

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: P331490-830

Luminaire Tested: **S122DIW-S290D1440U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331490-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DIW-S290D1440U830-4F0-1E-UDD-A1
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1440 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5944.1 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

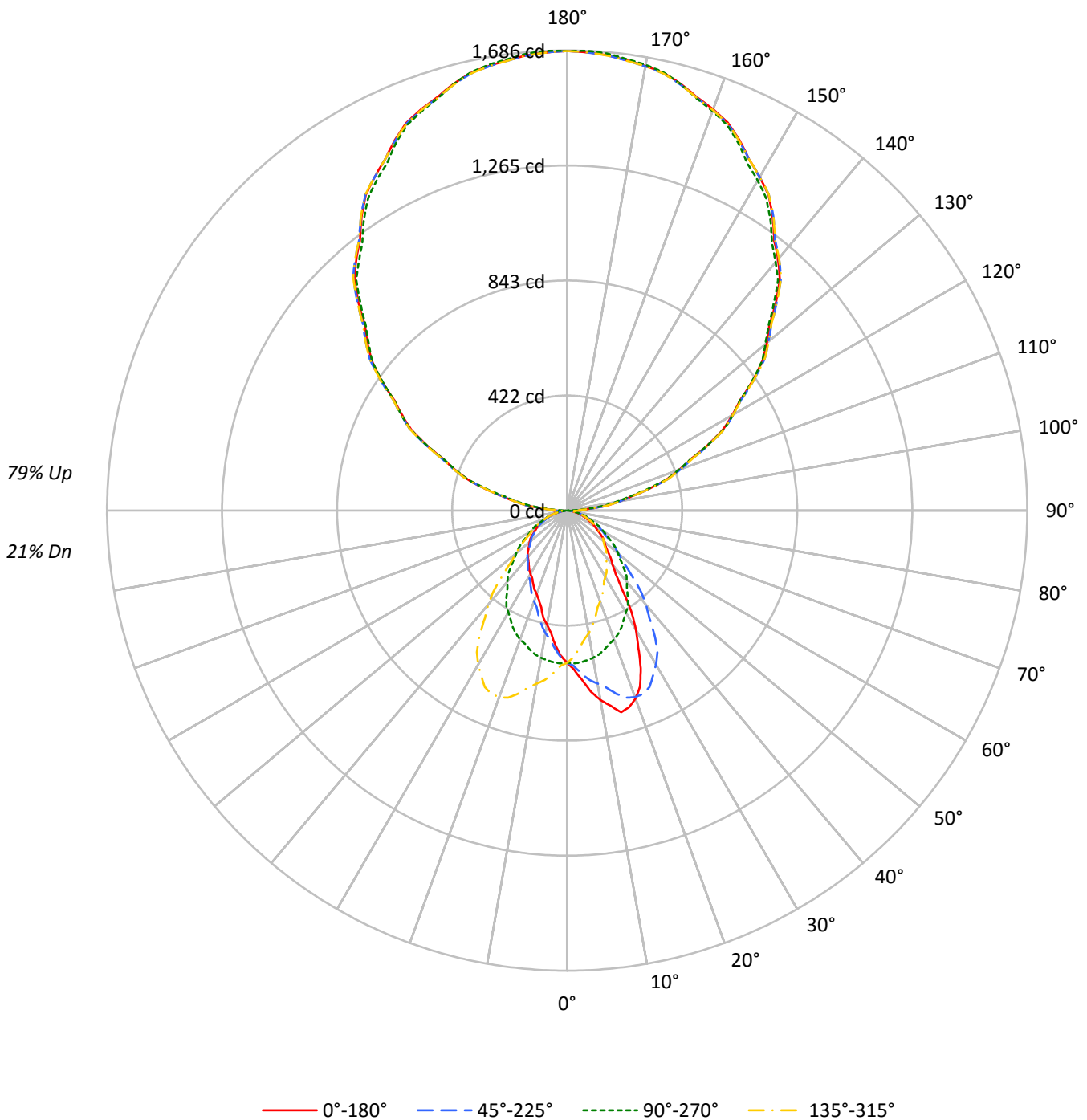
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	67	67	67	47	47	47	29	29	29	21				
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	26	26	25	18				
2	83	76	71	66	74	68	63	59	52	49	46	37	35	33	23	22	21	15				
3	76	67	60	55	67	60	54	49	46	42	39	33	30	28	21	19	18	13				
4	70	60	52	46	61	53	47	42	41	36	33	29	27	24	19	17	16	11				
5	64	53	45	40	56	47	41	36	36	32	28	26	23	21	17	15	14	10				
6	59	47	40	34	52	42	36	31	33	28	25	24	21	18	15	14	12	9				
7	54	43	35	30	48	38	32	27	30	25	22	22	19	16	14	12	11	8				
8	50	39	31	26	44	35	28	24	27	22	19	20	17	14	13	11	10	7				
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	12	10	9	7				
10	43	32	25	21	38	29	23	19	22	18	15	17	14	12	11	9	8	6				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8995	8995	8995	8995
5°	10084	9054	8023	9054
10°	11555	8979	6943	8979
15°	12784	8816	6135	8816
20°	12589	8639	5593	8639
25°	11352	8402	5248	8402
30°	9380	8028	4998	8028
35°	6838	7634	4819	7634
40°	5461	7172	4719	7172
45°	4772	6635	4587	6635
50°	4486	6116	4496	6116
55°	4132	5588	4374	5588
60°	3788	5025	4191	5025
65°	3454	4523	4008	4523
70°	3135	4032	3744	4032
75°	2782	3487	3313	3487
80°	2390	2882	2669	2882
85°	2149	2149	1593	2149



