

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: P333191-840

Luminaire Tested: **S125DIP-S610D1035U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333191-840
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: S125DIP-S610D1035U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6042.0 lumens
Efficiency: N/A
Efficacy: 135.8 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

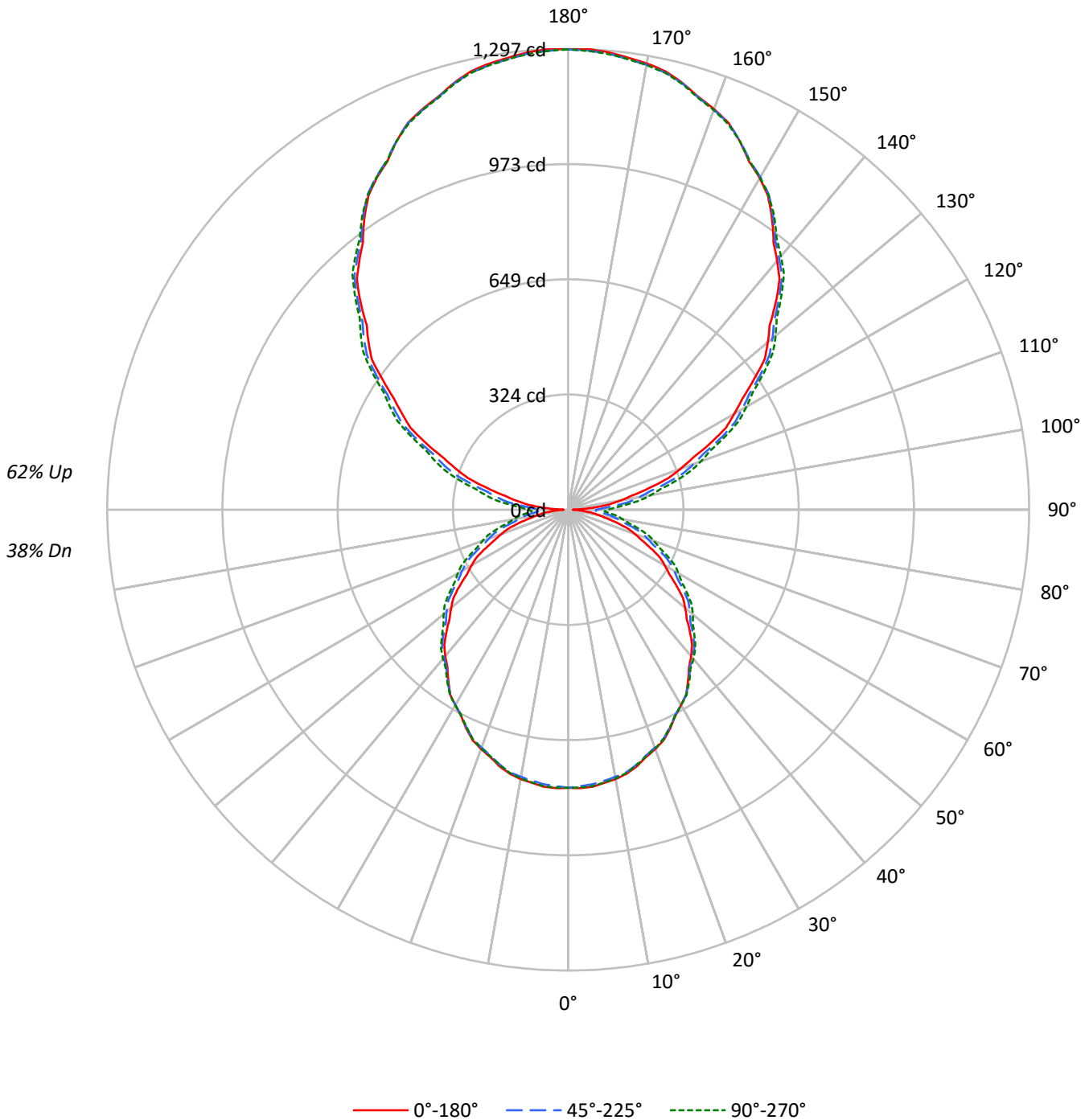
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	94	90	86	82	85	82	78	75	66	64	62	52	50	49	39	38	37	31
2	86	78	72	67	77	71	66	61	58	54	50	45	43	40	34	32	30	25
3	78	69	61	55	70	62	56	51	51	46	42	40	36	34	30	28	26	21
4	71	60	53	46	64	55	48	43	45	40	36	35	32	29	26	24	22	18
5	65	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	15
6	60	48	40	34	54	44	37	32	36	31	27	28	25	22	21	19	17	14
7	55	43	35	30	50	40	33	28	32	27	23	26	22	19	20	17	15	12
8	51	39	31	26	46	36	29	24	29	24	21	24	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	25	21	40	30	24	19	25	20	16	20	16	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5054	5054	5054
5°	5064	4961	4977
10°	5029	4873	4865
15°	4969	4767	4723
20°	4888	4635	4581
25°	4792	4495	4406
30°	4676	4340	4247
35°	4567	4199	4102
40°	4457	4049	3955
45°	4331	3922	3825
50°	4213	3783	3710
55°	4069	3652	3575
60°	3913	3503	3437
65°	3749	3347	3282
70°	3561	3133	3123
75°	3269	2928	2928
80°	2884	2679	2713
85°	2526	2512	2645



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	1.2
10°-20°	210.1	3.5
20°-30°	312.4	5.2
30°-40°	370.1	6.1
40°-50°	382.6	6.3
50°-60°	352.5	5.8
60°-70°	284.9	4.7
70°-80°	190.8	3.2
80°-90°	101.8	1.7
90°-100°	142.3	2.4
100°-110°	297.2	4.9
110°-120°	461.5	7.6
120°-130°	586.8	9.7
130°-140°	646.8	10.7
140°-150°	628.7	10.4
150°-160°	526.9	8.7
160°-170°	350.2	5.8
170°-180°	122.6	2.0
0°-30°	596.5	9.9
0°-40°	966.6	16.0
0°-60°	1701.7	28.2
0°-90°	2279.2	37.7
90°-120°	900.9	14.9
90°-150°	2763.2	45.7
90°-180°	3763.0	62.3
0°-180°	6042.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	783	781	776	781	781	74
15°	747	748	743	747	744	210
25°	679	681	677	679	676	312
35°	588	593	591	593	593	368
45°	484	492	496	502	503	373
55°	372	384	397	405	408	333
65°	256	274	292	303	307	254
75°	141	161	186	200	205	150
85°	42	68	94	111	117	45
90°	13	46	79	101	110	12
95°	76	98	134	157	165	78
105°	237	255	283	304	313	253
115°	439	449	470	483	487	434
125°	637	643	659	669	672	570
