

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: P332403-830

Luminaire Tested: **S123RDIW-S340D1320U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332403-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDIW-S340D1320U830-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1320 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5593.4 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: Semi-Indirect

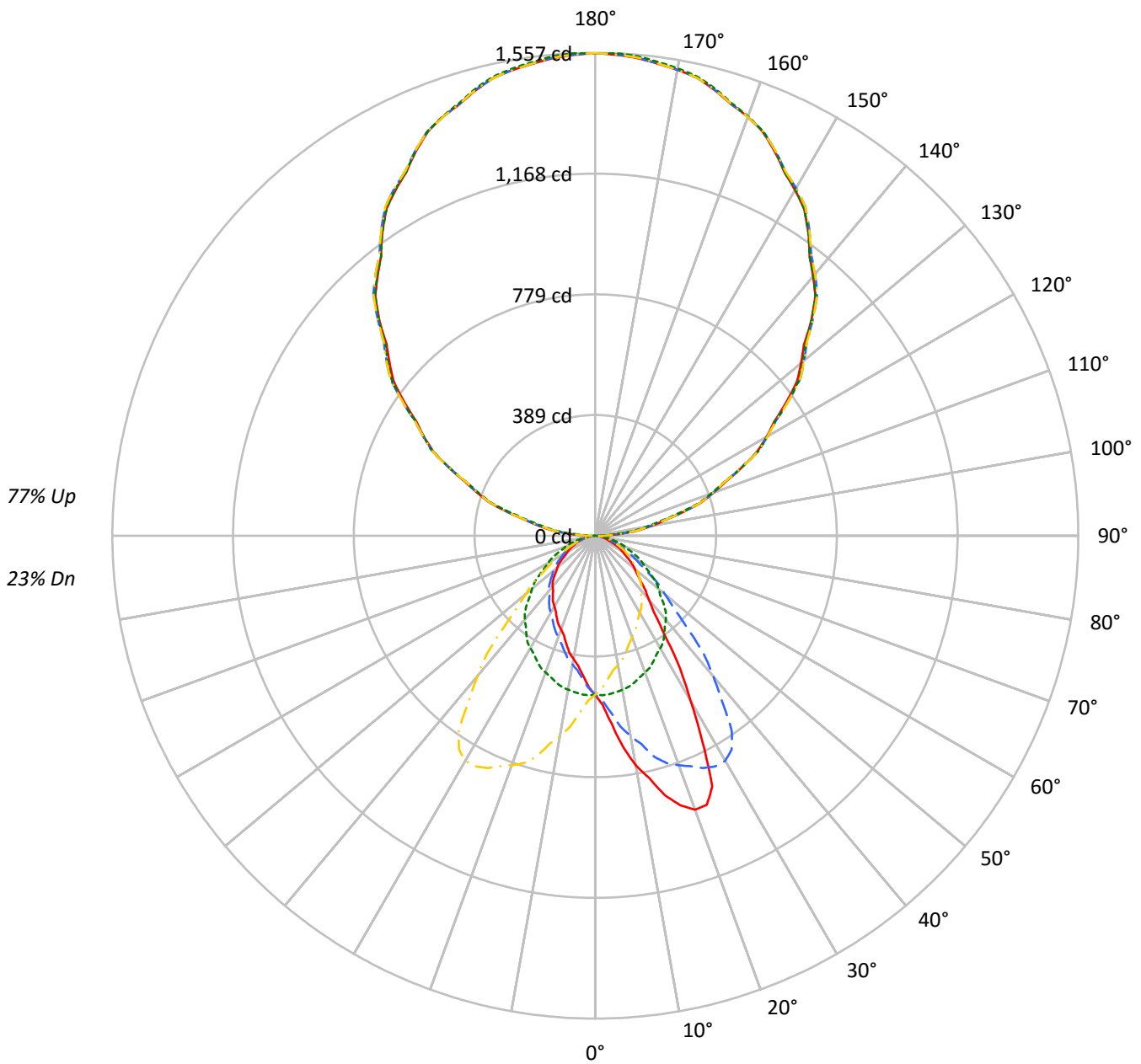
Input Watts (W): 46.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - · 90°-270° - · - · 135°-315°



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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	89	89	89	89	68	68	68	49	49	49	31	31	31	23
1	92	88	84	81	82	78	75	73	60	58	56	43	42	41	28	27	27	20
2	84	77	71	67	74	69	64	60	53	50	47	38	36	35	25	24	23	17
3	77	68	61	56	68	61	55	50	47	43	40	34	32	30	22	21	20	15
4	70	60	53	47	62	54	47	43	42	37	34	30	28	25	20	19	17	13
5	64	53	46	40	57	48	41	37	37	33	29	27	24	22	18	16	15	11
6	59	48	40	35	52	43	36	32	33	29	25	25	22	19	17	15	13	10
7	55	43	36	30	48	39	32	28	30	26	22	22	19	17	15	13	12	9
8	51	39	32	27	45	35	29	24	28	23	20	21	17	15	14	12	11	8
9	47	35	28	24	42	32	26	22	25	21	18	19	16	14	13	11	10	7
10	44	32	26	21	39	29	23	19	23	19	16	17	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5521	5521	5521	5521
5°	6582	5545	4883	5545
10°	8218	5513	4411	5513
15°	9646	5457	4023	5457
20°	10766	5372	3692	5372
25°	10594	5284	3489	5284
30°	7615	5203	3280	5203
35°	5084	5096	3144	5096
40°	3746	4967	3006	4967
45°	3142	4743	2868	4743
50°	2773	4449	2678	4449
55°	2432	4112	2415	4112
60°	2166	3791	2211	3791
65°	1900	3446	2058	3446
70°	1492	3138	1882	3138
75°	1314	2741	1718	2741
80°	1147	2325	1686	2325
85°	914	1877	1791	1877



