2	1358.9	1357.5	1356.0	1354.6	1354.0	1354.2	1354.4	1354.7	1354.9	1356.6
170°	1367.6	1366.0	1364.4	1362.8	1361.2	1360.6	1360.8	1361.0	1361.2	1361.5	1363.3
172.5°	1372.5	1370.9	1369.3	1367.8	1366.1	1365.5	1365.9	1366.3	1366.8	1367.2	1368.8
175°	1377.8	1376.4	1375.0	1373.7	1372.3	1371.8	1372.0	1372.2	1372.5	1372.7	1374.5
177.5°	1380.3	1379.2	1378.1	1377.0	1375.9	1375.4	1375.6	1375.8	1375.9	1376.1	1377.5
180°	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	474.9	475.5	476.2	476.4	476.3	476.3	476.2	476.1
5°	473.5	474.3	475.1	475.5	475.4	475.3	475.2	475.1
7.5°	469.6	470.3	471.0	471.3	471.2	471.1	471.0	470.9
10°	465.9	466.6	467.3	467.6	467.5	467.4	467.3	467.2
12.5°	461.4	461.9	462.5	462.6	462.4	462.1	461.8	461.6
15°	453.0	453.6	454.2	454.3	453.9	453.5	453.1	452.7
17.5°	442.4	442.8	443.3	443.4	443.2	442.9	442.7	442.4
20°	434.2	434.5	434.8	434.9	434.9	434.9	434.9	434.9
22.5°	425.8	426.2	426.6	426.7	426.4	426.2	425.9	425.7
25°	412.4	412.9	413.3	413.2	412.7	412.2	411.7	411.2
27.5°	397.0	397.3	397.6	397.7	397.5	397.3	397.1	396.9
30°	386.4	386.6	386.8	386.9	386.8	386.7	386.6	386.5
32.5°	376.3	376.5	376.7	376.8	376.7	376.6	376.5	376.4
35°	360.0	360.3	360.6	360.7	360.7	360.7	360.7	360.7
37.5°	342.8	343.3	343.7	343.9	343.9	343.8	343.8	343.7
40°	331.2	331.6	332.1	332.4	332.6	332.9	333.1	333.3
42.5°	320.6	321.1	321.6	321.8	321.9	321.9	321.9	322.0
45°	303.5	304.2	304.9	305.3	305.4	305.5	305.6	305.7
47.5°	285.7	286.8	287.8	288.4	288.7	288.9	289.1	289.3
50°	273.9	275.1	276.2	276.9	277.2	277.5	277.8	278.1
52.5°	262.2	263.4	264.6	265.3	265.5	265.8	266.0	266.2
55°	243.6	244.7	245.9	246.6	247.0	247.4	247.9	248.3
57.5°	225.2	226.5	227.8	228.6	228.9	229.2	229.6	229.9
60°	212.7	214.2	215.8	216.7	217.0	217.3	217.6	217.9
62.5°	200.0	201.7	203.4	204.4	204.8	205.2	205.6	206.0
65°	181.0	182.5	184.0	185.0	185.4	185.8	186.3	186.7
67.5°	161.5	163.3	165.2	166.4	166.9	167.5	168.0	168.5
70°	148.1	150.2	152.1	153.4	154.0	154.6	155.2	155.9
72.5°	135.8	137.9	140.1	141.4	141.8	142.3	142.7	143.2
75°	117.1	119.2	121.3	122.5	123.1	123.6	124.1	124.6
77.5°	98.4	100.7	102.9	104.3	104.7	105.1	105.5	105.9
80°	87.2	89.5	91.7	93.1	93.5	93.9	94.3	94.7
82.5°	76.5	78.8	81.0	82.4	83.2	83.9	84.6	85.4
85°	62.0	64.2	66.6	68.1	68.9	69.8	70.6	71.4
87.5°	53.8	56.5	59.1	60.8	61.7	62.5	63.4	64.2
90°	61.7	65.1	68.7	71.2	72.6	73.9	75.3	76.7
92.5°	60.0	63.4	66.9	69.1	70.2	71.2	72.2	73.3
95°	57.3	60.7	64.1	66.1	66.9	67.6	68.4	69.1
97.5°	73.5	69.3	65.1	63.3	64.0	64.7	65.4	66.1
100°	144.3	112.7	81.0	65.0	64.7	64.5	64.2	63.9
102.5°	246.5	242.2	237.9	228.3	213.5	198.7	183.9	169.1
105°	334.2	336.3	338.3	339.6	340.1	340.6	341.1	341.6
107.5°	412.8	415.0	417.1	418.1	418.1	418.0	418.0	418.0
110°	463.7	464.9	466.3	467.4	468.4	469.3	470.3	471.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	513.9	515.0	516.0	516.7	517.2	517.6	518.0	518.4
115°	590.1	591.0	592.0	592.1	591.3	590.6	589.9	589.1
117.5°	663.3	663.8	664.4	664.8	664.9	665.0	665.1	665.2
120°	710.5	711.9	713.2	713.6	713.1	712.6	712.1	711.6
122.5°	755.5	756.7	757.9	758.2	757.5	756.8	756.1	755.5
125°	821.1	821.9	822.6	822.9	822.7	822.6	822.4	822.3
127.5°	880.8	881.9	882.9	882.9	881.8	880.7	879.7	878.6
130°	920.1	920.8	921.6	921.7	921.1	920.4	919.8	919.2
132.5°	956.4	957.8	959.1	959.4	958.7	958.0	957.3	956.5
135°	1009.5	1010.4	1011.3	1011.3	1010.5	1009.7	1008.8	1007.9
137.5°	1059.3	1060.7	1062.0	1062.3	1061.5	1060.7	1060.0	1059.1
140°	1089.8	1091.5	1093.0	1093.4	1092.4	1091.5	1090.5	1089.5
142.5°	1119.8	1121.0	1122.0	1122.1	1121.2	1120.1	1119.2	1118.3
145°	1162.8	1163.5	1164.3	1164.2	1163.2	1162.3	1161.3	1160.3
147.5°	1199.7	1200.2	1200.6	1200.1	1198.7	1197.2	1195.8	1194.4
150°	1223.5	1224.0	1224.4	1223.8	1222.0	1220.3	1218.6	1216.9
152.5°	1244.7	1245.2	1245.6	1245.1	1243.4	1241.8	1240.2	1238.6
155°	1273.9	1274.7	1275.4	1274.8	1272.9	1271.1	1269.3	1267.5
157.5°	1298.2	1298.9	1299.6	1299.1	1297.3	1295.5	1293.6	1291.8
160°	1313.2	1314.1	1315.0	1314.5	1312.8	1311.0	1309.2	1307.4
162.5°	1327.1	1328.3	1329.6	1329.2	1327.2	1325.2	1323.2	1321.2
165°	1344.7	1346.2	1347.5	1347.3	1345.4	1343.6	1341.8	1340.0
167.5°	1358.2	1359.8	1361.5	1361.3	1359.2	1357.2	1355.1	1353.1
170°	1365.1	1367.0	1368.8	1368.6	1366.5	1364.5	1362.5	1360.4
172.5°	1370.5	1372.1	1373.7	1373.5	1371.5	1369.4	1367.4	1365.3
175°	1376.3	1378.2	1380.0	1379.9	1377.8	1375.7	1373.7	1371.7
177.5°	1378.7	1380.0	1381.3	1381.2	1379.7	1378.3	1376.8	1375.3
180°	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8

(END OF REPORT)