135°	826	832	838	847	848	637
145°	1000	1003	1006	1010	1010	625
155°	1143	1143	1144	1148	1143	526
165°	1243	1241	1242	1246	1240	351
175°	1292	1289	1288	1294	1288	123
180°	1296	1296	1296	1296	1296	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6
2.5°	784.5	784.2	784.0	783.7	783.4	782.7	781.8	780.8	779.9	778.9	779.9
5°	782.6	782.2	781.9	781.6	781.2	780.5	779.3	778.1	776.9	775.7	777.1
7.5°	775.7	775.6	775.5	775.3	775.2	774.5	773.3	772.0	770.8	769.6	770.7
10°	769.6	769.6	769.6	769.6	769.6	768.9	767.5	766.2	764.8	763.5	764.7
12.5°	761.0	761.1	761.2	761.4	761.5	761.0	759.9	758.9	757.8	756.7	757.6
15°	747.3	747.5	747.7	747.8	748.0	747.5	746.3	745.1	744.0	742.8	743.8
17.5°	729.5	729.8	730.2	730.5	730.9	730.4	729.3	728.1	726.9	725.7	726.5
20°	716.6	717.0	717.3	717.7	718.0	717.6	716.4	715.2	714.0	712.8	713.3
22.5°	702.0	702.6	703.2	703.8	704.4	704.0	702.7	701.4	700.0	698.7	699.3
25°	679.0	679.5	680.0	680.5	681.1	680.9	679.8	678.8	677.7	676.7	677.4
27.5°	653.6	654.3	655.1	655.8	656.6	656.4	655.2	654.1	652.9	651.8	652.2
30°	634.5	635.6	636.6	637.6	638.6	638.6	637.6	636.6	635.6	634.5	634.9
32.5°	617.3	618.2	619.1	620.1	620.9	621.0	620.3	619.5	618.7	617.9	618.3
35°	587.7	589.0	590.2	591.3	592.5	592.9	592.4	591.8	591.3	590.8	591.3
37.5°	558.2	559.3	560.3	561.4	562.5	562.9	562.8	562.6	562.4	562.3	562.9
40°	537.9	539.3	540.6	542.0	543.3	543.9	543.7	543.6	543.4	543.2	543.9
42.5°	515.7	517.6	519.3	521.1	522.9	523.9	524.3	524.7	525.0	525.4	526.2
45°	484.1	486.0	487.9	489.8	491.7	493.0	493.9	494.7	495.5	496.4	497.7
47.5°	451.8	453.5	455.2	457.0	458.8	460.3	461.8	463.2	464.7	466.2	468.0
50°	429.7	431.5	433.4	435.4	437.2	439.1	440.9	442.8	444.6	446.6	448.5
52.5°	406.4	408.6	410.9	413.2	415.5	417.8	420.1	422.3	424.6	426.9	428.9
55°	372.1	374.9	377.6	380.3	383.0	385.8	388.5	391.2	393.9	396.7	398.6
57.5°	337.2	340.4	343.7	347.0	350.2	353.5	356.6	359.7	362.8	366.0	368.1
60°	313.9	317.2	320.6	324.1	327.5	330.8	334.3	337.7	341.1	344.5	347.1
62.5°	291.1	294.5	297.9	301.3	304.8	308.3	311.9	315.7	319.3	323.1	325.9
65°	256.3	260.2	264.1	268.0	272.0	276.0	280.0	284.2	288.2	292.4	294.9
67.5°	223.5	227.2	231.0	234.8	238.5	242.6	246.7	250.9	255.0	259.2	262.3
70°	199.4	203.4	207.3	211.3	215.2	219.3	223.8	228.2	232.7	237.1	240.3
72.5°	176.1	180.3	184.3	188.3	192.4	196.8	201.7	206.5	211.4	216.2	219.7
75°	141.2	145.6	150.1	154.5	159.0	163.9	169.4	174.8	180.3	185.7	189.0
