

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: P331901-830

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331901-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
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-A
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1195 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

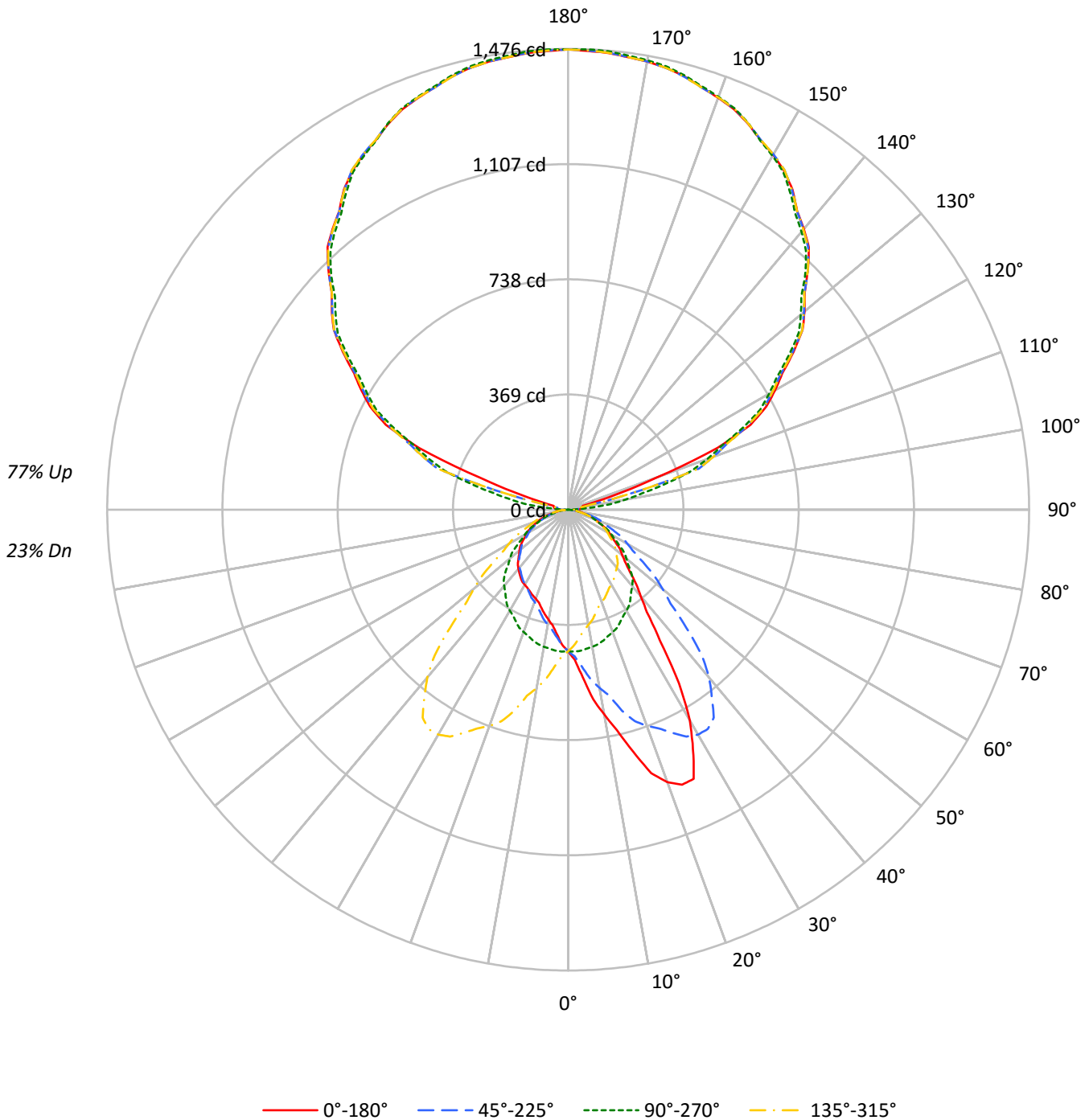
Lumens per Lamp: N/A
Luminaire Lumens: 5866.8 lumens
Efficiency: N/A
Efficacy: 139.0 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: Semi-Indirect

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	69	69	69	49	49	49	32	32	32	23
1	92	88	84	81	82	78	75	72	60	58	56	43	42	41	28	27	27	20
2	84	77	71	66	74	68	64	59	53	49	47	38	36	34	25	24	23	17
3	76	67	61	55	68	60	54	50	47	43	39	34	31	29	22	21	20	14
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	12
5	64	53	45	40	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	11	8
8	50	39	31	26	45	35	28	24	27	22	19	20	17	15	13	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	12	11	9	7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	11	10	8	6

