

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: P333541-930

Luminaire Tested: **S125RDIP-S610D1035U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333541-930
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: S125RDIP-S610D1035U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5312.1 lumens
Efficiency: N/A
Efficacy: 119.4 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-Indirect

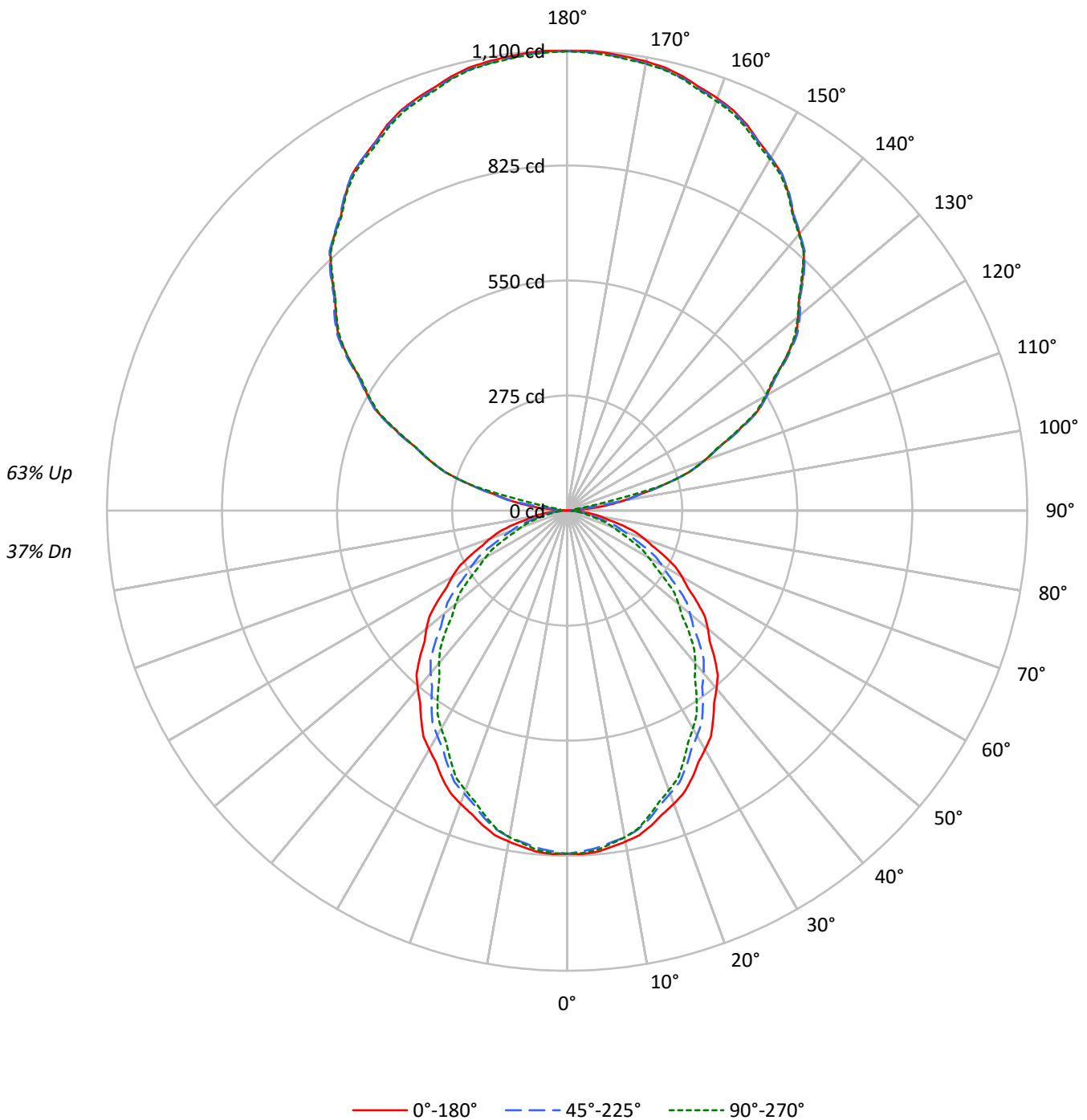
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37
1	95	91	87	84	86	82	79	76	67	64	62	52	51	49	39	38	37	31
2	87	79	73	69	78	72	67	63	59	55	52	46	44	42	34	33	32	26
3	79	70	63	57	71	64	58	53	52	47	44	41	38	35	31	29	27	22
4	72	62	54	48	65	56	50	45	46	41	37	36	33	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	22	20	18	15
7	56	44	37	31	51	41	34	29	34	28	25	27	23	20	21	18	16	13
8	52	40	33	28	47	37	30	26	31	25	22	25	21	18	19	16	14	12
9	49	37	29	25	44	34	27	23	28	23	20	23	19	16	17	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5297	5297	5297
5°	5309	5249	5281
10°	5269	5200	5200
15°	5207	5094	5053
20°	5126	4947	4887
25°	5032	4802	4697
30°	4915	4633	4486
35°	4796	4459	4249
40°	4684	4278	4016
45°	4549	4074	3763
50°	4413	3852	3497
55°	4255	3640	3216
60°	4097	3384	2913
65°	3909	3085	2566
70°	3697	2713	2211
75°	3401	2286	1839
80°	2998	1796	1543
85°	2527	1467	1378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.1	1.5
10°-20°	215.5	4.1
20°-30°	312.5	5.9
30°-40°	356.2	6.7
40°-50°	347.2	6.5
50°-60°	292.3	5.5
60°-70°	204.9	3.9
70°-80°	105.3	2.0
80°-90°	28.9	0.5
90°-100°	39.9	0.8
100°-110°	245.9	4.6
110°-120°	446.1	8.4
120°-130°	572.5	10.8
130°-140°	615.7	11.6
140°-150°	578.0	10.9
150°-160°	467.5	8.8
160°-170°	302.4	5.7
170°-180°	104.3	2.0
0°-30°	605.2	11.4
0°-40°	961.4	18.1
0°-60°	1600.8	30.1
0°-90°	1939.9	36.5
90°-120°	731.9	13.8
90°-150°	2498.1	47.0
90°-180°	3372.0	63.5
0°-180°	5312.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	819	816	810	815	815	78
15°	779	774	762	761	756	219
25°	706	696	674	666	659	325
35°	608	593	566	548	539	381
45°	498	479	446	422	412	384
55°	378	357	323	296	286	338
65°	256	234	202	178	168	253
75°	136	117	92	79	74	144
85°	34	23	20	19	19	38
90°	1	7	13	17	20	4
95°	46	42	13	17	17	59
105°	239	242	243	243	242	254
115°	449	453	454	451	446	445
125°	639	644	645	642	639	571
135°	797	802	800	798	794	614
