

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: P331903-830

Luminaire Tested: **S123DIP-S340D1195U830-4F0-1E-UDD-A4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331903-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-17,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIP-S340D1195U830-4F0-1E-UDD-A4
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1195 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5442.1 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: Semi-Indirect

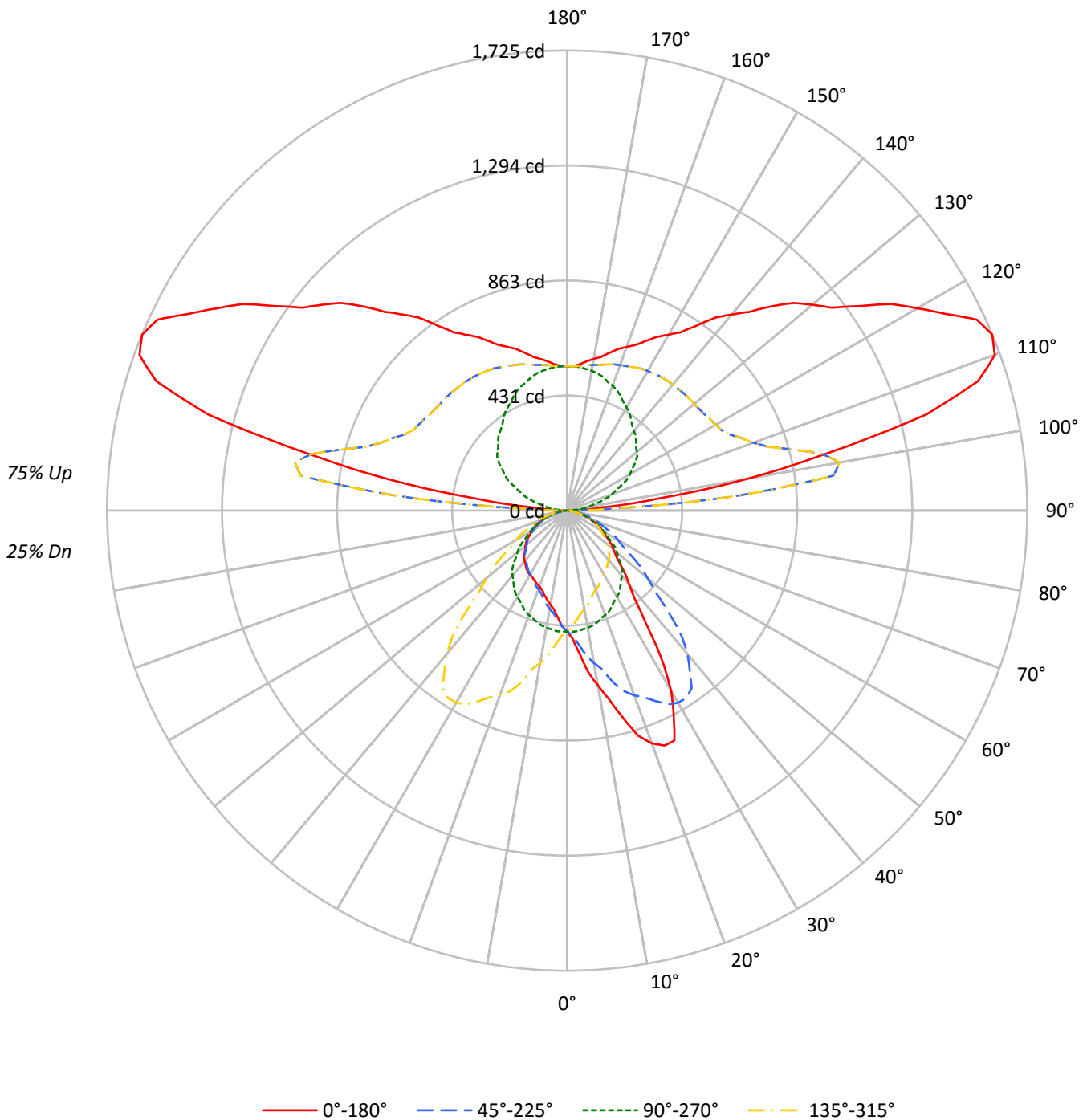
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	70	70	70	51	51	51	33	33	33	25
1	92	88	85	81	82	79	76	73	61	59	57	45	43	42	30	29	28	21
2	84	77	71	66	75	69	64	60	54	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	35	32	30	23	22	21	16
4	70	60	52	47	62	54	47	42	42	38	34	31	28	26	21	19	18	13
5	64	53	46	40	57	48	41	36	37	33	29	28	25	22	19	17	15	12
6	59	48	40	34	53	43	36	31	34	29	25	25	22	19	17	15	14	10
7	55	43	35	30	48	39	32	27	30	26	22	23	20	17	16	14	12	9
8	51	39	31	26	45	35	29	24	28	23	20	21	18	15	14	12	11	8
9	47	35	28	23	42	32	26	21	25	21	17	19	16	14	13	11	10	7
10	44	32	25	21	39	29	23	19	23	19	16	17	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4878	4878	4878	4878
5°	5817	4900	4341	4900
10°	7282	4875	3922	4875
15°	8931	4835	3651	4835
20°	10639	4774	3477	4774
25°	11297	4700	3437	4700
30°	9684	4645	3455	4645
35°	6734	4568	3491	4568
40°	5073	4477	3481	4477
45°	4211	4341	3436	4341
50°	3773	4068	3404	4068
55°	3526	3772	3363	3772
60°	3309	3460	3328	3460
65°	3110	3156	3222	3156
70°	2917	2807	3068	2807
75°	2612	2458	2816	2458
80°	2287	2015	2424	2015
85°	1791	1470	1630	1470