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	2.4
20°-30°	240.3	4.1
30°-40°	272.0	4.6
40°-50°	244.0	4.2
50°-60°	196.9	3.4
60°-70°	137.2	2.3
70°-80°	72.1	1.2
80°-90°	21.8	0.4
90°-100°	53.6	0.9
100°-110°	255.4	4.4
110°-120°	613.5	10.5
120°-130°	781.2	13.3
130°-140°	834.7	14.2
140°-150°	780.5	13.3
150°-160°	629.6	10.7
160°-170°	406.3	6.9
170°-180°	140.0	2.4
0°-30°	428.1	7.3
0°-40°	700.1	11.9
0°-60°	1140.9	19.4
0°-90°	1372.0	23.4
90°-120°	922.4	15.7
90°-150°	3318.8	56.6
90°-180°	4495.0	76.6
0°-180°	5866.8	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°	33	1	33	1	33	16
95°	42	67	42	67	42	35
105°	48	326	48	326	48	110
115°	644	612	644	612	644	595
125°	880	863	880	863	880	786
135°	1085	1074	1085	1074	1085	837
145°	1252	1240	1252	1240	1252	781
155°	1363	1366	1363	1366	1363	629
165°	1437	1440	1437	1440	1437	406
175°	1468	1474	1468	1474	1468	140
180°	1474	1474	1474	1474	1474	



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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°	11.9	11.4	11.5	11.6	11.3	11.3	11.3	11.3	11.2	11.2	10.7
90°	32.9	32.3	31.9	31.4	30.9	30.2	29.2	28.2	27.2	26.3	23.1
92.5°	36.4	36.1	35.8	35.4	35.2	34.3	32.7	31.1	29.6	28.0	25.6
95°	41.6	41.6	41.6	41.6	41.6	40.7	39.0	37.3	35.6	33.9	31.3
97.5°	45.1	44.9	44.7	44.4	44.1	43.1	41.1	39.1	37.2	35.3	32.8
100°	46.0	45.7	45.5	45.2	45.1	43.9	41.9	40.1	38.1	36.1	34.1
102.5°	46.8	46.5	46.0	45.5	45.1	47.9	53.9	59.9	66.0	72.0	113.5
105°	48.2	47.7	47.2	46.8	46.3	67.5	110.6	153.6	196.7	239.8	261.7
107.5°	151.4	183.8	216.2	248.7	281.2	313.2	344.8	376.4	407.9	439.6	436.1
110°	301.1	335.9	370.7	405.6	440.4	461.8	469.8	477.8	485.9	493.9	491.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	516.6	524.0	531.3	538.7	546.0	549.7	549.5	549.3	549.2	549.0	546.4
115°	643.9	642.9	642.0	640.9	640.0	638.3	635.8	633.4	631.0	628.6	626.4
117.5°	715.3	715.1	714.9	714.7	714.5	713.4	711.5	709.5	707.6	705.7	704.6
120°	764.3	764.3	764.3	764.3	764.3	763.4	761.4	759.5	757.5	755.5	754.9
122.5°	812.6	812.4	812.1	811.9	811.7	811.0	809.6	808.2	806.9	805.5	804.6
125°	880.4	880.0	879.5	878.9	878.4	878.0	877.5	877.0	876.6	876.0	875.1
127.5°	945.7	946.2	946.7	947.2	947.6	947.4	946.7	945.9	945.2	944.3	943.2
130°	987.8	988.3	988.7	989.2	989.7	989.5	988.4	987.5	986.6	985.5	984.6
132.5°	1026.2	1027.0	1027.7	1028.3	1029.0	1028.9	1027.9	1026.9	1026.0	1025.0	1024.2
135°	1085.2	1085.9	1086.7	1087.4	1088.2	1088.2	1087.4	1086.7	1085.9	1085.2	1084.2
137.5°	1140.6	1141.1	1141.6	1142.1	1142.6	1142.2	1141.0	1139.9	1138.7	1137.6	1137.0
140°	1173.9	1174.4	1174.9	1175.4	1175.8	1175.6	1174.6	1173.7	1172.7	1171.7	1171.0
142.5°	1204.6	1205.2	1205.9	1206.6	1207.3	1207.2	1206.5	1205.7	1204.9	1204.1	1203.4
145°	1251.6	1251.6	1251.6	1251.6	1251.6	1251.4	1250.9	1250.5	1249.9	1249.4	1249.0
147.5°	1286.7	1287.8	1288.9	1290.1	1291.2	1291.5	1291.0	1290.5	1290.1	1289.5	1289.0
150°	1313.0	1313.7	1314.5	1315.1	1315.9	1316.0	1315.5	1315.0	1314.6	1314.1	1313.6
152.5°	1334.0	1335.1	1336.2	1337.4	1338.5	1338.6	1337.8	1336.8	1336.0	1335.1	1334.8
155°	1363.4	1364.8	1366.3	1367.7	1369.1	1369.3	1368.1	1366.9	1365.6	1364.4	1364.2
157.5°	1388.1	1390.0	1391.9	1393.8	1395.7	1395.9	1394.4	1393.0	1391.6	1390.1	1390.3
160°	1403.8	1405.5	1407.3	1409.0	1410.7	1410.8	1409.3	1407.9	1406.5	1405.0	1405.2
162.5°	1418.7	1420.2	1421.7	1423.2	1424.7	1424.7	1423.1	1421.4	1419.8	1418.1	1418.3
165°	1436.7	1438.4	1440.1	1441.8	1443.5	1443.4	1441.4	1439.5	1437.6	1435.6	1435.9
167.5°	1449.6	1451.6	1453.5	1455.5	1457.5	1457.5	1455.5	1453.5	1451.6	1449.6	1449.6
170°	1457.5	1459.4	1461.4	1463.4	1465.3	1465.3	1463.4	1461.4	1459.4	1457.5	1457.5
172.5°	1461.9	1464.1	1466.2	1468.3	1470.5	1470.6	1468.6	1466.7	1464.7	1462.7	1462.5
175°	1468.5	1470.5	1472.3	1474.3	1476.2	1476.4	1474.7	1473.0	1471.3	1469.5	1469.3
177.5°	1470.5	1472.3	1474.3	1476.3	1478.2	1478.4	1476.9	1475.3	1473.8	1472.2	1472.0
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