145°	924	926	926	926	922	578
155°	1018	1013	1014	1016	1010	469
165°	1074	1069	1070	1074	1068	303
175°	1098	1094	1094	1100	1093	105
180°	1098	1098	1098	1098	1098	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	821.7	821.3	821.0	820.7	820.4	819.6	818.5	817.4	816.3	815.2	816.3
5°	818.9	818.4	817.8	817.3	816.7	815.7	814.2	812.7	811.1	809.6	811.0
7.5°	810.9	810.3	809.8	809.3	808.8	807.6	805.8	804.0	802.2	800.3	801.3
10°	803.4	803.0	802.6	802.2	801.8	800.6	798.7	796.8	794.8	792.9	793.3
12.5°	795.0	794.5	793.9	793.4	792.9	791.3	788.8	786.2	783.6	781.0	781.3
15°	778.7	777.8	777.0	776.2	775.3	773.5	770.6	767.7	764.8	761.9	761.8
17.5°	760.2	759.0	757.7	756.4	755.1	752.7	749.0	745.4	741.8	738.2	737.4
20°	745.8	744.4	743.1	741.7	740.3	737.4	733.0	728.6	724.2	719.8	719.1
22.5°	729.9	728.6	727.2	725.9	724.5	721.5	716.8	712.2	707.6	703.0	701.6
25°	706.2	704.1	702.1	700.0	697.9	694.3	689.3	684.1	679.1	673.9	672.2
27.5°	678.9	676.5	673.9	671.4	668.9	665.0	659.5	654.0	648.6	643.1	640.6
30°	659.1	656.5	653.9	651.3	648.7	644.4	638.6	632.9	627.1	621.3	618.2
32.5°	639.8	636.7	633.7	630.6	627.5	623.1	617.2	611.3	605.4	599.5	596.0
35°	608.3	605.0	601.7	598.4	595.1	590.4	584.2	578.0	571.8	565.6	561.6
37.5°	577.5	573.4	569.4	565.4	561.4	556.2	549.8	543.4	537.0	530.6	525.9
40°	555.6	551.5	547.4	543.2	539.2	533.8	527.2	520.6	514.0	507.4	502.1
42.5°	532.9	528.6	524.4	520.2	515.9	510.4	503.5	496.7	489.9	483.1	478.0
45°	498.1	494.1	490.1	486.1	482.1	476.3	468.7	461.1	453.6	446.0	440.5
47.5°	462.0	457.8	453.6	449.4	445.2	439.2	431.6	424.0	416.4	408.7	403.1
50°	439.2	434.6	430.1	425.6	421.0	414.8	407.0	399.2	391.3	383.4	377.6
52.5°	414.4	409.8	405.1	400.5	395.8	389.8	382.4	375.0	367.5	360.1	353.9
55°	377.9	373.5	369.1	364.7	360.3	354.2	346.5	338.8	331.1	323.3	317.2
57.5°	341.0	336.2	331.5	326.9	322.1	316.0	308.6	301.2	293.8	286.3	280.2
60°	317.2	312.3	307.5	302.7	297.9	291.8	284.3	276.9	269.5	262.0	256.0
62.5°	291.9	287.3	282.7	278.1	273.5	267.4	259.9	252.3	244.8	237.3	231.6
65°	255.8	251.2	246.5	241.8	237.1	231.1	223.8	216.5	209.2	201.9	196.4
67.5°	220.0	215.3	210.7	206.0	201.3	195.5	188.5	181.5	174.5	167.5	162.5
70°	195.8	191.1	186.4	181.7	177.0	171.2	164.4	157.5	150.6	143.7	139.4
72.5°	171.9	167.4	162.8	158.2	153.7	148.1	141.7	135.3	128.8	122.4	118.5
75°	136.3	132.2	128.0	123.9	119.8	114.8	109.0	103.2	97.4	91.6	88.6