77.5°	107.6	112.7	117.9	122.9	128.1	133.2	138.5	143.7	149.0	154.2	157.9
80°	86.7	91.8	96.9	102.1	107.1	112.6	118.5	124.2	130.0	135.8	139.6
82.5°	67.7	73.0	78.5	83.8	89.3	94.9	100.8	106.7	112.7	118.7	122.2
85°	42.2	47.9	53.4	59.1	64.7	70.5	76.4	82.4	88.4	94.4	98.2
87.5°	24.1	30.0	35.7	41.6	47.4	53.3	59.5	65.5	71.7	77.8	82.0
90°	13.3	20.5	27.8	35.0	42.3	49.6	57.0	64.3	71.7	79.1	84.1
92.5°	35.4	41.7	48.1	54.3	60.7	67.8	75.6	83.4	91.3	99.2	104.4
95°	75.5	80.4	85.2	90.2	95.0	101.5	109.6	117.5	125.6	133.6	139.0
97.5°	118.0	122.1	126.2	130.5	134.6	141.1	149.8	158.4	167.1	175.8	180.9
100°	149.6	153.2	156.7	160.4	163.9	169.9	178.2	186.6	195.0	203.4	208.9
102.5°	183.7	187.8	192.1	196.3	200.5	206.0	212.8	219.5	226.4	233.2	238.8
105°	236.8	240.7	244.5	248.3	252.2	257.3	263.8	270.2	276.7	283.2	287.9
107.5°	295.6	299.0	302.5	305.9	309.3	314.0	319.9	325.9	331.8	337.8	341.8
110°	336.1	339.2	342.3	345.6	348.7	353.0	358.5	364.0	369.4	374.9	378.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	378.0	380.2	382.4	384.7	386.9	390.7	396.3	401.7	407.2	412.7	416.1
115°	439.1	441.2	443.3	445.5	447.5	451.0	455.9	460.7	465.6	470.5	473.3
117.5°	500.5	501.7	502.8	504.0	505.2	508.2	512.7	517.4	521.9	526.5	529.6
120°	539.2	540.8	542.5	544.1	545.7	548.6	552.8	556.9	561.1	565.2	568.0
122.5°	580.5	581.2	581.8	582.5	583.1	585.6	590.0	594.3	598.6	603.1	605.6
125°	637.2	638.4	639.5	640.8	642.0	644.3	647.9	651.6	655.2	658.8	661.2
127.5°	696.9	697.5	698.1	698.7	699.3	701.1	704.2	707.3	710.3	713.4	715.7
130°	733.3	734.2	735.2	736.1	737.0	738.9	741.7	744.6	747.4	750.2	752.5
132.5°	768.9	770.7	772.5	774.4	776.2	777.9	779.7	781.4	783.2	785.0	787.1
135°	826.3	827.4	828.6	829.8	830.9	832.2	833.6	835.1	836.5	837.9	840.1
137.5°	880.1	881.3	882.4	883.6	884.7	885.9	887.0	888.1	889.1	890.2	892.5
140°	914.2	915.3	916.5	917.6	918.7	919.7	920.5	921.3	922.2	923.0	925.3
142.5°	948.9	949.7	950.5	951.3	952.1	952.9	953.8	954.7	955.6	956.4	958.4
145°	999.9	1000.6	1001.4	1002.1	1002.8	1003.5	1004.2	1004.8	1005.5	1006.2	1007.0
147.5°	1046.3	1046.8	1047.3	1047.8	1048.2	1048.8	1049.4	1049.9	1050.4	1051.0	1051.8
150°	1077.7	1077.5	1077.3	1077.1	1076.9	1077.2	1078.1	1079.0	1079.8	1080.8	1080.8
152.5°	1103.6	1103.9	1104.2	1104.5	1104.8	1105.2	1105.5	1105.9	1106.2	1106.6	1107.1
155°	1143.3	1143.3	1143.3	1143.3	1143.3	1143.4	1143.7	1143.9	1144.1	1144.3	1145.2
157.5°	1178.8	1178.3	1177.8	1177.3	1176.8	1176.7	1176.9	1177.1	1177.4	1177.6	1178.5
