

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: P332399-830

Luminaire Tested: **S123RDIW-S340D1030U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332399-830  
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-S340D1030U830-4F0-1E-UDD-A1  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1030 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4648.8 lumens  
Efficiency: N/A  
Efficacy: 122.3 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

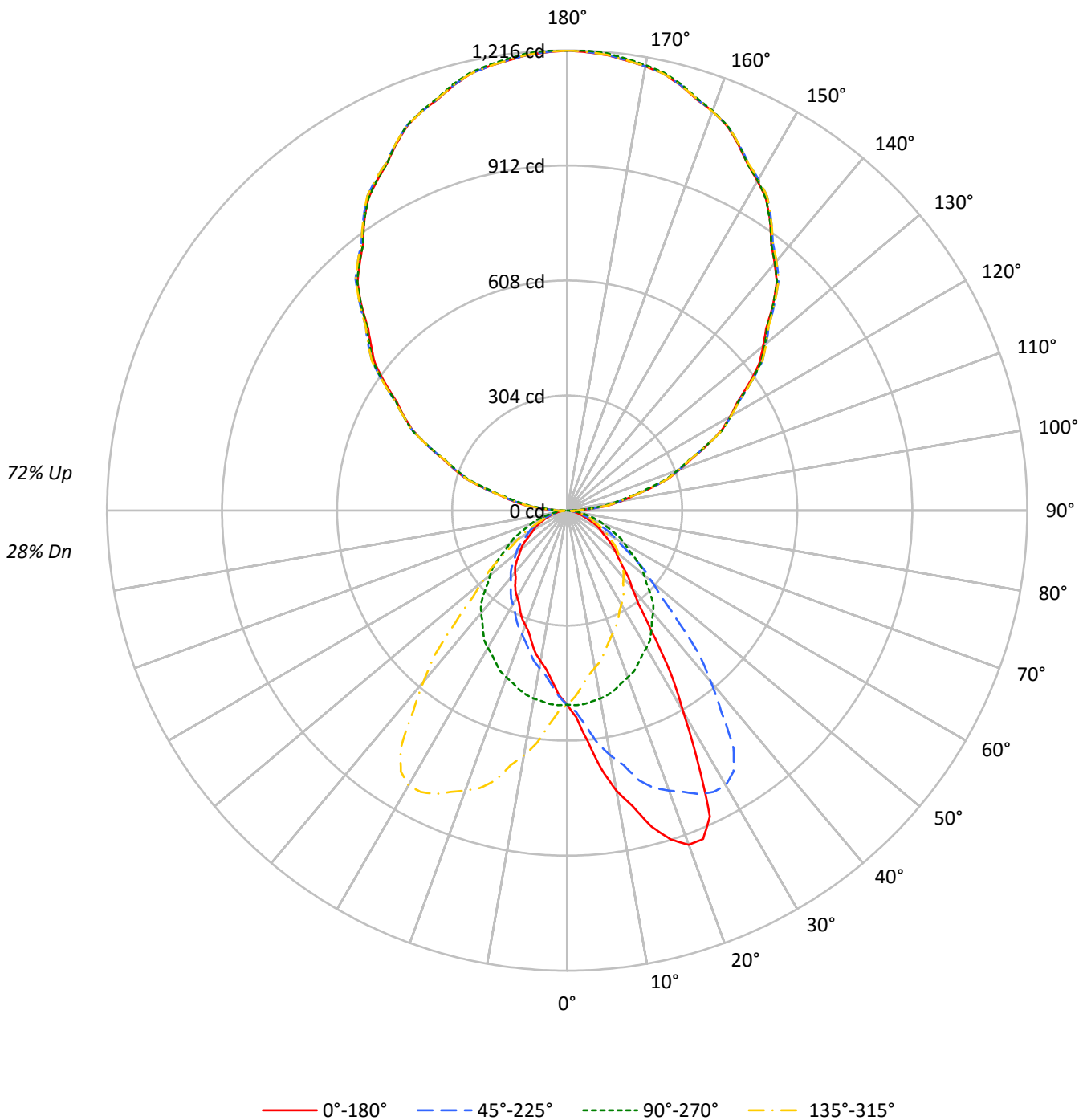
Input Watts (W): 38  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	36	36	36	28				28
1	93	89	85	82	83	80	77	74	62	60	59	46	45	44	32	31	31	24				24
2	85	78	72	67	76	70	65	61	55	52	49	41	39	37	28	27	26	20				20
3	78	69	62	56	69	62	56	51	49	45	41	37	34	32	25	24	23	18				18
4	71	61	54	48	63	55	49	44	43	39	35	33	30	27	23	21	20	15				15
5	65	54	47	41	58	49	42	38	39	34	31	29	26	24	21	19	17	14				14
6	60	49	41	36	54	44	37	33	35	30	27	27	23	21	19	17	15	12				12
7	55	44	36	31	50	40	33	29	32	27	24	24	21	19	17	15	14	11				11
8	51	40	32	27	46	36	30	25	29	24	21	22	19	17	16	14	12	10				10
9	48	36	29	24	43	33	27	22	26	22	19	20	17	15	15	13	11	9				9
10	45	33	26	22	40	30	24	20	24	20	17	19	16	13	14	12	10	8				8