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.4	0.9
10°-20°	157.6	2.8
20°-30°	247.6	4.4
30°-40°	258.3	4.6
40°-50°	221.1	4.0
50°-60°	168.5	3.0
60°-70°	108.0	1.9
70°-80°	52.0	0.9
80°-90°	18.3	0.3
90°-100°	101.4	1.8
100°-110°	303.4	5.4
110°-120°	516.1	9.2
120°-130°	678.8	12.1
130°-140°	763.0	13.6
140°-150°	750.0	13.4
150°-160°	631.4	11.3
160°-170°	420.3	7.5
170°-180°	147.2	2.6
0°-30°	455.6	8.1
0°-40°	714.0	12.8
0°-60°	1103.5	19.7
0°-90°	1281.8	22.9
90°-120°	920.9	16.5
90°-150°	3112.8	55.7
90°-180°	4312.0	77.1
0°-180°	5593.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	513	513	513	513	513	
5°	609	513	452	513	609	63
15°	866	490	361	490	866	245
25°	892	445	294	445	892	383
35°	387	388	239	388	387	254
45°	206	312	188	312	206	162
55°	130	219	129	219	130	117
65°	75	135	81	135	75	73
75°	32	66	41	66	32	34
85°	7	15	14	15	7	10
90°	37	1	37	1	37	18
95°	95	72	95	72	95	98
105°	291	275	291	275	291	309
115°	521	520	521	520	521	516
125°	752	760	752	760	752	672
135°	985	987	985	987	985	758
145°	1197	1197	1197	1197	1197	747
155°	1368	1370	1368	1370	1368	630
165°	1488	1493	1488	1493	1488	420
175°	1546	1553	1546	1553	1546	147
180°	1556	1556	1556	1556	1556	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	546.4	547.1	544.8	544.4	541.8	541.1	541.1	537.3	535.1	532.2	530.4
5°	609.2	612.7	610.9	607.0	600.4	598.8	594.7	588.1	580.6	571.4	567.0
7.5°	687.6	692.4	690.5	684.5	677.5	671.9	660.2	649.2	634.0	620.5	609.0
10°	751.9	746.9	742.9	737.0	730.6	720.3	707.9	691.1	671.6	656.1	639.0
12.5°	800.0	799.2	794.2	788.1	779.1	769.3	754.1	733.6	710.9	688.6	669.0
15°	865.6	867.0	863.7	857.3	844.5	827.2	804.4	795.8	763.3	739.1	715.0
17.5°	911.1	910.8	910.3	901.5	888.5	876.2	855.0	832.5	803.0	769.0	736.5
20°	939.9	937.6	938.1	928.2	918.6	904.3	883.6	850.9	826.8	787.5	753.8
22.5°	939.1	938.7	940.4	937.0	930.0	919.1	902.8	875.2	844.3	804.6	766.9
25°	892.0	890.2	900.5	903.4	914.6	916.6	911.7	896.6	867.4	826.5	779.8
27.5°	746.5	745.6	764.7	788.7	819.1	842.7	865.5	876.6	867.4	838.1	791.3
30°	612.7	633.3	643.0	677.7	716.3	762.4	802.9	841.2	850.7	837.9	799.6
32.5°	508.7	526.7	534.8	564.5	600.6	654.6	715.2	769.6	808.0	817.7	794.7
35°	386.9	387.1	405.6	418.8	452.1	507.7	566.6	639.4	711.9	766.9	772.5
37.5°	308.8	309.8	321.0	334.1	359.2	388.5	440.4	501.0	584.7	668.9	718.4
40°	266.6	268.5	276.9	289.8	307.8	330.1	370.4	427.5	497.4	591.2	667.8
42.5°	239.5	242.7	247.0	257.0	268.2	289.0	321.6	365.7	429.2	517.9	606.3
45°	206.4	208.2	211.5	216.1	226.2	240.6	262.6	292.3	345.0	416.3	504.8
47.5°	182.1	181.2	184.6	188.3	195.1	205.0	219.7	243.8	281.4	338.7	413.8
50°	165.6	165.3	167.8	170.6	177.0	184.3	196.3	214.5	244.4	291.8	360.6
52.5°	150.1	150.9	152.7	156.2	160.8	166.6	177.5	190.7	216.3	257.2	314.5
55°	129.6	130.3	132.6	134.6	137.9	143.8	150.6	161.6	179.2	207.7	255.0
57.5°	112.2	111.9	114.1	114.7	118.4	123.2	128.5	137.0	149.8	171.0	202.7
60°	100.6	99.9	101.9	103.4	105.4	109.3	113.8	122.1	132.2	147.8	175.0
62.5°	90.0	89.7	91.1	92.7	94.3	97.9	101.6	108.0	116.0	129.1	150.8
65°	74.6	75.3	76.0	76.6	77.5	79.7	83.2	87.7	93.1	102.4	117.9
67.5°	58.7	59.4	59.6	60.9	62.8	64.2	66.4	70.2	74.1	81.8	90.7
70°	47.4	47.2	47.4	48.1	50.5	52.9	55.8	58.6	61.1	66.5	74.0
72.5°	40.7	40.3	40.9	41.1	42.2	42.9	44.7	47.4	50.5	54.2	59.6
75°	31.6	31.6	31.6	31.6	32.5	32.9	33.6	34.2	35.3	37.1	41.1
77.5°	23.4	23.4	23.8	23.9	24.1	24.4	24.8	25.4	25.8	26.8	28.5
80°	18.5	18.7	18.5	18.7	18.7	19.1	19.3	20.0	20.2	21.3	22.0
82.5°	13.9	13.8	13.9	14.1	14.1	14.5	14.6	15.1	15.1	15.6	16.3
85°	7.4	7.1	7.4	7.3	7.7	7.3	7.4	7.9	7.9	8.1	9.0
87.5°	9.0	9.3	8.9	9.0	8.9	8.9	8.7	8.4	8.6	8.1	7.6
90°	36.7	36.1	35.6	35.1	34.5	33.6	32.6	31.5	30.4	29.3	25.8
92.5°	49.4	49.7	50.0	50.3	50.7	50.4	49.6	48.6	47.8	46.9	45.0
95°	95.4	95.4	95.4	95.4	95.4	94.8	93.7	92.7	91.5	90.5	88.3
97.5°	146.7	146.8	146.9	147.0	147.1	146.6	145.3	144.0	142.8	141.6	140.0
100°	185.8	185.3	184.7	184.2	183.6	182.9	182.1	181.3	180.5	179.7	178.3
102.5°	225.9	226.0	226.1	226.2	226.3	226.0	225.2	224.3	223.6	222.7	220.9
105°	291.0	290.4	289.8	289.4	288.8	288.5	288.5	288.5	288.5	288.5	286.1
107.5°	358.6	359.0	359.3	359.7	360.0	359.7	358.8	358.0	357.1	356.2	355.2
110°	404.6	405.2	405.8	406.2	406.8	406.5	405.5	404.4	403.3	402.2	401.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	453.6	453.6	453.7	453.8	453.9	453.4	452.0	450.7	449.5	448.2	448.1
115°	520.8	521.0	521.3	521.6	521.9	521.9	521.6	521.3	521.0	520.8	521.3
117.5°	589.0	589.7	590.5	591.3	592.0	592.4	592.5	592.6	592.6	592.7	593.3
120°	636.9	637.4	638.0	638.6	639.0	639.5	639.8	640.0	640.3	640.6	642.0
122.5°	682.9	683.6	684.4	685.1	685.9	686.6	687.3	688.1	688.7	689.5	690.1
125°	751.8	752.9	753.9	755.1	756.2	757.2	758.4	759.4	760.5	761.6	762.1
127.5°	820.5	821.8	823.0	824.3	825.5	826.9	828.4	829.9	831.4	833.0	833.6
130°	865.5	867.4	869.3	871.2	873.1	874.6	875.7	876.8	877.9	878.9	879.8
132.5°	912.5	913.9	915.4	916.8	918.3	919.7	921.0	922.3	923.6	924.9	925.5
135°	985.3	985.8	986.4	986.9	987.5	988.3	989.4	990.4	991.6	992.6	992.9
137.5°	1049.6	1050.7	1051.7	1052.7	1053.8	1054.8	1055.9	1057.1	1058.2	1059.4	1058.7
140°	1091.7	1093.5	1095.4	1097.4	1099.3	1100.3	1100.6	1100.9	1101.2	1101.5	1101.2
142.5°	1134.7	1136.1	1137.6	1139.1	1140.6	1141.4	1141.7	1142.0	1142.3	1142.6	1142.0
145°	1196.7	1197.9	1198.9	1200.0	1201.2	1201.8	1202.1	1202.3	1202.6	1202.9	1202.1
147.5°	1252.1	1253.7	1255.3	1257.0	1258.6	1259.3	1259.3	1259.3	1259.3	1259.3	1258.6
150°	1287.2	1288.8	1290.5	1292.1	1293.7	1294.6	1294.6	1294.6	1294.6	1294.6	1294.0
152.5°	1321.4	1322.9	1324.3	1325.7	1327.1	1327.6	1327.2	1326.7	1326.3	1325.9	1325.6
155°	1367.9	1369.8	1371.8	1373.7	1375.5	1375.9	1374.9	1373.8	1372.7	1371.6	1371.3
157.5°	1410.2	1411.7	1413.2	1414.8	1416.3	1416.5	1415.3	1414.2	1413.1	1411.9	1411.7
160°	1437.6	1438.7	1439.8	1440.9	1442.0	1441.8	1440.5	1439.1	1437.8	1436.3	1436.3
162.5°	1458.1	1459.9	1461.6	1463.4	1465.1	1465.3	1464.0	1462.5	1461.2	1459.8	1459.6
165°	1487.7	1489.6	1491.6	1493.5	1495.3	1495.4	1493.8	1492.2	1490.5	1488.9	1488.9
167.5°	1512.9	1514.6	1516.3	1518.0	1519.7	1519.7	1518.0	1516.3	1514.6	1512.9	1512.7
170°	1525.6	1527.5	1529.5	1531.3	1533.2	1533.2	1531.3	1529.5	1527.5	1525.6	1525.6
172.5°	1535.4	1537.3	1539.2	1541.2	1543.0	1543.1	1541.4	1539.7	1538.0	1536.3	1536.3
175°	1546.4	1548.3	1550.2	1552.1	1554.0	1554.2	1552.6	1550.9	1549.3	1547.7	1547.7
177.5°	1552.3	1553.8	1555.3	1556.8	1558.4	1558.5	1557.2	1555.9	1554.5	1553.2	1553.2
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	529.6	529.1	526.7	523.9	520.2	517.7	515.8	514.7	511.5	507.7	505.1
5°	562.4	555.8	548.7	540.2	532.3	524.1	519.2	513.2	506.0	497.9	492.1
7.5°	597.4	584.5	570.6	556.2	542.1	529.3	518.0	508.4	496.9	485.2	477.1
10°	624.3	605.4	585.9	565.9	547.7	530.6	517.4	504.4	490.6	477.2	467.0
12.5°	648.8	623.9	601.3	576.7	553.5	533.0	514.1	498.8	482.1	467.9	456.4
15°	679.7	654.1	627.0	589.6	558.6	532.7	509.6	489.7	469.5	451.9	440.7
17.5°	708.5	670.2	633.6	602.5	562.2	529.9	501.7	477.9	455.6	437.1	423.2
20°	720.5	683.3	643.7	603.9	564.4	528.1	495.4	469.0	446.0	424.9	412.2
22.5°	727.6	685.7	643.8	601.1	559.1	521.4	489.1	460.1	435.1	415.1	399.4
25°	736.0	686.0	639.9	597.8	554.9	514.1	475.6	444.9	417.9	396.6	379.9
27.5°	741.6	682.7	628.2	581.4	537.9	497.3	462.0	429.4	402.0	379.5	361.6
30°	742.6	680.0	619.3	568.5	524.4	487.0	449.7	418.6	389.6	365.6	348.9
32.5°	744.0	673.5	607.1	553.3	508.0	471.1	437.2	407.5	377.8	354.2	337.1
35°	738.3	670.0	588.7	526.8	481.5	445.7	415.3	387.8	358.6	335.7	318.4
37.5°	713.3	655.7	569.7	497.0	449.7	416.6	391.7	367.8	341.0	316.3	300.0
40°	688.2	641.7	554.9	478.9	429.5	395.5	373.1	353.5	327.6	304.5	287.0
42.5°	650.8	622.5	540.8	460.0	406.7	373.9	355.0	336.7	314.0	290.5	274.0
45°	582.1	585.9	512.1	429.7	375.0	342.1	324.3	311.6	291.4	272.1	255.1
47.5°	496.1	530.9	478.3	397.6	341.8	310.9	295.3	284.2	270.5	251.6	236.1
50°	439.9	489.7	451.3	376.0	320.8	290.1	274.8	265.7	253.8	238.9	224.2
52.5°	388.0	441.6	418.6	351.9	298.1	270.0	255.1	247.6	238.2	224.1	210.8
55°	316.4	370.7	365.4	315.6	264.2	238.9	227.5	219.1	212.8	202.3	191.7
57.5°	256.0	307.4	310.1	275.1	234.2	209.2	199.4	193.1	189.0	181.1	171.3
60°	217.8	265.0	274.3	247.9	212.8	190.9	181.2	176.1	172.9	166.5	159.0
62.5°	186.2	226.4	236.9	217.9	192.3	171.6	164.1	159.3	157.0	151.6	145.0
65°	142.5	175.9	186.0	175.5	162.0	145.6	139.4	135.3	133.3	130.3	125.4
67.5°	107.2	131.5	142.6	135.2	130.3	119.9	116.0	113.8	112.0	109.9	105.8
70°	86.1	104.1	115.5	113.6	109.6	104.1	101.2	99.7	97.9	96.1	92.7
72.5°	69.2	81.6	92.3	93.3	90.1	89.0	86.4	85.8	84.7	82.7	80.7
75°	45.9	54.5	61.9	64.8	66.1	67.2	66.1	65.9	65.7	63.9	62.8
77.5°	30.1	34.7	39.4	44.3	46.4	47.8	48.2	49.0	48.4	47.5	46.9
80°	23.1	24.1	27.4	31.6	34.9	36.2	37.1	37.5	37.3	37.1	36.2
82.5°	16.8	17.6	19.2	22.1	24.9	27.1	27.6	27.5	28.0	28.2	27.4
85°	9.0	9.2	9.7	10.1	11.6	14.0	14.7	15.2	15.6	15.6	14.2
87.5°	7.3	6.4	6.0	5.4	5.4	5.0	5.6	5.8	6.6	6.4	7.0
90°	22.2	18.8	15.2	12.1	9.3	6.7	4.0	1.2	4.0	6.7	9.3
92.5°	42.9	40.9	38.9	36.9	35.2	33.3	31.4	29.6	31.4	33.3	35.2
95°	86.1	84.0	81.8	79.7	77.9	76.0	74.0	72.1	74.0	76.0	77.9
97.5°	138.4	136.9	135.3	133.7	132.3	130.9	129.5	128.1	129.5	130.9	132.3
100°	177.0	175.6	174.3	172.8	171.2	169.5	167.9	166.3	167.9	169.5	171.2
102.5°	219.1	217.4	215.6	214.1	213.2	212.3	211.2	210.3	211.2	212.3	213.2
105°	283.6	281.2	278.7	277.2	276.6	276.2	275.6	275.0	275.6	276.2	276.6
107.5°	354.3	353.3	352.3	351.7	351.4	351.0	350.7	350.3	350.7	351.0	351.4
110°	401.1	400.6	400.0	399.4	398.9	398.4	397.8	397.3	397.8	398.4	398.9