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	0.9
10°-20°	154.2	2.6
20°-30°	223.9	3.8
30°-40°	236.2	4.0
40°-50°	209.2	3.5
50°-60°	166.9	2.8
60°-70°	113.4	1.9
70°-80°	58.2	1.0
80°-90°	20.7	0.3
90°-100°	106.7	1.8
100°-110°	331.4	5.6
110°-120°	566.4	9.5
120°-130°	744.9	12.5
130°-140°	836.1	14.1
140°-150°	819.8	13.8
150°-160°	687.6	11.6
160°-170°	456.0	7.7
170°-180°	159.4	2.7
0°-30°	431.2	7.3
0°-40°	667.4	11.2
0°-60°	1043.5	17.6
0°-90°	1235.8	20.8
90°-120°	1004.5	16.9
90°-150°	3405.2	57.3
90°-180°	4708.0	79.2
0°-180°	5944.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	557	557	557	557	557	
5°	622	559	495	559	622	62
15°	765	527	367	527	765	211
25°	637	472	295	472	637	288
35°	347	387	244	387	347	226
45°	209	291	201	291	209	164
55°	147	198	155	198	147	132
65°	90	118	105	118	90	90
75°	45	56	53	56	45	48
85°	12	12	9	12	12	14
90°	48	1	48	1	48	22
95°	88	74	88	74	88	98
105°	316	306	316	306	316	332
115°	568	568	568	568	568	561
125°	830	827	830	827	830	740
135°	1083	1070	1083	1070	1083	833
145°	1313	1299	1313	1299	1313	820
155°	1496	1485	1496	1485	1496	689
165°	1617	1616	1617	1616	1617	456
175°	1675	1681	1675	1681	1675	159
180°	1684	1684	1684	1684	1684	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	582.8	583.0	583.3	580.6	580.2	580.2	577.9	575.8	573.3	570.1	570.5
5°	622.2	624.5	625.4	622.8	619.0	618.6	614.9	609.0	603.3	598.9	595.7
7.5°	669.2	670.1	668.1	664.7	661.9	656.7	649.9	643.3	634.0	625.5	619.2
10°	704.8	706.2	702.5	697.6	693.5	687.5	677.7	667.6	655.4	643.7	634.2
12.5°	731.9	735.1	730.4	729.8	722.8	714.5	702.9	697.8	680.6	664.2	654.0
15°	764.8	764.6	765.1	760.9	755.8	754.5	742.2	728.6	704.5	694.7	678.1
17.5°	755.3	758.6	760.1	760.0	759.9	759.0	755.1	746.6	734.4	718.8	699.6
20°	732.7	737.0	737.6	742.5	745.4	748.9	750.5	748.1	740.6	727.5	710.9
22.5°	697.8	699.0	701.0	708.6	714.6	723.8	728.5	736.5	733.6	727.2	713.2
25°	637.2	635.1	642.5	646.4	660.3	674.9	685.4	696.9	707.2	713.4	709.4
27.5°	564.5	561.3	572.5	582.8	594.0	609.8	626.1	645.5	661.5	681.6	688.5
30°	503.1	505.1	515.8	526.7	543.8	566.1	584.6	605.7	628.7	651.1	666.8
32.5°	437.1	444.4	451.2	468.0	483.1	507.8	534.9	561.4	589.9	615.5	639.7
35°	346.9	355.4	364.9	377.0	398.2	422.8	449.2	484.9	524.0	558.8	587.5
37.5°	292.0	290.6	296.0	304.8	322.0	341.9	372.2	407.5	453.4	494.4	534.9
40°	259.1	258.3	262.0	270.2	283.2	297.8	324.4	355.4	398.0	448.2	496.3
42.5°	236.5	237.0	239.1	244.9	253.8	265.8	285.7	312.1	351.1	398.3	450.1
45°	209.0	210.5	212.8	215.7	220.7	230.6	241.8	260.6	291.4	330.8	381.7
47.5°	189.2	189.3	191.6	194.1	197.1	202.6	211.8	223.6	245.3	277.4	321.2
50°	178.6	177.1	178.8	180.7	183.9	187.8	193.8	204.9	219.4	245.3	282.0
52.5°	165.5	165.6	167.1	167.9	170.7	174.6	180.0	187.8	201.0	221.2	251.3
55°	146.8	148.0	148.8	150.1	152.7	155.4	159.8	164.9	175.1	190.3	212.6
57.5°	129.3	129.7	130.5	133.0	134.6	137.1	141.2	145.9	152.6	163.8	180.6
60°	117.3	117.3	119.0	120.1	122.2	124.8	128.0	132.5	138.6	147.7	161.3
62.5°	106.4	106.2	106.9	108.7	110.3	112.6	115.8	119.7	125.4	133.6	144.6
65°	90.4	89.9	91.2	91.6	93.3	95.7	98.3	102.4	106.9	112.8	122.7
67.5°	74.9	75.5	76.2	76.9	77.9	80.4	82.1	84.9	88.8	93.8	100.4
70°	66.4	66.4	66.4	67.0	68.3	69.6	71.3	73.6	77.3	81.5	87.6
72.5°	56.7	57.5	58.2	57.8	59.4	60.1	62.2	63.5	67.0	69.7	75.0
75°	44.6	44.6	44.6	45.6	46.3	46.8	48.2	49.5	51.2	54.6	57.4
77.5°	33.3	33.2	33.4	33.6	34.3	35.1	35.4	36.6	38.2	39.8	42.1
80°	25.7	26.1	26.3	26.8	26.8	27.1	27.4	28.9	30.0	31.0	32.5
82.5°	19.9	20.0	20.0	20.1	20.3	20.5	21.1	21.6	22.0	22.8	23.9
85°	11.6	11.3	11.3	11.8	11.6	11.6	12.0	12.4	12.4	12.6	13.3
87.5°	14.1	14.0	14.1	13.9	13.9	14.0	14.2	14.1	14.4	14.7	13.5
90°	48.4	48.0	47.7	47.4	47.0	47.2	47.9	48.4	49.1	49.8	42.8
92.5°	46.0	46.0	45.9	45.8	45.8	45.7	45.5	45.4	45.3	45.1	43.5
95°	88.1	88.7	89.4	90.0	90.6	91.0	91.0	91.0	91.0	91.0	90.3
97.5°	152.6	152.7	152.7	152.8	152.9	152.9	152.9	152.9	152.9	152.9	151.7
100°	194.6	195.0	195.3	195.6	196.0	196.0	196.0	196.0	196.0	196.0	195.1
102.5°	242.4	242.7	243.1	243.4	243.6	243.7	243.5	243.2	243.0	242.7	241.5
105°	315.5	315.5	315.5	315.5	315.5	315.1	314.5	313.9	313.2	312.6	312.0
107.5°	384.2	385.7	387.1	388.6	390.0	390.6	390.4	390.1	389.8	389.6	389.6
110°	437.6	438.6	439.5	440.5	441.4	442.0	442.0	442.0	442.0	442.0	442.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	488.8	489.5	490.2	490.9	491.5	492.3	493.0	493.8	494.6	495.3	495.6
115°	568.4	569.3	570.2	571.2	572.1	572.8	573.1	573.4	573.7	574.1	574.7
117.5°	644.2	645.2	646.1	647.1	648.0	648.9	649.7	650.4	651.2	652.0	653.7
120°	697.7	698.6	699.6	700.5	701.4	701.9	701.9	701.9	701.9	701.9	704.5
122.5°	750.0	750.6	751.4	752.1	752.7	753.5	754.2	755.0	755.7	756.5	758.3
125°	829.8	830.2	830.5	830.8	831.1	831.7	832.6	833.6	834.5	835.5	836.5
127.5°	902.6	903.6	904.6	905.6	906.6	907.7	908.8	909.9	911.1	912.3	913.4
130°	954.9	956.1	957.4	958.7	959.9	960.8	961.5	962.1	962.8	963.4	964.0
132.5°	1004.8	1005.9	1006.9	1008.0	1008.9	1010.1	1011.5	1013.0	1014.3	1015.7	1015.6
135°	1082.8	1083.7	1084.7	1085.6	1086.6	1087.2	1087.5	1087.8	1088.2	1088.4	1087.8
137.5°	1153.2	1154.5	1155.7	1157.1	1158.3	1159.0	1159.3	1159.5	1159.8	1160.1	1159.2
140°	1202.1	1203.3	1204.7	1205.9	1207.2	1207.8	1207.8	1207.8	1207.8	1207.8	1206.3
142.5°	1246.4	1247.7	1249.0	1250.3	1251.5	1252.0	1251.8	1251.5	1251.2	1251.0	1249.9
145°	1313.0	1314.2	1315.5	1316.7	1318.0	1318.4	1318.1	1317.9	1317.5	1317.2	1315.3
147.5°	1372.3	1373.6	1374.7	1375.9	1377.1	1377.4	1376.7	1376.0	1375.4	1374.6	1373.4
150°	1411.0	1411.9	1412.9	1413.8	1414.8	1414.8	1413.8	1412.9	1411.9	1411.0	1409.8
152.5°	1447.4	1448.6	1449.7	1451.0	1452.2	1452.2	1451.0	1449.7	1448.6	1447.4	1445.9
155°	1496.3	1497.2	1498.2	1499.1	1500.1	1499.7	1498.2	1496.6	1495.0	1493.4	1492.4
157.5°	1538.3	1539.8	1541.3	1542.8	1544.4	1544.1	1541.9	1539.7	1537.6	1535.5	1534.9
160°	1564.4	1565.8	1567.0	1568.2	1569.5	1569.1	1567.3	1565.4	1563.5	1561.6	1561.3
162.5°	1587.1	1588.7	1590.3	1591.8	1593.3	1592.9	1590.8	1588.7	1586.5	1584.3	1584.0
165°	1617.0	1618.6	1620.2	1621.7	1623.3	1623.1	1620.8	1618.6	1616.4	1614.2	1614.2
167.5°	1641.4	1643.1	1644.7	1646.4	1648.0	1647.8	1645.6	1643.3	1641.2	1638.9	1639.0
170°	1654.0	1655.9	1657.7	1659.6	1661.5	1661.4	1659.2	1657.0	1654.7	1652.6	1652.8
172.5°	1664.2	1666.1	1668.0	1669.9	1671.8	1671.6	1669.4	1667.2	1665.0	1662.7	1663.1
175°	1675.3	1677.2	1679.0	1680.9	1682.9	1682.7	1680.5	1678.3	1676.1	1673.9	1674.5
177.5°	1680.4	1681.9	1683.5	1685.0	1686.5	1686.5	1685.0	1683.5	1681.9	1680.4	1680.9
180°	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	571.7	570.3	569.5	566.4	563.6	560.9	560.1	560.3	556.6	553.0	551.5
5°	594.0	589.7	585.6	579.9	573.0	565.4	561.7	558.6	551.1	543.0	538.3
7.5°	613.9	607.8	599.9	589.1	579.1	567.3	559.8	553.2	542.2	530.7	523.7
10°	626.0	617.7	607.7	594.4	582.2	567.8	557.8	547.7	534.9	521.1	512.6
12.5°	636.5	625.3	615.4	598.3	583.9	565.9	554.0	539.8	526.3	510.0	501.6
15°	661.4	640.6	621.8	602.5	584.8	559.7	546.4	527.4	509.6	489.5	479.8
17.5°	680.6	657.2	627.6	603.1	582.4	554.6	535.2	512.4	491.3	468.3	455.2
20°	691.5	664.8	632.9	603.8	579.0	547.2	526.0	502.8	478.2	452.2	438.1
22.5°	698.0	670.0	638.4	601.2	572.1	541.3	514.6	489.0	464.1	436.1	421.3
25°	700.1	674.5	641.0	599.1	563.5	528.7	496.5	471.6	441.5	415.4	393.8
27.5°	689.9	671.6	639.4	595.0	553.6	512.8	477.0	448.9	417.1	388.7	366.9
30°	677.4	666.8	635.5	591.0	545.7	501.9	462.5	430.6	398.9	370.2	347.9
32.5°	658.1	655.8	628.3	585.1	537.3	488.0	447.2	415.0	379.8	351.7	330.5
35°	620.1	630.4	613.0	572.1	521.6	468.3	424.1	387.3	350.9	324.0	304.1
37.5°	569.1	594.7	590.1	553.1	500.2	446.8	398.0	359.6	324.9	297.7	278.1
40°	534.0	566.6	571.3	538.5	485.2	430.2	378.5	340.3	306.4	281.5	261.8
42.5°	496.3	534.3	547.2	521.0	468.7	412.6	361.1	321.4	287.9	263.7	246.3
45°	433.2	483.4	506.8	491.8	441.3	383.9	330.8	290.6	260.1	237.4	223.9
47.5°	374.1	429.0	460.4	455.2	410.8	353.9	301.4	262.8	233.2	215.1	203.0
50°	332.3	388.8	426.7	428.5	388.8	332.5	279.8	243.5	216.2	199.3	189.5
52.5°	296.0	350.0	391.2	400.4	364.3	310.3	260.5	224.2	200.3	184.7	176.0
55°	248.5	294.2	340.0	356.8	327.8	276.4	230.4	198.5	176.0	165.3	157.6
57.5°	206.7	244.7	287.0	305.5	287.7	243.6	200.5	172.8	154.6	145.2	139.2
60°	184.5	214.5	252.2	274.3	258.8	219.7	182.0	155.6	140.6	132.3	126.8
62.5°	164.0	190.6	222.4	242.6	234.2	197.3	163.5	140.3	127.3	119.5	115.5
65°	135.3	156.3	181.0	199.5	194.0	166.0	138.3	118.4	108.1	101.9	98.7
67.5°	111.4	126.6	143.6	159.9	155.5	135.6	113.5	97.9	90.3	84.9	82.9
70°	96.3	107.9	123.1	136.2	132.5	116.3	98.7	85.4	78.8	74.3	72.4
72.5°	82.0	91.4	103.1	113.8	111.3	97.7	83.1	73.1	68.0	63.8	62.3
75°	61.9	69.2	76.3	83.3	82.7	72.2	63.6	55.9	51.8	48.6	48.0
77.5°	45.7	49.8	54.6	58.7	57.6	51.6	44.9	40.4	37.5	35.3	35.0
80°	34.9	37.2	40.7	43.6	42.2	39.6	34.2	31.0	28.9	26.8	25.9
82.5°	25.4	27.6	29.7	31.4	30.2	27.8	24.5	22.3	21.0	19.6	19.2
85°	13.3	14.5	15.5	15.8	15.5	13.9	12.4	11.6	10.5	9.8	9.6
87.5°	12.3	10.9	9.5	8.8	7.5	6.8	5.3	4.1	4.6	5.2	5.7
90°	35.8	28.9	22.0	16.6	12.8	9.0	5.2	1.4	5.2	9.0	12.8
92.5°	41.9	40.2	38.6	36.4	33.6	30.8	28.1	25.3	28.1	30.8	33.6
95°	89.6	89.1	88.4	86.5	83.3	80.2	77.0	73.9	77.0	80.2	83.3
97.5°	150.5	149.3	148.1	146.1	143.4	140.5	137.8	135.0	137.8	140.5	143.4
100°	194.2	193.2	192.3	190.6	188.0	185.5	182.9	180.5	182.9	185.5	188.0
102.5°	240.3	239.1	237.9	236.3	234.2	232.2	230.3	228.2	230.3	232.2	234.2
105°	311.3	310.8	310.1	309.2	308.3	307.4	306.4	305.5	306.4	307.4	308.3
107.5°	389.6	389.6	389.6	388.9	387.6	386.2	384.7	383.3	384.7	386.2	387.6
110°	442.0	442.0	442.0	440.9	439.0	437.2	435.3	433.4	435.3	437.2	439.0