77.5°	100.9	97.5	94.2	90.9	87.6	83.6	79.0	74.4	69.8	65.1	63.0
80°	80.6	77.2	73.9	70.6	67.3	63.8	59.8	56.0	52.2	48.3	47.0
82.5°	60.7	57.7	54.8	51.8	48.8	46.0	43.4	40.7	38.1	35.5	34.9
85°	34.1	31.6	29.1	26.7	24.1	22.6	21.9	21.2	20.5	19.8	19.6
87.5°	11.6	11.1	10.6	10.1	9.6	9.5	9.6	9.8	9.9	10.0	10.2
90°	0.8	2.3	3.7	5.1	6.6	8.0	9.2	10.5	11.7	13.0	13.9
92.5°	12.6	11.5	10.5	9.5	8.5	8.6	9.6	10.8	11.9	13.0	13.9
95°	46.4	45.8	45.3	44.8	44.3	40.5	33.7	26.7	19.9	13.0	13.9
97.5°	96.9	97.8	98.8	99.8	100.8	94.5	80.9	67.3	53.6	40.0	35.0
100°	135.9	136.5	137.1	137.5	138.1	138.8	139.5	140.2	140.9	141.6	114.7
102.5°	175.7	176.3	177.1	177.7	178.4	179.0	179.4	179.9	180.3	180.8	175.6
105°	239.3	240.0	240.8	241.5	242.2	242.6	242.6	242.6	242.6	242.6	242.6
107.5°	305.4	305.4	305.4	305.4	305.4	305.6	306.0	306.3	306.7	307.0	307.1
110°	348.4	348.4	348.4	348.4	348.4	348.6	348.9	349.4	349.7	350.0	349.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	388.8	389.2	389.6	390.1	390.5	390.9	391.1	391.3	391.5	391.8	391.0
115°	449.4	450.3	451.2	452.1	453.0	453.6	453.7	453.9	454.0	454.2	453.6
117.5°	512.0	512.0	511.9	511.9	511.9	512.3	512.9	513.6	514.3	514.9	514.0
120°	551.1	550.9	550.7	550.6	550.4	550.6	551.1	551.6	552.2	552.8	552.4
122.5°	585.6	586.3	587.0	587.7	588.4	588.8	589.1	589.4	589.6	589.9	589.5
125°	639.0	640.3	641.6	642.9	644.1	644.7	644.7	644.7	644.7	644.7	644.0
127.5°	690.0	690.9	691.8	692.7	693.6	694.0	693.9	693.8	693.7	693.6	693.2
130°	721.2	722.2	723.1	724.0	724.9	725.4	725.6	725.8	725.9	726.1	725.6
132.5°	752.5	753.6	754.6	755.6	756.7	757.0	756.6	756.3	755.9	755.5	755.3
135°	797.0	798.0	799.2	800.2	801.3	801.7	801.3	801.0	800.5	800.2	799.8
137.5°	837.8	838.8	839.7	840.7	841.6	841.9	841.6	841.2	840.9	840.6	840.7
140°	864.5	864.9	865.3	865.6	865.9	866.1	865.8	865.7	865.5	865.4	865.7
142.5°	888.6	888.8	889.1	889.2	889.5	889.7	890.0	890.2	890.5	890.7	890.8
145°	924.0	924.3	924.6	925.0	925.4	925.6	925.6	925.6	925.6	925.6	925.8
147.5°	954.9	954.8	954.7	954.6	954.6	954.6	954.9	955.1	955.3	955.5	955.8
150°	974.4	974.0	973.7	973.3	973.0	973.0	973.3	973.7	974.0	974.4	974.8
152.5°	993.3	992.5	991.7	990.9	990.1	989.9	990.3	990.6	991.0	991.3	991.7
155°	1017.6	1016.5	1015.4	1014.3	1013.3	1012.8	1013.3	1013.6	1013.9	1014.3	1014.9
157.5°	1036.2	1035.6	1035.0	1034.4	1033.7	1033.4	1033.4	1033.5	1033.5	1033.6	1034.1