TEST NUMBER: P332403-830

CATALOG NUMBER: S123RDIW-S340D1320U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	447.9	447.8	447.7	447.5	447.1	446.9	446.5	446.2	446.5	446.9	447.1
115°	521.9	522.4	522.9	522.8	522.0	521.1	520.4	519.5	520.4	521.1	522.0
117.5°	594.1	594.7	595.5	595.6	595.0	594.5	593.9	593.4	593.9	594.5	595.0
120°	643.3	644.6	646.0	645.8	644.2	642.6	640.9	639.3	640.9	642.6	644.2
122.5°	690.9	691.5	692.3	692.0	690.9	689.7	688.4	687.3	688.4	689.7	690.9
125°	762.7	763.2	763.7	763.6	762.8	762.0	761.2	760.3	761.2	762.0	762.8
127.5°	834.2	834.8	835.4	834.8	833.0	831.3	829.6	827.8	829.6	831.3	833.0
130°	880.6	881.4	882.2	881.6	879.4	877.2	875.0	872.8	875.0	877.2	879.4
132.5°	926.1	926.7	927.3	926.5	924.4	922.2	920.0	917.8	920.0	922.2	924.4
135°	993.2	993.4	993.7	993.1	991.4	989.8	988.2	986.6	988.2	989.8	991.4
137.5°	1058.0	1057.2	1056.6	1055.6	1054.1	1052.8	1051.4	1050.1	1051.4	1052.8	1054.1
140°	1100.9	1100.6	1100.3	1099.6	1098.2	1096.8	1095.4	1094.1	1095.4	1096.8	1098.2
142.5°	1141.5	1141.0	1140.6	1139.6	1138.3	1136.9	1135.6	1134.2	1135.6	1136.9	1138.3
145°	1201.3	1200.4	1199.7	1198.9	1198.4	1197.9	1197.3	1196.7	1197.3	1197.9	1198.4
147.5°	1257.8	1257.1	1256.3	1255.5	1254.5	1253.5	1252.5	1251.5	1252.5	1253.5	1254.5
150°	1293.5	1293.0	1292.4	1291.8	1291.3	1290.8	1290.2	1289.7	1290.2	1290.8	1291.3
152.5°	1325.2	1324.9	1324.6	1324.0	1323.2	1322.5	1321.7	1321.0	1321.7	1322.5	1323.2
155°	1371.0	1370.7	1370.6	1370.4	1370.4	1370.4	1370.4	1370.4	1370.4	1370.4	1370.4
157.5°	1411.5	1411.3	1411.1	1411.1	1411.5	1411.7	1412.1	1412.4	1412.1	1411.7	1411.5
160°	1436.3	1436.3	1436.3	1436.6	1437.2	1437.8	1438.3	1438.8	1438.3	1437.8	1437.2
162.5°	1459.4	1459.2	1459.0	1459.2	1460.0	1460.8	1461.5	1462.3	1461.5	1460.8	1460.0
165°	1488.9	1488.9	1488.9	1489.4	1490.2	1491.0	1491.8	1492.6	1491.8	1491.0	1490.2
167.5°	1512.5	1512.2	1512.0	1512.5	1513.5	1514.7	1515.7	1516.8	1515.7	1514.7	1513.5
170°	1525.6	1525.6	1525.6	1526.2	1527.3	1528.3	1529.5	1530.5	1529.5	1528.3	1527.3
172.5°	1536.3	1536.3	1536.3	1536.9	1538.0	1539.1	1540.2	1541.2	1540.2	1539.1	1538.0
175°	1547.7	1547.7	1547.7	1548.1	1549.3	1550.4	1551.4	1552.6	1551.4	1550.4	1549.3
177.5°	1553.2	1553.2	1553.2	1553.7	1554.5	1555.4	1556.3	1557.2	1556.3	1555.4	1554.5
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