160°	1199.7	1199.1	1198.4	1197.7	1197.1	1196.9	1197.1	1197.3	1197.5	1197.7	1198.6
162.5°	1218.3	1217.8	1217.3	1216.8	1216.4	1216.1	1216.2	1216.2	1216.3	1216.3	1217.4
165°	1243.1	1242.6	1242.2	1241.7	1241.3	1241.2	1241.4	1241.6	1241.8	1242.1	1243.0
167.5°	1264.0	1263.1	1262.3	1261.4	1260.5	1260.0	1260.0	1260.0	1260.0	1260.0	1261.4
170°	1275.4	1274.4	1273.5	1272.7	1271.8	1271.3	1271.3	1271.3	1271.3	1271.3	1272.7
172.5°	1283.4	1282.5	1281.6	1280.7	1279.9	1279.4	1279.4	1279.4	1279.4	1279.4	1280.7
175°	1292.5	1291.6	1290.7	1289.8	1288.9	1288.5	1288.5	1288.5	1288.5	1288.5	1289.8
177.5°	1297.2	1296.5	1295.8	1294.9	1294.2	1293.8	1293.6	1293.4	1293.3	1293.1	1294.2
180°	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6
2.5°	780.8	781.8	782.7	783.2	783.0	782.9	782.7	782.6
5°	778.4	779.8	781.1	781.7	781.6	781.4	781.2	781.1
7.5°	771.9	773.2	774.4	774.9	774.7	774.6	774.4	774.2
10°	765.9	767.0	768.2	768.7	768.6	768.4	768.2	768.0
12.5°	758.5	759.4	760.4	760.6	760.1	759.7	759.3	758.8
15°	744.8	745.8	746.8	747.0	746.3	745.6	745.0	744.3
17.5°	727.3	728.0	728.8	729.0	728.6	728.2	727.8	727.4
20°	713.9	714.4	714.9	715.1	715.1	715.1	715.1	715.1
22.5°	699.9	700.6	701.3	701.4	700.9	700.5	700.1	699.7
25°	678.1	678.8	679.4	679.4	678.5	677.7	676.8	676.0
27.5°	652.7	653.2	653.7	653.7	653.4	653.1	652.8	652.5
30°	635.2	635.6	635.9	636.0	635.8	635.6	635.5	635.3
32.5°	618.6	618.9	619.4	619.5	619.2	619.0	618.9	618.7
35°	591.8	592.4	592.9	593.1	593.1	593.1	593.1	593.1
37.5°	563.6	564.3	565.0	565.3	565.2	565.1	565.1	565.0
40°	544.6	545.3	545.9	546.4	546.8	547.1	547.5	547.9
42.5°	527.0	527.9	528.7	529.2	529.3	529.3	529.4	529.5
45°	498.8	500.0	501.2	501.9	502.1	502.2	502.4	502.6
47.5°	469.7	471.4	473.1	474.2	474.6	474.9	475.3	475.7
50°	450.3	452.2	454.0	455.2	455.8	456.3	456.8	457.3
52.5°	430.9	432.9	434.9	436.2	436.6	436.9	437.3	437.7
55°	400.4	402.3	404.1	405.5	406.2	406.9	407.5	408.2
57.5°	370.3	372.4	374.6	375.9	376.5	377.0	377.5	378.0
60°	349.6	352.1	354.8	356.3	356.8	357.3	357.8	358.3
62.5°	328.7	331.5	334.4	336.1	336.7	337.4	338.0	338.7
65°	297.4	300.0	302.6	304.2	304.9	305.6	306.2	306.9
67.5°	265.4	268.5	271.6	273.6	274.5	275.4	276.3	277.1
70°	243.6	246.8	250.0	252.2	253.2	254.2	255.3	256.3
72.5°	223.3	226.7	230.2	232.4	233.2	233.9	234.7	235.4
75°	192.5	195.9	199.3	201.5	202.3	203.2	204.0	204.9
77.5°	161.7	165.5	169.3	171.5	172.1	172.8	173.5	174.2
