

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: P332108-830

Luminaire Tested: **S123DIW-S340D1320U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332108-830
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: S123DIW-S340D1320U830-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1320 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6347.1 lumens
Efficiency: N/A
Efficacy: 136.2 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

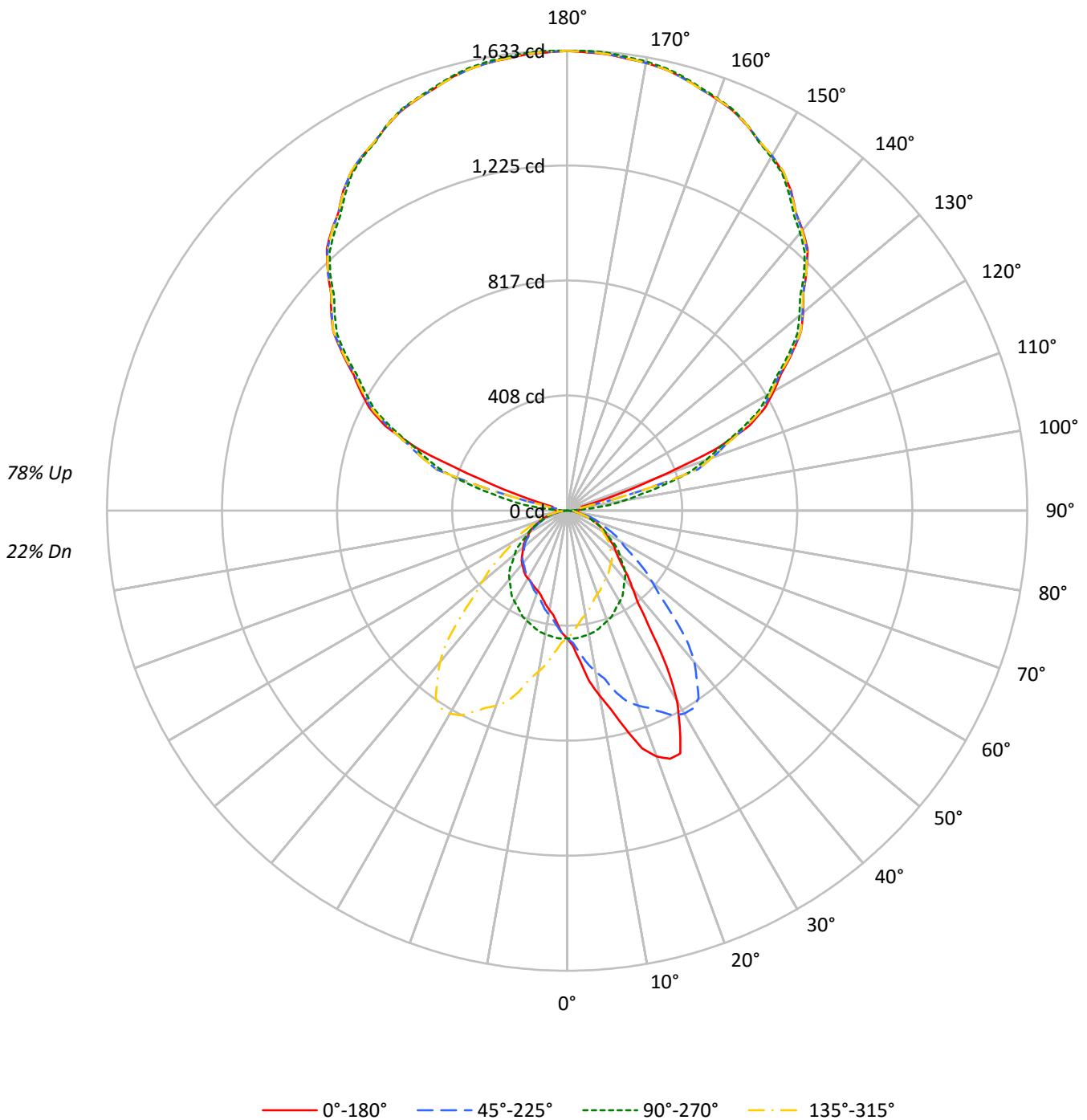
Input Watts (W): 46.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22				
1	92	87	84	80	81	78	75	72	59	57	55	42	41	40	27	26	26	18				
2	83	76	71	66	74	68	63	59	52	49	46	37	35	34	24	23	22	16				
3	76	67	60	55	67	60	54	49	46	42	39	33	30	28	21	20	18	13				
4	70	59	52	46	61	53	47	42	41	36	33	29	27	24	19	17	16	12				
5	64	53	45	39	56	47	41	36	36	32	28	26	23	21	17	15	14	10				
6	59	47	39	34	52	42	36	31	33	28	24	24	21	18	15	14	12	9				
7	54	42	35	30	48	38	31	27	29	25	21	21	18	16	14	12	11	8				
8	50	38	31	26	44	34	28	24	27	22	19	20	16	14	13	11	10	7				
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	6				
10	43	32	25	20	38	28	23	18	22	18	15	16	13	11	11	9	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	0.7
10°-20°	143.2	2.3
20°-30°	240.3	3.8
30°-40°	272.0	4.3
40°-50°	244.0	3.8
50°-60°	196.9	3.1
60°-70°	137.2	2.2
70°-80°	72.1	1.1
80°-90°	22.2	0.3
90°-100°	59.3	0.9
100°-110°	282.7	4.5
110°-120°	679.0	10.7
120°-130°	864.6	13.6
130°-140°	923.8	14.6
140°-150°	863.8	13.6
150°-160°	696.8	11.0
160°-170°	449.7	7.1
170°-180°	155.0	2.4
0°-30°	428.1	6.7
0°-40°	700.1	11.0
0°-60°	1140.9	18.0
0°-90°	1372.5	21.6
90°-120°	1020.9	16.1
90°-150°	3673.1	57.9
90°-180°	4975.0	78.4
0°-180°	6347.1	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°	36	1	36	1	36	17
95°	46	74	46	74	46	39
105°	53	361	53	361	53	122
115°	713	678	713	678	713	658
125°	974	955	974	955	974	870
135°	1201	1189	1201	1189	1201	926
145°	1385	1372	1385	1372	1385	865
155°	1509	1511	1509	1511	1509	696
165°	1590	1594	1590	1594	1590	449
175°	1625	1631	1625	1631	1625	155
180°	1631	1631	1631	1631	1631	