160°	1049.3	1048.2	1047.2	1046.0	1045.0	1044.5	1044.7	1044.9	1045.1	1045.2	1045.9
162.5°	1059.7	1058.7	1057.5	1056.5	1055.4	1054.9	1055.1	1055.3	1055.5	1055.6	1056.7
165°	1073.7	1072.6	1071.5	1070.5	1069.4	1068.9	1069.1	1069.3	1069.5	1069.7	1070.7
167.5°	1084.2	1083.0	1081.9	1080.8	1079.7	1079.2	1079.4	1079.5	1079.7	1079.9	1081.2
170°	1090.0	1088.8	1087.4	1086.2	1084.9	1084.4	1084.6	1084.8	1084.9	1085.2	1086.5
172.5°	1093.9	1092.7	1091.4	1090.1	1088.8	1088.4	1088.7	1089.0	1089.3	1089.6	1091.0
175°	1098.1	1097.1	1096.0	1094.9	1093.8	1093.4	1093.6	1093.7	1093.9	1094.1	1095.5
177.5°	1100.1	1099.3	1098.4	1097.5	1096.7	1096.3	1096.4	1096.6	1096.7	1096.8	1097.9
180°	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	817.4	818.5	819.6	820.1	820.0	819.9	819.8	819.7
5°	812.4	813.8	815.1	815.7	815.4	815.1	814.9	814.6
7.5°	802.3	803.2	804.2	804.5	804.2	803.9	803.6	803.3
10°	793.7	794.1	794.6	794.6	794.1	793.7	793.3	792.9
12.5°	781.6	782.0	782.2	782.0	781.4	780.8	780.2	779.5
15°	761.7	761.5	761.4	760.7	759.5	758.2	757.0	755.7
17.5°	736.8	736.1	735.4	734.5	733.5	732.5	731.5	730.4
20°	718.4	717.7	717.1	716.1	714.9	713.6	712.4	711.1
22.5°	700.3	698.9	697.6	696.3	695.4	694.3	693.3	692.3
25°	670.4	668.6	666.8	665.1	663.7	662.1	660.6	659.1
27.5°	638.1	635.6	633.1	631.1	629.7	628.2	626.7	625.3
30°	615.0	611.8	608.6	606.4	605.2	604.0	602.8	601.5
32.5°	592.5	589.1	585.5	583.0	581.4	579.8	578.3	576.7
35°	557.6	553.6	549.6	546.7	544.7	542.7	540.9	538.9
37.5°	521.1	516.2	511.4	508.1	506.2	504.4	502.6	500.7
40°	496.8	491.6	486.4	483.0	481.4	479.6	478.0	476.4
42.5°	473.0	468.0	463.0	459.3	456.9	454.4	452.0	449.6
45°	435.0	429.5	424.0	420.2	418.2	416.0	414.0	412.0
47.5°	397.4	391.7	386.0	382.0	379.8	377.5	375.2	372.9
50°	371.9	366.1	360.3	356.4	354.3	352.3	350.2	348.1
52.5°	347.7	341.4	335.3	331.1	329.1	327.0	324.9	322.9
55°	311.0	304.8	298.6	294.4	292.2	290.0	287.8	285.6
57.5°	274.2	268.2	262.1	258.0	256.1	254.1	252.3	250.3
60°	249.9	243.9	237.8	233.7	231.7	229.6	227.6	225.5
62.5°	226.0	220.4	214.7	210.9	208.9	206.8	204.7	202.7
65°	190.9	185.4	179.9	176.1	174.1	172.0	169.9	167.9
67.5°	157.4	152.4	147.3	144.0	142.4	140.7	139.0	137.4
70°	135.2	130.9	126.6	123.7	122.1	120.4	118.7	117.1
72.5°	114.5	110.6	106.6	104.1	103.1	101.9	100.9	99.7
75°	85.6	82.6	79.6	77.5	76.6	75.7	74.7	73.7