80°	143.3	147.0	150.8	153.0	153.7	154.4	155.1	155.7
82.5°	125.8	129.5	133.1	135.5	136.7	137.9	139.2	140.4
85°	101.9	105.6	109.4	111.9	113.3	114.6	116.0	117.3
87.5°	86.1	90.3	94.4	97.1	98.5	99.8	101.1	102.4
90°	89.2	94.2	99.2	102.7	104.5	106.4	108.3	110.2
92.5°	109.7	114.9	120.3	123.7	125.4	127.0	128.8	130.5
95°	144.3	149.6	154.9	158.4	160.1	161.7	163.3	165.0
97.5°	185.9	191.0	196.0	199.2	200.7	202.1	203.6	205.0
100°	214.6	220.2	225.7	229.2	230.8	232.3	233.7	235.2
102.5°	244.5	250.0	255.7	259.3	261.1	262.7	264.3	266.0
105°	292.7	297.4	302.2	305.5	307.4	309.2	311.0	313.0
107.5°	345.9	349.9	354.0	356.5	357.5	358.5	359.5	360.5
110°	382.6	386.6	390.5	392.9	393.8	394.9	395.8	396.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	419.5	422.9	426.4	428.5	429.3	430.0	430.8	431.6
115°	476.2	479.1	481.9	483.7	484.5	485.3	486.1	486.9
117.5°	532.7	535.7	538.9	540.5	540.8	541.0	541.3	541.6
120°	571.0	573.9	576.7	578.2	578.5	578.6	578.7	578.8
122.5°	608.2	610.8	613.4	614.8	615.1	615.4	615.7	616.0
125°	663.4	665.7	668.0	669.4	670.0	670.7	671.4	672.0
127.5°	718.0	720.3	722.6	724.1	724.6	725.1	725.7	726.2
130°	754.6	756.8	758.9	760.2	760.6	761.0	761.4	761.8
132.5°	789.2	791.4	793.6	794.7	794.8	794.9	795.0	795.1
135°	842.3	844.6	846.8	847.9	847.8	847.8	847.7	847.7
137.5°	894.7	897.1	899.3	900.2	899.8	899.4	898.9	898.5
140°	927.7	930.0	932.3	933.3	932.8	932.4	931.9	931.5
142.5°	960.2	962.1	964.0	964.7	964.2	963.8	963.4	962.9
145°	1007.8	1008.8	1009.6	1010.1	1010.1	1010.1	1010.1	1010.1
147.5°	1052.6	1053.4	1054.2	1054.0	1052.8	1051.6	1050.4	1049.1
150°	1080.8	1080.8	1080.8	1080.7	1080.4	1080.1	1079.8	1079.5
152.5°	1107.7	1108.2	1108.7	1108.6	1107.8	1107.1	1106.3	1105.5
155°	1146.1	1147.0	1147.9	1147.8	1146.7	1145.5	1144.4	1143.3
157.5°	1179.3	1180.2	1181.1	1180.8	1179.4	1177.9	1176.4	1175.0
160°	1199.5	1200.4	1201.3	1201.2	1200.1	1199.0	1197.9	1196.7
162.5°	1218.4	1219.5	1220.6	1220.5	1219.2	1217.9	1216.6	1215.3
165°	1243.9	1244.8	1245.7	1245.5	1244.2	1242.7	1241.4	1240.1
167.5°	1262.7	1264.0	1265.5	1265.4	1264.0	1262.6	1261.2	1259.8
170°	1274.0	1275.4	1276.7	1276.6	1275.1	1273.4	1271.9	1270.3
172.5°	1282.1	1283.4	1284.8	1284.8	1283.3	1282.0	1280.6	1279.2
175°	1291.2	1292.5	1293.8	1293.7	1292.2	1290.6	1289.0	1287.5
177.5°	1295.3	1296.4	1297.4	1297.4	1296.1	1294.8	1293.5	1292.3
180°	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6

(END OF REPORT)