TEST NUMBER: P331490-830

CATALOG NUMBER: S122DIW-S290D1440U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	495.9	496.1	496.3	495.5	493.6	491.7	489.8	488.0	489.8	491.7	493.6
115°	575.3	576.0	576.6	576.0	574.1	572.1	570.2	568.4	570.2	572.1	574.1
117.5°	655.4	657.2	659.0	658.6	656.1	653.6	651.0	648.6	651.0	653.6	656.1
120°	707.0	709.5	712.1	712.1	709.5	707.0	704.5	701.9	704.5	707.0	709.5
122.5°	760.1	761.9	763.6	763.0	759.9	756.9	753.8	750.8	753.8	756.9	759.9
125°	837.4	838.4	839.3	838.4	835.5	832.6	829.8	827.0	829.8	832.6	835.5
127.5°	914.5	915.7	916.8	915.6	912.0	908.3	904.7	901.2	904.7	908.3	912.0
130°	964.7	965.3	965.9	964.2	960.1	956.0	951.9	947.7	951.9	956.0	960.1
132.5°	1015.4	1015.3	1015.2	1013.4	1010.1	1006.7	1003.4	1000.0	1003.4	1006.7	1010.1
135°	1087.2	1086.6	1085.9	1083.8	1080.3	1076.9	1073.5	1070.0	1073.5	1076.9	1080.3
137.5°	1158.4	1157.6	1156.8	1154.9	1152.1	1149.2	1146.4	1143.6	1146.4	1149.2	1152.1
140°	1204.7	1203.1	1201.5	1199.3	1196.5	1193.6	1190.7	1187.9	1190.7	1193.6	1196.5
142.5°	1248.9	1247.7	1246.7	1244.7	1241.9	1239.1	1236.2	1233.4	1236.2	1239.1	1241.9
145°	1313.4	1311.5	1309.7	1307.6	1305.3	1303.2	1301.0	1298.7	1301.0	1303.2	1305.3
147.5°	1372.1	1370.8	1369.6	1367.6	1365.0	1362.3	1359.6	1357.0	1359.6	1362.3	1365.0
150°	1408.4	1407.2	1405.9	1404.4	1402.5	1400.6	1398.6	1396.8	1398.6	1400.6	1402.5
152.5°	1444.4	1442.8	1441.3	1439.6	1437.7	1435.8	1433.9	1432.0	1433.9	1435.8	1437.7
155°	1491.5	1490.5	1489.6	1488.7	1487.7	1486.8	1485.8	1484.9	1485.8	1486.8	1487.7
157.5°	1534.4	1533.8	1533.2	1532.6	1532.0	1531.3	1530.7	1530.0	1530.7	1531.3	1532.0
160°	1560.9	1560.7	1560.4	1559.9	1559.2	1558.6	1558.0	1557.4	1558.0	1558.6	1559.2
162.5°	1583.8	1583.4	1583.1	1582.9	1582.7	1582.6	1582.5	1582.3	1582.5	1582.6	1582.7
165°	1614.2	1614.2	1614.2	1614.4	1614.7	1615.0	1615.3	1615.6	1615.3	1615.0	1614.7
167.5°	1639.1	1639.1	1639.2	1639.6	1640.6	1641.5	1642.5	1643.4	1642.5	1641.5	1640.6
170°	1653.2	1653.5	1653.8	1654.4	1655.4	1656.3	1657.3	1658.2	1657.3	1656.3	1655.4
172.5°	1663.4	1663.8	1664.1	1664.7	1665.7	1666.6	1667.5	1668.5	1667.5	1666.6	1665.7
175°	1675.1	1675.7	1676.4	1677.2	1678.1	1679.0	1680.0	1680.9	1680.0	1679.0	1678.1
177.5°	1681.4	1681.9	1682.4	1683.1	1683.9	1684.6	1685.4	1686.1	1685.4	1684.6	1683.9
180°	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9