TEST NUMBER: P332403-830

CATALOG NUMBER: S123RDIW-S340D1320U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	504.2	501.9	500.3	496.8	494.6	492.1	489.7	491.2	491.0	490.9	490.9
5°	487.3	482.2	477.6	471.6	468.0	463.4	459.9	459.4	460.2	457.2	455.4
7.5°	470.5	463.6	457.0	450.5	443.6	438.0	434.6	432.9	430.7	428.9	426.9
10°	458.7	450.6	444.2	436.1	428.7	422.1	417.9	415.0	413.5	412.0	409.1
12.5°	446.6	438.7	430.6	421.3	414.2	406.6	403.5	400.3	397.4	395.6	391.7
15°	428.9	418.6	410.0	400.3	392.4	384.9	380.6	374.2	373.3	371.1	367.1
17.5°	411.0	399.9	388.0	380.9	372.0	364.2	357.5	355.4	349.1	346.8	343.3
20°	397.0	386.7	377.7	368.3	355.3	348.1	342.8	340.0	334.9	331.8	329.6
22.5°	384.9	374.4	364.0	353.0	342.3	334.1	330.3	325.8	323.1	318.8	316.4
25°	367.6	356.2	343.7	331.8	324.1	318.0	311.8	307.8	303.9	301.9	297.6
27.5°	347.5	335.5	323.9	314.8	305.4	299.4	293.8	290.3	285.5	282.2	279.7
30°	336.4	322.3	312.3	304.2	292.1	286.3	282.2	277.8	274.3	270.8	268.3
32.5°	323.6	310.8	301.2	291.2	281.9	275.6	270.2	266.4	263.3	260.0	257.6
35°	303.5	292.8	282.9	272.8	265.9	259.6	253.2	249.9	247.0	243.9	241.8
37.5°	285.3	275.2	265.8	256.3	247.8	242.6	237.5	235.0	231.1	229.0	226.9
40°	274.1	264.2	254.1	244.9	236.1	232.1	227.5	223.8	220.3	218.7	216.3
42.5°	261.7	251.8	243.4	233.5	226.2	220.8	216.6	212.5	209.9	207.6	206.3
45°	243.6	234.8	226.4	216.5	209.7	205.1	200.3	196.5	194.2	192.6	190.2
47.5°	225.8	217.1	208.6	200.0	193.4	188.1	183.2	180.7	177.5	175.6	174.0
50°	213.0	205.1	196.1	188.2	181.6	176.3	172.4	169.1	166.3	163.8	162.7
52.5°	201.2	192.8	185.0	177.7	170.7	164.8	161.2	157.7	155.5	152.8	151.5
55°	181.8	173.7	167.1	159.9	153.1	148.0	143.6	140.5	138.4	135.3	133.6
57.5°	163.6	156.3	148.5	142.1	135.2	130.9	127.2	123.1	120.4	118.0	116.2
60°	151.3	143.0	136.1	130.3	124.0	118.6	115.3	112.0	109.1	106.7	105.2
62.5°	138.5	131.2	124.7	118.3	112.6	107.8	104.1	101.3	98.8	97.3	95.7
65°	118.8	113.1	106.5	101.2	96.0	92.5	89.4	87.0	85.2	84.1	82.8
67.5°	100.7	95.2	89.4	84.3	80.7	78.0	76.1	74.0	73.0	71.6	70.8
70°	89.0	83.2	78.1	74.2	70.7	68.7	67.4	65.9	65.0	63.2	62.4
72.5°	76.2	72.0	68.3	65.1	62.3	60.5	58.8	56.9	55.5	53.5	52.7
75°	59.9	56.2	53.3	51.2	49.4	47.0	44.6	42.6	41.9	41.3	41.1
77.5°	44.4	42.0	40.0	38.1	35.9	34.2	33.6	33.2	33.1	32.7	32.7
80°	34.9	32.7	31.2	29.0	27.7	27.7	27.7	27.2	27.4	27.4	27.4
82.5°	25.9	23.9	23.1	22.3	22.1	22.2	22.2	22.3	22.1	22.5	22.3
85°	13.4	13.6	14.0	13.9	14.0	14.0	14.5	14.2	14.5	14.0	14.5
87.5°	7.4	8.5	9.3	10.3	11.1	11.7	12.1	12.3	12.6	12.9	13.0
90°	12.1	15.2	18.8	22.2	25.8	29.3	30.4	31.5	32.6	33.6	34.5
92.5°	36.9	38.9	40.9	42.9	45.0	46.9	47.8	48.6	49.6	50.4	50.7
95°	79.7	81.8	84.0	86.1	88.3	90.5	91.5	92.7	93.7	94.8	95.4
97.5°	133.7	135.3	136.9	138.4	140.0	141.6	142.8	144.0	145.3	146.6	147.1
100°	172.8	174.3	175.6	177.0	178.3	179.7	180.5	181.3	182.1	182.9	183.6
102.5°	214.1	215.6	217.4	219.1	220.9	222.7	223.6	224.3	225.2	226.0	226.3
105°	277.2	278.7	281.2	283.6	286.1	288.5	288.5	288.5	288.5	288.5	288.8
107.5°	351.7	352.3	353.3	354.3	355.2	356.2	357.1	358.0	358.8	359.7	360.0
110°	399.4	400.0	400.6	401.1	401.6	402.2	403.3	404.4	405.5	406.5	406.8



TEST NUMBER: P332403-830

CATALOG NUMBER: S123RDIW-S340D1320U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	447.5	447.7	447.8	447.9	448.1	448.2	449.5	450.7	452.0	453.4	453.9
115°	522.8	522.9	522.4	521.9	521.3	520.8	521.0	521.3	521.6	521.9	521.9
117.5°	595.6	595.5	594.7	594.1	593.3	592.7	592.6	592.6	592.5	592.4	592.0
120°	645.8	646.0	644.6	643.3	642.0	640.6	640.3	640.0	639.8	639.5	639.0
122.5°	692.0	692.3	691.5	690.9	690.1	689.5	688.7	688.1	687.3	686.6	685.9
125°	763.6	763.7	763.2	762.7	762.1	761.6	760.5	759.4	758.4	757.2	756.2
127.5°	834.8	835.4	834.8	834.2	833.6	833.0	831.4	829.9	828.4	826.9	825.5
130°	881.6	882.2	881.4	880.6	879.8	878.9	877.9	876.8	875.7	874.6	873.1
132.5°	926.5	927.3	926.7	926.1	925.5	924.9	923.6	922.3	921.0	919.7	918.3
135°	993.1	993.7	993.4	993.2	992.9	992.6	991.6	990.4	989.4	988.3	987.5
137.5°	1055.6	1056.6	1057.2	1058.0	1058.7	1059.4	1058.2	1057.1	1055.9	1054.8	1053.8
140°	1099.6	1100.3	1100.6	1100.9	1101.2	1101.5	1101.2	1100.9	1100.6	1100.3	1099.3
142.5°	1139.6	1140.6	1141.0	1141.5	1142.0	1142.6	1142.3	1142.0	1141.7	1141.4	1140.6
145°	1198.9	1199.7	1200.4	1201.3	1202.1	1202.9	1202.6	1202.3	1202.1	1201.8	1201.2
147.5°	1255.5	1256.3	1257.1	1257.8	1258.6	1259.3	1259.3	1259.3	1259.3	1259.3	1258.6
150°	1291.8	1292.4	1293.0	1293.5	1294.0	1294.6	1294.6	1294.6	1294.6	1294.6	1293.7
152.5°	1324.0	1324.6	1324.9	1325.2	1325.6	1325.9	1326.3	1326.7	1327.2	1327.6	1327.1
155°	1370.4	1370.6	1370.7	1371.0	1371.3	1371.6	1372.7	1373.8	1374.9	1375.9	1375.5
157.5°	1411.1	1411.1	1411.3	1411.5	1411.7	1411.9	1413.1	1414.2	1415.3	1416.5	1416.3
160°	1436.6	1436.3	1436.3	1436.3	1436.3	1436.3	1437.8	1439.1	1440.5	1441.8	1442.0
162.5°	1459.2	1459.0	1459.2	1459.4	1459.6	1459.8	1461.2	1462.5	1464.0	1465.3	1465.1
165°	1489.4	1488.9	1488.9	1488.9	1488.9	1488.9	1490.5	1492.2	1493.8	1495.4	1495.3
167.5°	1512.5	1512.0	1512.2	1512.5	1512.7	1512.9	1514.6	1516.3	1518.0	1519.7	1519.7
170°	1526.2	1525.6	1525.6	1525.6	1525.6	1525.6	1527.5	1529.5	1531.3	1533.2	1533.2
172.5°	1536.9	1536.3	1536.3	1536.3	1536.3	1536.3	1538.0	1539.7	1541.4	1543.1	1543.0
175°	1548.1	1547.7	1547.7	1547.7	1547.7	1547.7	1549.3	1550.9	1552.6	1554.2	1554.0
177.5°	1553.7	1553.2	1553.2	1553.2	1553.2	1553.2	1554.5	1555.9	1557.2	1558.5	1558.4
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