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	0.8
10°-20°	143.2	2.6
20°-30°	240.3	4.4
30°-40°	272.0	5.0
40°-50°	244.0	4.5
50°-60°	196.9	3.6
60°-70°	137.2	2.5
70°-80°	72.1	1.3
80°-90°	21.8	0.4
90°-100°	301.1	5.5
100°-110°	852.5	15.7
110°-120°	838.6	15.4
120°-130°	668.9	12.3
130°-140°	527.4	9.7
140°-150°	393.6	7.2
150°-160°	274.4	5.0
160°-170°	161.2	3.0
170°-180°	52.4	1.0
0°-30°	428.1	7.9
0°-40°	700.1	12.9
0°-60°	1140.9	21.0
0°-90°	1372.1	25.2
90°-120°	1992.1	36.6
90°-150°	3582.0	65.8
90°-180°	4070.0	74.8
0°-180°	5442.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	453	453	453	453	453	
5°	538	454	402	454	538	56
15°	801	434	328	434	801	231
25°	951	396	289	396	951	417
35°	512	348	266	348	512	333
45°	277	285	226	285	277	219
55°	188	201	179	201	188	169
65°	122	124	126	124	122	122
75°	63	59	68	59	63	67
85°	14	12	13	12	14	18
90°	32	2	32	2	32	18
95°	127	37	127	37	127	229
105°	1393	127	1393	127	1393	1374
115°	1694	224	1694	224	1694	1646
125°	1336	312	1336	312	1336	1211
135°	1083	366	1083	366	1083	840
145°	846	417	846	417	846	538
155°	702	474	702	474	702	327
165°	612	518	612	518	612	175
175°	551	540	551	540	551	54
180°	541	541	541	541	541	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	481.0	480.6	479.8	480.4	479.0	477.1	476.9	475.1	470.0	469.8	468.3
5°	538.4	536.7	536.4	536.2	533.1	529.0	521.0	520.4	509.8	504.6	498.2
7.5°	612.8	613.7	610.5	607.8	598.3	592.1	583.6	572.8	559.9	546.7	538.0
10°	666.2	673.4	664.5	658.3	652.6	641.9	629.3	613.7	598.1	579.9	566.1
12.5°	723.5	727.0	725.2	719.4	710.6	694.2	672.0	654.8	640.5	610.1	597.9
15°	801.4	814.8	806.3	786.6	786.9	771.4	742.4	710.6	693.6	667.0	630.8
17.5°	884.6	886.2	882.6	866.1	855.2	833.7	806.9	776.5	742.2	710.0	671.6
20°	928.8	927.5	919.8	911.3	892.4	875.7	846.5	812.5	768.5	736.9	694.9
22.5°	953.4	951.2	947.5	940.4	924.7	906.8	880.5	843.4	801.5	758.0	709.5
25°	951.2	954.0	954.5	952.5	947.1	936.3	915.7	886.0	844.3	788.2	737.8
27.5°	865.2	869.2	880.9	891.4	903.0	914.8	913.2	898.5	867.6	819.3	757.5
30°	779.1	770.2	792.0	819.4	838.1	871.1	889.5	890.6	873.3	831.8	771.6
32.5°	659.6	669.3	678.9	712.7	753.5	790.4	827.2	856.7	860.1	832.5	779.9
35°	512.5	524.6	542.2	559.7	603.6	641.4	706.0	762.1	806.9	812.8	780.6
37.5°	413.0	419.0	430.1	447.7	476.4	521.2	571.1	642.2	707.1	755.4	757.4
40°	361.0	362.8	375.2	388.6	411.9	448.8	493.8	556.7	634.3	701.8	729.9
42.5°	322.0	325.8	331.2	344.0	362.6	390.3	432.2	484.1	555.3	632.9	687.9
45°	276.6	281.1	284.4	292.9	306.1	324.8	353.9	401.4	455.6	535.7	609.7
47.5°	246.8	247.0	249.5	256.0	264.9	279.0	299.6	330.1	379.8	444.9	520.8
50°	225.3	228.8	229.7	234.7	241.8	252.0	269.2	295.1	335.9	393.0	462.9
52.5°	210.2	211.2	213.7	217.4	223.5	231.5	246.4	266.6	298.7	347.4	411.6
55°	187.9	187.9	190.4	193.2	196.7	204.0	213.9	228.8	253.2	291.0	344.1
57.5°	167.4	168.5	170.2	171.1	174.1	178.9	187.1	198.5	216.6	245.7	287.9
60°	153.7	155.7	155.4	157.2	159.9	163.6	170.6	179.8	196.0	219.3	255.0
62.5°	141.8	141.7	141.6	143.7	146.3	149.9	154.5	162.4	176.3	196.9	227.2
65°	122.1	121.7	123.2	124.5	125.4	128.0	131.5	138.6	147.8	163.2	186.6
67.5°	104.6	103.3	104.2	104.6	106.1	108.2	111.5	115.8	123.1	135.4	153.2
70°	92.7	91.5	91.3	91.8	93.1	94.6	97.1	101.2	108.0	117.9	130.8
72.5°	80.4	79.6	79.6	80.6	81.2	82.2	83.9	87.7	93.1	100.6	112.6
75°	62.8	62.8	62.8	63.1	63.7	64.6	65.9	67.9	72.0	77.3	85.4
77.5°	47.0	47.0	46.8	46.8	47.7	48.1	48.4	50.2	52.6	56.1	62.0
80°	36.9	35.8	36.2	36.9	37.3	37.5	38.2	38.6	40.6	42.6	46.8
82.5°	27.4	26.5	26.6	27.6	27.7	27.9	28.6	29.1	29.9	31.7	33.9
85°	14.5	14.5	14.7	14.7	14.9	14.7	15.4	15.6	15.6	16.7	18.0
87.5°	11.6	11.5	11.4	11.4	11.4	11.2	11.1	11.1	11.0	11.4	10.9
90°	31.8	32.9	31.8	30.6	31.8	29.6	28.5	27.3	26.3	27.3	24.1
92.5°	52.8	54.8	53.6	56.9	58.9	64.6	73.1	92.2	127.1	168.4	185.3
95°	127.1	131.4	139.1	148.9	169.8	209.2	267.2	394.3	526.7	649.4	578.2
97.5°	345.8	355.2	384.8	434.1	514.9	645.9	787.1	982.7	1076.7	1006.4	736.8
100°	686.6	685.5	728.2	808.1	918.8	1074.3	1202.4	1291.1	1252.8	1037.1	700.9
102.5°	1007.3	1032.5	1068.2	1131.4	1217.5	1316.1	1390.7	1393.6	1261.5	980.1	648.3
105°	1393.0	1398.5	1433.5	1475.1	1525.5	1554.0	1533.1	1423.6	1194.8	880.4	583.7
107.5°	1615.0	1625.1	1636.9	1651.0	1650.1	1611.1	1515.1	1337.3	1077.8	792.4	542.5
110°	1706.2	1708.4	1710.5	1701.8	1671.1	1594.5	1456.5	1255.0	1004.2	742.4	526.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1724.6	1724.1	1715.8	1688.7	1632.6	1534.0	1379.4	1173.5	940.3	709.2	518.0
115°	1694.1	1688.7	1666.7	1618.5	1536.4	1417.0	1256.0	1065.5	862.9	673.4	514.7
117.5°	1597.3	1589.9	1558.3	1503.2	1417.5	1296.4	1151.8	987.3	816.2	652.4	516.7
120°	1516.7	1510.1	1483.8	1422.5	1336.1	1225.4	1094.0	946.1	791.7	642.8	520.2
122.5°	1441.3	1433.0	1404.1	1349.0	1272.1	1169.3	1047.5	913.7	771.6	636.7	526.3
125°	1336.1	1328.3	1301.0	1252.8	1182.7	1095.0	990.0	870.6	745.7	628.6	535.5
127.5°	1249.2	1242.3	1217.5	1176.4	1113.9	1034.2	939.3	832.9	723.0	624.6	546.0
130°	1200.2	1191.5	1168.5	1129.1	1071.0	996.6	907.9	809.3	710.7	622.0	553.0
132.5°	1152.1	1145.9	1125.5	1086.1	1031.6	960.6	878.1	787.4	699.4	621.1	558.3
135°	1083.1	1075.3	1055.6	1022.8	969.1	906.7	835.6	757.8	684.5	619.8	566.2
137.5°	1010.1	1005.0	988.4	955.2	910.0	855.9	794.6	730.8	671.5	617.4	571.5
140°	959.3	960.4	942.9	912.2	870.6	823.5	770.9	715.1	663.6	616.5	575.0
142.5°	912.0	913.0	897.3	870.2	834.7	793.7	748.2	700.2	656.6	614.8	577.6
145°	846.5	844.3	835.6	812.6	785.1	753.5	718.4	682.2	647.2	612.2	579.3
147.5°	792.6	791.7	783.4	767.9	747.1	724.5	696.3	667.6	638.0	608.0	579.3
150°	761.1	761.1	754.5	742.4	726.0	705.2	682.2	657.0	631.9	604.5	579.3
152.5°	734.8	734.8	730.8	719.7	706.8	689.5	669.1	647.4	624.9	600.1	576.6
155°	701.9	700.9	698.7	689.9	680.0	666.9	650.4	632.9	614.3	592.5	573.8
157.5°	671.9	672.1	670.4	663.8	655.3	645.0	632.4	617.6	602.5	585.7	570.1
160°	652.7	653.7	653.7	647.2	639.5	631.9	620.9	608.9	594.7	580.4	568.4
162.5°	635.2	636.2	636.2	630.6	625.5	618.7	608.7	598.3	586.7	575.1	564.9
165°	612.2	612.2	613.2	608.9	604.5	599.0	591.4	584.8	576.0	567.2	559.6
167.5°	590.2	590.2	591.4	588.2	586.4	582.4	578.0	573.0	565.7	559.4	554.3
170°	577.1	577.1	578.2	576.0	575.0	572.7	568.4	565.1	559.6	554.1	550.8
172.5°	564.9	565.7	567.7	565.5	565.2	564.0	560.4	558.1	553.5	549.7	548.2
175°	550.8	552.0	553.0	552.0	552.0	552.0	549.7	548.7	546.5	544.2	544.2
177.5°	542.7	542.7	544.5	543.6	544.5	544.5	543.6	542.7	541.9	541.0	541.9
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	467.2	465.9	464.5	462.0	459.9	456.9	456.0	455.0	451.8	449.0	446.9
5°	495.8	490.5	482.9	475.8	470.1	462.4	458.1	453.5	446.9	440.9	436.1
7.5°	525.7	515.3	503.3	490.5	478.4	466.8	457.5	449.1	439.9	431.2	424.3
10°	549.4	534.4	517.7	499.7	484.4	469.5	456.9	446.0	434.1	423.8	415.2
12.5°	576.5	554.3	531.3	509.4	491.3	470.5	455.3	441.4	427.9	415.6	406.0
15°	608.4	580.3	553.1	523.0	495.4	469.5	451.5	433.9	418.3	405.6	393.2
17.5°	637.6	605.8	569.9	533.3	499.9	469.2	444.0	424.1	404.6	389.1	376.8
20°	654.1	617.9	577.3	539.3	502.4	468.2	440.5	416.8	395.7	379.2	365.4
22.5°	668.4	625.9	583.9	543.3	502.2	465.3	433.9	409.5	386.7	370.6	355.9
25°	683.2	632.4	590.2	542.6	496.7	458.5	423.4	395.7	372.9	353.9	338.8
27.5°	695.8	632.0	581.9	530.7	488.0	449.7	412.2	382.5	358.3	337.7	322.3
30°	704.2	632.8	573.3	522.6	479.6	440.1	403.6	373.7	348.3	327.4	312.9
32.5°	709.5	632.3	565.4	511.3	466.2	431.2	394.3	363.4	337.1	316.7	302.7
35°	712.6	628.4	551.8	488.1	444.7	410.6	379.7	347.6	320.2	301.0	285.2
37.5°	706.3	620.3	536.0	465.7	418.1	384.7	358.5	331.3	305.0	284.0	270.3
40°	696.7	615.0	523.7	449.9	399.8	367.6	345.4	318.6	292.7	272.7	260.0
42.5°	678.3	604.4	510.2	432.3	380.9	348.6	328.2	305.8	281.3	262.5	249.8
45°	633.3	581.0	489.8	406.0	352.9	319.5	301.5	285.2	263.1	244.9	233.8
47.5°	570.8	545.9	460.5	378.2	323.6	291.5	272.8	259.8	243.6	228.8	218.3
50°	527.4	517.1	440.7	359.2	304.2	272.7	254.7	242.9	231.2	216.5	206.9
52.5°	477.4	483.7	417.5	339.6	284.3	253.4	236.5	227.1	216.5	204.3	196.0
55°	406.9	429.9	377.5	306.5	254.7	225.3	209.2	201.0	194.7	185.8	178.5
57.5°	340.9	370.2	334.1	272.5	225.6	200.3	184.9	175.9	171.9	167.2	161.5
60°	301.7	330.6	303.2	249.7	206.2	182.0	168.4	160.7	156.7	153.4	148.6
62.5°	266.7	296.1	273.1	226.5	187.0	164.7	152.8	145.2	142.2	140.5	136.4
65°	218.7	243.9	228.6	190.4	159.7	139.9	129.1	123.9	121.0	120.4	117.7
67.5°	178.0	197.2	186.1	157.9	133.7	116.7	107.5	103.0	100.9	100.6	98.6
70°	151.3	169.3	160.7	135.3	114.4	101.0	93.1	89.2	87.8	87.7	86.5
72.5°	130.5	143.1	136.3	115.1	99.0	86.8	81.0	76.8	75.4	75.7	74.9
75°	96.6	106.0	102.1	87.4	74.5	66.5	61.7	59.1	57.8	58.4	57.5
77.5°	69.6	75.5	71.9	61.7	53.7	48.1	44.5	42.9	41.7	41.7	41.3
80°	52.5	56.0	54.0	47.9	41.3	36.5	33.6	32.5	31.9	31.6	31.4
82.5°	37.4	40.3	38.0	33.8	29.3	26.4	24.8	23.4	22.9	23.0	22.8
85°	18.9	20.0	19.1	16.5	14.7	13.4	12.5	11.9	11.4	11.6	11.2
87.5°	10.7	10.2	9.0	7.8	7.1	5.8	5.5	4.6	4.7	5.2	5.7
90°	20.8	17.5	14.2	12.1	9.9	6.6	4.3	2.2	4.3	6.6	9.9
92.5°	139.1	92.0	63.3	47.1	37.9	29.3	20.2	13.6	20.2	29.3	37.9
95°	398.6	235.4	142.3	99.6	71.2	52.6	40.5	37.2	40.5	52.6	71.2
97.5°	437.3	253.4	164.5	118.3	90.2	74.0	64.6	63.5	64.6	74.0	90.2
100°	412.8	250.8	174.1	131.4	105.1	89.8	82.1	81.1	82.1	89.8	105.1
102.5°	391.8	254.3	185.5	146.3	122.6	108.2	101.4	99.4	101.4	108.2	122.6
105°	376.7	263.9	204.8	170.8	150.1	136.9	130.4	127.1	130.4	136.9	150.1
107.5°	375.6	281.9	230.0	198.4	178.9	166.0	159.7	156.4	159.7	166.0	178.9
110°	380.0	296.8	247.5	216.8	198.2	186.2	180.7	177.4	180.7	186.2	198.2