**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	1.1
10°-20°	157.6	3.4
20°-30°	247.6	5.3
30°-40°	258.3	5.6
40°-50°	221.1	4.8
50°-60°	168.5	3.6
60°-70°	108.0	2.3
70°-80°	52.0	1.1
80°-90°	17.3	0.4
90°-100°	79.2	1.7
100°-110°	237.0	5.1
110°-120°	403.1	8.7
120°-130°	530.3	11.4
130°-140°	596.0	12.8
140°-150°	585.8	12.6
150°-160°	493.2	10.6
160°-170°	328.3	7.1
170°-180°	115.0	2.5
0°-30°	455.6	9.8
0°-40°	714.0	15.4
0°-60°	1103.5	23.7
0°-90°	1280.8	27.6
90°-120°	719.4	15.5
90°-150°	2431.5	52.3
90°-180°	3368.0	72.4
0°-180°	4648.8	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	9
90°	29	1	29	1	29	14
95°	74	56	74	56	74	76
105°	227	215	227	215	227	241
115°	407	406	407	406	407	403
125°	587	594	587	594	587	525
135°	770	771	770	771	770	592
145°	935	935	935	935	935	584
155°	1069	1070	1069	1070	1069	492
165°	1162	1166	1162	1166	1162	328
175°	1208	1213	1208	1213	1208	115
180°	1216	1216	1216	1216	1216	