TEST NUMBER: P332403-830

CATALOG NUMBER: S123RDIW-S340D1320U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	488.7	488.5	488.7	488.0	488.7	488.5	488.7	490.9	490.9	491.0	491.2
5°	454.8	454.6	453.9	451.9	453.9	454.6	454.8	455.4	457.2	460.2	459.4
7.5°	425.1	424.8	422.9	422.9	422.9	424.8	425.1	426.9	428.9	430.7	432.9
10°	407.6	407.7	405.1	403.6	405.1	407.7	407.6	409.1	412.0	413.5	415.0
12.5°	390.5	389.6	387.4	385.7	387.4	389.6	390.5	391.7	395.6	397.4	400.3
15°	368.1	365.8	360.6	361.0	360.6	365.8	368.1	367.1	371.1	373.3	374.2
17.5°	341.6	340.0	339.9	336.8	339.9	340.0	341.6	343.3	346.8	349.1	355.4
20°	326.1	325.0	325.5	322.3	325.5	325.0	326.1	329.6	331.8	334.9	340.0
22.5°	314.0	312.8	311.0	310.1	311.0	312.8	314.0	316.4	318.8	323.1	325.8
25°	296.2	294.5	292.8	293.8	292.8	294.5	296.2	297.6	301.9	303.9	307.8
27.5°	278.5	277.2	275.4	275.2	275.4	277.2	278.5	279.7	282.2	285.5	290.3
30°	267.2	265.9	265.0	263.9	265.0	265.9	267.2	268.3	270.8	274.3	277.8
32.5°	255.8	255.5	254.0	253.7	254.0	255.5	255.8	257.6	260.0	263.3	266.4
35°	240.9	239.6	239.1	239.3	239.1	239.6	240.9	241.8	243.9	247.0	249.9
37.5°	226.7	225.0	224.1	223.4	224.1	225.0	226.7	226.9	229.0	231.1	235.0
40°	216.5	214.8	214.3	213.9	214.3	214.8	216.5	216.3	218.7	220.3	223.8
42.5°	205.1	204.4	204.2	203.3	204.2	204.4	205.1	206.3	207.6	209.9	212.5
45°	189.5	189.3	187.9	188.4	187.9	189.3	189.5	190.2	192.6	194.2	196.5
47.5°	173.1	172.1	171.2	171.8	171.2	172.1	173.1	174.0	175.6	177.5	180.7
50°	161.8	161.4	159.4	159.9	159.4	161.4	161.8	162.7	163.8	166.3	169.1
52.5°	150.6	148.9	148.2	147.9	148.2	148.9	150.6	151.5	152.8	155.5	157.7
55°	132.0	130.0	129.1	128.7	129.1	130.0	132.0	133.6	135.3	138.4	140.5
57.5°	113.7	113.2	112.4	112.9	112.4	113.2	113.7	116.2	118.0	120.4	123.1
60°	103.0	103.0	103.0	102.7	103.0	103.0	103.0	105.2	106.7	109.1	112.0
62.5°	94.7	94.2	94.1	94.3	94.1	94.2	94.7	95.7	97.3	98.8	101.3
65°	82.1	81.9	81.1	80.8	81.1	81.9	82.1	82.8	84.1	85.2	87.0
67.5°	70.2	69.5	69.2	68.9	69.2	69.5	70.2	70.8	71.6	73.0	74.0
70°	61.3	60.8	59.5	59.8	59.5	60.8	61.3	62.4	63.2	65.0	65.9
72.5°	51.7	51.2	50.9	50.6	50.9	51.2	51.7	52.7	53.5	55.5	56.9
75°	40.8	40.6	40.4	41.3	40.4	40.6	40.8	41.1	41.3	41.9	42.6
77.5°	32.7	32.7	32.9	32.5	32.9	32.7	32.7	32.7	32.7	33.1	33.2
80°	27.4	27.4	27.2	27.2	27.2	27.4	27.4	27.4	27.4	27.4	27.2
82.5°	22.0	22.1	22.3	22.0	22.3	22.1	22.0	22.3	22.5	22.1	22.3
85°	14.5	14.2	14.7	14.5	14.7	14.2	14.5	14.5	14.0	14.5	14.2
87.5°	13.5	13.3	13.4	13.7	13.4	13.3	13.5	13.0	12.9	12.6	12.3
90°	35.1	35.6	36.1	36.7	36.1	35.6	35.1	34.5	33.6	32.6	31.5
92.5°	50.3	50.0	49.7	49.4	49.7	50.0	50.3	50.7	50.4	49.6	48.6
95°	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	94.8	93.7	92.7
97.5°	147.0	146.9	146.8	146.7	146.8	146.9	147.0	147.1	146.6	145.3	144.0
100°	184.2	184.7	185.3	185.8	185.3	184.7	184.2	183.6	182.9	182.1	181.3
102.5°	226.2	226.1	226.0	225.9	226.0	226.1	226.2	226.3	226.0	225.2	224.3
105°	289.4	289.8	290.4	291.0	290.4	289.8	289.4	288.8	288.5	288.5	288.5
107.5°	359.7	359.3	359.0	358.6	359.0	359.3	359.7	360.0	359.7	358.8	358.0
110°	406.2	405.8	405.2	404.6	405.2	405.8	406.2	406.8	406.5	405.5	404.4



TEST NUMBER: P332403-830

CATALOG NUMBER: S123RDIW-S340D1320U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	453.8	453.7	453.6	453.6	453.6	453.7	453.8	453.9	453.4	452.0	450.7
115°	521.6	521.3	521.0	520.8	521.0	521.3	521.6	521.9	521.9	521.6	521.3
117.5°	591.3	590.5	589.7	589.0	589.7	590.5	591.3	592.0	592.4	592.5	592.6
120°	638.6	638.0	637.4	636.9	637.4	638.0	638.6	639.0	639.5	639.8	640.0
122.5°	685.1	684.4	683.6	682.9	683.6	684.4	685.1	685.9	686.6	687.3	688.1
125°	755.1	753.9	752.9	751.8	752.9	753.9	755.1	756.2	757.2	758.4	759.4
127.5°	824.3	823.0	821.8	820.5	821.8	823.0	824.3	825.5	826.9	828.4	829.9
130°	871.2	869.3	867.4	865.5	867.4	869.3	871.2	873.1	874.6	875.7	876.8
132.5°	916.8	915.4	913.9	912.5	913.9	915.4	916.8	918.3	919.7	921.0	922.3
135°	986.9	986.4	985.8	985.3	985.8	986.4	986.9	987.5	988.3	989.4	990.4
137.5°	1052.7	1051.7	1050.7	1049.6	1050.7	1051.7	1052.7	1053.8	1054.8	1055.9	1057.1
140°	1097.4	1095.4	1093.5	1091.7	1093.5	1095.4	1097.4	1099.3	1100.3	1100.6	1100.9
142.5°	1139.1	1137.6	1136.1	1134.7	1136.1	1137.6	1139.1	1140.6	1141.4	1141.7	1142.0
145°	1200.0	1198.9	1197.9	1196.7	1197.9	1198.9	1200.0	1201.2	1201.8	1202.1	1202.3
147.5°	1257.0	1255.3	1253.7	1252.1	1253.7	1255.3	1257.0	1258.6	1259.3	1259.3	1259.3
150°	1292.1	1290.5	1288.8	1287.2	1288.8	1290.5	1292.1	1293.7	1294.6	1294.6	1294.6
152.5°	1325.7	1324.3	1322.9	1321.4	1322.9	1324.3	1325.7	1327.1	1327.6	1327.2	1326.7
155°	1373.7	1371.8	1369.8	1367.9	1369.8	1371.8	1373.7	1375.5	1375.9	1374.9	1373.8
157.5°	1414.8	1413.2	1411.7	1410.2	1411.7	1413.2	1414.8	1416.3	1416.5	1415.3	1414.2
160°	1440.9	1439.8	1438.7	1437.6	1438.7	1439.8	1440.9	1442.0	1441.8	1440.5	1439.1
162.5°	1463.4	1461.6	1459.9	1458.1	1459.9	1461.6	1463.4	1465.1	1465.3	1464.0	1462.5
165°	1493.5	1491.6	1489.6	1487.7	1489.6	1491.6	1493.5	1495.3	1495.4	1493.8	1492.2
167.5°	1518.0	1516.3	1514.6	1512.9	1514.6	1516.3	1518.0	1519.7	1519.7	1518.0	1516.3
170°	1531.3	1529.5	1527.5	1525.6	1527.5	1529.5	1531.3	1533.2	1533.2	1531.3	1529.5
172.5°	1541.2	1539.2	1537.3	1535.4	1537.3	1539.2	1541.2	1543.0	1543.1	1541.4	1539.7
175°	1552.1	1550.2	1548.3	1546.4	1548.3	1550.2	1552.1	1554.0	1554.2	1552.6	1550.9
177.5°	1556.8	1555.3	1553.8	1552.3	1553.8	1555.3	1556.8	1558.4	1558.5	1557.2	1555.9
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