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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°	12.5	12.1	12.2	12.3	12.0	12.0	11.9	11.9	11.9	11.8	11.3
90°	36.4	35.8	35.3	34.8	34.2	33.4	32.3	31.2	30.2	29.1	25.5
92.5°	40.2	39.9	39.6	39.3	38.9	37.9	36.2	34.5	32.7	31.0	28.4
95°	46.1	46.1	46.1	46.1	46.1	45.1	43.3	41.4	39.5	37.6	34.6
97.5°	50.0	49.7	49.4	49.1	48.8	47.6	45.5	43.4	41.2	39.0	58.4
100°	50.9	50.6	50.3	50.0	49.9	48.6	46.5	44.3	42.1	40.0	82.0
102.5°	51.8	51.4	50.9	50.4	50.0	53.1	59.7	66.4	73.0	79.7	125.6
105°	53.3	52.8	52.2	51.7	51.2	74.7	122.4	170.0	217.7	265.4	289.6
107.5°	167.5	203.4	239.3	275.3	311.2	346.7	381.6	416.6	451.5	486.4	482.7
110°	333.3	371.8	410.3	448.8	487.3	511.0	519.9	528.8	537.7	546.6	543.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	571.8	579.9	588.1	596.2	604.4	608.3	608.1	608.0	607.8	607.7	604.7
115°	712.7	711.5	710.5	709.4	708.3	706.4	703.7	701.1	698.3	695.7	693.2
117.5°	791.6	791.5	791.2	791.0	790.8	789.6	787.4	785.3	783.2	781.0	779.8
120°	845.9	845.9	845.9	845.9	845.9	844.9	842.7	840.6	838.4	836.2	835.5
122.5°	899.3	899.1	898.8	898.6	898.4	897.6	896.1	894.6	893.1	891.6	890.5
125°	974.4	973.8	973.4	972.8	972.2	971.7	971.2	970.6	970.1	969.6	968.5
127.5°	1046.6	1047.2	1047.7	1048.3	1048.8	1048.7	1047.7	1046.9	1046.0	1045.2	1043.9
130°	1093.2	1093.7	1094.3	1094.8	1095.3	1095.0	1094.0	1092.9	1091.8	1090.7	1089.7
132.5°	1135.9	1136.6	1137.4	1138.1	1138.9	1138.7	1137.6	1136.5	1135.5	1134.3	1133.5
135°	1201.1	1201.8	1202.7	1203.4	1204.3	1204.3	1203.4	1202.7	1201.8	1201.1	1200.0
137.5°	1262.3	1262.9	1263.5	1263.9	1264.5	1264.1	1262.8	1261.6	1260.3	1259.0	1258.4
140°	1299.2	1299.8	1300.2	1300.8	1301.4	1301.1	1300.0	1298.9	1297.9	1296.8	1296.0
142.5°	1333.1	1333.9	1334.6	1335.4	1336.1	1336.1	1335.2	1334.4	1333.5	1332.7	1331.8
145°	1385.3	1385.3	1385.3	1385.3	1385.3	1385.0	1384.4	1383.9	1383.4	1382.8	1382.3
147.5°	1424.0	1425.3	1426.5	1427.8	1429.0	1429.4	1428.8	1428.2	1427.8	1427.2	1426.6
150°	1453.1	1454.0	1454.7	1455.6	1456.3	1456.5	1455.9	1455.4	1454.9	1454.3	1453.8
152.5°	1476.4	1477.6	1478.8	1480.1	1481.4	1481.5	1480.5	1479.5	1478.6	1477.6	1477.2
155°	1508.9	1510.5	1512.1	1513.7	1515.3	1515.5	1514.1	1512.8	1511.5	1510.0	1509.9
157.5°	1536.3	1538.3	1540.5	1542.6	1544.6	1544.9	1543.3	1541.7	1540.0	1538.4	1538.7
160°	1553.7	1555.6	1557.5	1559.3	1561.2	1561.4	1559.8	1558.1	1556.5	1554.9	1555.2
162.5°	1570.2	1571.9	1573.6	1575.2	1576.9	1576.8	1575.0	1573.1	1571.3	1569.4	1569.7
165°	1590.1	1592.0	1593.8	1595.7	1597.6	1597.5	1595.3	1593.2	1591.0	1588.8	1589.1
167.5°	1604.4	1606.6	1608.7	1610.8	1613.0	1613.0	1610.8	1608.7	1606.6	1604.4	1604.4
170°	1613.1	1615.2	1617.4	1619.6	1621.7	1621.7	1619.6	1617.4	1615.2	1613.1	1613.1
172.5°	1618.0	1620.3	1622.7	1625.0	1627.4	1627.6	1625.4	1623.2	1621.1	1618.9	1618.7
175°	1625.2	1627.4	1629.6	1631.7	1633.8	1634.0	1632.1	1630.2	1628.3	1626.5	1626.2
177.5°	1627.4	1629.6	1631.7	1633.9	1636.1	1636.3	1634.6	1632.8	1631.1	1629.4	1629.1
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3