TEST NUMBER: P331903-830

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	388.8	311.7	265.9	236.1	217.4	205.5	200.0	196.7	200.0	205.5	217.4
115°	403.0	336.2	294.5	265.0	246.4	235.4	228.8	224.5	228.8	235.4	246.4
117.5°	421.8	362.2	321.1	293.7	272.9	262.8	257.3	252.3	257.3	262.8	272.9
120°	435.8	378.9	339.5	312.1	291.3	280.3	274.8	271.5	274.8	280.3	291.3
122.5°	449.0	396.4	357.9	328.8	308.8	297.0	291.5	288.2	291.5	297.0	308.8
125°	469.8	421.6	383.2	353.7	332.9	320.8	314.3	312.1	314.3	320.8	332.9
127.5°	486.9	443.5	406.5	376.9	353.9	341.7	333.6	330.3	333.6	341.7	353.9
130°	498.2	456.7	420.5	391.0	368.0	354.8	345.0	341.7	345.0	354.8	368.0
132.5°	508.8	468.1	432.8	404.1	381.1	365.3	354.6	350.4	354.6	365.3	381.1
135°	522.4	485.1	451.2	421.6	398.6	382.2	370.1	365.8	370.1	382.2	398.6
137.5°	532.4	496.9	464.3	437.0	414.2	396.6	384.8	380.2	384.8	396.6	414.2
140°	537.7	504.8	473.1	445.7	423.8	406.2	395.3	389.8	395.3	406.2	423.8
142.5°	542.9	511.0	480.1	454.5	432.5	416.8	405.0	400.4	405.0	416.8	432.5
145°	548.7	519.1	490.6	465.4	446.8	430.4	420.5	417.3	420.5	430.4	446.8
147.5°	552.1	525.7	499.5	478.2	460.1	445.9	436.3	434.3	436.3	445.9	460.1
150°	553.0	530.0	504.8	485.1	469.8	455.5	446.8	445.7	446.8	455.5	469.8
152.5°	554.8	532.6	511.0	492.1	478.5	466.1	457.3	457.1	457.3	466.1	478.5
155°	555.3	537.7	519.1	503.7	491.7	480.8	474.2	474.2	474.2	480.8	491.7
157.5°	556.3	540.5	525.7	513.8	503.5	493.9	488.6	487.8	488.6	493.9	503.5
160°	556.3	543.2	530.0	519.1	511.4	502.7	498.2	498.2	498.2	502.7	511.4
162.5°	555.4	544.0	532.6	523.5	516.7	509.6	506.1	506.1	506.1	509.6	516.7
165°	553.0	545.4	536.6	529.0	524.5	519.1	516.9	518.0	516.9	519.1	524.5
167.5°	551.3	545.2	538.8	534.0	530.9	526.7	525.7	527.0	525.7	526.7	530.9
170°	548.7	544.2	538.8	536.6	534.4	531.1	530.0	532.3	530.0	531.1	534.4
172.5°	547.8	544.2	539.7	538.4	537.1	534.6	534.4	535.7	534.4	534.6	537.1
175°	545.4	543.2	541.0	539.9	539.9	537.7	538.8	539.9	538.8	537.7	539.9
177.5°	543.6	541.9	541.0	541.0	541.0	540.1	541.0	541.9	541.0	540.1	541.0
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P331903-830