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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°	10.5	10.0	8.9	7.6	6.8	5.7	5.3	4.4	4.5	5.1	5.4
90°	20.0	16.8	13.7	10.8	8.4	5.9	3.5	1.1	3.5	5.9	8.4
92.5°	23.3	20.9	18.5	17.6	18.3	19.0	19.7	20.4	19.7	19.0	18.3
95°	28.6	25.9	23.3	26.9	36.9	46.8	56.8	66.8	56.8	46.8	36.9
97.5°	70.3	87.8	105.4	116.3	120.8	125.3	129.8	134.2	129.8	125.3	120.8
100°	112.1	150.1	187.9	204.5	199.6	194.8	189.9	185.0	189.9	194.8	199.6
102.5°	155.0	196.4	237.9	256.9	253.4	249.9	246.4	242.9	246.4	249.9	253.4
105°	283.6	305.5	327.4	337.1	334.3	331.7	329.0	326.3	329.0	331.7	334.3
107.5°	432.6	429.2	425.7	422.9	420.8	418.7	416.5	414.3	416.5	418.7	420.8
110°	488.5	485.9	483.1	480.9	478.9	476.9	475.0	473.1	475.0	476.9	478.9



TEST NUMBER: P331901-830

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	543.8	541.0	538.4	536.1	534.4	532.6	530.8	529.1	530.8	532.6	534.4
115°	624.2	622.0	619.8	617.9	616.5	615.0	613.6	612.2	613.6	615.0	616.5
117.5°	703.4	702.3	701.2	699.7	698.0	696.1	694.3	692.5	694.3	696.1	698.0
120°	754.1	753.4	752.7	751.2	749.0	746.9	744.6	742.4	744.6	746.9	749.0
122.5°	803.7	802.8	801.8	800.5	798.6	796.8	795.0	793.2	795.0	796.8	798.6
125°	874.1	873.1	872.1	870.7	868.7	866.8	864.9	862.9	864.9	866.8	868.7
127.5°	942.1	940.8	939.7	938.1	936.2	934.2	932.3	930.4	932.3	934.2	936.2
130°	983.6	982.6	981.7	980.1	978.3	976.3	974.4	972.4	974.4	976.3	978.3
132.5°	1023.4	1022.7	1021.8	1020.5	1018.5	1016.6	1014.6	1012.7	1014.6	1016.6	1018.5
135°	1083.3	1082.3	1081.3	1080.1	1078.6	1077.1	1075.7	1074.2	1075.7	1077.1	1078.6
137.5°	1136.5	1136.0	1135.4	1134.3	1132.4	1130.5	1128.7	1126.8	1128.7	1130.5	1132.4
140°	1170.3	1169.5	1168.8	1167.7	1166.2	1164.8	1163.3	1161.9	1163.3	1164.8	1166.2
142.5°	1202.7	1201.9	1201.2	1200.1	1198.6	1197.2	1195.7	1194.3	1195.7	1197.2	1198.6
145°	1248.5	1248.0	1247.5	1246.4	1244.7	1243.0	1241.3	1239.6	1241.3	1243.0	1244.7
147.5°	1288.5	1288.1	1287.6	1286.8	1285.6	1284.6	1283.5	1282.3	1283.5	1284.6	1285.6
150°	1313.1	1312.6	1312.1	1311.5	1310.8	1310.0	1309.3	1308.6	1309.3	1310.0	1310.8
152.5°	1334.5	1334.2	1333.9	1333.6	1333.2	1332.9	1332.6	1332.3	1332.6	1332.9	1333.2
155°	1364.0	1363.7	1363.5	1363.6	1364.0	1364.5	1365.1	1365.6	1365.1	1364.5	1364.0
157.5°	1390.5	1390.8	1391.0	1391.2	1391.2	1391.3	1391.3	1391.4	1391.3	1391.3	1391.2
160°	1405.4	1405.7	1405.9	1406.2	1406.5	1406.7	1406.9	1407.1	1406.9	1406.7	1406.5
162.5°	1418.6	1418.8	1419.1	1419.5	1420.1	1420.8	1421.4	1422.0	1421.4	1420.8	1420.1
165°	1436.1	1436.3	1436.6	1437.1	1437.8	1438.5	1439.3	1440.0	1439.3	1438.5	1437.8
167.5°	1449.6	1449.6	1449.6	1450.1	1451.1	1452.1	1453.0	1454.1	1453.0	1452.1	1451.1
170°	1457.5	1457.5	1457.5	1458.0	1459.0	1460.0	1460.9	1461.9	1460.9	1460.0	1459.0
172.5°	1462.4	1462.2	1462.0	1462.4	1463.7	1464.8	1466.0	1467.2	1466.0	1464.8	1463.7
175°	1469.0	1468.9	1468.6	1469.0	1470.3	1471.5	1472.7	1473.9	1472.7	1471.5	1470.3
177.5°	1471.8	1471.6	1471.4	1471.8	1472.8	1473.8	1474.7	1475.7	1474.7	1473.8	1472.8
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P331901-830