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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°	10.9	10.4	9.1	7.8	7.0	5.8	5.4	4.4	4.6	5.2	5.6
90°	22.1	18.6	15.1	12.0	9.3	6.6	3.9	1.2	3.9	6.6	9.3
92.5°	25.7	23.1	20.5	19.5	20.3	21.0	21.8	22.5	21.8	21.0	20.3
95°	31.7	28.7	25.7	29.8	40.8	51.8	62.9	73.9	62.9	51.8	40.8
97.5°	77.9	97.2	116.6	128.8	133.7	138.6	143.6	148.5	143.6	138.6	133.7
100°	124.0	166.1	208.0	226.4	220.9	215.6	210.2	204.8	210.2	215.6	220.9
102.5°	171.5	217.4	263.3	284.4	280.4	276.5	272.7	268.8	272.7	276.5	280.4
105°	313.9	338.1	362.4	373.0	370.0	367.1	364.1	361.2	364.1	367.1	370.0
107.5°	478.8	475.0	471.2	468.1	465.7	463.4	461.0	458.6	461.0	463.4	465.7
110°	540.6	537.7	534.7	532.2	530.0	527.8	525.8	523.6	525.8	527.8	530.0



TEST NUMBER: P332108-830

CATALOG NUMBER: S123DIW-S340D1320U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	601.7	598.8	595.8	593.3	591.4	589.5	587.6	585.6	587.6	589.5	591.4
115°	690.8	688.3	686.0	683.9	682.3	680.7	679.1	677.5	679.1	680.7	682.3
117.5°	778.5	777.2	776.0	774.4	772.4	770.4	768.5	766.5	768.5	770.4	772.4
120°	834.6	833.8	833.0	831.4	829.0	826.5	824.2	821.7	824.2	826.5	829.0
122.5°	889.5	888.4	887.4	885.9	883.9	881.9	880.0	878.0	880.0	881.9	883.9
125°	967.4	966.3	965.3	963.7	961.5	959.3	957.2	955.0	957.2	959.3	961.5
127.5°	1042.6	1041.3	1040.0	1038.3	1036.1	1034.0	1031.8	1029.6	1031.8	1034.0	1036.1
130°	1088.6	1087.5	1086.5	1084.9	1082.7	1080.5	1078.4	1076.2	1078.4	1080.5	1082.7
132.5°	1132.7	1131.8	1131.0	1129.4	1127.3	1125.1	1122.9	1120.8	1122.9	1125.1	1127.3
135°	1198.9	1197.8	1196.7	1195.4	1193.7	1192.1	1190.5	1188.9	1190.5	1192.1	1193.7
137.5°	1257.8	1257.2	1256.6	1255.3	1253.2	1251.2	1249.2	1247.1	1249.2	1251.2	1253.2
140°	1295.1	1294.4	1293.5	1292.3	1290.7	1289.1	1287.5	1285.9	1287.5	1289.1	1290.7
142.5°	1331.1	1330.2	1329.5	1328.2	1326.6	1325.0	1323.3	1321.7	1323.3	1325.0	1326.6
145°	1381.8	1381.2	1380.6	1379.5	1377.6	1375.7	1373.9	1372.0	1373.9	1375.7	1377.6
147.5°	1426.1	1425.6	1425.0	1424.2	1422.9	1421.6	1420.4	1419.2	1420.4	1421.6	1422.9
150°	1453.2	1452.7	1452.2	1451.5	1450.7	1449.9	1449.1	1448.3	1449.1	1449.9	1450.7
152.5°	1477.0	1476.7	1476.3	1475.9	1475.6	1475.2	1474.8	1474.4	1474.8	1475.2	1475.6
155°	1509.6	1509.3	1509.0	1509.1	1509.7	1510.2	1510.8	1511.3	1510.8	1510.2	1509.7
157.5°	1539.0	1539.3	1539.5	1539.6	1539.7	1539.8	1539.8	1539.9	1539.8	1539.8	1539.7
160°	1555.5	1555.8	1556.0	1556.2	1556.5	1556.8	1557.1	1557.4	1557.1	1556.8	1556.5
162.5°	1570.0	1570.3	1570.6	1571.0	1571.7	1572.4	1573.1	1573.9	1573.1	1572.4	1571.7
165°	1589.4	1589.7	1590.0	1590.4	1591.3	1592.0	1592.9	1593.7	1592.9	1592.0	1591.3
167.5°	1604.4	1604.4	1604.4	1604.9	1606.0	1607.0	1608.2	1609.2	1608.2	1607.0	1606.0
170°	1613.1	1613.1	1613.1	1613.6	1614.8	1615.8	1616.8	1618.0	1616.8	1615.8	1614.8
172.5°	1618.5	1618.3	1618.1	1618.6	1619.9	1621.2	1622.5	1623.8	1622.5	1621.2	1619.9
175°	1625.9	1625.6	1625.3	1625.9	1627.2	1628.6	1629.9	1631.3	1629.9	1628.6	1627.2
177.5°	1628.9	1628.7	1628.5	1628.9	1630.0	1631.1	1632.1	1633.2	1632.1	1631.1	1630.0
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3