77.5°	60.9	58.8	56.7	55.3	54.5	53.8	53.2	52.4
80°	45.8	44.6	43.4	42.6	42.3	42.1	41.7	41.5
82.5°	34.2	33.7	33.1	32.8	32.6	32.4	32.3	32.1
85°	19.6	19.4	19.2	19.2	19.0	18.8	18.8	18.6
87.5°	10.4	10.6	10.8	10.8	10.8	10.8	10.8	10.8
90°	14.8	15.7	16.6	17.4	17.9	18.4	19.0	19.6
92.5°	14.8	15.7	16.6	17.2	17.4	17.7	18.0	18.3
95°	14.8	15.7	16.6	17.1	17.1	17.1	17.1	17.1
97.5°	29.8	24.8	19.6	17.1	17.1	17.1	17.1	17.1
100°	87.7	60.8	33.8	20.0	19.2	18.5	17.9	17.1
102.5°	170.5	165.4	160.3	151.6	139.3	127.0	114.7	102.4
105°	242.6	242.6	242.6	242.5	242.3	242.1	242.0	241.7
107.5°	307.1	307.2	307.2	307.0	306.4	305.9	305.3	304.8
110°	348.9	348.4	347.9	347.7	347.9	348.1	348.2	348.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	390.4	389.6	389.0	388.5	388.2	388.0	387.8	387.5
115°	452.8	452.1	451.3	450.5	449.4	448.3	447.2	446.1
117.5°	513.1	512.2	511.2	510.5	510.1	509.6	509.1	508.6
120°	552.0	551.6	551.3	550.7	549.8	548.9	548.0	547.1
122.5°	589.1	588.8	588.4	587.7	586.7	585.6	584.6	583.5
125°	643.3	642.5	641.8	641.2	640.7	640.1	639.6	639.0
127.5°	692.8	692.4	691.9	691.1	689.7	688.4	687.1	685.7
130°	725.0	724.5	724.0	723.3	722.4	721.5	720.6	719.6
132.5°	755.2	755.1	755.0	754.5	753.6	752.7	751.8	750.9
135°	799.5	799.2	798.7	798.0	797.0	795.9	794.8	793.7
137.5°	840.7	840.8	840.9	840.4	839.5	838.5	837.6	836.7
140°	866.1	866.4	866.7	866.4	865.4	864.2	863.2	862.1
142.5°	890.9	891.0	891.0	890.6	889.4	888.4	887.3	886.1
145°	925.9	926.1	926.3	925.9	924.8	923.7	922.6	921.5
147.5°	955.9	956.2	956.4	955.9	954.6	953.2	951.9	950.6
150°	975.2	975.5	975.8	975.3	973.9	972.4	970.9	969.6
152.5°	992.1	992.5	992.8	992.3	991.0	989.7	988.4	987.1
155°	1015.4	1015.9	1016.5	1016.0	1014.6	1013.1	1011.7	1010.2
157.5°	1034.7	1035.3	1035.8	1035.4	1034.0	1032.5	1031.0	1029.6
160°	1046.7	1047.4	1048.1	1047.7	1046.4	1044.9	1043.4	1042.0
162.5°	1057.7	1058.7	1059.7	1059.4	1057.9	1056.2	1054.7	1053.0
165°	1071.8	1072.9	1074.0	1073.8	1072.4	1070.9	1069.5	1068.0
167.5°	1082.6	1083.9	1085.2	1085.0	1083.4	1081.7	1080.1	1078.5
170°	1088.0	1089.5	1091.0	1090.8	1089.2	1087.6	1086.0	1084.3
172.5°	1092.3	1093.6	1094.9	1094.7	1093.1	1091.4	1089.8	1088.3
175°	1097.0	1098.5	1099.8	1099.8	1098.1	1096.5	1094.9	1093.2
177.5°	1098.9	1099.9	1100.9	1100.8	1099.7	1098.5	1097.4	1096.2
180°	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1

(END OF REPORT)