TEST NUMBER: P331490-830

CATALOG NUMBER: S122DIW-S290D1440U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	549.8	548.7	545.2	543.3	540.2	537.2	535.4	536.2	536.9	536.6	536.0
5°	534.0	529.9	523.7	518.4	514.5	507.5	504.4	502.9	501.6	500.2	498.7
7.5°	515.2	508.8	499.9	492.3	485.1	476.3	471.3	468.3	465.2	461.8	458.8
10°	501.9	492.9	483.4	472.8	464.2	456.3	449.2	444.5	440.2	436.1	433.2
12.5°	487.9	477.5	465.8	451.2	441.8	430.4	429.3	421.0	414.3	411.8	408.3
15°	465.5	450.9	436.1	418.8	411.3	401.1	394.6	388.1	382.4	378.3	377.3
17.5°	440.1	421.2	406.5	394.1	381.8	371.3	365.3	360.2	355.4	350.1	349.3
20°	420.8	404.4	388.4	377.5	364.9	354.1	346.9	341.8	337.6	334.4	331.7
22.5°	402.4	384.6	369.9	358.0	345.5	336.9	331.1	326.1	322.7	319.2	316.6
25°	373.0	359.1	343.0	329.5	319.2	313.7	309.0	304.7	302.6	300.2	297.2
27.5°	347.2	331.8	316.8	306.3	297.3	292.4	289.0	286.1	284.1	282.7	281.0
30°	329.1	313.5	301.7	291.4	283.9	279.0	276.8	275.1	272.8	271.9	271.1
32.5°	311.6	297.6	287.5	278.5	271.5	268.2	266.3	264.7	262.9	262.0	260.2
35°	286.9	275.1	265.3	260.3	254.6	251.8	250.3	248.2	246.5	245.6	245.3
37.5°	263.6	253.4	246.9	240.6	238.2	236.5	234.4	233.0	232.4	232.3	232.1
40°	248.5	240.3	234.4	229.3	228.3	225.6	223.9	222.7	222.7	222.9	222.7
42.5°	234.9	227.3	222.3	217.8	216.6	215.1	213.3	213.3	213.6	214.3	213.6
45°	214.1	208.8	205.1	203.0	200.7	199.2	198.9	199.5	199.7	200.0	200.7
47.5°	195.0	191.4	188.1	185.8	184.7	184.5	184.3	185.4	186.4	186.8	187.8
50°	183.7	179.6	176.8	175.3	174.5	174.1	174.5	175.8	176.6	177.7	178.3
52.5°	171.1	168.1	166.3	165.0	164.8	165.0	165.0	166.5	167.9	168.3	168.6
55°	153.5	151.4	151.0	149.0	149.9	149.7	150.7	151.6	152.9	154.2	154.4
57.5°	136.0	134.3	133.2	133.4	133.7	134.6	135.4	137.0	138.3	139.7	139.8
60°	124.4	123.6	122.9	122.9	123.3	124.6	125.6	127.1	128.0	128.9	129.5
62.5°	113.8	112.9	112.3	112.6	113.8	114.5	115.7	116.6	117.4	118.3	118.6
65°	97.0	96.6	97.2	97.6	97.8	98.9	100.4	101.0	101.9	102.4	103.9
67.5°	81.5	81.6	81.5	82.1	83.4	83.6	85.0	86.5	86.7	87.6	88.5
70°	71.1	71.5	71.9	72.4	73.4	73.9	74.9	75.6	76.4	77.1	77.8
72.5°	61.5	61.5	62.0	61.9	62.9	63.7	64.7	65.3	66.2	67.0	67.6
75°	47.3	47.3	47.8	48.0	49.0	50.1	49.9	50.3	51.2	52.0	52.5
77.5°	34.6	34.1	34.6	34.8	35.2	36.0	36.2	36.8	37.8	37.5	38.0
80°	26.3	25.7	26.3	26.6	26.6	27.6	27.6	28.1	28.7	28.1	28.7
82.5°	18.8	18.5	18.9	19.0	19.3	19.4	19.7	19.8	20.5	20.2	20.5
85°	9.4	9.2	9.4	9.2	9.4	9.6	9.6	9.4	9.4	9.8	9.2
87.5°	6.2	7.2	8.4	9.7	10.9	12.2	11.9	11.8	11.6	11.1	11.1
90°	16.6	22.0	28.9	35.8	42.8	49.8	49.1	48.4	47.9	47.2	47.0
92.5°	36.4	38.6	40.2	41.9	43.5	45.1	45.3	45.4	45.5	45.7	45.8
95°	86.5	88.4	89.1	89.6	90.3	91.0	91.0	91.0	91.0	91.0	90.6
97.5°	146.1	148.1	149.3	150.5	151.7	152.9	152.9	152.9	152.9	152.9	152.9
100°	190.6	192.3	193.2	194.2	195.1	196.0	196.0	196.0	196.0	196.0	196.0
102.5°	236.3	237.9	239.1	240.3	241.5	242.7	243.0	243.2	243.5	243.7	243.6
105°	309.2	310.1	310.8	311.3	312.0	312.6	313.2	313.9	314.5	315.1	315.5
107.5°	388.9	389.6	389.6	389.6	389.6	389.6	389.8	390.1	390.4	390.6	390.0
110°	440.9	442.0	442.0	442.0	442.0	442.0	442.0	442.0	442.0	442.0	441.4



TEST NUMBER: P331490-830

CATALOG NUMBER: S122DIW-S290D1440U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	495.5	496.3	496.1	495.9	495.6	495.3	494.6	493.8	493.0	492.3	491.5
115°	576.0	576.6	576.0	575.3	574.7	574.1	573.7	573.4	573.1	572.8	572.1
117.5°	658.6	659.0	657.2	655.4	653.7	652.0	651.2	650.4	649.7	648.9	648.0
120°	712.1	712.1	709.5	707.0	704.5	701.9	701.9	701.9	701.9	701.9	701.4
122.5°	763.0	763.6	761.9	760.1	758.3	756.5	755.7	755.0	754.2	753.5	752.7
125°	838.4	839.3	838.4	837.4	836.5	835.5	834.5	833.6	832.6	831.7	831.1
127.5°	915.6	916.8	915.7	914.5	913.4	912.3	911.1	909.9	908.8	907.7	906.6
130°	964.2	965.9	965.3	964.7	964.0	963.4	962.8	962.1	961.5	960.8	959.9
132.5°	1013.4	1015.2	1015.3	1015.4	1015.6	1015.7	1014.3	1013.0	1011.5	1010.1	1008.9
135°	1083.8	1085.9	1086.6	1087.2	1087.8	1088.4	1088.2	1087.8	1087.5	1087.2	1086.6
137.5°	1154.9	1156.8	1157.6	1158.4	1159.2	1160.1	1159.8	1159.5	1159.3	1159.0	1158.3
140°	1199.3	1201.5	1203.1	1204.7	1206.3	1207.8	1207.8	1207.8	1207.8	1207.8	1207.2
142.5°	1244.7	1246.7	1247.7	1248.9	1249.9	1251.0	1251.2	1251.5	1251.8	1252.0	1251.5
145°	1307.6	1309.7	1311.5	1313.4	1315.3	1317.2	1317.5	1317.9	1318.1	1318.4	1318.0
147.5°	1367.6	1369.6	1370.8	1372.1	1373.4	1374.6	1375.4	1376.0	1376.7	1377.4	1377.1
150°	1404.4	1405.9	1407.2	1408.4	1409.8	1411.0	1411.9	1412.9	1413.8	1414.8	1414.8
152.5°	1439.6	1441.3	1442.8	1444.4	1445.9	1447.4	1448.6	1449.7	1451.0	1452.2	1452.2
155°	1488.7	1489.6	1490.5	1491.5	1492.4	1493.4	1495.0	1496.6	1498.2	1499.7	1500.1
157.5°	1532.6	1533.2	1533.8	1534.4	1534.9	1535.5	1537.6	1539.7	1541.9	1544.1	1544.4
160°	1559.9	1560.4	1560.7	1560.9	1561.3	1561.6	1563.5	1565.4	1567.3	1569.1	1569.5
162.5°	1582.9	1583.1	1583.4	1583.8	1584.0	1584.3	1586.5	1588.7	1590.8	1592.9	1593.3
165°	1614.4	1614.2	1614.2	1614.2	1614.2	1614.2	1616.4	1618.6	1620.8	1623.1	1623.3
167.5°	1639.6	1639.2	1639.1	1639.1	1639.0	1638.9	1641.2	1643.3	1645.6	1647.8	1648.0
170°	1654.4	1653.8	1653.5	1653.2	1652.8	1652.6	1654.7	1657.0	1659.2	1661.4	1661.5
172.5°	1664.7	1664.1	1663.8	1663.4	1663.1	1662.7	1665.0	1667.2	1669.4	1671.6	1671.8
175°	1677.2	1676.4	1675.7	1675.1	1674.5	1673.9	1676.1	1678.3	1680.5	1682.7	1682.9
177.5°	1683.1	1682.4	1681.9	1681.4	1680.9	1680.4	1681.9	1683.5	1685.0	1686.5	1686.5
180°	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9