TEST NUMBER: P332108-830

CATALOG NUMBER: S123DIW-S340D1320U830-4F0-1E-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°	5.9	6.7	7.3	8.1	8.7	9.5	9.7	9.6	9.8	10.6	10.0
90°	12.0	15.1	18.6	22.1	25.5	29.1	30.2	31.2	32.3	33.4	34.2
92.5°	19.5	20.5	23.1	25.7	28.4	31.0	32.7	34.5	36.2	37.9	38.9
95°	29.8	25.7	28.7	31.7	34.6	37.6	39.5	41.4	43.3	45.1	46.1
97.5°	128.8	116.6	97.2	77.9	58.4	39.0	41.2	43.4	45.5	47.6	48.8
100°	226.4	208.0	166.1	124.0	82.0	40.0	42.1	44.3	46.5	48.6	49.9
102.5°	284.4	263.3	217.4	171.5	125.6	79.7	73.0	66.4	59.7	53.1	50.0
105°	373.0	362.4	338.1	313.9	289.6	265.4	217.7	170.0	122.4	74.7	51.2
107.5°	468.1	471.2	475.0	478.8	482.7	486.4	451.5	416.6	381.6	346.7	311.2
110°	532.2	534.7	537.7	540.6	543.7	546.6	537.7	528.8	519.9	511.0	487.3



TEST NUMBER: P332108-830

CATALOG NUMBER: S123DIW-S340D1320U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	593.3	595.8	598.8	601.7	604.7	607.7	607.8	608.0	608.1	608.3	604.4
115°	683.9	686.0	688.3	690.8	693.2	695.7	698.3	701.1	703.7	706.4	708.3
117.5°	774.4	776.0	777.2	778.5	779.8	781.0	783.2	785.3	787.4	789.6	790.8
120°	831.4	833.0	833.8	834.6	835.5	836.2	838.4	840.6	842.7	844.9	845.9
122.5°	885.9	887.4	888.4	889.5	890.5	891.6	893.1	894.6	896.1	897.6	898.4
125°	963.7	965.3	966.3	967.4	968.5	969.6	970.1	970.6	971.2	971.7	972.2
127.5°	1038.3	1040.0	1041.3	1042.6	1043.9	1045.2	1046.0	1046.9	1047.7	1048.7	1048.8
130°	1084.9	1086.5	1087.5	1088.6	1089.7	1090.7	1091.8	1092.9	1094.0	1095.0	1095.3
132.5°	1129.4	1131.0	1131.8	1132.7	1133.5	1134.3	1135.5	1136.5	1137.6	1138.7	1138.9
135°	1195.4	1196.7	1197.8	1198.9	1200.0	1201.1	1201.8	1202.7	1203.4	1204.3	1204.3
137.5°	1255.3	1256.6	1257.2	1257.8	1258.4	1259.0	1260.3	1261.6	1262.8	1264.1	1264.5
140°	1292.3	1293.5	1294.4	1295.1	1296.0	1296.8	1297.9	1298.9	1300.0	1301.1	1301.4
142.5°	1328.2	1329.5	1330.2	1331.1	1331.8	1332.7	1333.5	1334.4	1335.2	1336.1	1336.1
145°	1379.5	1380.6	1381.2	1381.8	1382.3	1382.8	1383.4	1383.9	1384.4	1385.0	1385.3
147.5°	1424.2	1425.0	1425.6	1426.1	1426.6	1427.2	1427.8	1428.2	1428.8	1429.4	1429.0
150°	1451.5	1452.2	1452.7	1453.2	1453.8	1454.3	1454.9	1455.4	1455.9	1456.5	1456.3
152.5°	1475.9	1476.3	1476.7	1477.0	1477.2	1477.6	1478.6	1479.5	1480.5	1481.5	1481.4
155°	1509.1	1509.0	1509.3	1509.6	1509.9	1510.0	1511.5	1512.8	1514.1	1515.5	1515.3
157.5°	1539.6	1539.5	1539.3	1539.0	1538.7	1538.4	1540.0	1541.7	1543.3	1544.9	1544.6
160°	1556.2	1556.0	1555.8	1555.5	1555.2	1554.9	1556.5	1558.1	1559.8	1561.4	1561.2
162.5°	1571.0	1570.6	1570.3	1570.0	1569.7	1569.4	1571.3	1573.1	1575.0	1576.8	1576.9
165°	1590.4	1590.0	1589.7	1589.4	1589.1	1588.8	1591.0	1593.2	1595.3	1597.5	1597.6
167.5°	1604.9	1604.4	1604.4	1604.4	1604.4	1604.4	1606.6	1608.7	1610.8	1613.0	1613.0
170°	1613.6	1613.1	1613.1	1613.1	1613.1	1613.1	1615.2	1617.4	1619.6	1621.7	1621.7
172.5°	1618.6	1618.1	1618.3	1618.5	1618.7	1618.9	1621.1	1623.2	1625.4	1627.6	1627.4
175°	1625.9	1625.3	1625.6	1625.9	1626.2	1626.5	1628.3	1630.2	1632.1	1634.0	1633.8
177.5°	1628.9	1628.5	1628.7	1628.9	1629.1	1629.4	1631.1	1632.8	1634.6	1636.3	1636.1
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3