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	445.6	444.4	442.7	440.1	437.9	434.6	434.6	435.1	435.1	435.0	434.6
5°	432.2	428.9	424.9	420.3	415.5	410.6	409.7	407.9	406.7	405.8	404.7
7.5°	417.8	412.0	406.2	399.8	393.9	389.1	385.7	382.9	381.1	379.1	377.7
10°	408.2	401.0	394.2	387.4	379.8	373.9	370.2	367.6	365.6	363.8	363.0
12.5°	396.8	388.5	381.0	374.5	366.4	360.2	356.7	355.4	353.2	349.4	347.5
15°	380.1	372.4	363.4	353.5	349.6	342.1	337.9	335.9	334.6	331.8	330.9
17.5°	365.8	355.8	345.6	338.3	330.9	324.9	322.5	320.1	318.4	316.0	315.3
20°	354.4	345.4	336.2	328.3	320.6	314.0	312.0	310.3	308.5	307.5	306.5
22.5°	342.8	333.8	326.1	318.8	310.6	306.2	304.2	302.2	301.0	300.2	299.4
25°	326.5	318.6	310.0	303.5	296.9	294.0	292.7	291.6	290.7	289.6	289.4
27.5°	312.0	303.3	296.4	290.2	285.5	283.1	281.8	281.3	281.5	281.9	282.2
30°	301.0	293.1	287.5	282.2	277.8	275.6	275.3	275.3	276.3	276.4	276.9
32.5°	291.1	284.6	278.8	273.7	270.4	268.9	269.8	269.8	270.4	271.0	271.8
35°	276.4	270.7	266.4	261.9	259.1	259.8	260.2	260.6	261.7	263.1	263.9
37.5°	262.5	257.6	253.0	249.6	248.3	249.4	250.5	251.4	252.7	253.7	254.6
40°	252.5	248.7	244.4	241.3	241.8	242.4	243.3	244.4	245.5	246.2	247.0
42.5°	243.2	239.3	235.9	233.4	234.0	234.9	235.4	235.9	237.2	238.5	238.9
45°	229.0	225.9	222.9	221.3	221.8	222.3	222.6	223.3	224.4	225.3	225.6
47.5°	213.1	210.9	208.9	207.4	208.1	207.9	208.5	209.9	210.2	210.8	212.0
50°	202.9	201.0	198.5	198.0	198.0	198.0	198.3	200.0	200.0	201.0	201.8
52.5°	191.6	190.4	188.9	188.0	187.7	187.7	188.6	189.5	189.8	191.1	192.0
55°	175.0	173.7	172.4	171.7	171.3	171.7	173.4	173.9	175.0	175.7	176.3
57.5°	157.7	156.7	155.6	155.2	155.1	155.7	156.7	158.0	158.3	160.3	161.3
60°	146.3	144.7	143.8	143.8	143.4	145.3	145.0	147.1	147.6	148.9	150.4
62.5°	134.5	132.4	132.1	132.1	132.7	133.3	133.8	134.8	136.0	137.6	138.8
65°	115.5	114.4	115.9	115.7	115.3	116.6	116.6	117.7	119.0	120.6	123.0
67.5°	97.6	97.0	97.1	97.1	97.7	98.5	99.2	100.1	101.7	103.3	104.9
70°	85.4	86.1	85.0	85.9	86.5	86.7	87.2	88.5	90.2	91.3	93.1
72.5°	73.6	73.6	73.7	74.1	74.7	75.1	75.6	77.1	79.0	79.9	81.3
75°	56.6	56.5	57.1	57.1	58.2	58.6	59.1	59.8	61.5	62.8	63.9
77.5°	41.4	41.7	41.5	42.2	41.9	42.0	43.4	44.0	44.2	46.8	47.4
80°	31.2	31.6	31.9	32.0	32.2	31.9	33.4	34.0	34.0	35.5	36.7
82.5°	22.4	22.6	23.2	23.5	23.5	23.9	24.0	24.5	25.1	25.7	27.1
85°	11.2	11.9	12.1	11.9	12.1	11.6	12.3	12.5	12.7	12.7	12.7
87.5°	5.9	6.5	7.0	7.8	8.3	9.1	9.0	8.9	9.0	9.8	9.5
90°	12.1	14.2	17.5	20.8	24.1	27.3	26.3	27.3	28.5	29.6	31.8
92.5°	47.1	63.3	92.0	139.1	185.3	168.4	127.1	92.2	73.1	64.6	58.9
95°	99.6	142.3	235.4	398.6	578.2	649.4	526.7	394.3	267.2	209.2	169.8
97.5°	118.3	164.5	253.4	437.3	736.8	1006.4	1076.7	982.7	787.1	645.9	514.9
100°	131.4	174.1	250.8	412.8	700.9	1037.1	1252.8	1291.1	1202.4	1074.3	918.8
102.5°	146.3	185.5	254.3	391.8	648.3	980.1	1261.5	1393.6	1390.7	1316.1	1217.5
105°	170.8	204.8	263.9	376.7	583.7	880.4	1194.8	1423.6	1533.1	1554.0	1525.5
107.5°	198.4	230.0	281.9	375.6	542.5	792.4	1077.8	1337.3	1515.1	1611.1	1650.1
110°	216.8	247.5	296.8	380.0	526.7	742.4	1004.2	1255.0	1456.5	1594.5	1671.1



TEST NUMBER: P331903-830

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	236.1	265.9	311.7	388.8	518.0	709.2	940.3	1173.5	1379.4	1534.0	1632.6
115°	265.0	294.5	336.2	403.0	514.7	673.4	862.9	1065.5	1256.0	1417.0	1536.4
117.5°	293.7	321.1	362.2	421.8	516.7	652.4	816.2	987.3	1151.8	1296.4	1417.5
120°	312.1	339.5	378.9	435.8	520.2	642.8	791.7	946.1	1094.0	1225.4	1336.1
122.5°	328.8	357.9	396.4	449.0	526.3	636.7	771.6	913.7	1047.5	1169.3	1272.1
125°	353.7	383.2	421.6	469.8	535.5	628.6	745.7	870.6	990.0	1095.0	1182.7
127.5°	376.9	406.5	443.5	486.9	546.0	624.6	723.0	832.9	939.3	1034.2	1113.9
130°	391.0	420.5	456.7	498.2	553.0	622.0	710.7	809.3	907.9	996.6	1071.0
132.5°	404.1	432.8	468.1	508.8	558.3	621.1	699.4	787.4	878.1	960.6	1031.6
135°	421.6	451.2	485.1	522.4	566.2	619.8	684.5	757.8	835.6	906.7	969.1
137.5°	437.0	464.3	496.9	532.4	571.5	617.4	671.5	730.8	794.6	855.9	910.0
140°	445.7	473.1	504.8	537.7	575.0	616.5	663.6	715.1	770.9	823.5	870.6
142.5°	454.5	480.1	511.0	542.9	577.6	614.8	656.6	700.2	748.2	793.7	834.7
145°	465.4	490.6	519.1	548.7	579.3	612.2	647.2	682.2	718.4	753.5	785.1
147.5°	478.2	499.5	525.7	552.1	579.3	608.0	638.0	667.6	696.3	724.5	747.1
150°	485.1	504.8	530.0	553.0	579.3	604.5	631.9	657.0	682.2	705.2	726.0
152.5°	492.1	511.0	532.6	554.8	576.6	600.1	624.9	647.4	669.1	689.5	706.8
155°	503.7	519.1	537.7	555.3	573.8	592.5	614.3	632.9	650.4	666.9	680.0
157.5°	513.8	525.7	540.5	556.3	570.1	585.7	602.5	617.6	632.4	645.0	655.3
160°	519.1	530.0	543.2	556.3	568.4	580.4	594.7	608.9	620.9	631.9	639.5
162.5°	523.5	532.6	544.0	555.4	564.9	575.1	586.7	598.3	608.7	618.7	625.5
165°	529.0	536.6	545.4	553.0	559.6	567.2	576.0	584.8	591.4	599.0	604.5
167.5°	534.0	538.8	545.2	551.3	554.3	559.4	565.7	573.0	578.0	582.4	586.4
170°	536.6	538.8	544.2	548.7	550.8	554.1	559.6	565.1	568.4	572.7	575.0
172.5°	538.4	539.7	544.2	547.8	548.2	549.7	553.5	558.1	560.4	564.0	565.2
175°	539.9	541.0	543.2	545.4	544.2	544.2	546.5	548.7	549.7	552.0	552.0
177.5°	541.0	541.0	541.9	543.6	541.9	541.0	541.9	542.7	543.6	544.5	544.5
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P331903-830