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

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°	5.7	6.4	6.9	7.6	8.1	9.0	9.1	9.0	9.1	9.9	9.3
90°	10.8	13.7	16.8	20.0	23.1	26.3	27.2	28.2	29.2	30.2	30.9
92.5°	17.6	18.5	20.9	23.3	25.6	28.0	29.6	31.1	32.7	34.3	35.2
95°	26.9	23.3	25.9	28.6	31.3	33.9	35.6	37.3	39.0	40.7	41.6
97.5°	116.3	105.4	87.8	70.3	52.8	35.3	37.2	39.1	41.1	43.1	44.1
100°	204.5	187.9	150.1	112.1	74.1	36.1	38.1	40.1	41.9	43.9	45.1
102.5°	256.9	237.9	196.4	155.0	113.5	72.0	66.0	59.9	53.9	47.9	45.1
105°	337.1	327.4	305.5	283.6	261.7	239.8	196.7	153.6	110.6	67.5	46.3
107.5°	422.9	425.7	429.2	432.6	436.1	439.6	407.9	376.4	344.8	313.2	281.2
110°	480.9	483.1	485.9	488.5	491.2	493.9	485.9	477.8	469.8	461.8	440.4



TEST NUMBER: P331901-830

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

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	536.1	538.4	541.0	543.8	546.4	549.0	549.2	549.3	549.5	549.7	546.0
115°	617.9	619.8	622.0	624.2	626.4	628.6	631.0	633.4	635.8	638.3	640.0
117.5°	699.7	701.2	702.3	703.4	704.6	705.7	707.6	709.5	711.5	713.4	714.5
120°	751.2	752.7	753.4	754.1	754.9	755.5	757.5	759.5	761.4	763.4	764.3
122.5°	800.5	801.8	802.8	803.7	804.6	805.5	806.9	808.2	809.6	811.0	811.7
125°	870.7	872.1	873.1	874.1	875.1	876.0	876.6	877.0	877.5	878.0	878.4
127.5°	938.1	939.7	940.8	942.1	943.2	944.3	945.2	945.9	946.7	947.4	947.6
130°	980.1	981.7	982.6	983.6	984.6	985.5	986.6	987.5	988.4	989.5	989.7
132.5°	1020.5	1021.8	1022.7	1023.4	1024.2	1025.0	1026.0	1026.9	1027.9	1028.9	1029.0
135°	1080.1	1081.3	1082.3	1083.3	1084.2	1085.2	1085.9	1086.7	1087.4	1088.2	1088.2
137.5°	1134.3	1135.4	1136.0	1136.5	1137.0	1137.6	1138.7	1139.9	1141.0	1142.2	1142.6
140°	1167.7	1168.8	1169.5	1170.3	1171.0	1171.7	1172.7	1173.7	1174.6	1175.6	1175.8
142.5°	1200.1	1201.2	1201.9	1202.7	1203.4	1204.1	1204.9	1205.7	1206.5	1207.2	1207.3
145°	1246.4	1247.5	1248.0	1248.5	1249.0	1249.4	1249.9	1250.5	1250.9	1251.4	1251.6
147.5°	1286.8	1287.6	1288.1	1288.5	1289.0	1289.5	1290.1	1290.5	1291.0	1291.5	1291.2
150°	1311.5	1312.1	1312.6	1313.1	1313.6	1314.1	1314.6	1315.0	1315.5	1316.0	1315.9
152.5°	1333.6	1333.9	1334.2	1334.5	1334.8	1335.1	1336.0	1336.8	1337.8	1338.6	1338.5
155°	1363.6	1363.5	1363.7	1364.0	1364.2	1364.4	1365.6	1366.9	1368.1	1369.3	1369.1
157.5°	1391.2	1391.0	1390.8	1390.5	1390.3	1390.1	1391.6	1393.0	1394.4	1395.9	1395.7
160°	1406.2	1405.9	1405.7	1405.4	1405.2	1405.0	1406.5	1407.9	1409.3	1410.8	1410.7
162.5°	1419.5	1419.1	1418.8	1418.6	1418.3	1418.1	1419.8	1421.4	1423.1	1424.7	1424.7
165°	1437.1	1436.6	1436.3	1436.1	1435.9	1435.6	1437.6	1439.5	1441.4	1443.4	1443.5
167.5°	1450.1	1449.6	1449.6	1449.6	1449.6	1449.6	1451.6	1453.5	1455.5	1457.5	1457.5
170°	1458.0	1457.5	1457.5	1457.5	1457.5	1457.5	1459.4	1461.4	1463.4	1465.3	1465.3
172.5°	1462.4	1462.0	1462.2	1462.4	1462.5	1462.7	1464.7	1466.7	1468.6	1470.6	1470.5
175°	1469.0	1468.6	1468.9	1469.0	1469.3	1469.5	1471.3	1473.0	1474.7	1476.4	1476.2
177.5°	1471.8	1471.4	1471.6	1471.8	1472.0	1472.2	1473.8	1475.3	1476.9	1478.4	1478.2
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P331901-830