TEST NUMBER: P332108-830

CATALOG NUMBER: S123DIW-S340D1320U830-4F0-1E-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°	10.1	10.2	10.2	10.1	10.2	10.2	10.1	10.0	10.6	9.8	9.6
90°	34.8	35.3	35.8	36.4	35.8	35.3	34.8	34.2	33.4	32.3	31.2
92.5°	39.3	39.6	39.9	40.2	39.9	39.6	39.3	38.9	37.9	36.2	34.5
95°	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	45.1	43.3	41.4
97.5°	49.1	49.4	49.7	50.0	49.7	49.4	49.1	48.8	47.6	45.5	43.4
100°	50.0	50.3	50.6	50.9	50.6	50.3	50.0	49.9	48.6	46.5	44.3
102.5°	50.4	50.9	51.4	51.8	51.4	50.9	50.4	50.0	53.1	59.7	66.4
105°	51.7	52.2	52.8	53.3	52.8	52.2	51.7	51.2	74.7	122.4	170.0
107.5°	275.3	239.3	203.4	167.5	203.4	239.3	275.3	311.2	346.7	381.6	416.6
110°	448.8	410.3	371.8	333.3	371.8	410.3	448.8	487.3	511.0	519.9	528.8



TEST NUMBER: P332108-830

CATALOG NUMBER: S123DIW-S340D1320U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	596.2	588.1	579.9	571.8	579.9	588.1	596.2	604.4	608.3	608.1	608.0
115°	709.4	710.5	711.5	712.7	711.5	710.5	709.4	708.3	706.4	703.7	701.1
117.5°	791.0	791.2	791.5	791.6	791.5	791.2	791.0	790.8	789.6	787.4	785.3
120°	845.9	845.9	845.9	845.9	845.9	845.9	845.9	845.9	844.9	842.7	840.6
122.5°	898.6	898.8	899.1	899.3	899.1	898.8	898.6	898.4	897.6	896.1	894.6
125°	972.8	973.4	973.8	974.4	973.8	973.4	972.8	972.2	971.7	971.2	970.6
127.5°	1048.3	1047.7	1047.2	1046.6	1047.2	1047.7	1048.3	1048.8	1048.7	1047.7	1046.9
130°	1094.8	1094.3	1093.7	1093.2	1093.7	1094.3	1094.8	1095.3	1095.0	1094.0	1092.9
132.5°	1138.1	1137.4	1136.6	1135.9	1136.6	1137.4	1138.1	1138.9	1138.7	1137.6	1136.5
135°	1203.4	1202.7	1201.8	1201.1	1201.8	1202.7	1203.4	1204.3	1204.3	1203.4	1202.7
137.5°	1263.9	1263.5	1262.9	1262.3	1262.9	1263.5	1263.9	1264.5	1264.1	1262.8	1261.6
140°	1300.8	1300.2	1299.8	1299.2	1299.8	1300.2	1300.8	1301.4	1301.1	1300.0	1298.9
142.5°	1335.4	1334.6	1333.9	1333.1	1333.9	1334.6	1335.4	1336.1	1336.1	1335.2	1334.4
145°	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3	1385.0	1384.4	1383.9
147.5°	1427.8	1426.5	1425.3	1424.0	1425.3	1426.5	1427.8	1429.0	1429.4	1428.8	1428.2
150°	1455.6	1454.7	1454.0	1453.1	1454.0	1454.7	1455.6	1456.3	1456.5	1455.9	1455.4
152.5°	1480.1	1478.8	1477.6	1476.4	1477.6	1478.8	1480.1	1481.4	1481.5	1480.5	1479.5
155°	1513.7	1512.1	1510.5	1508.9	1510.5	1512.1	1513.7	1515.3	1515.5	1514.1	1512.8
157.5°	1542.6	1540.5	1538.3	1536.3	1538.3	1540.5	1542.6	1544.6	1544.9	1543.3	1541.7
160°	1559.3	1557.5	1555.6	1553.7	1555.6	1557.5	1559.3	1561.2	1561.4	1559.8	1558.1
162.5°	1575.2	1573.6	1571.9	1570.2	1571.9	1573.6	1575.2	1576.9	1576.8	1575.0	1573.1
165°	1595.7	1593.8	1592.0	1590.1	1592.0	1593.8	1595.7	1597.6	1597.5	1595.3	1593.2
167.5°	1610.8	1608.7	1606.6	1604.4	1606.6	1608.7	1610.8	1613.0	1613.0	1610.8	1608.7
170°	1619.6	1617.4	1615.2	1613.1	1615.2	1617.4	1619.6	1621.7	1621.7	1619.6	1617.4
172.5°	1625.0	1622.7	1620.3	1618.0	1620.3	1622.7	1625.0	1627.4	1627.6	1625.4	1623.2
175°	1631.7	1629.6	1627.4	1625.2	1627.4	1629.6	1631.7	1633.8	1634.0	1632.1	1630.2
177.5°	1633.9	1631.7	1629.6	1627.4	1629.6	1631.7	1633.9	1636.1	1636.3	1634.6	1632.8
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3