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	433.4	433.2	434.4	433.6	434.4	433.2	433.4	434.6	435.0	435.1	435.1
5°	403.4	404.1	401.8	401.8	401.8	404.1	403.4	404.7	405.8	406.7	407.9
7.5°	376.6	375.7	375.8	374.6	375.8	375.7	376.6	377.7	379.1	381.1	382.9
10°	360.3	359.0	358.5	358.8	358.5	359.0	360.3	363.0	363.8	365.6	367.6
12.5°	346.8	346.6	343.7	343.7	343.7	346.6	346.8	347.5	349.4	353.2	355.4
15°	330.9	326.8	326.3	327.6	326.3	326.8	330.9	330.9	331.8	334.6	335.9
17.5°	315.0	312.7	312.9	312.3	312.9	312.7	315.0	315.3	316.0	318.4	320.1
20°	306.5	305.2	305.0	303.5	305.0	305.2	306.5	306.5	307.5	308.5	310.3
22.5°	298.8	298.4	298.5	296.8	298.5	298.4	298.8	299.4	300.2	301.0	302.2
25°	289.2	290.3	289.4	289.4	289.4	290.3	289.2	289.4	289.6	290.7	291.6
27.5°	282.7	282.7	282.2	282.2	282.2	282.7	282.7	282.2	281.9	281.5	281.3
30°	277.8	277.6	278.0	278.0	278.0	277.6	277.8	276.9	276.4	276.3	275.3
32.5°	272.9	273.1	273.2	273.4	273.2	273.1	272.9	271.8	271.0	270.4	269.8
35°	265.2	265.5	266.2	265.7	266.2	265.5	265.2	263.9	263.1	261.7	260.6
37.5°	255.0	256.0	255.8	256.1	255.8	256.0	255.0	254.6	253.7	252.7	251.4
40°	247.2	247.9	247.7	247.7	247.7	247.9	247.2	247.0	246.2	245.5	244.4
42.5°	239.3	239.8	239.2	238.9	239.2	239.8	239.3	238.9	238.5	237.2	235.9
45°	226.4	225.9	226.6	225.7	226.6	225.9	226.4	225.6	225.3	224.4	223.3
47.5°	211.9	212.4	212.5	213.2	212.5	212.4	211.9	212.0	210.8	210.2	209.9
50°	202.3	203.6	203.6	203.3	203.6	203.6	202.3	201.8	201.0	200.0	200.0
52.5°	192.7	193.3	194.3	194.2	194.3	193.3	192.7	192.0	191.1	189.8	189.5
55°	178.0	178.5	179.0	179.2	179.0	178.5	178.0	176.3	175.7	175.0	173.9
57.5°	162.9	162.7	163.7	164.1	163.7	162.7	162.9	161.3	160.3	158.3	158.0
60°	152.1	152.1	153.9	154.6	153.9	152.1	152.1	150.4	148.9	147.6	147.1
62.5°	140.7	141.5	143.2	142.3	143.2	141.5	140.7	138.8	137.6	136.0	134.8
65°	124.0	125.8	125.6	126.5	125.6	125.8	124.0	123.0	120.6	119.0	117.7
67.5°	106.6	107.7	109.3	109.4	109.3	107.7	106.6	104.9	103.3	101.7	100.1
70°	94.8	96.0	96.8	97.5	96.8	96.0	94.8	93.1	91.3	90.2	88.5
72.5°	83.4	84.0	86.1	85.2	86.1	84.0	83.4	81.3	79.9	79.0	77.1
75°	65.4	67.0	68.3	67.7	68.3	67.0	65.4	63.9	62.8	61.5	59.8
77.5°	48.4	50.0	50.5	50.0	50.5	50.0	48.4	47.4	46.8	44.2	44.0
80°	38.2	38.0	39.3	39.1	39.3	38.0	38.2	36.7	35.5	34.0	34.0
82.5°	28.0	27.8	28.4	28.6	28.4	27.8	28.0	27.1	25.7	25.1	24.5
85°	13.6	14.2	13.4	13.2	13.4	14.2	13.6	12.7	12.7	12.7	12.5
87.5°	9.3	9.5	9.5	9.1	9.5	9.5	9.3	9.5	9.8	9.0	8.9
90°	30.6	31.8	32.9	31.8	32.9	31.8	30.6	31.8	29.6	28.5	27.3
92.5°	56.9	53.6	54.8	52.8	54.8	53.6	56.9	58.9	64.6	73.1	92.2
95°	148.9	139.1	131.4	127.1	131.4	139.1	148.9	169.8	209.2	267.2	394.3
97.5°	434.1	384.8	355.2	345.8	355.2	384.8	434.1	514.9	645.9	787.1	982.7
100°	808.1	728.2	685.5	686.6	685.5	728.2	808.1	918.8	1074.3	1202.4	1291.1
102.5°	1131.4	1068.2	1032.5	1007.3	1032.5	1068.2	1131.4	1217.5	1316.1	1390.7	1393.6
105°	1475.1	1433.5	1398.5	1393.0	1398.5	1433.5	1475.1	1525.5	1554.0	1533.1	1423.6
107.5°	1651.0	1636.9	1625.1	1615.0	1625.1	1636.9	1651.0	1650.1	1611.1	1515.1	1337.3
110°	1701.8	1710.5	1708.4	1706.2	1708.4	1710.5	1701.8	1671.1	1594.5	1456.5	1255.0



TEST NUMBER: P331903-830

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1688.7	1715.8	1724.1	1724.6	1724.1	1715.8	1688.7	1632.6	1534.0	1379.4	1173.5
115°	1618.5	1666.7	1688.7	1694.1	1688.7	1666.7	1618.5	1536.4	1417.0	1256.0	1065.5
117.5°	1503.2	1558.3	1589.9	1597.3	1589.9	1558.3	1503.2	1417.5	1296.4	1151.8	987.3
120°	1422.5	1483.8	1510.1	1516.7	1510.1	1483.8	1422.5	1336.1	1225.4	1094.0	946.1
122.5°	1349.0	1404.1	1433.0	1441.3	1433.0	1404.1	1349.0	1272.1	1169.3	1047.5	913.7
125°	1252.8	1301.0	1328.3	1336.1	1328.3	1301.0	1252.8	1182.7	1095.0	990.0	870.6
127.5°	1176.4	1217.5	1242.3	1249.2	1242.3	1217.5	1176.4	1113.9	1034.2	939.3	832.9
130°	1129.1	1168.5	1191.5	1200.2	1191.5	1168.5	1129.1	1071.0	996.6	907.9	809.3
132.5°	1086.1	1125.5	1145.9	1152.1	1145.9	1125.5	1086.1	1031.6	960.6	878.1	787.4
135°	1022.8	1055.6	1075.3	1083.1	1075.3	1055.6	1022.8	969.1	906.7	835.6	757.8
137.5°	955.2	988.4	1005.0	1010.1	1005.0	988.4	955.2	910.0	855.9	794.6	730.8
140°	912.2	942.9	960.4	959.3	960.4	942.9	912.2	870.6	823.5	770.9	715.1
142.5°	870.2	897.3	913.0	912.0	913.0	897.3	870.2	834.7	793.7	748.2	700.2
145°	812.6	835.6	844.3	846.5	844.3	835.6	812.6	785.1	753.5	718.4	682.2
147.5°	767.9	783.4	791.7	792.6	791.7	783.4	767.9	747.1	724.5	696.3	667.6
150°	742.4	754.5	761.1	761.1	761.1	754.5	742.4	726.0	705.2	682.2	657.0
152.5°	719.7	730.8	734.8	734.8	734.8	730.8	719.7	706.8	689.5	669.1	647.4
155°	689.9	698.7	700.9	701.9	700.9	698.7	689.9	680.0	666.9	650.4	632.9
157.5°	663.8	670.4	672.1	671.9	672.1	670.4	663.8	655.3	645.0	632.4	617.6
160°	647.2	653.7	653.7	652.7	653.7	653.7	647.2	639.5	631.9	620.9	608.9
162.5°	630.6	636.2	636.2	635.2	636.2	636.2	630.6	625.5	618.7	608.7	598.3
165°	608.9	613.2	612.2	612.2	612.2	613.2	608.9	604.5	599.0	591.4	584.8
167.5°	588.2	591.4	590.2	590.2	590.2	591.4	588.2	586.4	582.4	578.0	573.0
170°	576.0	578.2	577.1	577.1	577.1	578.2	576.0	575.0	572.7	568.4	565.1
172.5°	565.5	567.7	565.7	564.9	565.7	567.7	565.5	565.2	564.0	560.4	558.1
175°	552.0	553.0	552.0	550.8	552.0	553.0	552.0	552.0	552.0	549.7	548.7
177.5°	543.6	544.5	542.7	542.7	542.7	544.5	543.6	544.5	544.5	543.6	542.7
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P331903-830