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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°	7.4	7.7	7.4	7.4	7.4	7.4	7.2	7.1	7.3	6.9	6.5
90°	28.7	28.2	27.8	27.3	27.0	26.3	25.4	24.6	23.8	22.9	20.2
92.5°	38.5	38.8	39.1	39.3	39.6	39.4	38.7	38.0	37.3	36.7	35.1
95°	74.5	74.5	74.5	74.5	74.5	74.1	73.2	72.4	71.5	70.7	69.0
97.5°	114.6	114.7	114.8	114.8	114.9	114.5	113.5	112.5	111.6	110.6	109.3
100°	145.2	144.7	144.3	143.8	143.5	142.9	142.3	141.7	141.0	140.3	139.3
102.5°	176.4	176.5	176.6	176.7	176.8	176.5	175.9	175.2	174.7	174.0	172.6
105°	227.2	226.9	226.4	226.0	225.6	225.4	225.4	225.4	225.4	225.4	223.5
107.5°	280.1	280.4	280.7	281.0	281.2	281.0	280.3	279.7	278.9	278.2	277.5
110°	316.0	316.5	316.9	317.4	317.7	317.5	316.7	315.8	315.0	314.1	313.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	354.3	354.4	354.4	354.5	354.6	354.1	353.1	352.1	351.1	350.1	350.0
115°	406.8	407.0	407.2	407.5	407.6	407.6	407.5	407.2	407.0	406.8	407.2
117.5°	460.1	460.6	461.3	461.8	462.4	462.8	462.8	462.9	462.9	463.0	463.4
120°	497.5	497.9	498.3	498.8	499.2	499.5	499.7	499.9	500.1	500.4	501.4
122.5°	533.4	534.0	534.6	535.2	535.7	536.4	536.9	537.4	538.0	538.6	539.1
125°	587.3	588.1	589.0	589.8	590.7	591.5	592.4	593.2	594.1	594.9	595.3
127.5°	640.9	641.9	642.9	643.9	644.8	645.9	647.1	648.3	649.5	650.6	651.1
130°	676.1	677.6	679.0	680.5	682.0	683.2	684.0	684.9	685.7	686.5	687.2
132.5°	712.8	713.9	715.0	716.1	717.4	718.4	719.4	720.5	721.4	722.5	722.9
135°	769.7	770.1	770.5	770.9	771.4	771.9	772.8	773.6	774.5	775.3	775.6
137.5°	819.9	820.7	821.5	822.3	823.1	824.0	824.8	825.8	826.6	827.6	827.0
140°	852.7	854.2	855.7	857.1	858.7	859.5	859.7	860.0	860.2	860.4	860.2
142.5°	886.4	887.5	888.6	889.8	890.9	891.6	891.8	892.0	892.2	892.5	892.1
145°	934.8	935.7	936.5	937.4	938.2	938.8	939.0	939.2	939.4	939.6	939.0
147.5°	978.0	979.3	980.5	981.8	983.1	983.7	983.7	983.7	983.7	983.7	983.2
150°	1005.5	1006.8	1008.0	1009.4	1010.6	1011.3	1011.3	1011.3	1011.3	1011.3	1010.8
152.5°	1032.3	1033.3	1034.4	1035.6	1036.7	1037.1	1036.7	1036.3	1036.0	1035.7	1035.5
155°	1068.6	1070.1	1071.5	1073.0	1074.5	1074.8	1073.9	1073.1	1072.2	1071.4	1071.2
157.5°	1101.5	1102.8	1104.0	1105.1	1106.4	1106.5	1105.6	1104.7	1103.8	1102.9	1102.8
160°	1122.9	1123.8	1124.6	1125.5	1126.3	1126.2	1125.2	1124.2	1123.0	1122.0	1122.0
162.5°	1139.0	1140.4	1141.7	1143.1	1144.4	1144.6	1143.5	1142.5	1141.4	1140.4	1140.2
165°	1162.2	1163.6	1165.1	1166.6	1168.1	1168.2	1166.9	1165.6	1164.3	1163.1	1163.1
167.5°	1181.8	1183.1	1184.4	1185.7	1187.0	1187.0	1185.7	1184.4	1183.1	1181.8	1181.7
170°	1191.8	1193.2	1194.7	1196.2	1197.7	1197.7	1196.2	1194.7	1193.2	1191.8	1191.8
172.5°	1199.4	1200.8	1202.3	1203.8	1205.3	1205.4	1204.1	1202.8	1201.5	1200.1	1200.1
175°	1208.0	1209.5	1210.9	1212.4	1213.9	1214.0	1212.8	1211.4	1210.2	1208.9	1208.9
177.5°	1212.6	1213.7	1214.9	1216.1	1217.3	1217.4	1216.4	1215.3	1214.3	1213.3	1213.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



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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°	6.3	5.6	5.4	4.9	5.0	4.7	5.4	5.8	6.4	6.1	6.6
90°	17.4	14.6	11.9	9.4	7.4	5.2	3.1	0.9	3.1	5.2	7.4
92.5°	33.6	32.0	30.3	28.8	27.4	26.0	24.5	23.1	24.5	26.0	27.4
95°	67.3	65.6	63.9	62.3	60.8	59.3	57.8	56.4	57.8	59.3	60.8
97.5°	108.1	106.9	105.7	104.5	103.4	102.3	101.1	100.1	101.1	102.3	103.4
100°	138.3	137.2	136.1	135.0	133.7	132.4	131.1	129.9	131.1	132.4	133.7
102.5°	171.2	169.8	168.3	167.3	166.5	165.8	165.0	164.3	165.0	165.8	166.5
105°	221.5	219.6	217.7	216.6	216.1	215.7	215.3	214.9	215.3	215.7	216.1
107.5°	276.7	276.0	275.2	274.7	274.5	274.2	273.9	273.7	273.9	274.2	274.5
110°	313.3	312.9	312.5	312.1	311.6	311.2	310.8	310.4	310.8	311.2	311.6