TEST NUMBER: P332108-830

CATALOG NUMBER: S123DIW-S340D1320U830-4F0-1E-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°	9.7	9.5	8.7	8.1	7.3	6.7	5.9	5.6	5.2	4.6	4.4
90°	30.2	29.1	25.5	22.1	18.6	15.1	12.0	9.3	6.6	3.9	1.2
92.5°	32.7	31.0	28.4	25.7	23.1	20.5	19.5	20.3	21.0	21.8	22.5
95°	39.5	37.6	34.6	31.7	28.7	25.7	29.8	40.8	51.8	62.9	73.9
97.5°	41.2	39.0	58.4	77.9	97.2	116.6	128.8	133.7	138.6	143.6	148.5
100°	42.1	40.0	82.0	124.0	166.1	208.0	226.4	220.9	215.6	210.2	204.8
102.5°	73.0	79.7	125.6	171.5	217.4	263.3	284.4	280.4	276.5	272.7	268.8
105°	217.7	265.4	289.6	313.9	338.1	362.4	373.0	370.0	367.1	364.1	361.2
107.5°	451.5	486.4	482.7	478.8	475.0	471.2	468.1	465.7	463.4	461.0	458.6
110°	537.7	546.6	543.7	540.6	537.7	534.7	532.2	530.0	527.8	525.8	523.6



TEST NUMBER: P332108-830

CATALOG NUMBER: S123DIW-S340D1320U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	607.8	607.7	604.7	601.7	598.8	595.8	593.3	591.4	589.5	587.6	585.6
115°	698.3	695.7	693.2	690.8	688.3	686.0	683.9	682.3	680.7	679.1	677.5
117.5°	783.2	781.0	779.8	778.5	777.2	776.0	774.4	772.4	770.4	768.5	766.5
120°	838.4	836.2	835.5	834.6	833.8	833.0	831.4	829.0	826.5	824.2	821.7
122.5°	893.1	891.6	890.5	889.5	888.4	887.4	885.9	883.9	881.9	880.0	878.0
125°	970.1	969.6	968.5	967.4	966.3	965.3	963.7	961.5	959.3	957.2	955.0
127.5°	1046.0	1045.2	1043.9	1042.6	1041.3	1040.0	1038.3	1036.1	1034.0	1031.8	1029.6
130°	1091.8	1090.7	1089.7	1088.6	1087.5	1086.5	1084.9	1082.7	1080.5	1078.4	1076.2
132.5°	1135.5	1134.3	1133.5	1132.7	1131.8	1131.0	1129.4	1127.3	1125.1	1122.9	1120.8
135°	1201.8	1201.1	1200.0	1198.9	1197.8	1196.7	1195.4	1193.7	1192.1	1190.5	1188.9
137.5°	1260.3	1259.0	1258.4	1257.8	1257.2	1256.6	1255.3	1253.2	1251.2	1249.2	1247.1
140°	1297.9	1296.8	1296.0	1295.1	1294.4	1293.5	1292.3	1290.7	1289.1	1287.5	1285.9
142.5°	1333.5	1332.7	1331.8	1331.1	1330.2	1329.5	1328.2	1326.6	1325.0	1323.3	1321.7
145°	1383.4	1382.8	1382.3	1381.8	1381.2	1380.6	1379.5	1377.6	1375.7	1373.9	1372.0
147.5°	1427.8	1427.2	1426.6	1426.1	1425.6	1425.0	1424.2	1422.9	1421.6	1420.4	1419.2
150°	1454.9	1454.3	1453.8	1453.2	1452.7	1452.2	1451.5	1450.7	1449.9	1449.1	1448.3
152.5°	1478.6	1477.6	1477.2	1477.0	1476.7	1476.3	1475.9	1475.6	1475.2	1474.8	1474.4
155°	1511.5	1510.0	1509.9	1509.6	1509.3	1509.0	1509.1	1509.7	1510.2	1510.8	1511.3
157.5°	1540.0	1538.4	1538.7	1539.0	1539.3	1539.5	1539.6	1539.7	1539.8	1539.8	1539.9
160°	1556.5	1554.9	1555.2	1555.5	1555.8	1556.0	1556.2	1556.5	1556.8	1557.1	1557.4
162.5°	1571.3	1569.4	1569.7	1570.0	1570.3	1570.6	1571.0	1571.7	1572.4	1573.1	1573.9
165°	1591.0	1588.8	1589.1	1589.4	1589.7	1590.0	1590.4	1591.3	1592.0	1592.9	1593.7
167.5°	1606.6	1604.4	1604.4	1604.4	1604.4	1604.4	1604.9	1606.0	1607.0	1608.2	1609.2
170°	1615.2	1613.1	1613.1	1613.1	1613.1	1613.1	1613.6	1614.8	1615.8	1616.8	1618.0
172.5°	1621.1	1618.9	1618.7	1618.5	1618.3	1618.1	1618.6	1619.9	1621.2	1622.5	1623.8
175°	1628.3	1626.5	1626.2	1625.9	1625.6	1625.3	1625.9	1627.2	1628.6	1629.9	1631.3
177.5°	1631.1	1629.4	1629.1	1628.9	1628.7	1628.5	1628.9	1630.0	1631.1	1632.1	1633.2
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3