TEST NUMBER: P331490-830

CATALOG NUMBER: S122DIW-S290D1440U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	534.3	534.0	534.0	532.4	534.0	534.0	534.3	536.0	536.6	536.9	536.2
5°	495.7	495.0	494.0	495.0	494.0	495.0	495.7	498.7	500.2	501.6	502.9
7.5°	457.4	454.9	454.5	451.9	454.5	454.9	457.4	458.8	461.8	465.2	468.3
10°	429.5	427.8	427.5	423.5	427.5	427.8	429.5	433.2	436.1	440.2	444.5
12.5°	408.3	404.2	405.0	402.7	405.0	404.2	408.3	408.3	411.8	414.3	421.0
15°	371.5	371.5	370.6	367.0	370.6	371.5	371.5	377.3	378.3	382.4	388.1
17.5°	345.1	344.6	342.6	343.7	342.6	344.6	345.1	349.3	350.1	355.4	360.2
20°	329.3	328.0	325.5	325.5	325.5	328.0	329.3	331.7	334.4	337.6	341.8
22.5°	314.4	314.3	311.6	312.5	311.6	314.3	314.4	316.6	319.2	322.7	326.1
25°	297.0	295.3	294.0	294.6	294.0	295.3	297.0	297.2	300.2	302.6	304.7
27.5°	280.4	279.5	279.4	277.7	279.4	279.5	280.4	281.0	282.7	284.1	286.1
30°	270.9	268.7	269.1	268.1	269.1	268.7	270.9	271.1	271.9	272.8	275.1
32.5°	259.9	259.1	258.7	257.8	258.7	259.1	259.9	260.2	262.0	262.9	264.7
35°	245.0	245.2	244.1	244.5	244.1	245.2	245.0	245.3	245.6	246.5	248.2
37.5°	231.9	232.5	232.1	232.1	232.1	232.5	231.9	232.1	232.3	232.4	233.0
40°	223.3	223.3	223.3	223.9	223.3	223.3	223.3	222.7	222.9	222.7	222.7
42.5°	215.1	214.7	214.4	214.3	214.4	214.7	215.1	213.6	214.3	213.6	213.3
45°	201.0	201.7	201.9	200.9	201.9	201.7	201.0	200.7	200.0	199.7	199.5
47.5°	188.3	188.4	188.3	189.3	188.3	188.4	188.3	187.8	186.8	186.4	185.4
50°	179.5	179.0	179.5	179.0	179.5	179.0	179.5	178.3	177.7	176.6	175.8
52.5°	170.0	170.1	169.8	169.8	169.8	170.1	170.0	168.6	168.3	167.9	166.5
55°	155.2	155.6	155.4	155.4	155.4	155.6	155.2	154.4	154.2	152.9	151.6
57.5°	140.0	140.3	140.6	139.7	140.6	140.3	140.0	139.8	139.7	138.3	137.0
60°	129.3	130.4	130.2	129.8	130.2	130.4	129.3	129.5	128.9	128.0	127.1
62.5°	119.5	120.0	119.9	119.8	119.9	120.0	119.5	118.6	118.3	117.4	116.6
65°	104.5	104.9	104.2	104.9	104.2	104.9	104.5	103.9	102.4	101.9	101.0
67.5°	88.2	88.4	88.9	89.2	88.9	88.4	88.2	88.5	87.6	86.7	86.5
70°	78.1	77.9	78.6	79.3	78.6	77.9	78.1	77.8	77.1	76.4	75.6
72.5°	67.5	68.0	67.8	68.2	67.8	68.0	67.5	67.6	67.0	66.2	65.3
75°	52.0	52.7	52.5	53.1	52.5	52.7	52.0	52.5	52.0	51.2	50.3
77.5°	37.6	37.7	37.6	38.0	37.6	37.7	37.6	38.0	37.5	37.8	36.8
80°	28.7	28.3	27.8	28.7	27.8	28.3	28.7	28.7	28.1	28.7	28.1
82.5°	20.0	20.2	19.8	19.8	19.8	20.2	20.0	20.5	20.2	20.5	19.8
85°	9.2	9.0	8.6	8.6	8.6	9.0	9.2	9.2	9.8	9.4	9.4
87.5°	11.2	11.1	11.1	11.0	11.1	11.1	11.2	11.1	11.1	11.6	11.8
90°	47.4	47.7	48.0	48.4	48.0	47.7	47.4	47.0	47.2	47.9	48.4
92.5°	45.8	45.9	46.0	46.0	46.0	45.9	45.8	45.8	45.7	45.5	45.4
95°	90.0	89.4	88.7	88.1	88.7	89.4	90.0	90.6	91.0	91.0	91.0
97.5°	152.8	152.7	152.7	152.6	152.7	152.7	152.8	152.9	152.9	152.9	152.9
100°	195.6	195.3	195.0	194.6	195.0	195.3	195.6	196.0	196.0	196.0	196.0
102.5°	243.4	243.1	242.7	242.4	242.7	243.1	243.4	243.6	243.7	243.5	243.2
105°	315.5	315.5	315.5	315.5	315.5	315.5	315.5	315.5	315.1	314.5	313.9
107.5°	388.6	387.1	385.7	384.2	385.7	387.1	388.6	390.0	390.6	390.4	390.1
110°	440.5	439.5	438.6	437.6	438.6	439.5	440.5	441.4	442.0	442.0	442.0