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

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°	9.4	9.5	9.4	9.4	9.4	9.5	9.4	9.3	9.9	9.1	9.0
90°	31.4	31.9	32.3	32.9	32.3	31.9	31.4	30.9	30.2	29.2	28.2
92.5°	35.4	35.8	36.1	36.4	36.1	35.8	35.4	35.2	34.3	32.7	31.1
95°	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	40.7	39.0	37.3
97.5°	44.4	44.7	44.9	45.1	44.9	44.7	44.4	44.1	43.1	41.1	39.1
100°	45.2	45.5	45.7	46.0	45.7	45.5	45.2	45.1	43.9	41.9	40.1
102.5°	45.5	46.0	46.5	46.8	46.5	46.0	45.5	45.1	47.9	53.9	59.9
105°	46.8	47.2	47.7	48.2	47.7	47.2	46.8	46.3	67.5	110.6	153.6
107.5°	248.7	216.2	183.8	151.4	183.8	216.2	248.7	281.2	313.2	344.8	376.4
110°	405.6	370.7	335.9	301.1	335.9	370.7	405.6	440.4	461.8	469.8	477.8



TEST NUMBER: P331901-830

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	538.7	531.3	524.0	516.6	524.0	531.3	538.7	546.0	549.7	549.5	549.3
115°	640.9	642.0	642.9	643.9	642.9	642.0	640.9	640.0	638.3	635.8	633.4
117.5°	714.7	714.9	715.1	715.3	715.1	714.9	714.7	714.5	713.4	711.5	709.5
120°	764.3	764.3	764.3	764.3	764.3	764.3	764.3	764.3	763.4	761.4	759.5
122.5°	811.9	812.1	812.4	812.6	812.4	812.1	811.9	811.7	811.0	809.6	808.2
125°	878.9	879.5	880.0	880.4	880.0	879.5	878.9	878.4	878.0	877.5	877.0
127.5°	947.2	946.7	946.2	945.7	946.2	946.7	947.2	947.6	947.4	946.7	945.9
130°	989.2	988.7	988.3	987.8	988.3	988.7	989.2	989.7	989.5	988.4	987.5
132.5°	1028.3	1027.7	1027.0	1026.2	1027.0	1027.7	1028.3	1029.0	1028.9	1027.9	1026.9
135°	1087.4	1086.7	1085.9	1085.2	1085.9	1086.7	1087.4	1088.2	1088.2	1087.4	1086.7
137.5°	1142.1	1141.6	1141.1	1140.6	1141.1	1141.6	1142.1	1142.6	1142.2	1141.0	1139.9
140°	1175.4	1174.9	1174.4	1173.9	1174.4	1174.9	1175.4	1175.8	1175.6	1174.6	1173.7
142.5°	1206.6	1205.9	1205.2	1204.6	1205.2	1205.9	1206.6	1207.3	1207.2	1206.5	1205.7
145°	1251.6	1251.6	1251.6	1251.6	1251.6	1251.6	1251.6	1251.6	1251.4	1250.9	1250.5
147.5°	1290.1	1288.9	1287.8	1286.7	1287.8	1288.9	1290.1	1291.2	1291.5	1291.0	1290.5
150°	1315.1	1314.5	1313.7	1313.0	1313.7	1314.5	1315.1	1315.9	1316.0	1315.5	1315.0
152.5°	1337.4	1336.2	1335.1	1334.0	1335.1	1336.2	1337.4	1338.5	1338.6	1337.8	1336.8
155°	1367.7	1366.3	1364.8	1363.4	1364.8	1366.3	1367.7	1369.1	1369.3	1368.1	1366.9
157.5°	1393.8	1391.9	1390.0	1388.1	1390.0	1391.9	1393.8	1395.7	1395.9	1394.4	1393.0
160°	1409.0	1407.3	1405.5	1403.8	1405.5	1407.3	1409.0	1410.7	1410.8	1409.3	1407.9
162.5°	1423.2	1421.7	1420.2	1418.7	1420.2	1421.7	1423.2	1424.7	1424.7	1423.1	1421.4
165°	1441.8	1440.1	1438.4	1436.7	1438.4	1440.1	1441.8	1443.5	1443.4	1441.4	1439.5
167.5°	1455.5	1453.5	1451.6	1449.6	1451.6	1453.5	1455.5	1457.5	1457.5	1455.5	1453.5
170°	1463.4	1461.4	1459.4	1457.5	1459.4	1461.4	1463.4	1465.3	1465.3	1463.4	1461.4
172.5°	1468.3	1466.2	1464.1	1461.9	1464.1	1466.2	1468.3	1470.5	1470.6	1468.6	1466.7
175°	1474.3	1472.3	1470.5	1468.5	1470.5	1472.3	1474.3	1476.2	1476.4	1474.7	1473.0
177.5°	1476.3	1474.3	1472.3	1470.5	1472.3	1474.3	1476.3	1478.2	1478.4	1476.9	1475.3
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P331901-830

