

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: P333391-830

Luminaire Tested: **S125DIW-S610D1340U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333391-830
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-S610D1340U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6649.9 lumens
Efficiency: N/A
Efficacy: 123.6 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

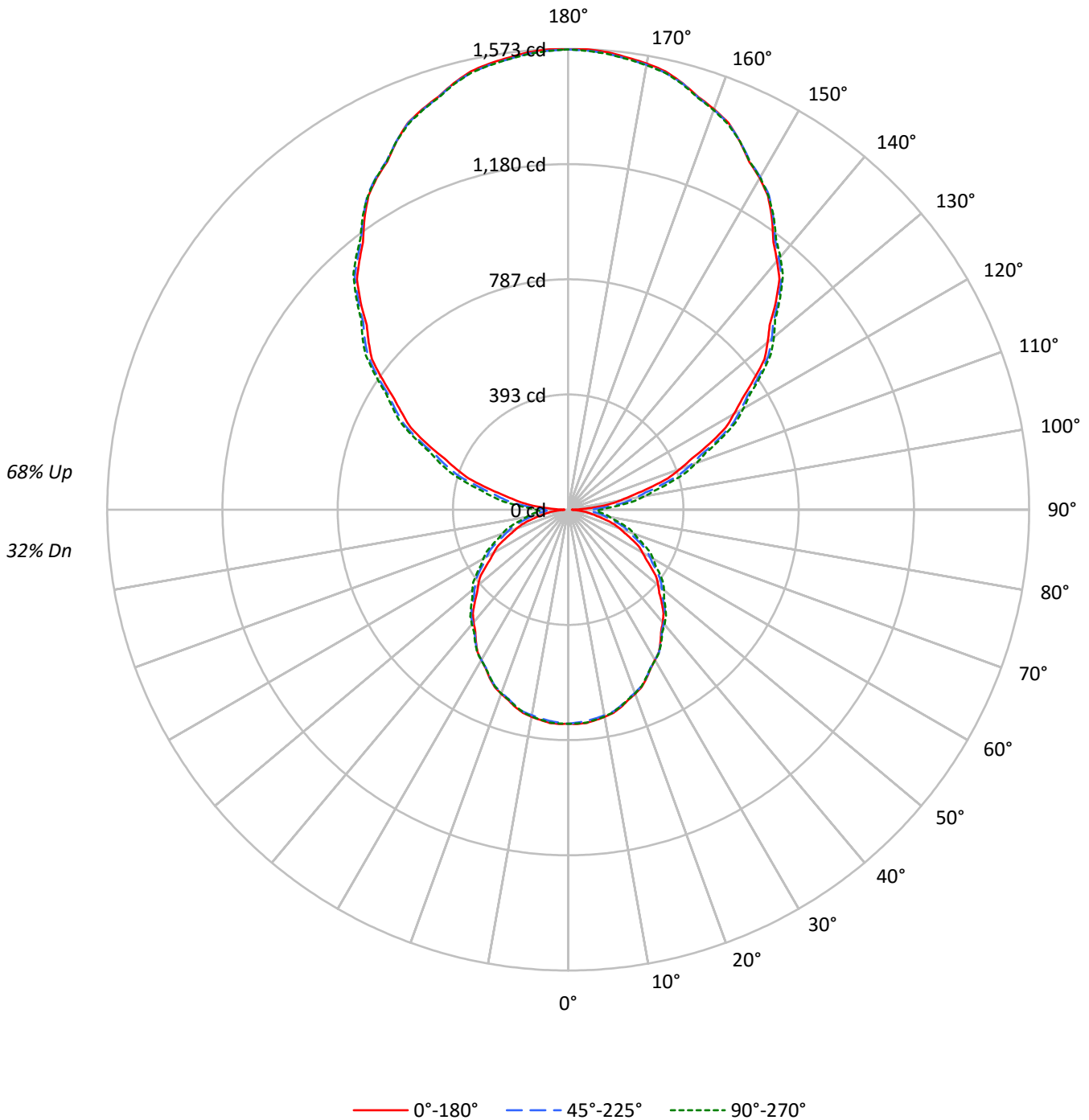
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	93	89	85	81	84	80	77	74	63	61	59	48	47	45	34	33	32	26
2	85	77	71	66	76	70	64	60	55	52	48	42	40	37	30	28	27	21
3	77	68	60	55	69	61	55	50	49	44	40	37	34	31	26	24	23	18
4	70	60	52	46	63	54	47	42	43	38	34	33	29	27	23	21	19	15
5	64	53	45	39	58	48	41	36	38	33	29	29	26	23	21	19	17	13
6	59	47	39	34	53	43	36	31	34	29	25	26	23	20	19	17	15	11
7	55	43	35	29	49	39	32	27	31	26	22	24	20	18	17	15	13	10
8	51	39	31	26	45	35	28	24	28	23	20	22	18	16	16	13	12	9
9	47	35	28	23	42	32	25	21	26	21	17	20	16	14	15	12	10	8
10	44	32	25	20	39	29	23	19	24	19	16	18	15	12	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4718	4718	4718
5°	4727	4630	4645
10°	4693	4548	4541
15°	4638	4449	4409
20°	4562	4326	4276
25°	4473	4195	4112
30°	4364	4051	3964
35°	4263	3919	3829
40°	4160	3779	3691
45°	4043	3661	3570
50°	3932	3531	3463
55°	3798	3408	3337
60°	3652	3269	3208
65°	3499	3124	3063
70°	3326	2924	2915
75°	3052	2732	2732
80°	2694	2501	2532
85°	2358	2344	2469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	1.0
10°-20°	196.1	2.9
20°-30°	291.6	4.4
30°-40°	345.4	5.2
40°-50°	357.1	5.4
50°-60°	329.0	4.9
60°-70°	265.9	4.0
70°-80°	178.1	2.7
80°-90°	95.8	1.4
90°-100°	157.1	2.4
100°-110°	348.9	5.2
110°-120°	551.9	8.3
120°-130°	707.2	10.6
130°-140°	782.5	11.8
140°-150°	762.0	11.5
150°-160°	638.9	9.6
160°-170°	424.7	6.4
170°-180°	148.6	2.2
0°-30°	556.7	8.4
0°-40°	902.2	13.6
0°-60°	1588.2	23.9
0°-90°	2128.1	32.0
90°-120°	1057.9	15.9
90°-150°	3309.6	49.8
90°-180°	4522.0	68.0
0°-180°	6649.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	730	729	724	729	729	69
