

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: P333386-930

Luminaire Tested: **S125DIW-S610D1050U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333386-930
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-S610D1050U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5455.6 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

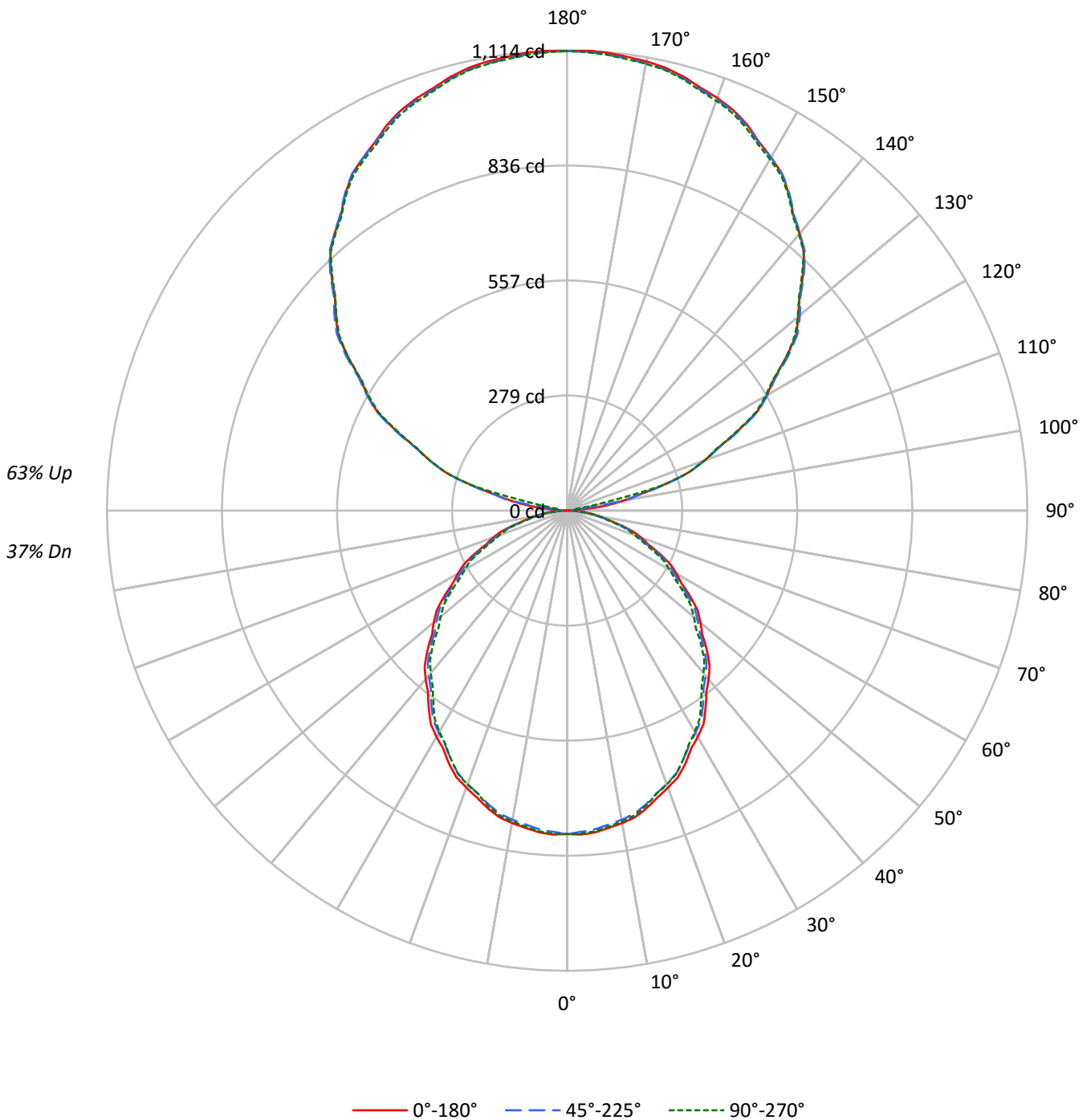
Input Watts (W): 45.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45
1	95	91	87	83	86	82	79	76	67	64	62	52	51	50	39	38	37
2	86	79	73	68	78	72	67	62	58	55	52	46	44	41	35	33	32
3	79	69	62	57	71	63	57	52	51	47	43	41	38	35	31	29	27
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	25	22	20
6	61	49	41	35	55	45	38	33	37	31	28	29	25	23	22	20	18
7	56	44	36	31	51	40	33	29	33	28	24	27	23	20	20	18	16
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	19	16	14
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13
10	45	33	26	21	41	31	24	20	25	21	17	21	17	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5057	5057	5057
5°	5068	5020	5052
10°	5037	4985	5013
15°	4983	4924	4945
20°	4904	4841	4849
25°	4821	4741	4737
30°	4716	4633	4610
35°	4606	4518	4454
40°	4491	4392	4330
45°	4369	4277	4192
50°	4233	4140	4015
55°	4102	3983	3871
60°	3945	3825	3689
65°	3758	3636	3512
70°	3580	3416	3299
75°	3261	3154	3047
80°	2901	2856	2786
85°	2527	2571	2438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.8	1.4
10°-20°	208.5	3.8
20°-30°	307.9	5.6
30°-40°	359.3	6.6
40°-50°	360.9	6.6
50°-60°	316.8	5.8
60°-70°	236.0	4.3
70°-80°	135.0	2.5
80°-90°	41.6	0.8
90°-100°	40.4	0.7
100°-110°	249.1	4.6
110°-120°	451.8	8.3
120°-130°	579.9	10.6
130°-140°	623.7	11.4
140°-150°	585.4	10.7
150°-160°	473.6	8.7
160°-170°	306.3	5.6
170°-180°	105.6	1.9
0°-30°	590.3	10.8
0°-40°	949.6	17.4
0°-60°	1627.2	29.8
0°-90°	2039.8	37.4
90°-120°	741.4	13.6
90°-150°	2530.3	46.4
90°-180°	3416.0	62.6
0°-180°	5455.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	782	780	774	780	779	74
15°	745	743	736	739	740	210
25°	676	673	665	666	665	311
35°	584	581	573	570	565	365
45°	478	476	468	461	459	368
55°	364	362	354	348	344	325
65°	246	244	238	232	230	244
75°	131	129	126	124	122	139
85°	34	35	35	34	33	38
90°	1	7	13	17	20	4
95°	47	43	13	17	17	60
105°	242	246	246	246	245	257
115°	455	459	460	457	452	451
125°	647	653	653	650	647	578
135°	807	812	811	809	804	622