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

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°	9.1	9.0	8.1	7.6	6.9	6.4	5.7	5.4	5.1	4.5	4.4
90°	27.2	26.3	23.1	20.0	16.8	13.7	10.8	8.4	5.9	3.5	1.1
92.5°	29.6	28.0	25.6	23.3	20.9	18.5	17.6	18.3	19.0	19.7	20.4
95°	35.6	33.9	31.3	28.6	25.9	23.3	26.9	36.9	46.8	56.8	66.8
97.5°	37.2	35.3	52.8	70.3	87.8	105.4	116.3	120.8	125.3	129.8	134.2
100°	38.1	36.1	74.1	112.1	150.1	187.9	204.5	199.6	194.8	189.9	185.0
102.5°	66.0	72.0	113.5	155.0	196.4	237.9	256.9	253.4	249.9	246.4	242.9
105°	196.7	239.8	261.7	283.6	305.5	327.4	337.1	334.3	331.7	329.0	326.3
107.5°	407.9	439.6	436.1	432.6	429.2	425.7	422.9	420.8	418.7	416.5	414.3
110°	485.9	493.9	491.2	488.5	485.9	483.1	480.9	478.9	476.9	475.0	473.1



TEST NUMBER: P331901-830

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

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	549.2	549.0	546.4	543.8	541.0	538.4	536.1	534.4	532.6	530.8	529.1
115°	631.0	628.6	626.4	624.2	622.0	619.8	617.9	616.5	615.0	613.6	612.2
117.5°	707.6	705.7	704.6	703.4	702.3	701.2	699.7	698.0	696.1	694.3	692.5
120°	757.5	755.5	754.9	754.1	753.4	752.7	751.2	749.0	746.9	744.6	742.4
122.5°	806.9	805.5	804.6	803.7	802.8	801.8	800.5	798.6	796.8	795.0	793.2
125°	876.6	876.0	875.1	874.1	873.1	872.1	870.7	868.7	866.8	864.9	862.9
127.5°	945.2	944.3	943.2	942.1	940.8	939.7	938.1	936.2	934.2	932.3	930.4
130°	986.6	985.5	984.6	983.6	982.6	981.7	980.1	978.3	976.3	974.4	972.4
132.5°	1026.0	1025.0	1024.2	1023.4	1022.7	1021.8	1020.5	1018.5	1016.6	1014.6	1012.7
135°	1085.9	1085.2	1084.2	1083.3	1082.3	1081.3	1080.1	1078.6	1077.1	1075.7	1074.2
137.5°	1138.7	1137.6	1137.0	1136.5	1136.0	1135.4	1134.3	1132.4	1130.5	1128.7	1126.8
140°	1172.7	1171.7	1171.0	1170.3	1169.5	1168.8	1167.7	1166.2	1164.8	1163.3	1161.9
142.5°	1204.9	1204.1	1203.4	1202.7	1201.9	1201.2	1200.1	1198.6	1197.2	1195.7	1194.3
145°	1249.9	1249.4	1249.0	1248.5	1248.0	1247.5	1246.4	1244.7	1243.0	1241.3	1239.6
147.5°	1290.1	1289.5	1289.0	1288.5	1288.1	1287.6	1286.8	1285.6	1284.6	1283.5	1282.3
150°	1314.6	1314.1	1313.6	1313.1	1312.6	1312.1	1311.5	1310.8	1310.0	1309.3	1308.6
152.5°	1336.0	1335.1	1334.8	1334.5	1334.2	1333.9	1333.6	1333.2	1332.9	1332.6	1332.3
155°	1365.6	1364.4	1364.2	1364.0	1363.7	1363.5	1363.6	1364.0	1364.5	1365.1	1365.6
157.5°	1391.6	1390.1	1390.3	1390.5	1390.8	1391.0	1391.2	1391.2	1391.3	1391.3	1391.4
160°	1406.5	1405.0	1405.2	1405.4	1405.7	1405.9	1406.2	1406.5	1406.7	1406.9	1407.1
162.5°	1419.8	1418.1	1418.3	1418.6	1418.8	1419.1	1419.5	1420.1	1420.8	1421.4	1422.0
165°	1437.6	1435.6	1435.9	1436.1	1436.3	1436.6	1437.1	1437.8	1438.5	1439.3	1440.0
167.5°	1451.6	1449.6	1449.6	1449.6	1449.6	1449.6	1450.1	1451.1	1452.1	1453.0	1454.1
170°	1459.4	1457.5	1457.5	1457.5	1457.5	1457.5	1458.0	1459.0	1460.0	1460.9	1461.9
172.5°	1464.7	1462.7	1462.5	1462.4	1462.2	1462.0	1462.4	1463.7	1464.8	1466.0	1467.2
175°	1471.3	1469.5	1469.3	1469.0	1468.9	1468.6	1469.0	1470.3	1471.5	1472.7	1473.9
177.5°	1473.8	1472.2	1472.0	1471.8	1471.6	1471.4	1471.8	1472.8	1473.8	1474.7	1475.7
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P331901-830