TEST NUMBER: P332403-830

CATALOG NUMBER: S123RDIW-S340D1320U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	489.7	492.1	494.6	496.8	500.3	501.9	504.2	505.1	507.7	511.5	514.7
5°	459.9	463.4	468.0	471.6	477.6	482.2	487.3	492.1	497.9	506.0	513.2
7.5°	434.6	438.0	443.6	450.5	457.0	463.6	470.5	477.1	485.2	496.9	508.4
10°	417.9	422.1	428.7	436.1	444.2	450.6	458.7	467.0	477.2	490.6	504.4
12.5°	403.5	406.6	414.2	421.3	430.6	438.7	446.6	456.4	467.9	482.1	498.8
15°	380.6	384.9	392.4	400.3	410.0	418.6	428.9	440.7	451.9	469.5	489.7
17.5°	357.5	364.2	372.0	380.9	388.0	399.9	411.0	423.2	437.1	455.6	477.9
20°	342.8	348.1	355.3	368.3	377.7	386.7	397.0	412.2	424.9	446.0	469.0
22.5°	330.3	334.1	342.3	353.0	364.0	374.4	384.9	399.4	415.1	435.1	460.1
25°	311.8	318.0	324.1	331.8	343.7	356.2	367.6	379.9	396.6	417.9	444.9
27.5°	293.8	299.4	305.4	314.8	323.9	335.5	347.5	361.6	379.5	402.0	429.4
30°	282.2	286.3	292.1	304.2	312.3	322.3	336.4	348.9	365.6	389.6	418.6
32.5°	270.2	275.6	281.9	291.2	301.2	310.8	323.6	337.1	354.2	377.8	407.5
35°	253.2	259.6	265.9	272.8	282.9	292.8	303.5	318.4	335.7	358.6	387.8
37.5°	237.5	242.6	247.8	256.3	265.8	275.2	285.3	300.0	316.3	341.0	367.8
40°	227.5	232.1	236.1	244.9	254.1	264.2	274.1	287.0	304.5	327.6	353.5
42.5°	216.6	220.8	226.2	233.5	243.4	251.8	261.7	274.0	290.5	314.0	336.7
45°	200.3	205.1	209.7	216.5	226.4	234.8	243.6	255.1	272.1	291.4	311.6
47.5°	183.2	188.1	193.4	200.0	208.6	217.1	225.8	236.1	251.6	270.5	284.2
50°	172.4	176.3	181.6	188.2	196.1	205.1	213.0	224.2	238.9	253.8	265.7
52.5°	161.2	164.8	170.7	177.7	185.0	192.8	201.2	210.8	224.1	238.2	247.6
55°	143.6	148.0	153.1	159.9	167.1	173.7	181.8	191.7	202.3	212.8	219.1
57.5°	127.2	130.9	135.2	142.1	148.5	156.3	163.6	171.3	181.1	189.0	193.1
60°	115.3	118.6	124.0	130.3	136.1	143.0	151.3	159.0	166.5	172.9	176.1
62.5°	104.1	107.8	112.6	118.3	124.7	131.2	138.5	145.0	151.6	157.0	159.3
65°	89.4	92.5	96.0	101.2	106.5	113.1	118.8	125.4	130.3	133.3	135.3
67.5°	76.1	78.0	80.7	84.3	89.4	95.2	100.7	105.8	109.9	112.0	113.8
70°	67.4	68.7	70.7	74.2	78.1	83.2	89.0	92.7	96.1	97.9	99.7
72.5°	58.8	60.5	62.3	65.1	68.3	72.0	76.2	80.7	82.7	84.7	85.8
75°	44.6	47.0	49.4	51.2	53.3	56.2	59.9	62.8	63.9	65.7	65.9
77.5°	33.6	34.2	35.9	38.1	40.0	42.0	44.4	46.9	47.5	48.4	49.0
80°	27.7	27.7	27.7	29.0	31.2	32.7	34.9	36.2	37.1	37.3	37.5
82.5°	22.2	22.2	22.1	22.3	23.1	23.9	25.9	27.4	28.2	28.0	27.5
85°	14.5	14.0	14.0	13.9	14.0	13.6	13.4	14.2	15.6	15.6	15.2
87.5°	12.1	11.7	11.1	10.3	9.3	8.5	7.4	7.0	6.4	6.6	5.8
90°	30.4	29.3	25.8	22.2	18.8	15.2	12.1	9.3	6.7	4.0	1.2
92.5°	47.8	46.9	45.0	42.9	40.9	38.9	36.9	35.2	33.3	31.4	29.6
95°	91.5	90.5	88.3	86.1	84.0	81.8	79.7	77.9	76.0	74.0	72.1
97.5°	142.8	141.6	140.0	138.4	136.9	135.3	133.7	132.3	130.9	129.5	128.1
100°	180.5	179.7	178.3	177.0	175.6	174.3	172.8	171.2	169.5	167.9	166.3
102.5°	223.6	222.7	220.9	219.1	217.4	215.6	214.1	213.2	212.3	211.2	210.3
105°	288.5	288.5	286.1	283.6	281.2	278.7	277.2	276.6	276.2	275.6	275.0
107.5°	357.1	356.2	355.2	354.3	353.3	352.3	351.7	351.4	351.0	350.7	350.3
110°	403.3	402.2	401.6	401.1	400.6	400.0	399.4	398.9	398.4	397.8	397.3