TEST NUMBER: P332399-830

CATALOG NUMBER: S123RDIW-S340D1030U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	349.9	349.8	349.7	349.6	349.3	349.0	348.8	348.6	348.8	349.0	349.3
115°	407.6	408.0	408.5	408.4	407.7	407.1	406.4	405.9	406.4	407.1	407.7
117.5°	464.0	464.6	465.1	465.2	464.8	464.4	463.9	463.5	463.9	464.4	464.8
120°	502.5	503.5	504.6	504.5	503.2	502.0	500.7	499.5	500.7	502.0	503.2
122.5°	539.7	540.3	540.7	540.5	539.6	538.8	537.8	536.9	537.8	538.8	539.6
125°	595.8	596.2	596.6	596.5	595.9	595.2	594.6	594.0	594.6	595.2	595.9
127.5°	651.6	652.1	652.5	652.1	650.7	649.4	648.0	646.7	648.0	649.4	650.7
130°	687.9	688.5	689.1	688.6	686.9	685.2	683.5	681.8	683.5	685.2	686.9
132.5°	723.4	723.9	724.3	723.8	722.1	720.3	718.6	716.9	718.6	720.3	722.1
135°	775.8	776.0	776.2	775.7	774.4	773.2	771.8	770.6	771.8	773.2	774.4
137.5°	826.4	825.9	825.3	824.5	823.4	822.4	821.3	820.3	821.3	822.4	823.4
140°	860.0	859.7	859.5	858.8	857.8	856.8	855.7	854.6	855.7	856.8	857.8
142.5°	891.6	891.3	890.9	890.2	889.1	888.1	887.0	886.0	887.0	888.1	889.1
145°	938.4	937.7	937.1	936.5	936.1	935.7	935.3	934.8	935.3	935.7	936.1
147.5°	982.6	981.9	981.4	980.7	980.0	979.1	978.4	977.6	978.4	979.1	980.0
150°	1010.4	1009.9	1009.6	1009.1	1008.7	1008.2	1007.9	1007.4	1007.9	1008.2	1008.7
152.5°	1035.2	1034.9	1034.6	1034.3	1033.7	1033.0	1032.5	1031.9	1032.5	1033.0	1033.7
155°	1071.0	1070.7	1070.5	1070.4	1070.4	1070.4	1070.4	1070.4	1070.4	1070.4	1070.4
157.5°	1102.6	1102.4	1102.2	1102.3	1102.5	1102.8	1103.1	1103.3	1103.1	1102.8	1102.5
160°	1122.0	1122.0	1122.0	1122.2	1122.7	1123.0	1123.5	1123.9	1123.5	1123.0	1122.7
162.5°	1140.0	1139.8	1139.6	1139.9	1140.5	1141.0	1141.7	1142.3	1141.7	1141.0	1140.5
165°	1163.1	1163.1	1163.1	1163.4	1164.0	1164.7	1165.3	1165.9	1165.3	1164.7	1164.0
167.5°	1181.5	1181.3	1181.1	1181.5	1182.3	1183.2	1184.0	1184.9	1184.0	1183.2	1182.3
170°	1191.8	1191.8	1191.8	1192.1	1193.0	1193.8	1194.7	1195.5	1194.7	1193.8	1193.0
172.5°	1200.1	1200.1	1200.1	1200.5	1201.4	1202.2	1203.1	1203.9	1203.1	1202.2	1201.4
175°	1208.9	1208.9	1208.9	1209.4	1210.2	1211.1	1211.9	1212.8	1211.9	1211.1	1210.2
177.5°	1213.3	1213.3	1213.3	1213.6	1214.3	1215.0	1215.7	1216.4	1215.7	1215.0	1214.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