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

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°	5.3	5.7	6.8	7.6	8.9	10.0	10.5	10.7	11.2	11.2	11.3
90°	3.5	5.9	8.4	10.8	13.7	16.8	20.0	23.1	26.3	27.2	28.2
92.5°	19.7	19.0	18.3	17.6	18.5	20.9	23.3	25.6	28.0	29.6	31.1
95°	56.8	46.8	36.9	26.9	23.3	25.9	28.6	31.3	33.9	35.6	37.3
97.5°	129.8	125.3	120.8	116.3	105.4	87.8	70.3	52.8	35.3	37.2	39.1
100°	189.9	194.8	199.6	204.5	187.9	150.1	112.1	74.1	36.1	38.1	40.1
102.5°	246.4	249.9	253.4	256.9	237.9	196.4	155.0	113.5	72.0	66.0	59.9
105°	329.0	331.7	334.3	337.1	327.4	305.5	283.6	261.7	239.8	196.7	153.6
107.5°	416.5	418.7	420.8	422.9	425.7	429.2	432.6	436.1	439.6	407.9	376.4
110°	475.0	476.9	478.9	480.9	483.1	485.9	488.5	491.2	493.9	485.9	477.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	530.8	532.6	534.4	536.1	538.4	541.0	543.8	546.4	549.0	549.2	549.3
115°	613.6	615.0	616.5	617.9	619.8	622.0	624.2	626.4	628.6	631.0	633.4
117.5°	694.3	696.1	698.0	699.7	701.2	702.3	703.4	704.6	705.7	707.6	709.5
120°	744.6	746.9	749.0	751.2	752.7	753.4	754.1	754.9	755.5	757.5	759.5
122.5°	795.0	796.8	798.6	800.5	801.8	802.8	803.7	804.6	805.5	806.9	808.2
125°	864.9	866.8	868.7	870.7	872.1	873.1	874.1	875.1	876.0	876.6	877.0
127.5°	932.3	934.2	936.2	938.1	939.7	940.8	942.1	943.2	944.3	945.2	945.9
130°	974.4	976.3	978.3	980.1	981.7	982.6	983.6	984.6	985.5	986.6	987.5
132.5°	1014.6	1016.6	1018.5	1020.5	1021.8	1022.7	1023.4	1024.2	1025.0	1026.0	1026.9
135°	1075.7	1077.1	1078.6	1080.1	1081.3	1082.3	1083.3	1084.2	1085.2	1085.9	1086.7
137.5°	1128.7	1130.5	1132.4	1134.3	1135.4	1136.0	1136.5	1137.0	1137.6	1138.7	1139.9
140°	1163.3	1164.8	1166.2	1167.7	1168.8	1169.5	1170.3	1171.0	1171.7	1172.7	1173.7
142.5°	1195.7	1197.2	1198.6	1200.1	1201.2	1201.9	1202.7	1203.4	1204.1	1204.9	1205.7
145°	1241.3	1243.0	1244.7	1246.4	1247.5	1248.0	1248.5	1249.0	1249.4	1249.9	1250.5
147.5°	1283.5	1284.6	1285.6	1286.8	1287.6	1288.1	1288.5	1289.0	1289.5	1290.1	1290.5
150°	1309.3	1310.0	1310.8	1311.5	1312.1	1312.6	1313.1	1313.6	1314.1	1314.6	1315.0
152.5°	1332.6	1332.9	1333.2	1333.6	1333.9	1334.2	1334.5	1334.8	1335.1	1336.0	1336.8
155°	1365.1	1364.5	1364.0	1363.6	1363.5	1363.7	1364.0	1364.2	1364.4	1365.6	1366.9
157.5°	1391.3	1391.3	1391.2	1391.2	1391.0	1390.8	1390.5	1390.3	1390.1	1391.6	1393.0
160°	1406.9	1406.7	1406.5	1406.2	1405.9	1405.7	1405.4	1405.2	1405.0	1406.5	1407.9
162.5°	1421.4	1420.8	1420.1	1419.5	1419.1	1418.8	1418.6	1418.3	1418.1	1419.8	1421.4
165°	1439.3	1438.5	1437.8	1437.1	1436.6	1436.3	1436.1	1435.9	1435.6	1437.6	1439.5
167.5°	1453.0	1452.1	1451.1	1450.1	1449.6	1449.6	1449.6	1449.6	1449.6	1451.6	1453.5
170°	1460.9	1460.0	1459.0	1458.0	1457.5	1457.5	1457.5	1457.5	1457.5	1459.4	1461.4
172.5°	1466.0	1464.8	1463.7	1462.4	1462.0	1462.2	1462.4	1462.5	1462.7	1464.7	1466.7
175°	1472.7	1471.5	1470.3	1469.0	1468.6	1468.9	1469.0	1469.3	1469.5	1471.3	1473.0
177.5°	1474.7	1473.8	1472.8	1471.8	1471.4	1471.6	1471.8	1472.0	1472.2	1473.8	1475.3
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