TEST NUMBER: P331490-830

CATALOG NUMBER: S122DIW-S290D1440U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	490.9	490.2	489.5	488.8	489.5	490.2	490.9	491.5	492.3	493.0	493.8
115°	571.2	570.2	569.3	568.4	569.3	570.2	571.2	572.1	572.8	573.1	573.4
117.5°	647.1	646.1	645.2	644.2	645.2	646.1	647.1	648.0	648.9	649.7	650.4
120°	700.5	699.6	698.6	697.7	698.6	699.6	700.5	701.4	701.9	701.9	701.9
122.5°	752.1	751.4	750.6	750.0	750.6	751.4	752.1	752.7	753.5	754.2	755.0
125°	830.8	830.5	830.2	829.8	830.2	830.5	830.8	831.1	831.7	832.6	833.6
127.5°	905.6	904.6	903.6	902.6	903.6	904.6	905.6	906.6	907.7	908.8	909.9
130°	958.7	957.4	956.1	954.9	956.1	957.4	958.7	959.9	960.8	961.5	962.1
132.5°	1008.0	1006.9	1005.9	1004.8	1005.9	1006.9	1008.0	1008.9	1010.1	1011.5	1013.0
135°	1085.6	1084.7	1083.7	1082.8	1083.7	1084.7	1085.6	1086.6	1087.2	1087.5	1087.8
137.5°	1157.1	1155.7	1154.5	1153.2	1154.5	1155.7	1157.1	1158.3	1159.0	1159.3	1159.5
140°	1205.9	1204.7	1203.3	1202.1	1203.3	1204.7	1205.9	1207.2	1207.8	1207.8	1207.8
142.5°	1250.3	1249.0	1247.7	1246.4	1247.7	1249.0	1250.3	1251.5	1252.0	1251.8	1251.5
145°	1316.7	1315.5	1314.2	1313.0	1314.2	1315.5	1316.7	1318.0	1318.4	1318.1	1317.9
147.5°	1375.9	1374.7	1373.6	1372.3	1373.6	1374.7	1375.9	1377.1	1377.4	1376.7	1376.0
150°	1413.8	1412.9	1411.9	1411.0	1411.9	1412.9	1413.8	1414.8	1414.8	1413.8	1412.9
152.5°	1451.0	1449.7	1448.6	1447.4	1448.6	1449.7	1451.0	1452.2	1452.2	1451.0	1449.7
155°	1499.1	1498.2	1497.2	1496.3	1497.2	1498.2	1499.1	1500.1	1499.7	1498.2	1496.6
157.5°	1542.8	1541.3	1539.8	1538.3	1539.8	1541.3	1542.8	1544.4	1544.1	1541.9	1539.7
160°	1568.2	1567.0	1565.8	1564.4	1565.8	1567.0	1568.2	1569.5	1569.1	1567.3	1565.4
162.5°	1591.8	1590.3	1588.7	1587.1	1588.7	1590.3	1591.8	1593.3	1592.9	1590.8	1588.7
165°	1621.7	1620.2	1618.6	1617.0	1618.6	1620.2	1621.7	1623.3	1623.1	1620.8	1618.6
167.5°	1646.4	1644.7	1643.1	1641.4	1643.1	1644.7	1646.4	1648.0	1647.8	1645.6	1643.3
170°	1659.6	1657.7	1655.9	1654.0	1655.9	1657.7	1659.6	1661.5	1661.4	1659.2	1657.0
172.5°	1669.9	1668.0	1666.1	1664.2	1666.1	1668.0	1669.9	1671.8	1671.6	1669.4	1667.2
175°	1680.9	1679.0	1677.2	1675.3	1677.2	1679.0	1680.9	1682.9	1682.7	1680.5	1678.3
177.5°	1685.0	1683.5	1681.9	1680.4	1681.9	1683.5	1685.0	1686.5	1686.5	1685.0	1683.5
180°	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	535.4	537.2	540.2	543.3	545.2	548.7	549.8	551.5	553.0	556.6	560.3
5°	504.4	507.5	514.5	518.4	523.7	529.9	534.0	538.3	543.0	551.1	558.6
7.5°	471.3	476.3	485.1	492.3	499.9	508.8	515.2	523.7	530.7	542.2	553.2
10°	449.2	456.3	464.2	472.8	483.4	492.9	501.9	512.6	521.1	534.9	547.7
12.5°	429.3	430.4	441.8	451.2	465.8	477.5	487.9	501.6	510.0	526.3	539.8
15°	394.6	401.1	411.3	418.8	436.1	450.9	465.5	479.8	489.5	509.6	527.4
17.5°	365.3	371.3	381.8	394.1	406.5	421.2	440.1	455.2	468.3	491.3	512.4
20°	346.9	354.1	364.9	377.5	388.4	404.4	420.8	438.1	452.2	478.2	502.8
22.5°	331.1	336.9	345.5	358.0	369.9	384.6	402.4	421.3	436.1	464.1	489.0
25°	309.0	313.7	319.2	329.5	343.0	359.1	373.0	393.8	415.4	441.5	471.6
27.5°	289.0	292.4	297.3	306.3	316.8	331.8	347.2	366.9	388.7	417.1	448.9
30°	276.8	279.0	283.9	291.4	301.7	313.5	329.1	347.9	370.2	398.9	430.6
32.5°	266.3	268.2	271.5	278.5	287.5	297.6	311.6	330.5	351.7	379.8	415.0
35°	250.3	251.8	254.6	260.3	265.3	275.1	286.9	304.1	324.0	350.9	387.3
37.5°	234.4	236.5	238.2	240.6	246.9	253.4	263.6	278.1	297.7	324.9	359.6
40°	223.9	225.6	228.3	229.3	234.4	240.3	248.5	261.8	281.5	306.4	340.3
42.5°	213.3	215.1	216.6	217.8	222.3	227.3	234.9	246.3	263.7	287.9	321.4
45°	198.9	199.2	200.7	203.0	205.1	208.8	214.1	223.9	237.4	260.1	290.6
47.5°	184.3	184.5	184.7	185.8	188.1	191.4	195.0	203.0	215.1	233.2	262.8
50°	174.5	174.1	174.5	175.3	176.8	179.6	183.7	189.5	199.3	216.2	243.5
52.5°	165.0	165.0	164.8	165.0	166.3	168.1	171.1	176.0	184.7	200.3	224.2
55°	150.7	149.7	149.9	149.0	151.0	151.4	153.5	157.6	165.3	176.0	198.5
57.5°	135.4	134.6	133.7	133.4	133.2	134.3	136.0	139.2	145.2	154.6	172.8
60°	125.6	124.6	123.3	122.9	122.9	123.6	124.4	126.8	132.3	140.6	155.6
62.5°	115.7	114.5	113.8	112.6	112.3	112.9	113.8	115.5	119.5	127.3	140.3
65°	100.4	98.9	97.8	97.6	97.2	96.6	97.0	98.7	101.9	108.1	118.4
67.5°	85.0	83.6	83.4	82.1	81.5	81.6	81.5	82.9	84.9	90.3	97.9
70°	74.9	73.9	73.4	72.4	71.9	71.5	71.1	72.4	74.3	78.8	85.4
72.5°	64.7	63.7	62.9	61.9	62.0	61.5	61.5	62.3	63.8	68.0	73.1
75°	49.9	50.1	49.0	48.0	47.8	47.3	47.3	48.0	48.6	51.8	55.9
77.5°	36.2	36.0	35.2	34.8	34.6	34.1	34.6	35.0	35.3	37.5	40.4
80°	27.6	27.6	26.6	26.6	26.3	25.7	26.3	25.9	26.8	28.9	31.0
82.5°	19.7	19.4	19.3	19.0	18.9	18.5	18.8	19.2	19.6	21.0	22.3
85°	9.6	9.6	9.4	9.2	9.4	9.2	9.4	9.6	9.8	10.5	11.6
87.5°	11.9	12.2	10.9	9.7	8.4	7.2	6.2	5.7	5.2	4.6	4.1
90°	49.1	49.8	42.8	35.8	28.9	22.0	16.6	12.8	9.0	5.2	1.4
92.5°	45.3	45.1	43.5	41.9	40.2	38.6	36.4	33.6	30.8	28.1	25.3
95°	91.0	91.0	90.3	89.6	89.1	88.4	86.5	83.3	80.2	77.0	73.9
97.5°	152.9	152.9	151.7	150.5	149.3	148.1	146.1	143.4	140.5	137.8	135.0
100°	196.0	196.0	195.1	194.2	193.2	192.3	190.6	188.0	185.5	182.9	180.5
102.5°	243.0	242.7	241.5	240.3	239.1	237.9	236.3	234.2	232.2	230.3	228.2
105°	313.2	312.6	312.0	311.3	310.8	310.1	309.2	308.3	307.4	306.4	305.5
107.5°	389.8	389.6	389.6	389.6	389.6	389.6	388.9	387.6	386.2	384.7	383.3
110°	442.0	442.0	442.0	442.0	442.0	442.0	440.9	439.0	437.2	435.3	433.4