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	434.6	434.6	437.9	440.1	442.7	444.4	445.6	446.9	449.0	451.8	455.0
5°	409.7	410.6	415.5	420.3	424.9	428.9	432.2	436.1	440.9	446.9	453.5
7.5°	385.7	389.1	393.9	399.8	406.2	412.0	417.8	424.3	431.2	439.9	449.1
10°	370.2	373.9	379.8	387.4	394.2	401.0	408.2	415.2	423.8	434.1	446.0
12.5°	356.7	360.2	366.4	374.5	381.0	388.5	396.8	406.0	415.6	427.9	441.4
15°	337.9	342.1	349.6	353.5	363.4	372.4	380.1	393.2	405.6	418.3	433.9
17.5°	322.5	324.9	330.9	338.3	345.6	355.8	365.8	376.8	389.1	404.6	424.1
20°	312.0	314.0	320.6	328.3	336.2	345.4	354.4	365.4	379.2	395.7	416.8
22.5°	304.2	306.2	310.6	318.8	326.1	333.8	342.8	355.9	370.6	386.7	409.5
25°	292.7	294.0	296.9	303.5	310.0	318.6	326.5	338.8	353.9	372.9	395.7
27.5°	281.8	283.1	285.5	290.2	296.4	303.3	312.0	322.3	337.7	358.3	382.5
30°	275.3	275.6	277.8	282.2	287.5	293.1	301.0	312.9	327.4	348.3	373.7
32.5°	269.8	268.9	270.4	273.7	278.8	284.6	291.1	302.7	316.7	337.1	363.4
35°	260.2	259.8	259.1	261.9	266.4	270.7	276.4	285.2	301.0	320.2	347.6
37.5°	250.5	249.4	248.3	249.6	253.0	257.6	262.5	270.3	284.0	305.0	331.3
40°	243.3	242.4	241.8	241.3	244.4	248.7	252.5	260.0	272.7	292.7	318.6
42.5°	235.4	234.9	234.0	233.4	235.9	239.3	243.2	249.8	262.5	281.3	305.8
45°	222.6	222.3	221.8	221.3	222.9	225.9	229.0	233.8	244.9	263.1	285.2
47.5°	208.5	207.9	208.1	207.4	208.9	210.9	213.1	218.3	228.8	243.6	259.8
50°	198.3	198.0	198.0	198.0	198.5	201.0	202.9	206.9	216.5	231.2	242.9
52.5°	188.6	187.7	187.7	188.0	188.9	190.4	191.6	196.0	204.3	216.5	227.1
55°	173.4	171.7	171.3	171.7	172.4	173.7	175.0	178.5	185.8	194.7	201.0
57.5°	156.7	155.7	155.1	155.2	155.6	156.7	157.7	161.5	167.2	171.9	175.9
60°	145.0	145.3	143.4	143.8	143.8	144.7	146.3	148.6	153.4	156.7	160.7
62.5°	133.8	133.3	132.7	132.1	132.1	132.4	134.5	136.4	140.5	142.2	145.2
65°	116.6	116.6	115.3	115.7	115.9	114.4	115.5	117.7	120.4	121.0	123.9
67.5°	99.2	98.5	97.7	97.1	97.1	97.0	97.6	98.6	100.6	100.9	103.0
70°	87.2	86.7	86.5	85.9	85.0	86.1	85.4	86.5	87.7	87.8	89.2
72.5°	75.6	75.1	74.7	74.1	73.7	73.6	73.6	74.9	75.7	75.4	76.8
75°	59.1	58.6	58.2	57.1	57.1	56.5	56.6	57.5	58.4	57.8	59.1
77.5°	43.4	42.0	41.9	42.2	41.5	41.7	41.4	41.3	41.7	41.7	42.9
80°	33.4	31.9	32.2	32.0	31.9	31.6	31.2	31.4	31.6	31.9	32.5
82.5°	24.0	23.9	23.5	23.5	23.2	22.6	22.4	22.8	23.0	22.9	23.4
85°	12.3	11.6	12.1	11.9	12.1	11.9	11.2	11.2	11.6	11.4	11.9
87.5°	9.0	9.1	8.3	7.8	7.0	6.5	5.9	5.7	5.2	4.7	4.6
90°	26.3	27.3	24.1	20.8	17.5	14.2	12.1	9.9	6.6	4.3	2.2
92.5°	127.1	168.4	185.3	139.1	92.0	63.3	47.1	37.9	29.3	20.2	13.6
95°	526.7	649.4	578.2	398.6	235.4	142.3	99.6	71.2	52.6	40.5	37.2
97.5°	1076.7	1006.4	736.8	437.3	253.4	164.5	118.3	90.2	74.0	64.6	63.5
100°	1252.8	1037.1	700.9	412.8	250.8	174.1	131.4	105.1	89.8	82.1	81.1
102.5°	1261.5	980.1	648.3	391.8	254.3	185.5	146.3	122.6	108.2	101.4	99.4
105°	1194.8	880.4	583.7	376.7	263.9	204.8	170.8	150.1	136.9	130.4	127.1
107.5°	1077.8	792.4	542.5	375.6	281.9	230.0	198.4	178.9	166.0	159.7	156.4
110°	1004.2	742.4	526.7	380.0	296.8	247.5	216.8	198.2	186.2	180.7	177.4