15°	698	698	693	697	695	196
25°	634	636	632	634	631	292
35°	549	553	551	554	554	343
45°	452	460	463	468	469	349
55°	347	359	370	378	381	310
65°	239	256	273	283	286	237
75°	132	151	173	187	191	140
85°	39	63	88	103	110	42
90°	13	45	78	100	110	12
95°	89	111	146	170	178	92
105°	285	303	332	352	362	305
115°	531	542	562	573	577	525
125°	772	779	794	803	805	691
135°	1002	1008	1014	1023	1022	772
145°	1212	1216	1220	1224	1223	757
155°	1386	1387	1388	1392	1386	638
165°	1508	1505	1506	1510	1504	425
175°	1567	1563	1562	1569	1561	149
180°	1571	1571	1571	1571	1571	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	732.2	731.9	731.7	731.4	731.1	730.6	729.7	728.8	727.9	727.0	727.9
5°	730.5	730.1	729.8	729.5	729.2	728.5	727.4	726.2	725.1	724.0	725.3
7.5°	724.0	723.9	723.8	723.6	723.5	722.8	721.7	720.6	719.4	718.3	719.3
10°	718.3	718.3	718.3	718.3	718.3	717.7	716.3	715.1	713.8	712.6	713.7
12.5°	710.3	710.4	710.5	710.7	710.8	710.3	709.3	708.3	707.3	706.2	707.1
15°	697.5	697.7	697.9	698.0	698.1	697.7	696.5	695.4	694.4	693.2	694.2
17.5°	680.9	681.2	681.6	681.8	682.2	681.7	680.7	679.6	678.4	677.3	678.1
20°	668.8	669.2	669.5	669.9	670.1	669.8	668.6	667.5	666.4	665.2	665.7
22.5°	655.2	655.7	656.3	656.9	657.4	657.0	655.8	654.6	653.4	652.1	652.7
25°	633.8	634.2	634.7	635.2	635.7	635.5	634.5	633.6	632.5	631.6	632.3
27.5°	610.0	610.7	611.4	612.1	612.8	612.7	611.5	610.5	609.4	608.3	608.7
30°	592.2	593.2	594.2	595.1	596.1	596.1	595.1	594.2	593.2	592.2	592.6
32.5°	576.2	577.0	577.9	578.7	579.5	579.6	578.9	578.2	577.5	576.7	577.1
35°	548.6	549.7	550.8	551.9	553.0	553.4	552.9	552.3	551.9	551.4	551.9
37.5°	520.9	522.0	522.9	524.0	525.0	525.4	525.3	525.1	524.9	524.8	525.4
40°	502.0	503.3	504.5	505.9	507.1	507.7	507.5	507.4	507.2	507.0	507.7
42.5°	481.4	483.1	484.7	486.4	488.0	489.0	489.4	489.7	490.0	490.4	491.2
45°	451.9	453.6	455.3	457.1	458.9	460.1	461.0	461.8	462.5	463.4	464.5
47.5°	421.7	423.3	424.9	426.5	428.2	429.6	431.0	432.3	433.8	435.1	436.8