145°	936	937	938	938	933	585
155°	1031	1026	1027	1029	1023	475
165°	1088	1083	1084	1088	1082	307
175°	1112	1108	1108	1114	1107	106
180°	1112	1112	1112	1112	1112	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0
2.5°	785.0	784.6	784.3	784.0	783.7	782.9	781.9	780.7	779.7	778.5	779.7
5°	781.8	781.5	781.2	780.9	780.6	779.8	778.4	777.1	775.7	774.3	775.6
7.5°	774.5	774.3	774.0	773.7	773.5	772.6	771.0	769.6	768.0	766.5	767.7
10°	768.1	767.8	767.6	767.3	767.0	766.1	764.6	763.1	761.6	760.1	761.2
12.5°	760.2	759.7	759.2	758.7	758.2	757.2	755.9	754.5	753.0	751.6	752.5
15°	745.2	744.8	744.4	744.0	743.6	742.6	741.1	739.6	738.0	736.5	737.2
17.5°	728.0	727.4	726.8	726.2	725.5	724.5	722.9	721.3	719.7	718.2	719.0
20°	713.6	713.3	713.1	712.8	712.5	711.5	709.7	707.9	706.1	704.3	705.3
22.5°	699.2	698.7	698.2	697.7	697.2	696.2	694.5	692.8	691.1	689.4	690.1
25°	676.5	675.7	675.1	674.4	673.7	672.5	670.7	668.9	667.1	665.3	665.6
27.5°	649.8	649.4	649.0	648.6	648.2	647.0	645.1	643.4	641.5	639.7	639.7
30°	632.4	632.0	631.6	631.2	630.8	629.6	627.5	625.4	623.4	621.3	621.0
32.5°	613.6	613.0	612.4	611.7	611.1	609.8	608.1	606.2	604.3	602.5	602.0
35°	584.2	583.6	583.0	582.5	582.0	580.7	578.8	576.8	574.9	573.0	572.3
37.5°	553.5	552.9	552.2	551.5	550.8	549.5	547.7	545.9	544.0	542.3	541.3
40°	532.7	532.1	531.3	530.7	529.9	528.6	526.8	524.8	522.9	521.0	519.8
42.5°	510.5	509.9	509.2	508.7	508.1	506.9	504.9	503.0	501.1	499.1	498.1
45°	478.3	477.7	477.1	476.5	476.1	474.9	473.3	471.7	469.9	468.3	466.7
47.5°	443.5	443.5	443.6	443.6	443.6	442.6	440.7	438.7	436.8	434.7	433.1
50°	421.3	420.8	420.4	420.0	419.6	418.6	416.9	415.2	413.6	412.0	410.2
52.5°	398.4	398.1	397.9	397.5	397.2	396.2	394.4	392.6	390.9	389.1	387.6
55°	364.3	363.8	363.4	363.0	362.6	361.4	359.5	357.6	355.6	353.7	352.5
57.5°	328.2	328.0	327.8	327.5	327.3	326.4	324.7	323.1	321.5	319.9	318.3
60°	305.4	304.8	304.3	303.7	303.2	302.1	300.7	299.1	297.6	296.1	294.7
62.5°	281.6	281.2	280.7	280.3	279.8	279.0	277.7	276.4	275.1	273.8	272.3
65°	245.9	245.6	245.4	245.1	244.8	243.9	242.4	240.9	239.4	237.9	236.6
67.5°	211.3	210.8	210.2	209.6	209.0	208.2	207.1	205.9	204.8	203.7	202.6
70°	189.6	188.9	188.2	187.5	186.8	185.8	184.6	183.4	182.1	180.9	180.0
72.5°	165.8	165.3	164.9	164.4	163.9	163.2	162.5	161.7	160.9	160.0	159.1
75°	130.7	130.4	130.1	129.9	129.6	129.1	128.4	127.8	127.0	126.4	126.0