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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°	11.3	11.3	11.3	11.6	11.5	11.4	11.9
90°	29.2	30.2	30.9	31.4	31.9	32.3	32.9
92.5°	32.7	34.3	35.2	35.4	35.8	36.1	36.4
95°	39.0	40.7	41.6	41.6	41.6	41.6	41.6
97.5°	41.1	43.1	44.1	44.4	44.7	44.9	45.1
100°	41.9	43.9	45.1	45.2	45.5	45.7	46.0
102.5°	53.9	47.9	45.1	45.5	46.0	46.5	46.8
105°	110.6	67.5	46.3	46.8	47.2	47.7	48.2
107.5°	344.8	313.2	281.2	248.7	216.2	183.8	151.4
110°	469.8	461.8	440.4	405.6	370.7	335.9	301.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	549.5	549.7	546.0	538.7	531.3	524.0	516.6
115°	635.8	638.3	640.0	640.9	642.0	642.9	643.9
117.5°	711.5	713.4	714.5	714.7	714.9	715.1	715.3
120°	761.4	763.4	764.3	764.3	764.3	764.3	764.3
122.5°	809.6	811.0	811.7	811.9	812.1	812.4	812.6
125°	877.5	878.0	878.4	878.9	879.5	880.0	880.4
127.5°	946.7	947.4	947.6	947.2	946.7	946.2	945.7
130°	988.4	989.5	989.7	989.2	988.7	988.3	987.8
132.5°	1027.9	1028.9	1029.0	1028.3	1027.7	1027.0	1026.2
135°	1087.4	1088.2	1088.2	1087.4	1086.7	1085.9	1085.2
137.5°	1141.0	1142.2	1142.6	1142.1	1141.6	1141.1	1140.6
140°	1174.6	1175.6	1175.8	1175.4	1174.9	1174.4	1173.9
142.5°	1206.5	1207.2	1207.3	1206.6	1205.9	1205.2	1204.6
145°	1250.9	1251.4	1251.6	1251.6	1251.6	1251.6	1251.6
147.5°	1291.0	1291.5	1291.2	1290.1	1288.9	1287.8	1286.7
150°	1315.5	1316.0	1315.9	1315.1	1314.5	1313.7	1313.0
152.5°	1337.8	1338.6	1338.5	1337.4	1336.2	1335.1	1334.0
155°	1368.1	1369.3	1369.1	1367.7	1366.3	1364.8	1363.4
157.5°	1394.4	1395.9	1395.7	1393.8	1391.9	1390.0	1388.1
160°	1409.3	1410.8	1410.7	1409.0	1407.3	1405.5	1403.8
162.5°	1423.1	1424.7	1424.7	1423.2	1421.7	1420.2	1418.7
165°	1441.4	1443.4	1443.5	1441.8	1440.1	1438.4	1436.7
167.5°	1455.5	1457.5	1457.5	1455.5	1453.5	1451.6	1449.6
170°	1463.4	1465.3	1465.3	1463.4	1461.4	1459.4	1457.5
172.5°	1468.6	1470.6	1470.5	1468.3	1466.2	1464.1	1461.9
175°	1474.7	1476.4	1476.2	1474.3	1472.3	1470.5	1468.5
177.5°	1476.9	1478.4	1478.2	1476.3	1474.3	1472.3	1470.5
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9

(END OF REPORT)