50°	401.1	402.7	404.5	406.3	408.0	409.8	411.5	413.3	415.0	416.8	418.6
52.5°	379.3	381.4	383.5	385.7	387.8	389.9	392.1	394.2	396.3	398.4	400.3
55°	347.3	349.9	352.4	355.0	357.5	360.1	362.6	365.1	367.7	370.2	372.0
57.5°	314.7	317.7	320.7	323.9	326.9	329.9	332.8	335.7	338.7	341.6	343.6
60°	292.9	296.1	299.3	302.5	305.7	308.8	312.0	315.2	318.4	321.5	324.0
62.5°	271.7	274.8	278.1	281.3	284.5	287.8	291.2	294.6	298.0	301.5	304.2
65°	239.2	242.9	246.5	250.2	253.8	257.6	261.4	265.2	269.0	272.9	275.2
67.5°	208.6	212.1	215.6	219.1	222.6	226.4	230.3	234.1	238.0	242.0	244.8
70°	186.2	189.8	193.5	197.2	200.9	204.7	208.9	213.0	217.2	221.3	224.3
72.5°	164.4	168.2	172.0	175.8	179.6	183.7	188.2	192.7	197.3	201.8	205.1
75°	131.8	135.9	140.1	144.2	148.4	153.0	158.1	163.2	168.2	173.3	176.4
77.5°	100.4	105.2	110.0	114.7	119.5	124.3	129.2	134.1	139.0	143.9	147.4
80°	81.0	85.7	90.5	95.3	100.0	105.1	110.6	115.9	121.3	126.8	130.3
82.5°	63.2	68.1	73.2	78.2	83.3	88.6	94.1	99.6	105.2	110.7	114.0
85°	39.4	44.7	49.9	55.1	60.4	65.8	71.4	76.9	82.5	88.1	91.6
87.5°	22.6	28.1	33.6	39.2	44.7	50.3	56.2	61.9	67.8	73.5	77.5
90°	12.7	20.0	27.2	34.5	41.8	49.0	56.4	63.6	71.0	78.3	83.3
92.5°	39.9	46.1	52.4	58.6	64.8	71.9	79.7	87.7	95.5	103.4	108.7
95°	88.8	93.5	98.1	102.8	107.5	114.0	122.1	130.2	138.3	146.4	151.8
97.5°	140.5	144.4	148.4	152.3	156.3	162.7	171.6	180.7	189.6	198.6	203.7
100°	179.1	182.4	185.8	189.1	192.4	198.4	207.0	215.7	224.2	232.9	238.7
102.5°	220.6	224.7	228.8	233.1	237.2	242.7	249.5	256.2	263.0	269.8	275.6
105°	285.2	289.1	293.0	296.9	300.9	305.9	312.4	318.8	325.2	331.6	336.4
107.5°	356.8	360.2	363.7	367.3	370.8	375.5	381.4	387.2	393.0	398.8	402.7
110°	406.0	409.3	412.6	415.8	419.1	423.4	428.7	433.9	439.2	444.5	448.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	456.9	459.1	461.4	463.6	465.8	469.7	474.9	480.3	485.7	491.1	494.4
115°	531.2	533.5	535.6	537.8	540.1	543.5	548.2	552.9	557.5	562.2	564.8
117.5°	605.9	607.1	608.3	609.5	610.8	613.5	617.9	622.4	626.8	631.1	634.0