TEST NUMBER: P332403-830

CATALOG NUMBER: S123RDIW-S340D1320U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	449.5	448.2	448.1	447.9	447.8	447.7	447.5	447.1	446.9	446.5	446.2
115°	521.0	520.8	521.3	521.9	522.4	522.9	522.8	522.0	521.1	520.4	519.5
117.5°	592.6	592.7	593.3	594.1	594.7	595.5	595.6	595.0	594.5	593.9	593.4
120°	640.3	640.6	642.0	643.3	644.6	646.0	645.8	644.2	642.6	640.9	639.3
122.5°	688.7	689.5	690.1	690.9	691.5	692.3	692.0	690.9	689.7	688.4	687.3
125°	760.5	761.6	762.1	762.7	763.2	763.7	763.6	762.8	762.0	761.2	760.3
127.5°	831.4	833.0	833.6	834.2	834.8	835.4	834.8	833.0	831.3	829.6	827.8
130°	877.9	878.9	879.8	880.6	881.4	882.2	881.6	879.4	877.2	875.0	872.8
132.5°	923.6	924.9	925.5	926.1	926.7	927.3	926.5	924.4	922.2	920.0	917.8
135°	991.6	992.6	992.9	993.2	993.4	993.7	993.1	991.4	989.8	988.2	986.6
137.5°	1058.2	1059.4	1058.7	1058.0	1057.2	1056.6	1055.6	1054.1	1052.8	1051.4	1050.1
140°	1101.2	1101.5	1101.2	1100.9	1100.6	1100.3	1099.6	1098.2	1096.8	1095.4	1094.1
142.5°	1142.3	1142.6	1142.0	1141.5	1141.0	1140.6	1139.6	1138.3	1136.9	1135.6	1134.2
145°	1202.6	1202.9	1202.1	1201.3	1200.4	1199.7	1198.9	1198.4	1197.9	1197.3	1196.7
147.5°	1259.3	1259.3	1258.6	1257.8	1257.1	1256.3	1255.5	1254.5	1253.5	1252.5	1251.5
150°	1294.6	1294.6	1294.0	1293.5	1293.0	1292.4	1291.8	1291.3	1290.8	1290.2	1289.7
152.5°	1326.3	1325.9	1325.6	1325.2	1324.9	1324.6	1324.0	1323.2	1322.5	1321.7	1321.0
155°	1372.7	1371.6	1371.3	1371.0	1370.7	1370.6	1370.4	1370.4	1370.4	1370.4	1370.4
157.5°	1413.1	1411.9	1411.7	1411.5	1411.3	1411.1	1411.1	1411.5	1411.7	1412.1	1412.4
160°	1437.8	1436.3	1436.3	1436.3	1436.3	1436.3	1436.6	1437.2	1437.8	1438.3	1438.8
162.5°	1461.2	1459.8	1459.6	1459.4	1459.2	1459.0	1459.2	1460.0	1460.8	1461.5	1462.3
165°	1490.5	1488.9	1488.9	1488.9	1488.9	1488.9	1489.4	1490.2	1491.0	1491.8	1492.6
167.5°	1514.6	1512.9	1512.7	1512.5	1512.2	1512.0	1512.5	1513.5	1514.7	1515.7	1516.8
170°	1527.5	1525.6	1525.6	1525.6	1525.6	1525.6	1526.2	1527.3	1528.3	1529.5	1530.5
172.5°	1538.0	1536.3	1536.3	1536.3	1536.3	1536.3	1536.9	1538.0	1539.1	1540.2	1541.2
175°	1549.3	1547.7	1547.7	1547.7	1547.7	1547.7	1548.1	1549.3	1550.4	1551.4	1552.6
177.5°	1554.5	1553.2	1553.2	1553.2	1553.2	1553.2	1553.7	1554.5	1555.4	1556.3	1557.2
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



TEST NUMBER: P332403-830

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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	515.8	517.7	520.2	523.9	526.7	529.1	529.6	530.4	532.2	535.1	537.3
5°	519.2	524.1	532.3	540.2	548.7	555.8	562.4	567.0	571.4	580.6	588.1
7.5°	518.0	529.3	542.1	556.2	570.6	584.5	597.4	609.0	620.5	634.0	649.2
10°	517.4	530.6	547.7	565.9	585.9	605.4	624.3	639.0	656.1	671.6	691.1
12.5°	514.1	533.0	553.5	576.7	601.3	623.9	648.8	669.0	688.6	710.9	733.6
15°	509.6	532.7	558.6	589.6	627.0	654.1	679.7	715.0	739.1	763.3	795.8
17.5°	501.7	529.9	562.2	602.5	633.6	670.2	708.5	736.5	769.0	803.0	832.5
20°	495.4	528.1	564.4	603.9	643.7	683.3	720.5	753.8	787.5	826.8	850.9
22.5°	489.1	521.4	559.1	601.1	643.8	685.7	727.6	766.9	804.6	844.3	875.2
25°	475.6	514.1	554.9	597.8	639.9	686.0	736.0	779.8	826.5	867.4	896.6
27.5°	462.0	497.3	537.9	581.4	628.2	682.7	741.6	791.3	838.1	867.4	876.6
30°	449.7	487.0	524.4	568.5	619.3	680.0	742.6	799.6	837.9	850.7	841.2
32.5°	437.2	471.1	508.0	553.3	607.1	673.5	744.0	794.7	817.7	808.0	769.6
35°	415.3	445.7	481.5	526.8	588.7	670.0	738.3	772.5	766.9	711.9	639.4
37.5°	391.7	416.6	449.7	497.0	569.7	655.7	713.3	718.4	668.9	584.7	501.0
40°	373.1	395.5	429.5	478.9	554.9	641.7	688.2	667.8	591.2	497.4	427.5
42.5°	355.0	373.9	406.7	460.0	540.8	622.5	650.8	606.3	517.9	429.2	365.7
45°	324.3	342.1	375.0	429.7	512.1	585.9	582.1	504.8	416.3	345.0	292.3
47.5°	295.3	310.9	341.8	397.6	478.3	530.9	496.1	413.8	338.7	281.4	243.8
50°	274.8	290.1	320.8	376.0	451.3	489.7	439.9	360.6	291.8	244.4	214.5
52.5°	255.1	270.0	298.1	351.9	418.6	441.6	388.0	314.5	257.2	216.3	190.7
55°	227.5	238.9	264.2	315.6	365.4	370.7	316.4	255.0	207.7	179.2	161.6
57.5°	199.4	209.2	234.2	275.1	310.1	307.4	256.0	202.7	171.0	149.8	137.0
60°	181.2	190.9	212.8	247.9	274.3	265.0	217.8	175.0	147.8	132.2	122.1
62.5°	164.1	171.6	192.3	217.9	236.9	226.4	186.2	150.8	129.1	116.0	108.0
65°	139.4	145.6	162.0	175.5	186.0	175.9	142.5	117.9	102.4	93.1	87.7
67.5°	116.0	119.9	130.3	135.2	142.6	131.5	107.2	90.7	81.8	74.1	70.2
70°	101.2	104.1	109.6	113.6	115.5	104.1	86.1	74.0	66.5	61.1	58.6
72.5°	86.4	89.0	90.1	93.3	92.3	81.6	69.2	59.6	54.2	50.5	47.4
75°	66.1	67.2	66.1	64.8	61.9	54.5	45.9	41.1	37.1	35.3	34.2
77.5°	48.2	47.8	46.4	44.3	39.4	34.7	30.1	28.5	26.8	25.8	25.4
80°	37.1	36.2	34.9	31.6	27.4	24.1	23.1	22.0	21.3	20.2	20.0
82.5°	27.6	27.1	24.9	22.1	19.2	17.6	16.8	16.3	15.6	15.1	15.1
85°	14.7	14.0	11.6	10.1	9.7	9.2	9.0	9.0	8.1	7.9	7.9
87.5°	5.6	5.0	5.4	5.4	6.0	6.4	7.3	7.6	8.1	8.6	8.4
90°	4.0	6.7	9.3	12.1	15.2	18.8	22.2	25.8	29.3	30.4	31.5
92.5°	31.4	33.3	35.2	36.9	38.9	40.9	42.9	45.0	46.9	47.8	48.6
95°	74.0	76.0	77.9	79.7	81.8	84.0	86.1	88.3	90.5	91.5	92.7
97.5°	129.5	130.9	132.3	133.7	135.3	136.9	138.4	140.0	141.6	142.8	144.0
100°	167.9	169.5	171.2	172.8	174.3	175.6	177.0	178.3	179.7	180.5	181.3
102.5°	211.2	212.3	213.2	214.1	215.6	217.4	219.1	220.9	222.7	223.6	224.3
105°	275.6	276.2	276.6	277.2	278.7	281.2	283.6	286.1	288.5	288.5	288.5
107.5°	350.7	351.0	351.4	351.7	352.3	353.3	354.3	355.2	356.2	357.1	358.0
110°	397.8	398.4	398.9	399.4	400.0	400.6	401.1	401.6	402.2	403.3	404.4