77.5°	98.4	98.2	98.2	98.0	97.9	97.7	97.3	96.9	96.5	96.1	95.9
80°	78.0	78.0	78.0	78.0	78.0	77.9	77.6	77.4	77.1	76.8	76.6
82.5°	60.3	60.0	59.8	59.5	59.4	59.2	59.1	59.1	59.0	58.9	58.7
85°	34.1	34.2	34.3	34.5	34.7	34.7	34.7	34.7	34.7	34.7	34.6
87.5°	13.5	13.9	14.1	14.4	14.8	14.9	15.1	15.2	15.4	15.5	15.7
90°	0.8	2.3	3.8	5.2	6.7	8.1	9.4	10.6	11.9	13.2	14.1
92.5°	12.7	11.7	10.7	9.6	8.6	8.6	9.8	10.9	12.1	13.2	14.1
95°	47.0	46.5	45.9	45.3	44.8	41.0	34.1	27.1	20.1	13.2	14.1
97.5°	98.2	99.1	100.1	101.1	102.1	95.7	81.9	68.2	54.4	40.6	35.4
100°	137.7	138.3	138.8	139.3	139.9	140.6	141.3	142.0	142.8	143.5	116.2
102.5°	178.0	178.6	179.4	180.0	180.8	181.3	181.7	182.1	182.6	183.0	177.9
105°	242.4	243.1	243.9	244.6	245.3	245.7	245.7	245.7	245.7	245.7	245.7
107.5°	309.4	309.4	309.4	309.4	309.4	309.6	309.9	310.3	310.6	311.0	311.0
110°	352.9	352.9	352.9	352.9	352.9	353.1	353.4	353.8	354.2	354.6	354.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	393.8	394.3	394.7	395.1	395.6	395.9	396.2	396.3	396.6	396.8	396.1
115°	455.2	456.1	457.0	457.9	458.9	459.3	459.6	459.7	459.9	460.1	459.3
117.5°	518.7	518.6	518.6	518.5	518.5	518.9	519.5	520.2	520.9	521.6	520.7
120°	558.2	558.1	557.8	557.7	557.5	557.7	558.2	558.8	559.3	559.9	559.5
122.5°	593.2	593.9	594.6	595.3	596.0	596.5	596.7	597.0	597.2	597.5	597.1
125°	647.3	648.6	649.9	651.1	652.4	653.1	653.1	653.1	653.1	653.1	652.3
127.5°	698.9	699.9	700.7	701.6	702.5	703.0	702.9	702.8	702.6	702.5	702.1
130°	730.6	731.5	732.4	733.3	734.3	734.7	735.0	735.2	735.3	735.5	735.0
132.5°	762.2	763.3	764.3	765.4	766.5	766.8	766.4	766.0	765.6	765.2	765.1
135°	807.2	808.4	809.4	810.6	811.6	812.0	811.6	811.3	810.9	810.6	810.2
137.5°	848.6	849.6	850.5	851.5	852.5	852.8	852.5	852.2	851.7	851.4	851.5
140°	875.7	876.0	876.4	876.8	877.2	877.3	877.1	876.9	876.7	876.5	876.9
142.5°	900.1	900.3	900.6	900.7	901.0	901.2	901.5	901.7	902.0	902.2	902.3
145°	935.9	936.3	936.6	937.0	937.3	937.5	937.5	937.5	937.5	937.5	937.8
147.5°	967.2	967.2	967.1	967.0	966.9	967.0	967.2	967.4	967.7	967.8	968.1
150°	987.0	986.7	986.3	985.9	985.5	985.5	985.9	986.3	986.7	987.0	987.4
152.5°	1006.2	1005.3	1004.5	1003.7	1002.9	1002.7	1003.1	1003.5	1003.8	1004.1	1004.5
155°	1030.7	1029.6	1028.5	1027.4	1026.3	1026.0	1026.3	1026.7	1027.0	1027.4	1027.9
157.5°	1049.7	1049.0	1048.4	1047.7	1047.0	1046.8	1046.8	1046.8	1046.8	1046.8	1047.5