120°	652.8	654.6	656.5	658.3	660.2	663.0	666.9	670.9	674.9	678.7	681.5
122.5°	703.0	703.8	704.6	705.2	706.0	708.4	712.7	716.9	721.1	725.4	727.7
125°	771.9	773.4	774.9	776.3	777.8	780.2	783.7	787.1	790.6	794.1	796.1
127.5°	844.5	845.3	846.0	846.9	847.6	849.4	852.3	855.4	858.3	861.2	863.3
130°	888.5	889.8	891.0	892.1	893.3	895.3	898.1	900.9	903.6	906.4	908.4
132.5°	932.0	934.2	936.4	938.6	940.8	942.7	944.3	945.9	947.5	949.1	951.1
135°	1001.5	1003.1	1004.5	1006.0	1007.4	1008.9	1010.2	1011.6	1013.0	1014.4	1016.4
137.5°	1067.0	1068.4	1069.8	1071.3	1072.7	1074.0	1075.2	1076.3	1077.4	1078.6	1080.8
140°	1108.4	1109.7	1111.2	1112.5	1113.9	1115.0	1116.0	1117.0	1117.9	1118.9	1121.2
142.5°	1150.5	1151.5	1152.5	1153.5	1154.5	1155.6	1156.6	1157.7	1158.8	1159.8	1161.7
145°	1212.3	1213.2	1214.2	1215.1	1216.1	1216.9	1217.8	1218.5	1219.4	1220.2	1221.0
147.5°	1268.9	1269.4	1270.1	1270.6	1271.2	1271.9	1272.5	1273.2	1273.8	1274.5	1275.4
150°	1307.0	1306.7	1306.5	1306.2	1305.9	1306.3	1307.4	1308.5	1309.6	1310.7	1310.7
152.5°	1338.3	1338.7	1339.1	1339.4	1339.8	1340.2	1340.7	1341.0	1341.5	1342.0	1342.7
155°	1386.5	1386.5	1386.5	1386.5	1386.5	1386.6	1386.9	1387.1	1387.4	1387.7	1388.7
157.5°	1429.5	1428.9	1428.3	1427.7	1427.1	1426.9	1427.2	1427.5	1427.8	1428.0	1429.1
160°	1454.9	1454.2	1453.3	1452.5	1451.7	1451.4	1451.7	1452.0	1452.2	1452.5	1453.6
162.5°	1477.4	1476.9	1476.2	1475.6	1475.1	1474.8	1474.8	1474.9	1474.9	1475.0	1476.3
165°	1507.5	1506.9	1506.4	1505.9	1505.3	1505.2	1505.4	1505.7	1506.0	1506.3	1507.4
167.5°	1533.0	1531.8	1530.8	1529.7	1528.6	1528.0	1528.0	1528.0	1528.0	1528.0	1529.7
170°	1546.6	1545.6	1544.5	1543.4	1542.3	1541.7	1541.7	1541.7	1541.7	1541.7	1543.4
172.5°	1556.4	1555.3	1554.3	1553.1	1552.1	1551.5	1551.5	1551.5	1551.5	1551.5	1553.1
175°	1567.4	1566.3	1565.3	1564.1	1563.1	1562.5	1562.5	1562.5	1562.5	1562.5	1564.1
177.5°	1573.0	1572.2	1571.3	1570.5	1569.5	1569.1	1568.8	1568.6	1568.4	1568.1	1569.4
180°	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	728.8	729.7	730.6	730.9	730.8	730.8	730.6	730.5