TEST NUMBER: P331490-830

CATALOG NUMBER: S122DIW-S290D1440U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	494.6	495.3	495.6	495.9	496.1	496.3	495.5	493.6	491.7	489.8	488.0
115°	573.7	574.1	574.7	575.3	576.0	576.6	576.0	574.1	572.1	570.2	568.4
117.5°	651.2	652.0	653.7	655.4	657.2	659.0	658.6	656.1	653.6	651.0	648.6
120°	701.9	701.9	704.5	707.0	709.5	712.1	712.1	709.5	707.0	704.5	701.9
122.5°	755.7	756.5	758.3	760.1	761.9	763.6	763.0	759.9	756.9	753.8	750.8
125°	834.5	835.5	836.5	837.4	838.4	839.3	838.4	835.5	832.6	829.8	827.0
127.5°	911.1	912.3	913.4	914.5	915.7	916.8	915.6	912.0	908.3	904.7	901.2
130°	962.8	963.4	964.0	964.7	965.3	965.9	964.2	960.1	956.0	951.9	947.7
132.5°	1014.3	1015.7	1015.6	1015.4	1015.3	1015.2	1013.4	1010.1	1006.7	1003.4	1000.0
135°	1088.2	1088.4	1087.8	1087.2	1086.6	1085.9	1083.8	1080.3	1076.9	1073.5	1070.0
137.5°	1159.8	1160.1	1159.2	1158.4	1157.6	1156.8	1154.9	1152.1	1149.2	1146.4	1143.6
140°	1207.8	1207.8	1206.3	1204.7	1203.1	1201.5	1199.3	1196.5	1193.6	1190.7	1187.9
142.5°	1251.2	1251.0	1249.9	1248.9	1247.7	1246.7	1244.7	1241.9	1239.1	1236.2	1233.4
145°	1317.5	1317.2	1315.3	1313.4	1311.5	1309.7	1307.6	1305.3	1303.2	1301.0	1298.7
147.5°	1375.4	1374.6	1373.4	1372.1	1370.8	1369.6	1367.6	1365.0	1362.3	1359.6	1357.0
150°	1411.9	1411.0	1409.8	1408.4	1407.2	1405.9	1404.4	1402.5	1400.6	1398.6	1396.8
152.5°	1448.6	1447.4	1445.9	1444.4	1442.8	1441.3	1439.6	1437.7	1435.8	1433.9	1432.0
155°	1495.0	1493.4	1492.4	1491.5	1490.5	1489.6	1488.7	1487.7	1486.8	1485.8	1484.9
157.5°	1537.6	1535.5	1534.9	1534.4	1533.8	1533.2	1532.6	1532.0	1531.3	1530.7	1530.0
160°	1563.5	1561.6	1561.3	1560.9	1560.7	1560.4	1559.9	1559.2	1558.6	1558.0	1557.4
162.5°	1586.5	1584.3	1584.0	1583.8	1583.4	1583.1	1582.9	1582.7	1582.6	1582.5	1582.3
165°	1616.4	1614.2	1614.2	1614.2	1614.2	1614.2	1614.4	1614.7	1615.0	1615.3	1615.6
167.5°	1641.2	1638.9	1639.0	1639.1	1639.1	1639.2	1639.6	1640.6	1641.5	1642.5	1643.4
170°	1654.7	1652.6	1652.8	1653.2	1653.5	1653.8	1654.4	1655.4	1656.3	1657.3	1658.2
172.5°	1665.0	1662.7	1663.1	1663.4	1663.8	1664.1	1664.7	1665.7	1666.6	1667.5	1668.5
175°	1676.1	1673.9	1674.5	1675.1	1675.7	1676.4	1677.2	1678.1	1679.0	1680.0	1680.9
177.5°	1681.9	1680.4	1680.9	1681.4	1681.9	1682.4	1683.1	1683.9	1684.6	1685.4	1686.1
180°	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9



TEST NUMBER: P331490-830

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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	560.1	560.9	563.6	566.4	569.5	570.3	571.7	570.5	570.1	573.3	575.8
5°	561.7	565.4	573.0	579.9	585.6	589.7	594.0	595.7	598.9	603.3	609.0
7.5°	559.8	567.3	579.1	589.1	599.9	607.8	613.9	619.2	625.5	634.0	643.3
10°	557.8	567.8	582.2	594.4	607.7	617.7	626.0	634.2	643.7	655.4	667.6
12.5°	554.0	565.9	583.9	598.3	615.4	625.3	636.5	654.0	664.2	680.6	697.8
15°	546.4	559.7	584.8	602.5	621.8	640.6	661.4	678.1	694.7	704.5	728.6
17.5°	535.2	554.6	582.4	603.1	627.6	657.2	680.6	699.6	718.8	734.4	746.6
20°	526.0	547.2	579.0	603.8	632.9	664.8	691.5	710.9	727.5	740.6	748.1
22.5°	514.6	541.3	572.1	601.2	638.4	670.0	698.0	713.2	727.2	733.6	736.5
25°	496.5	528.7	563.5	599.1	641.0	674.5	700.1	709.4	713.4	707.2	696.9
27.5°	477.0	512.8	553.6	595.0	639.4	671.6	689.9	688.5	681.6	661.5	645.5
30°	462.5	501.9	545.7	591.0	635.5	666.8	677.4	666.8	651.1	628.7	605.7
32.5°	447.2	488.0	537.3	585.1	628.3	655.8	658.1	639.7	615.5	589.9	561.4
35°	424.1	468.3	521.6	572.1	613.0	630.4	620.1	587.5	558.8	524.0	484.9
37.5°	398.0	446.8	500.2	553.1	590.1	594.7	569.1	534.9	494.4	453.4	407.5
40°	378.5	430.2	485.2	538.5	571.3	566.6	534.0	496.3	448.2	398.0	355.4
42.5°	361.1	412.6	468.7	521.0	547.2	534.3	496.3	450.1	398.3	351.1	312.1
45°	330.8	383.9	441.3	491.8	506.8	483.4	433.2	381.7	330.8	291.4	260.6
47.5°	301.4	353.9	410.8	455.2	460.4	429.0	374.1	321.2	277.4	245.3	223.6
50°	279.8	332.5	388.8	428.5	426.7	388.8	332.3	282.0	245.3	219.4	204.9
52.5°	260.5	310.3	364.3	400.4	391.2	350.0	296.0	251.3	221.2	201.0	187.8
55°	230.4	276.4	327.8	356.8	340.0	294.2	248.5	212.6	190.3	175.1	164.9
57.5°	200.5	243.6	287.7	305.5	287.0	244.7	206.7	180.6	163.8	152.6	145.9
60°	182.0	219.7	258.8	274.3	252.2	214.5	184.5	161.3	147.7	138.6	132.5
62.5°	163.5	197.3	234.2	242.6	222.4	190.6	164.0	144.6	133.6	125.4	119.7
65°	138.3	166.0	194.0	199.5	181.0	156.3	135.3	122.7	112.8	106.9	102.4
67.5°	113.5	135.6	155.5	159.9	143.6	126.6	111.4	100.4	93.8	88.8	84.9
70°	98.7	116.3	132.5	136.2	123.1	107.9	96.3	87.6	81.5	77.3	73.6
72.5°	83.1	97.7	111.3	113.8	103.1	91.4	82.0	75.0	69.7	67.0	63.5
75°	63.6	72.2	82.7	83.3	76.3	69.2	61.9	57.4	54.6	51.2	49.5
77.5°	44.9	51.6	57.6	58.7	54.6	49.8	45.7	42.1	39.8	38.2	36.6
80°	34.2	39.6	42.2	43.6	40.7	37.2	34.9	32.5	31.0	30.0	28.9
82.5°	24.5	27.8	30.2	31.4	29.7	27.6	25.4	23.9	22.8	22.0	21.6
85°	12.4	13.9	15.5	15.8	15.5	14.5	13.3	13.3	12.6	12.4	12.4
87.5°	5.3	6.8	7.5	8.8	9.5	10.9	12.3	13.5	14.7	14.4	14.1
90°	5.2	9.0	12.8	16.6	22.0	28.9	35.8	42.8	49.8	49.1	48.4
92.5°	28.1	30.8	33.6	36.4	38.6	40.2	41.9	43.5	45.1	45.3	45.4
95°	77.0	80.2	83.3	86.5	88.4	89.1	89.6	90.3	91.0	91.0	91.0
97.5°	137.8	140.5	143.4	146.1	148.1	149.3	150.5	151.7	152.9	152.9	152.9
100°	182.9	185.5	188.0	190.6	192.3	193.2	194.2	195.1	196.0	196.0	196.0
102.5°	230.3	232.2	234.2	236.3	237.9	239.1	240.3	241.5	242.7	243.0	243.2
105°	306.4	307.4	308.3	309.2	310.1	310.8	311.3	312.0	312.6	313.2	313.9
107.5°	384.7	386.2	387.6	388.9	389.6	389.6	389.6	389.6	389.6	389.8	390.1
110°	435.3	437.2	439.0	440.9	442.0	442.0	442.0	442.0	442.0	442.0	442.0