160°	1062.9	1061.8	1060.7	1059.6	1058.5	1058.0	1058.2	1058.4	1058.6	1058.7	1059.5
162.5°	1073.4	1072.4	1071.2	1070.2	1069.0	1068.5	1068.8	1068.9	1069.1	1069.3	1070.3
165°	1087.6	1086.5	1085.4	1084.3	1083.2	1082.7	1083.0	1083.1	1083.3	1083.5	1084.6
167.5°	1098.1	1097.1	1095.9	1094.8	1093.6	1093.2	1093.3	1093.5	1093.7	1093.9	1095.2
170°	1104.1	1102.9	1101.6	1100.2	1098.9	1098.5	1098.6	1098.8	1098.9	1099.2	1100.7
172.5°	1108.1	1106.8	1105.5	1104.2	1102.9	1102.4	1102.8	1103.1	1103.4	1103.8	1105.1
175°	1112.3	1111.3	1110.1	1109.1	1107.9	1107.5	1107.7	1107.8	1108.1	1108.2	1109.7
177.5°	1114.4	1113.5	1112.6	1111.7	1110.8	1110.4	1110.6	1110.8	1110.8	1111.0	1112.1
180°	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0
2.5°	780.7	781.9	782.9	783.4	783.3	783.2	783.1	783.0
5°	776.8	778.0	779.3	779.8	779.7	779.6	779.4	779.3
7.5°	768.9	770.1	771.4	771.9	771.8	771.6	771.5	771.4
10°	762.3	763.4	764.5	765.0	764.8	764.7	764.5	764.4
12.5°	753.4	754.3	755.1	755.6	755.5	755.5	755.5	755.5
15°	737.9	738.6	739.3	739.6	739.6	739.6	739.6	739.6
17.5°	719.9	720.7	721.6	721.7	721.0	720.3	719.7	718.9
20°	706.2	707.2	708.2	708.3	707.6	706.9	706.2	705.6
22.5°	690.7	691.4	692.0	692.1	691.6	691.1	690.6	690.2
25°	665.9	666.1	666.4	666.3	665.9	665.5	665.1	664.7
27.5°	639.8	639.8	639.8	639.7	639.3	638.9	638.5	638.1
30°	620.8	620.5	620.2	619.9	619.5	619.1	618.6	618.2
32.5°	601.5	601.0	600.5	599.9	599.2	598.4	597.6	596.9
35°	571.6	571.0	570.2	569.3	568.3	567.1	566.1	564.9
37.5°	540.2	539.2	538.2	537.4	536.7	536.1	535.5	534.8
40°	518.4	517.2	516.0	515.2	514.8	514.4	514.0	513.6
42.5°	496.9	495.8	494.6	493.7	493.1	492.5	491.9	491.2
45°	465.0	463.3	461.7	460.6	460.2	459.8	459.4	459.0
47.5°	431.4	429.7	428.0	426.7	425.7	424.8	423.8	422.8
50°	408.4	406.6	404.8	403.4	402.4	401.5	400.5	399.6
52.5°	386.0	384.4	382.9	381.6	380.5	379.4	378.3	377.2
55°	351.2	350.0	348.8	347.6	346.7	345.7	344.8	343.8
57.5°	316.7	315.1	313.5	312.4	311.9	311.4	310.9	310.4
60°	293.3	292.0	290.6	289.4	288.5	287.5	286.5	285.6
62.5°	270.8	269.4	267.8	266.8	266.0	265.2	264.5	263.7
65°	235.4	234.2	232.9	232.0	231.5	230.9	230.4	229.8
67.5°	201.6	200.6	199.5	198.8	198.4	198.1	197.8	197.5
70°	179.2	178.4	177.6	176.9	176.3	175.8	175.2	174.7
72.5°	158.2	157.3	156.3	155.6	155.0	154.5	153.9	153.4
75°	125.6	125.1	124.7	124.3	123.7	123.1	122.6	122.1