TEST NUMBER: P331903-830

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	940.3	709.2	518.0	388.8	311.7	265.9	236.1	217.4	205.5	200.0	196.7
115°	862.9	673.4	514.7	403.0	336.2	294.5	265.0	246.4	235.4	228.8	224.5
117.5°	816.2	652.4	516.7	421.8	362.2	321.1	293.7	272.9	262.8	257.3	252.3
120°	791.7	642.8	520.2	435.8	378.9	339.5	312.1	291.3	280.3	274.8	271.5
122.5°	771.6	636.7	526.3	449.0	396.4	357.9	328.8	308.8	297.0	291.5	288.2
125°	745.7	628.6	535.5	469.8	421.6	383.2	353.7	332.9	320.8	314.3	312.1
127.5°	723.0	624.6	546.0	486.9	443.5	406.5	376.9	353.9	341.7	333.6	330.3
130°	710.7	622.0	553.0	498.2	456.7	420.5	391.0	368.0	354.8	345.0	341.7
132.5°	699.4	621.1	558.3	508.8	468.1	432.8	404.1	381.1	365.3	354.6	350.4
135°	684.5	619.8	566.2	522.4	485.1	451.2	421.6	398.6	382.2	370.1	365.8
137.5°	671.5	617.4	571.5	532.4	496.9	464.3	437.0	414.2	396.6	384.8	380.2
140°	663.6	616.5	575.0	537.7	504.8	473.1	445.7	423.8	406.2	395.3	389.8
142.5°	656.6	614.8	577.6	542.9	511.0	480.1	454.5	432.5	416.8	405.0	400.4
145°	647.2	612.2	579.3	548.7	519.1	490.6	465.4	446.8	430.4	420.5	417.3
147.5°	638.0	608.0	579.3	552.1	525.7	499.5	478.2	460.1	445.9	436.3	434.3
150°	631.9	604.5	579.3	553.0	530.0	504.8	485.1	469.8	455.5	446.8	445.7
152.5°	624.9	600.1	576.6	554.8	532.6	511.0	492.1	478.5	466.1	457.3	457.1
155°	614.3	592.5	573.8	555.3	537.7	519.1	503.7	491.7	480.8	474.2	474.2
157.5°	602.5	585.7	570.1	556.3	540.5	525.7	513.8	503.5	493.9	488.6	487.8
160°	594.7	580.4	568.4	556.3	543.2	530.0	519.1	511.4	502.7	498.2	498.2
162.5°	586.7	575.1	564.9	555.4	544.0	532.6	523.5	516.7	509.6	506.1	506.1
165°	576.0	567.2	559.6	553.0	545.4	536.6	529.0	524.5	519.1	516.9	518.0
167.5°	565.7	559.4	554.3	551.3	545.2	538.8	534.0	530.9	526.7	525.7	527.0
170°	559.6	554.1	550.8	548.7	544.2	538.8	536.6	534.4	531.1	530.0	532.3
172.5°	553.5	549.7	548.2	547.8	544.2	539.7	538.4	537.1	534.6	534.4	535.7
175°	546.5	544.2	544.2	545.4	543.2	541.0	539.9	539.9	537.7	538.8	539.9
177.5°	541.9	541.0	541.9	543.6	541.9	541.0	541.0	541.0	540.1	541.0	541.9
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P331903-830

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	456.0	456.9	459.9	462.0	464.5	465.9	467.2	468.3	469.8	470.0	475.1
5°	458.1	462.4	470.1	475.8	482.9	490.5	495.8	498.2	504.6	509.8	520.4
7.5°	457.5	466.8	478.4	490.5	503.3	515.3	525.7	538.0	546.7	559.9	572.8
10°	456.9	469.5	484.4	499.7	517.7	534.4	549.4	566.1	579.9	598.1	613.7
12.5°	455.3	470.5	491.3	509.4	531.3	554.3	576.5	597.9	610.1	640.5	654.8
15°	451.5	469.5	495.4	523.0	553.1	580.3	608.4	630.8	667.0	693.6	710.6
17.5°	444.0	469.2	499.9	533.3	569.9	605.8	637.6	671.6	710.0	742.2	776.5
20°	440.5	468.2	502.4	539.3	577.3	617.9	654.1	694.9	736.9	768.5	812.5
22.5°	433.9	465.3	502.2	543.3	583.9	625.9	668.4	709.5	758.0	801.5	843.4
25°	423.4	458.5	496.7	542.6	590.2	632.4	683.2	737.8	788.2	844.3	886.0
27.5°	412.2	449.7	488.0	530.7	581.9	632.0	695.8	757.5	819.3	867.6	898.5
30°	403.6	440.1	479.6	522.6	573.3	632.8	704.2	771.6	831.8	873.3	890.6
32.5°	394.3	431.2	466.2	511.3	565.4	632.3	709.5	779.9	832.5	860.1	856.7
35°	379.7	410.6	444.7	488.1	551.8	628.4	712.6	780.6	812.8	806.9	762.1
37.5°	358.5	384.7	418.1	465.7	536.0	620.3	706.3	757.4	755.4	707.1	642.2
40°	345.4	367.6	399.8	449.9	523.7	615.0	696.7	729.9	701.8	634.3	556.7
42.5°	328.2	348.6	380.9	432.3	510.2	604.4	678.3	687.9	632.9	555.3	484.1
45°	301.5	319.5	352.9	406.0	489.8	581.0	633.3	609.7	535.7	455.6	401.4
47.5°	272.8	291.5	323.6	378.2	460.5	545.9	570.8	520.8	444.9	379.8	330.1
50°	254.7	272.7	304.2	359.2	440.7	517.1	527.4	462.9	393.0	335.9	295.1
52.5°	236.5	253.4	284.3	339.6	417.5	483.7	477.4	411.6	347.4	298.7	266.6
55°	209.2	225.3	254.7	306.5	377.5	429.9	406.9	344.1	291.0	253.2	228.8
57.5°	184.9	200.3	225.6	272.5	334.1	370.2	340.9	287.9	245.7	216.6	198.5
60°	168.4	182.0	206.2	249.7	303.2	330.6	301.7	255.0	219.3	196.0	179.8
62.5°	152.8	164.7	187.0	226.5	273.1	296.1	266.7	227.2	196.9	176.3	162.4
65°	129.1	139.9	159.7	190.4	228.6	243.9	218.7	186.6	163.2	147.8	138.6
67.5°	107.5	116.7	133.7	157.9	186.1	197.2	178.0	153.2	135.4	123.1	115.8
70°	93.1	101.0	114.4	135.3	160.7	169.3	151.3	130.8	117.9	108.0	101.2
72.5°	81.0	86.8	99.0	115.1	136.3	143.1	130.5	112.6	100.6	93.1	87.7
75°	61.7	66.5	74.5	87.4	102.1	106.0	96.6	85.4	77.3	72.0	67.9
77.5°	44.5	48.1	53.7	61.7	71.9	75.5	69.6	62.0	56.1	52.6	50.2
80°	33.6	36.5	41.3	47.9	54.0	56.0	52.5	46.8	42.6	40.6	38.6
82.5°	24.8	26.4	29.3	33.8	38.0	40.3	37.4	33.9	31.7	29.9	29.1
85°	12.5	13.4	14.7	16.5	19.1	20.0	18.9	18.0	16.7	15.6	15.6
87.5°	5.5	5.8	7.1	7.8	9.0	10.2	10.7	10.9	11.4	11.0	11.1
90°	4.3	6.6	9.9	12.1	14.2	17.5	20.8	24.1	27.3	26.3	27.3
92.5°	20.2	29.3	37.9	47.1	63.3	92.0	139.1	185.3	168.4	127.1	92.2
95°	40.5	52.6	71.2	99.6	142.3	235.4	398.6	578.2	649.4	526.7	394.3
97.5°	64.6	74.0	90.2	118.3	164.5	253.4	437.3	736.8	1006.4	1076.7	982.7
100°	82.1	89.8	105.1	131.4	174.1	250.8	412.8	700.9	1037.1	1252.8	1291.1
102.5°	101.4	108.2	122.6	146.3	185.5	254.3	391.8	648.3	980.1	1261.5	1393.6
105°	130.4	136.9	150.1	170.8	204.8	263.9	376.7	583.7	880.4	1194.8	1423.6
107.5°	159.7	166.0	178.9	198.4	230.0	281.9	375.6	542.5	792.4	1077.8	1337.3
110°	180.7	186.2	198.2	216.8	247.5	296.8	380.0	526.7	742.4	1004.2	1255.0