5°	726.5	727.8	729.1	729.6	729.5	729.3	729.2	729.1
7.5°	720.5	721.6	722.7	723.2	723.0	722.9	722.7	722.6
10°	714.8	715.9	717.0	717.5	717.4	717.2	717.0	716.8
12.5°	707.9	708.8	709.7	709.9	709.5	709.1	708.7	708.2
15°	695.1	696.1	697.0	697.2	696.5	695.9	695.3	694.7
17.5°	678.8	679.5	680.2	680.4	680.0	679.7	679.3	678.9
20°	666.3	666.8	667.2	667.4	667.4	667.4	667.4	667.4
22.5°	653.3	653.9	654.5	654.6	654.2	653.8	653.5	653.1
25°	632.9	633.6	634.1	634.1	633.3	632.5	631.7	630.9
27.5°	609.2	609.6	610.1	610.1	609.8	609.5	609.3	609.0
30°	592.9	593.2	593.5	593.6	593.4	593.2	593.1	593.0
32.5°	577.4	577.7	578.1	578.2	578.0	577.8	577.7	577.5
35°	552.3	552.9	553.4	553.6	553.6	553.6	553.6	553.6
37.5°	526.0	526.7	527.4	527.6	527.5	527.4	527.4	527.4
40°	508.3	509.0	509.5	510.0	510.4	510.7	511.0	511.3
42.5°	491.9	492.7	493.4	493.9	494.0	494.0	494.1	494.2
45°	465.5	466.7	467.8	468.4	468.6	468.7	468.9	469.1
47.5°	438.4	440.0	441.6	442.6	443.0	443.3	443.7	444.0
50°	420.3	422.1	423.8	424.9	425.4	425.8	426.3	426.8
52.5°	402.2	404.1	406.0	407.1	407.5	407.7	408.1	408.5
55°	373.7	375.5	377.2	378.4	379.1	379.8	380.3	381.0
57.5°	345.6	347.6	349.6	350.8	351.4	351.9	352.3	352.8
60°	326.3	328.7	331.1	332.5	333.0	333.5	333.9	334.4
62.5°	306.8	309.4	312.1	313.7	314.2	314.9	315.5	316.1
65°	277.6	280.0	282.4	283.9	284.6	285.2	285.8	286.4
67.5°	247.7	250.6	253.4	255.3	256.2	257.0	257.9	258.6
70°	227.3	230.4	233.4	235.4	236.3	237.2	238.3	239.2
72.5°	208.4	211.6	214.9	216.9	217.6	218.3	219.0	219.7
75°	179.6	182.9	186.1	188.0	188.8	189.6	190.4	191.2
77.5°	150.9	154.5	158.0	160.0	160.6	161.3	161.9	162.6
80°	133.7	137.2	140.7	142.8	143.5	144.1	144.8	145.3
82.5°	117.4	120.8	124.2	126.5	127.6	128.8	129.9	131.0
85°	95.1	98.6	102.1	104.4	105.8	107.0	108.3	109.5
87.5°	81.3	85.3	89.3	91.9	93.1	94.4	95.7	97.0
90°	88.3	93.3	98.4	101.8	103.8	105.7	107.6	109.5
92.5°	114.0	119.3	124.7	128.2	129.9	131.7	133.4	135.1
95°	157.2	162.6	168.1	171.5	173.2	174.8	176.5	178.2
97.5°	208.9	214.0	219.1	222.4	223.9	225.2	226.6	228.0