77.5°	95.6	95.4	95.1	94.8	94.4	94.1	93.7	93.3
80°	76.6	76.4	76.2	76.1	75.7	75.5	75.3	74.9
82.5°	58.5	58.2	58.0	57.8	57.8	57.7	57.6	57.6
85°	34.4	34.2	34.2	33.9	33.7	33.3	33.1	32.9
87.5°	15.9	16.1	16.2	16.3	16.1	16.1	16.0	15.8
90°	15.0	16.0	16.9	17.6	18.2	18.7	19.2	19.8
92.5°	15.0	16.0	16.9	17.4	17.7	17.9	18.2	18.5
95°	15.0	16.0	16.9	17.3	17.3	17.3	17.3	17.3
97.5°	30.2	25.0	19.9	17.3	17.3	17.3	17.3	17.3
100°	88.9	61.6	34.2	20.2	19.5	18.8	18.0	17.3
102.5°	172.7	167.5	162.4	153.6	141.1	128.7	116.2	103.7
105°	245.7	245.7	245.7	245.6	245.5	245.2	245.1	244.9
107.5°	311.1	311.1	311.2	311.0	310.4	309.8	309.2	308.8
110°	353.4	352.9	352.4	352.2	352.4	352.5	352.7	352.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	395.4	394.7	394.0	393.5	393.3	393.0	392.7	392.5
115°	458.6	457.9	457.1	456.2	455.2	454.0	453.0	451.8
117.5°	519.8	518.8	517.8	517.1	516.7	516.2	515.7	515.2
120°	559.1	558.8	558.4	557.7	556.8	556.0	555.1	554.1
122.5°	596.7	596.4	596.0	595.3	594.3	593.2	592.2	591.1
125°	651.6	650.9	650.1	649.5	649.0	648.4	647.8	647.3
127.5°	701.7	701.3	700.9	700.0	698.7	697.3	695.9	694.6
130°	734.4	733.9	733.3	732.5	731.6	730.8	729.9	729.0
132.5°	765.0	764.8	764.8	764.3	763.4	762.4	761.5	760.6
135°	809.8	809.4	809.1	808.4	807.2	806.2	805.0	804.0
137.5°	851.6	851.7	851.7	851.3	850.4	849.4	848.5	847.5
140°	877.3	877.6	878.0	877.6	876.5	875.4	874.3	873.2
142.5°	902.4	902.5	902.5	902.0	900.9	899.8	898.7	897.6
145°	937.9	938.1	938.2	937.8	936.7	935.6	934.5	933.4
147.5°	968.3	968.6	968.7	968.2	966.9	965.6	964.3	963.0
150°	987.7	988.1	988.5	987.9	986.4	985.0	983.5	982.0
152.5°	1004.9	1005.3	1005.6	1005.2	1003.8	1002.5	1001.2	999.9
155°	1028.5	1029.1	1029.6	1029.2	1027.7	1026.2	1024.7	1023.3
157.5°	1048.1	1048.6	1049.2	1048.8	1047.3	1045.9	1044.4	1042.9
160°	1060.2	1060.9	1061.7	1061.3	1059.9	1058.4	1057.0	1055.5
162.5°	1071.4	1072.4	1073.4	1073.1	1071.5	1069.9	1068.3	1066.7
165°	1085.7	1086.8	1087.9	1087.7	1086.2	1084.8	1083.3	1081.8
167.5°	1096.5	1097.8	1099.2	1099.0	1097.3	1095.7	1094.1	1092.4
170°	1102.1	1103.6	1105.1	1104.9	1103.3	1101.6	1100.0	1098.3
172.5°	1106.4	1107.7	1109.1	1108.9	1107.3	1105.5	1103.9	1102.3
175°	1111.2	1112.6	1114.1	1114.0	1112.3	1110.7	1109.1	1107.4
177.5°	1113.0	1114.1	1115.2	1115.1	1113.9	1112.7	1111.6	1110.4
180°	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3

(END OF REPORT)