TEST NUMBER: P331903-830

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	200.0	205.5	217.4	236.1	265.9	311.7	388.8	518.0	709.2	940.3	1173.5
115°	228.8	235.4	246.4	265.0	294.5	336.2	403.0	514.7	673.4	862.9	1065.5
117.5°	257.3	262.8	272.9	293.7	321.1	362.2	421.8	516.7	652.4	816.2	987.3
120°	274.8	280.3	291.3	312.1	339.5	378.9	435.8	520.2	642.8	791.7	946.1
122.5°	291.5	297.0	308.8	328.8	357.9	396.4	449.0	526.3	636.7	771.6	913.7
125°	314.3	320.8	332.9	353.7	383.2	421.6	469.8	535.5	628.6	745.7	870.6
127.5°	333.6	341.7	353.9	376.9	406.5	443.5	486.9	546.0	624.6	723.0	832.9
130°	345.0	354.8	368.0	391.0	420.5	456.7	498.2	553.0	622.0	710.7	809.3
132.5°	354.6	365.3	381.1	404.1	432.8	468.1	508.8	558.3	621.1	699.4	787.4
135°	370.1	382.2	398.6	421.6	451.2	485.1	522.4	566.2	619.8	684.5	757.8
137.5°	384.8	396.6	414.2	437.0	464.3	496.9	532.4	571.5	617.4	671.5	730.8
140°	395.3	406.2	423.8	445.7	473.1	504.8	537.7	575.0	616.5	663.6	715.1
142.5°	405.0	416.8	432.5	454.5	480.1	511.0	542.9	577.6	614.8	656.6	700.2
145°	420.5	430.4	446.8	465.4	490.6	519.1	548.7	579.3	612.2	647.2	682.2
147.5°	436.3	445.9	460.1	478.2	499.5	525.7	552.1	579.3	608.0	638.0	667.6
150°	446.8	455.5	469.8	485.1	504.8	530.0	553.0	579.3	604.5	631.9	657.0
152.5°	457.3	466.1	478.5	492.1	511.0	532.6	554.8	576.6	600.1	624.9	647.4
155°	474.2	480.8	491.7	503.7	519.1	537.7	555.3	573.8	592.5	614.3	632.9
157.5°	488.6	493.9	503.5	513.8	525.7	540.5	556.3	570.1	585.7	602.5	617.6
160°	498.2	502.7	511.4	519.1	530.0	543.2	556.3	568.4	580.4	594.7	608.9
162.5°	506.1	509.6	516.7	523.5	532.6	544.0	555.4	564.9	575.1	586.7	598.3
165°	516.9	519.1	524.5	529.0	536.6	545.4	553.0	559.6	567.2	576.0	584.8
167.5°	525.7	526.7	530.9	534.0	538.8	545.2	551.3	554.3	559.4	565.7	573.0
170°	530.0	531.1	534.4	536.6	538.8	544.2	548.7	550.8	554.1	559.6	565.1
172.5°	534.4	534.6	537.1	538.4	539.7	544.2	547.8	548.2	549.7	553.5	558.1
175°	538.8	537.7	539.9	539.9	541.0	543.2	545.4	544.2	544.2	546.5	548.7
177.5°	541.0	540.1	541.0	541.0	541.0	541.9	543.6	541.9	541.0	541.9	542.7
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	476.9	477.1	479.0	480.4	479.8	480.6	481.0
5°	521.0	529.0	533.1	536.2	536.4	536.7	538.4
7.5°	583.6	592.1	598.3	607.8	610.5	613.7	612.8
10°	629.3	641.9	652.6	658.3	664.5	673.4	666.2
12.5°	672.0	694.2	710.6	719.4	725.2	727.0	723.5
15°	742.4	771.4	786.9	786.6	806.3	814.8	801.4
17.5°	806.9	833.7	855.2	866.1	882.6	886.2	884.6
20°	846.5	875.7	892.4	911.3	919.8	927.5	928.8
22.5°	880.5	906.8	924.7	940.4	947.5	951.2	953.4
25°	915.7	936.3	947.1	952.5	954.5	954.0	951.2
27.5°	913.2	914.8	903.0	891.4	880.9	869.2	865.2
30°	889.5	871.1	838.1	819.4	792.0	770.2	779.1
32.5°	827.2	790.4	753.5	712.7	678.9	669.3	659.6
35°	706.0	641.4	603.6	559.7	542.2	524.6	512.5
37.5°	571.1	521.2	476.4	447.7	430.1	419.0	413.0
40°	493.8	448.8	411.9	388.6	375.2	362.8	361.0
42.5°	432.2	390.3	362.6	344.0	331.2	325.8	322.0
45°	353.9	324.8	306.1	292.9	284.4	281.1	276.6
47.5°	299.6	279.0	264.9	256.0	249.5	247.0	246.8
50°	269.2	252.0	241.8	234.7	229.7	228.8	225.3
52.5°	246.4	231.5	223.5	217.4	213.7	211.2	210.2
55°	213.9	204.0	196.7	193.2	190.4	187.9	187.9
57.5°	187.1	178.9	174.1	171.1	170.2	168.5	167.4
60°	170.6	163.6	159.9	157.2	155.4	155.7	153.7
62.5°	154.5	149.9	146.3	143.7	141.6	141.7	141.8
65°	131.5	128.0	125.4	124.5	123.2	121.7	122.1
67.5°	111.5	108.2	106.1	104.6	104.2	103.3	104.6
70°	97.1	94.6	93.1	91.8	91.3	91.5	92.7
72.5°	83.9	82.2	81.2	80.6	79.6	79.6	80.4
75°	65.9	64.6	63.7	63.1	62.8	62.8	62.8
77.5°	48.4	48.1	47.7	46.8	46.8	47.0	47.0
80°	38.2	37.5	37.3	36.9	36.2	35.8	36.9
82.5°	28.6	27.9	27.7	27.6	26.6	26.5	27.4
85°	15.4	14.7	14.9	14.7	14.7	14.5	14.5
87.5°	11.1	11.2	11.4	11.4	11.4	11.5	11.6
90°	28.5	29.6	31.8	30.6	31.8	32.9	31.8
92.5°	73.1	64.6	58.9	56.9	53.6	54.8	52.8
95°	267.2	209.2	169.8	148.9	139.1	131.4	127.1
97.5°	787.1	645.9	514.9	434.1	384.8	355.2	345.8
100°	1202.4	1074.3	918.8	808.1	728.2	685.5	686.6
102.5°	1390.7	1316.1	1217.5	1131.4	1068.2	1032.5	1007.3
105°	1533.1	1554.0	1525.5	1475.1	1433.5	1398.5	1393.0
107.5°	1515.1	1611.1	1650.1	1651.0	1636.9	1625.1	1615.0
110°	1456.5	1594.5	1671.1	1701.8	1710.5	1708.4	1706.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	1379.4	1534.0	1632.6	1688.7	1715.8	1724.1	1724.6
115°	1256.0	1417.0	1536.4	1618.5	1666.7	1688.7	1694.1
117.5°	1151.8	1296.4	1417.5	1503.2	1558.3	1589.9	1597.3
120°	1094.0	1225.4	1336.1	1422.5	1483.8	1510.1	1516.7
122.5°	1047.5	1169.3	1272.1	1349.0	1404.1	1433.0	1441.3
125°	990.0	1095.0	1182.7	1252.8	1301.0	1328.3	1336.1
127.5°	939.3	1034.2	1113.9	1176.4	1217.5	1242.3	1249.2
130°	907.9	996.6	1071.0	1129.1	1168.5	1191.5	1200.2
132.5°	878.1	960.6	1031.6	1086.1	1125.5	1145.9	1152.1
135°	835.6	906.7	969.1	1022.8	1055.6	1075.3	1083.1
137.5°	794.6	855.9	910.0	955.2	988.4	1005.0	1010.1
140°	770.9	823.5	870.6	912.2	942.9	960.4	959.3
142.5°	748.2	793.7	834.7	870.2	897.3	913.0	912.0
145°	718.4	753.5	785.1	812.6	835.6	844.3	846.5
147.5°	696.3	724.5	747.1	767.9	783.4	791.7	792.6
150°	682.2	705.2	726.0	742.4	754.5	761.1	761.1
152.5°	669.1	689.5	706.8	719.7	730.8	734.8	734.8
155°	650.4	666.9	680.0	689.9	698.7	700.9	701.9
157.5°	632.4	645.0	655.3	663.8	670.4	672.1	671.9
160°	620.9	631.9	639.5	647.2	653.7	653.7	652.7
162.5°	608.7	618.7	625.5	630.6	636.2	636.2	635.2
165°	591.4	599.0	604.5	608.9	613.2	612.2	612.2
167.5°	578.0	582.4	586.4	588.2	591.4	590.2	590.2
170°	568.4	572.7	575.0	576.0	578.2	577.1	577.1
172.5°	560.4	564.0	565.2	565.5	567.7	565.7	564.9
175°	549.7	552.0	552.0	552.0	553.0	552.0	550.8
177.5°	543.6	544.5	544.5	543.6	544.5	542.7	542.7
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0

(END OF REPORT)