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	489.8	491.7	493.6	495.5	496.3	496.1	495.9	495.6	495.3	494.6	493.8
115°	570.2	572.1	574.1	576.0	576.6	576.0	575.3	574.7	574.1	573.7	573.4
117.5°	651.0	653.6	656.1	658.6	659.0	657.2	655.4	653.7	652.0	651.2	650.4
120°	704.5	707.0	709.5	712.1	712.1	709.5	707.0	704.5	701.9	701.9	701.9
122.5°	753.8	756.9	759.9	763.0	763.6	761.9	760.1	758.3	756.5	755.7	755.0
125°	829.8	832.6	835.5	838.4	839.3	838.4	837.4	836.5	835.5	834.5	833.6
127.5°	904.7	908.3	912.0	915.6	916.8	915.7	914.5	913.4	912.3	911.1	909.9
130°	951.9	956.0	960.1	964.2	965.9	965.3	964.7	964.0	963.4	962.8	962.1
132.5°	1003.4	1006.7	1010.1	1013.4	1015.2	1015.3	1015.4	1015.6	1015.7	1014.3	1013.0
135°	1073.5	1076.9	1080.3	1083.8	1085.9	1086.6	1087.2	1087.8	1088.4	1088.2	1087.8
137.5°	1146.4	1149.2	1152.1	1154.9	1156.8	1157.6	1158.4	1159.2	1160.1	1159.8	1159.5
140°	1190.7	1193.6	1196.5	1199.3	1201.5	1203.1	1204.7	1206.3	1207.8	1207.8	1207.8
142.5°	1236.2	1239.1	1241.9	1244.7	1246.7	1247.7	1248.9	1249.9	1251.0	1251.2	1251.5
145°	1301.0	1303.2	1305.3	1307.6	1309.7	1311.5	1313.4	1315.3	1317.2	1317.5	1317.9
147.5°	1359.6	1362.3	1365.0	1367.6	1369.6	1370.8	1372.1	1373.4	1374.6	1375.4	1376.0
150°	1398.6	1400.6	1402.5	1404.4	1405.9	1407.2	1408.4	1409.8	1411.0	1411.9	1412.9
152.5°	1433.9	1435.8	1437.7	1439.6	1441.3	1442.8	1444.4	1445.9	1447.4	1448.6	1449.7
155°	1485.8	1486.8	1487.7	1488.7	1489.6	1490.5	1491.5	1492.4	1493.4	1495.0	1496.6
157.5°	1530.7	1531.3	1532.0	1532.6	1533.2	1533.8	1534.4	1534.9	1535.5	1537.6	1539.7
160°	1558.0	1558.6	1559.2	1559.9	1560.4	1560.7	1560.9	1561.3	1561.6	1563.5	1565.4
162.5°	1582.5	1582.6	1582.7	1582.9	1583.1	1583.4	1583.8	1584.0	1584.3	1586.5	1588.7
165°	1615.3	1615.0	1614.7	1614.4	1614.2	1614.2	1614.2	1614.2	1614.2	1616.4	1618.6
167.5°	1642.5	1641.5	1640.6	1639.6	1639.2	1639.1	1639.1	1639.0	1638.9	1641.2	1643.3
170°	1657.3	1656.3	1655.4	1654.4	1653.8	1653.5	1653.2	1652.8	1652.6	1654.7	1657.0
172.5°	1667.5	1666.6	1665.7	1664.7	1664.1	1663.8	1663.4	1663.1	1662.7	1665.0	1667.2
175°	1680.0	1679.0	1678.1	1677.2	1676.4	1675.7	1675.1	1674.5	1673.9	1676.1	1678.3
177.5°	1685.4	1684.6	1683.9	1683.1	1682.4	1681.9	1681.4	1680.9	1680.4	1681.9	1683.5
180°	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	577.9	580.2	580.2	580.6	583.3	583.0	582.8
5°	614.9	618.6	619.0	622.8	625.4	624.5	622.2
7.5°	649.9	656.7	661.9	664.7	668.1	670.1	669.2
10°	677.7	687.5	693.5	697.6	702.5	706.2	704.8
12.5°	702.9	714.5	722.8	729.8	730.4	735.1	731.9
15°	742.2	754.5	755.8	760.9	765.1	764.6	764.8
17.5°	755.1	759.0	759.9	760.0	760.1	758.6	755.3
20°	750.5	748.9	745.4	742.5	737.6	737.0	732.7
22.5°	728.5	723.8	714.6	708.6	701.0	699.0	697.8
25°	685.4	674.9	660.3	646.4	642.5	635.1	637.2
27.5°	626.1	609.8	594.0	582.8	572.5	561.3	564.5
30°	584.6	566.1	543.8	526.7	515.8	505.1	503.1
32.5°	534.9	507.8	483.1	468.0	451.2	444.4	437.1
35°	449.2	422.8	398.2	377.0	364.9	355.4	346.9
37.5°	372.2	341.9	322.0	304.8	296.0	290.6	292.0
40°	324.4	297.8	283.2	270.2	262.0	258.3	259.1
42.5°	285.7	265.8	253.8	244.9	239.1	237.0	236.5
45°	241.8	230.6	220.7	215.7	212.8	210.5	209.0
47.5°	211.8	202.6	197.1	194.1	191.6	189.3	189.2
50°	193.8	187.8	183.9	180.7	178.8	177.1	178.6
52.5°	180.0	174.6	170.7	167.9	167.1	165.6	165.5
55°	159.8	155.4	152.7	150.1	148.8	148.0	146.8
57.5°	141.2	137.1	134.6	133.0	130.5	129.7	129.3
60°	128.0	124.8	122.2	120.1	119.0	117.3	117.3
62.5°	115.8	112.6	110.3	108.7	106.9	106.2	106.4
65°	98.3	95.7	93.3	91.6	91.2	89.9	90.4
67.5°	82.1	80.4	77.9	76.9	76.2	75.5	74.9
70°	71.3	69.6	68.3	67.0	66.4	66.4	66.4
72.5°	62.2	60.1	59.4	57.8	58.2	57.5	56.7
75°	48.2	46.8	46.3	45.6	44.6	44.6	44.6
77.5°	35.4	35.1	34.3	33.6	33.4	33.2	33.3
80°	27.4	27.1	26.8	26.8	26.3	26.1	25.7
82.5°	21.1	20.5	20.3	20.1	20.0	20.0	19.9
85°	12.0	11.6	11.6	11.8	11.3	11.3	11.6
87.5°	14.2	14.0	13.9	13.9	14.1	14.0	14.1
90°	47.9	47.2	47.0	47.4	47.7	48.0	48.4
92.5°	45.5	45.7	45.8	45.8	45.9	46.0	46.0
95°	91.0	91.0	90.6	90.0	89.4	88.7	88.1
97.5°	152.9	152.9	152.9	152.8	152.7	152.7	152.6
100°	196.0	196.0	196.0	195.6	195.3	195.0	194.6
102.5°	243.5	243.7	243.6	243.4	243.1	242.7	242.4
105°	314.5	315.1	315.5	315.5	315.5	315.5	315.5
107.5°	390.4	390.6	390.0	388.6	387.1	385.7	384.2
110°	442.0	442.0	441.4	440.5	439.5	438.6	437.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	493.0	492.3	491.5	490.9	490.2	489.5	488.8
115°	573.1	572.8	572.1	571.2	570.2	569.3	568.4
117.5°	649.7	648.9	648.0	647.1	646.1	645.2	644.2
120°	701.9	701.9	701.4	700.5	699.6	698.6	697.7
122.5°	754.2	753.5	752.7	752.1	751.4	750.6	750.0
125°	832.6	831.7	831.1	830.8	830.5	830.2	829.8
127.5°	908.8	907.7	906.6	905.6	904.6	903.6	902.6
130°	961.5	960.8	959.9	958.7	957.4	956.1	954.9
132.5°	1011.5	1010.1	1008.9	1008.0	1006.9	1005.9	1004.8
135°	1087.5	1087.2	1086.6	1085.6	1084.7	1083.7	1082.8
137.5°	1159.3	1159.0	1158.3	1157.1	1155.7	1154.5	1153.2
140°	1207.8	1207.8	1207.2	1205.9	1204.7	1203.3	1202.1
142.5°	1251.8	1252.0	1251.5	1250.3	1249.0	1247.7	1246.4
145°	1318.1	1318.4	1318.0	1316.7	1315.5	1314.2	1313.0
147.5°	1376.7	1377.4	1377.1	1375.9	1374.7	1373.6	1372.3
150°	1413.8	1414.8	1414.8	1413.8	1412.9	1411.9	1411.0
152.5°	1451.0	1452.2	1452.2	1451.0	1449.7	1448.6	1447.4
155°	1498.2	1499.7	1500.1	1499.1	1498.2	1497.2	1496.3
157.5°	1541.9	1544.1	1544.4	1542.8	1541.3	1539.8	1538.3
160°	1567.3	1569.1	1569.5	1568.2	1567.0	1565.8	1564.4
162.5°	1590.8	1592.9	1593.3	1591.8	1590.3	1588.7	1587.1
165°	1620.8	1623.1	1623.3	1621.7	1620.2	1618.6	1617.0
167.5°	1645.6	1647.8	1648.0	1646.4	1644.7	1643.1	1641.4
170°	1659.2	1661.4	1661.5	1659.6	1657.7	1655.9	1654.0
172.5°	1669.4	1671.6	1671.8	1669.9	1668.0	1666.1	1664.2
175°	1680.5	1682.7	1682.9	1680.9	1679.0	1677.2	1675.3
177.5°	1685.0	1686.5	1686.5	1685.0	1683.5	1681.9	1680.4
180°	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9

(END OF REPORT)