100°	244.5	250.2	256.1	259.7	261.2	262.7	264.2	265.7
102.5°	281.4	287.4	293.2	297.0	298.8	300.5	302.2	303.9
105°	341.2	346.0	350.8	354.2	356.2	358.1	360.1	361.9
107.5°	406.8	410.8	414.7	417.2	418.1	419.0	419.9	420.8
110°	452.1	456.0	459.8	462.1	463.0	463.8	464.7	465.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	497.7	500.9	504.2	506.1	506.8	507.4	508.0	508.6
115°	567.4	570.0	572.6	574.2	575.0	575.6	576.3	576.9
117.5°	637.0	639.9	642.8	644.3	644.3	644.3	644.3	644.3
120°	684.2	686.8	689.6	690.9	690.7	690.6	690.5	690.3
122.5°	730.1	732.4	734.8	736.0	736.1	736.2	736.3	736.4
125°	798.1	800.0	802.1	803.3	803.9	804.4	804.9	805.4
127.5°	865.3	867.4	869.5	870.7	871.1	871.5	871.9	872.3
130°	910.3	912.3	914.3	915.4	915.6	915.9	916.2	916.3
132.5°	953.0	955.0	957.0	957.9	957.8	957.7	957.6	957.5
135°	1018.5	1020.6	1022.7	1023.6	1023.3	1022.9	1022.7	1022.4
137.5°	1083.0	1085.1	1087.4	1088.2	1087.4	1086.7	1086.0	1085.2
140°	1123.5	1125.8	1128.1	1128.9	1128.1	1127.5	1126.7	1126.0
142.5°	1163.5	1165.3	1167.2	1167.6	1167.0	1166.2	1165.5	1164.8
145°	1221.8	1222.6	1223.3	1223.7	1223.5	1223.3	1223.1	1222.9
147.5°	1276.3	1277.1	1278.1	1277.8	1276.2	1274.7	1273.1	1271.5
150°	1310.7	1310.7	1310.7	1310.5	1310.0	1309.7	1309.3	1308.9
152.5°	1343.2	1343.9	1344.5	1344.4	1343.5	1342.6	1341.6	1340.7
155°	1389.9	1390.9	1392.0	1391.9	1390.5	1389.2	1387.8	1386.5
157.5°	1430.2	1431.3	1432.4	1432.0	1430.2	1428.4	1426.6	1424.8
160°	1454.6	1455.8	1456.8	1456.7	1455.4	1454.0	1452.6	1451.2
162.5°	1477.6	1478.8	1480.2	1480.1	1478.5	1476.9	1475.4	1473.8
165°	1508.4	1509.6	1510.6	1510.3	1508.7	1507.1	1505.4	1503.8
167.5°	1531.3	1533.0	1534.6	1534.6	1532.9	1531.2	1529.5	1527.8
170°	1545.0	1546.6	1548.2	1548.1	1546.2	1544.4	1542.4	1540.5
172.5°	1554.8	1556.4	1558.0	1558.0	1556.3	1554.6	1552.9	1551.2
175°	1565.8	1567.4	1569.1	1568.9	1567.0	1565.1	1563.2	1561.3
177.5°	1570.7	1572.1	1573.4	1573.3	1571.7	1570.2	1568.7	1567.2
180°	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1

(END OF REPORT)