TEST NUMBER: P332108-830

CATALOG NUMBER: S123DIW-S340D1320U830-4F0-1E-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°	5.4	5.8	7.0	7.8	9.1	10.4	10.9	11.3	11.8	11.9	11.9
90°	3.9	6.6	9.3	12.0	15.1	18.6	22.1	25.5	29.1	30.2	31.2
92.5°	21.8	21.0	20.3	19.5	20.5	23.1	25.7	28.4	31.0	32.7	34.5
95°	62.9	51.8	40.8	29.8	25.7	28.7	31.7	34.6	37.6	39.5	41.4
97.5°	143.6	138.6	133.7	128.8	116.6	97.2	77.9	58.4	39.0	41.2	43.4
100°	210.2	215.6	220.9	226.4	208.0	166.1	124.0	82.0	40.0	42.1	44.3
102.5°	272.7	276.5	280.4	284.4	263.3	217.4	171.5	125.6	79.7	73.0	66.4
105°	364.1	367.1	370.0	373.0	362.4	338.1	313.9	289.6	265.4	217.7	170.0
107.5°	461.0	463.4	465.7	468.1	471.2	475.0	478.8	482.7	486.4	451.5	416.6
110°	525.8	527.8	530.0	532.2	534.7	537.7	540.6	543.7	546.6	537.7	528.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	587.6	589.5	591.4	593.3	595.8	598.8	601.7	604.7	607.7	607.8	608.0
115°	679.1	680.7	682.3	683.9	686.0	688.3	690.8	693.2	695.7	698.3	701.1
117.5°	768.5	770.4	772.4	774.4	776.0	777.2	778.5	779.8	781.0	783.2	785.3
120°	824.2	826.5	829.0	831.4	833.0	833.8	834.6	835.5	836.2	838.4	840.6
122.5°	880.0	881.9	883.9	885.9	887.4	888.4	889.5	890.5	891.6	893.1	894.6
125°	957.2	959.3	961.5	963.7	965.3	966.3	967.4	968.5	969.6	970.1	970.6
127.5°	1031.8	1034.0	1036.1	1038.3	1040.0	1041.3	1042.6	1043.9	1045.2	1046.0	1046.9
130°	1078.4	1080.5	1082.7	1084.9	1086.5	1087.5	1088.6	1089.7	1090.7	1091.8	1092.9
132.5°	1122.9	1125.1	1127.3	1129.4	1131.0	1131.8	1132.7	1133.5	1134.3	1135.5	1136.5
135°	1190.5	1192.1	1193.7	1195.4	1196.7	1197.8	1198.9	1200.0	1201.1	1201.8	1202.7
137.5°	1249.2	1251.2	1253.2	1255.3	1256.6	1257.2	1257.8	1258.4	1259.0	1260.3	1261.6
140°	1287.5	1289.1	1290.7	1292.3	1293.5	1294.4	1295.1	1296.0	1296.8	1297.9	1298.9
142.5°	1323.3	1325.0	1326.6	1328.2	1329.5	1330.2	1331.1	1331.8	1332.7	1333.5	1334.4
145°	1373.9	1375.7	1377.6	1379.5	1380.6	1381.2	1381.8	1382.3	1382.8	1383.4	1383.9
147.5°	1420.4	1421.6	1422.9	1424.2	1425.0	1425.6	1426.1	1426.6	1427.2	1427.8	1428.2
150°	1449.1	1449.9	1450.7	1451.5	1452.2	1452.7	1453.2	1453.8	1454.3	1454.9	1455.4
152.5°	1474.8	1475.2	1475.6	1475.9	1476.3	1476.7	1477.0	1477.2	1477.6	1478.6	1479.5
155°	1510.8	1510.2	1509.7	1509.1	1509.0	1509.3	1509.6	1509.9	1510.0	1511.5	1512.8
157.5°	1539.8	1539.8	1539.7	1539.6	1539.5	1539.3	1539.0	1538.7	1538.4	1540.0	1541.7
160°	1557.1	1556.8	1556.5	1556.2	1556.0	1555.8	1555.5	1555.2	1554.9	1556.5	1558.1
162.5°	1573.1	1572.4	1571.7	1571.0	1570.6	1570.3	1570.0	1569.7	1569.4	1571.3	1573.1
165°	1592.9	1592.0	1591.3	1590.4	1590.0	1589.7	1589.4	1589.1	1588.8	1591.0	1593.2
167.5°	1608.2	1607.0	1606.0	1604.9	1604.4	1604.4	1604.4	1604.4	1604.4	1606.6	1608.7
170°	1616.8	1615.8	1614.8	1613.6	1613.1	1613.1	1613.1	1613.1	1613.1	1615.2	1617.4
172.5°	1622.5	1621.2	1619.9	1618.6	1618.1	1618.3	1618.5	1618.7	1618.9	1621.1	1623.2
175°	1629.9	1628.6	1627.2	1625.9	1625.3	1625.6	1625.9	1626.2	1626.5	1628.3	1630.2
177.5°	1632.1	1631.1	1630.0	1628.9	1628.5	1628.7	1628.9	1629.1	1629.4	1631.1	1632.8
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3