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	446.5	446.9	447.1	447.5	447.7	447.8	447.9	448.1	448.2	449.5	450.7
115°	520.4	521.1	522.0	522.8	522.9	522.4	521.9	521.3	520.8	521.0	521.3
117.5°	593.9	594.5	595.0	595.6	595.5	594.7	594.1	593.3	592.7	592.6	592.6
120°	640.9	642.6	644.2	645.8	646.0	644.6	643.3	642.0	640.6	640.3	640.0
122.5°	688.4	689.7	690.9	692.0	692.3	691.5	690.9	690.1	689.5	688.7	688.1
125°	761.2	762.0	762.8	763.6	763.7	763.2	762.7	762.1	761.6	760.5	759.4
127.5°	829.6	831.3	833.0	834.8	835.4	834.8	834.2	833.6	833.0	831.4	829.9
130°	875.0	877.2	879.4	881.6	882.2	881.4	880.6	879.8	878.9	877.9	876.8
132.5°	920.0	922.2	924.4	926.5	927.3	926.7	926.1	925.5	924.9	923.6	922.3
135°	988.2	989.8	991.4	993.1	993.7	993.4	993.2	992.9	992.6	991.6	990.4
137.5°	1051.4	1052.8	1054.1	1055.6	1056.6	1057.2	1058.0	1058.7	1059.4	1058.2	1057.1
140°	1095.4	1096.8	1098.2	1099.6	1100.3	1100.6	1100.9	1101.2	1101.5	1101.2	1100.9
142.5°	1135.6	1136.9	1138.3	1139.6	1140.6	1141.0	1141.5	1142.0	1142.6	1142.3	1142.0
145°	1197.3	1197.9	1198.4	1198.9	1199.7	1200.4	1201.3	1202.1	1202.9	1202.6	1202.3
147.5°	1252.5	1253.5	1254.5	1255.5	1256.3	1257.1	1257.8	1258.6	1259.3	1259.3	1259.3
150°	1290.2	1290.8	1291.3	1291.8	1292.4	1293.0	1293.5	1294.0	1294.6	1294.6	1294.6
152.5°	1321.7	1322.5	1323.2	1324.0	1324.6	1324.9	1325.2	1325.6	1325.9	1326.3	1326.7
155°	1370.4	1370.4	1370.4	1370.4	1370.6	1370.7	1371.0	1371.3	1371.6	1372.7	1373.8
157.5°	1412.1	1411.7	1411.5	1411.1	1411.1	1411.3	1411.5	1411.7	1411.9	1413.1	1414.2
160°	1438.3	1437.8	1437.2	1436.6	1436.3	1436.3	1436.3	1436.3	1436.3	1437.8	1439.1
162.5°	1461.5	1460.8	1460.0	1459.2	1459.0	1459.2	1459.4	1459.6	1459.8	1461.2	1462.5
165°	1491.8	1491.0	1490.2	1489.4	1488.9	1488.9	1488.9	1488.9	1488.9	1490.5	1492.2
167.5°	1515.7	1514.7	1513.5	1512.5	1512.0	1512.2	1512.5	1512.7	1512.9	1514.6	1516.3
170°	1529.5	1528.3	1527.3	1526.2	1525.6	1525.6	1525.6	1525.6	1525.6	1527.5	1529.5
172.5°	1540.2	1539.1	1538.0	1536.9	1536.3	1536.3	1536.3	1536.3	1536.3	1538.0	1539.7
175°	1551.4	1550.4	1549.3	1548.1	1547.7	1547.7	1547.7	1547.7	1547.7	1549.3	1550.9
177.5°	1556.3	1555.4	1554.5	1553.7	1553.2	1553.2	1553.2	1553.2	1553.2	1554.5	1555.9
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	541.1	541.1	541.8	544.4	544.8	547.1	546.4
5°	594.7	598.8	600.4	607.0	610.9	612.7	609.2
7.5°	660.2	671.9	677.5	684.5	690.5	692.4	687.6
10°	707.9	720.3	730.6	737.0	742.9	746.9	751.9
12.5°	754.1	769.3	779.1	788.1	794.2	799.2	800.0
15°	804.4	827.2	844.5	857.3	863.7	867.0	865.6
17.5°	855.0	876.2	888.5	901.5	910.3	910.8	911.1
20°	883.6	904.3	918.6	928.2	938.1	937.6	939.9
22.5°	902.8	919.1	930.0	937.0	940.4	938.7	939.1
25°	911.7	916.6	914.6	903.4	900.5	890.2	892.0
27.5°	865.5	842.7	819.1	788.7	764.7	745.6	746.5
30°	802.9	762.4	716.3	677.7	643.0	633.3	612.7
32.5°	715.2	654.6	600.6	564.5	534.8	526.7	508.7
35°	566.6	507.7	452.1	418.8	405.6	387.1	386.9
37.5°	440.4	388.5	359.2	334.1	321.0	309.8	308.8
40°	370.4	330.1	307.8	289.8	276.9	268.5	266.6
42.5°	321.6	289.0	268.2	257.0	247.0	242.7	239.5
45°	262.6	240.6	226.2	216.1	211.5	208.2	206.4
47.5°	219.7	205.0	195.1	188.3	184.6	181.2	182.1
50°	196.3	184.3	177.0	170.6	167.8	165.3	165.6
52.5°	177.5	166.6	160.8	156.2	152.7	150.9	150.1
55°	150.6	143.8	137.9	134.6	132.6	130.3	129.6
57.5°	128.5	123.2	118.4	114.7	114.1	111.9	112.2
60°	113.8	109.3	105.4	103.4	101.9	99.9	100.6
62.5°	101.6	97.9	94.3	92.7	91.1	89.7	90.0
65°	83.2	79.7	77.5	76.6	76.0	75.3	74.6
67.5°	66.4	64.2	62.8	60.9	59.6	59.4	58.7
70°	55.8	52.9	50.5	48.1	47.4	47.2	47.4
72.5°	44.7	42.9	42.2	41.1	40.9	40.3	40.7
75°	33.6	32.9	32.5	31.6	31.6	31.6	31.6
77.5°	24.8	24.4	24.1	23.9	23.8	23.4	23.4
80°	19.3	19.1	18.7	18.7	18.5	18.7	18.5
82.5°	14.6	14.5	14.1	14.1	13.9	13.8	13.9
85°	7.4	7.3	7.7	7.3	7.4	7.1	7.4
87.5°	8.7	8.9	8.9	9.0	8.9	9.3	9.0
90°	32.6	33.6	34.5	35.1	35.6	36.1	36.7
92.5°	49.6	50.4	50.7	50.3	50.0	49.7	49.4
95°	93.7	94.8	95.4	95.4	95.4	95.4	95.4
97.5°	145.3	146.6	147.1	147.0	146.9	146.8	146.7
100°	182.1	182.9	183.6	184.2	184.7	185.3	185.8
102.5°	225.2	226.0	226.3	226.2	226.1	226.0	225.9
105°	288.5	288.5	288.8	289.4	289.8	290.4	291.0
107.5°	358.8	359.7	360.0	359.7	359.3	359.0	358.6
110°	405.5	406.5	406.8	406.2	405.8	405.2	404.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	452.0	453.4	453.9	453.8	453.7	453.6	453.6
115°	521.6	521.9	521.9	521.6	521.3	521.0	520.8
117.5°	592.5	592.4	592.0	591.3	590.5	589.7	589.0
120°	639.8	639.5	639.0	638.6	638.0	637.4	636.9
122.5°	687.3	686.6	685.9	685.1	684.4	683.6	682.9
125°	758.4	757.2	756.2	755.1	753.9	752.9	751.8
127.5°	828.4	826.9	825.5	824.3	823.0	821.8	820.5
130°	875.7	874.6	873.1	871.2	869.3	867.4	865.5
132.5°	921.0	919.7	918.3	916.8	915.4	913.9	912.5
135°	989.4	988.3	987.5	986.9	986.4	985.8	985.3
137.5°	1055.9	1054.8	1053.8	1052.7	1051.7	1050.7	1049.6
140°	1100.6	1100.3	1099.3	1097.4	1095.4	1093.5	1091.7
142.5°	1141.7	1141.4	1140.6	1139.1	1137.6	1136.1	1134.7
145°	1202.1	1201.8	1201.2	1200.0	1198.9	1197.9	1196.7
147.5°	1259.3	1259.3	1258.6	1257.0	1255.3	1253.7	1252.1
150°	1294.6	1294.6	1293.7	1292.1	1290.5	1288.8	1287.2
152.5°	1327.2	1327.6	1327.1	1325.7	1324.3	1322.9	1321.4
155°	1374.9	1375.9	1375.5	1373.7	1371.8	1369.8	1367.9
157.5°	1415.3	1416.5	1416.3	1414.8	1413.2	1411.7	1410.2
160°	1440.5	1441.8	1442.0	1440.9	1439.8	1438.7	1437.6
162.5°	1464.0	1465.3	1465.1	1463.4	1461.6	1459.9	1458.1
165°	1493.8	1495.4	1495.3	1493.5	1491.6	1489.6	1487.7
167.5°	1518.0	1519.7	1519.7	1518.0	1516.3	1514.6	1512.9
170°	1531.3	1533.2	1533.2	1531.3	1529.5	1527.5	1525.6
172.5°	1541.4	1543.1	1543.0	1541.2	1539.2	1537.3	1535.4
175°	1552.6	1554.2	1554.0	1552.1	1550.2	1548.3	1546.4
177.5°	1557.2	1558.5	1558.4	1556.8	1555.3	1553.8	1552.3
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2

(END OF REPORT)