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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°	11.9	12.0	12.0	12.3	12.2	12.1	12.5
90°	32.3	33.4	34.2	34.8	35.3	35.8	36.4
92.5°	36.2	37.9	38.9	39.3	39.6	39.9	40.2
95°	43.3	45.1	46.1	46.1	46.1	46.1	46.1
97.5°	45.5	47.6	48.8	49.1	49.4	49.7	50.0
100°	46.5	48.6	49.9	50.0	50.3	50.6	50.9
102.5°	59.7	53.1	50.0	50.4	50.9	51.4	51.8
105°	122.4	74.7	51.2	51.7	52.2	52.8	53.3
107.5°	381.6	346.7	311.2	275.3	239.3	203.4	167.5
110°	519.9	511.0	487.3	448.8	410.3	371.8	333.3



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	608.1	608.3	604.4	596.2	588.1	579.9	571.8
115°	703.7	706.4	708.3	709.4	710.5	711.5	712.7
117.5°	787.4	789.6	790.8	791.0	791.2	791.5	791.6
120°	842.7	844.9	845.9	845.9	845.9	845.9	845.9
122.5°	896.1	897.6	898.4	898.6	898.8	899.1	899.3
125°	971.2	971.7	972.2	972.8	973.4	973.8	974.4
127.5°	1047.7	1048.7	1048.8	1048.3	1047.7	1047.2	1046.6
130°	1094.0	1095.0	1095.3	1094.8	1094.3	1093.7	1093.2
132.5°	1137.6	1138.7	1138.9	1138.1	1137.4	1136.6	1135.9
135°	1203.4	1204.3	1204.3	1203.4	1202.7	1201.8	1201.1
137.5°	1262.8	1264.1	1264.5	1263.9	1263.5	1262.9	1262.3
140°	1300.0	1301.1	1301.4	1300.8	1300.2	1299.8	1299.2
142.5°	1335.2	1336.1	1336.1	1335.4	1334.6	1333.9	1333.1
145°	1384.4	1385.0	1385.3	1385.3	1385.3	1385.3	1385.3
147.5°	1428.8	1429.4	1429.0	1427.8	1426.5	1425.3	1424.0
150°	1455.9	1456.5	1456.3	1455.6	1454.7	1454.0	1453.1
152.5°	1480.5	1481.5	1481.4	1480.1	1478.8	1477.6	1476.4
155°	1514.1	1515.5	1515.3	1513.7	1512.1	1510.5	1508.9
157.5°	1543.3	1544.9	1544.6	1542.6	1540.5	1538.3	1536.3
160°	1559.8	1561.4	1561.2	1559.3	1557.5	1555.6	1553.7
162.5°	1575.0	1576.8	1576.9	1575.2	1573.6	1571.9	1570.2
165°	1595.3	1597.5	1597.6	1595.7	1593.8	1592.0	1590.1
167.5°	1610.8	1613.0	1613.0	1610.8	1608.7	1606.6	1604.4
170°	1619.6	1621.7	1621.7	1619.6	1617.4	1615.2	1613.1
172.5°	1625.4	1627.6	1627.4	1625.0	1622.7	1620.3	1618.0
175°	1632.1	1634.0	1633.8	1631.7	1629.6	1627.4	1625.2
177.5°	1634.6	1636.3	1636.1	1633.9	1631.7	1629.6	1627.4
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3

(END OF REPORT)