TEST NUMBER: P332399-830

CATALOG NUMBER: S123RDIW-S340D1030U830-4F0-1E-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°	6.8	7.8	8.6	9.2	10.0	10.4	10.7	10.9	11.2	11.4	11.5
90°	9.4	11.9	14.6	17.4	20.2	22.9	23.8	24.6	25.4	26.3	27.0
92.5°	28.8	30.3	32.0	33.6	35.1	36.7	37.3	38.0	38.7	39.4	39.6
95°	62.3	63.9	65.6	67.3	69.0	70.7	71.5	72.4	73.2	74.1	74.5
97.5°	104.5	105.7	106.9	108.1	109.3	110.6	111.6	112.5	113.5	114.5	114.9
100°	135.0	136.1	137.2	138.3	139.3	140.3	141.0	141.7	142.3	142.9	143.5
102.5°	167.3	168.3	169.8	171.2	172.6	174.0	174.7	175.2	175.9	176.5	176.8
105°	216.6	217.7	219.6	221.5	223.5	225.4	225.4	225.4	225.4	225.4	225.6
107.5°	274.7	275.2	276.0	276.7	277.5	278.2	278.9	279.7	280.3	281.0	281.2
110°	312.1	312.5	312.9	313.3	313.8	314.1	315.0	315.8	316.7	317.5	317.7



TEST NUMBER: P332399-830

CATALOG NUMBER: S123RDIW-S340D1030U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	349.6	349.7	349.8	349.9	350.0	350.1	351.1	352.1	353.1	354.1	354.6
115°	408.4	408.5	408.0	407.6	407.2	406.8	407.0	407.2	407.5	407.6	407.6
117.5°	465.2	465.1	464.6	464.0	463.4	463.0	462.9	462.9	462.8	462.8	462.4
120°	504.5	504.6	503.5	502.5	501.4	500.4	500.1	499.9	499.7	499.5	499.2
122.5°	540.5	540.7	540.3	539.7	539.1	538.6	538.0	537.4	536.9	536.4	535.7
125°	596.5	596.6	596.2	595.8	595.3	594.9	594.1	593.2	592.4	591.5	590.7
127.5°	652.1	652.5	652.1	651.6	651.1	650.6	649.5	648.3	647.1	645.9	644.8
130°	688.6	689.1	688.5	687.9	687.2	686.5	685.7	684.9	684.0	683.2	682.0
132.5°	723.8	724.3	723.9	723.4	722.9	722.5	721.4	720.5	719.4	718.4	717.4
135°	775.7	776.2	776.0	775.8	775.6	775.3	774.5	773.6	772.8	771.9	771.4
137.5°	824.5	825.3	825.9	826.4	827.0	827.6	826.6	825.8	824.8	824.0	823.1
140°	858.8	859.5	859.7	860.0	860.2	860.4	860.2	860.0	859.7	859.5	858.7
142.5°	890.2	890.9	891.3	891.6	892.1	892.5	892.2	892.0	891.8	891.6	890.9
145°	936.5	937.1	937.7	938.4	939.0	939.6	939.4	939.2	939.0	938.8	938.2
147.5°	980.7	981.4	981.9	982.6	983.2	983.7	983.7	983.7	983.7	983.7	983.1
150°	1009.1	1009.6	1009.9	1010.4	1010.8	1011.3	1011.3	1011.3	1011.3	1011.3	1010.6
152.5°	1034.3	1034.6	1034.9	1035.2	1035.5	1035.7	1036.0	1036.3	1036.7	1037.1	1036.7
155°	1070.4	1070.5	1070.7	1071.0	1071.2	1071.4	1072.2	1073.1	1073.9	1074.8	1074.5
157.5°	1102.3	1102.2	1102.4	1102.6	1102.8	1102.9	1103.8	1104.7	1105.6	1106.5	1106.4
160°	1122.2	1122.0	1122.0	1122.0	1122.0	1122.0	1123.0	1124.2	1125.2	1126.2	1126.3
162.5°	1139.9	1139.6	1139.8	1140.0	1140.2	1140.4	1141.4	1142.5	1143.5	1144.6	1144.4
165°	1163.4	1163.1	1163.1	1163.1	1163.1	1163.1	1164.3	1165.6	1166.9	1168.2	1168.1
167.5°	1181.5	1181.1	1181.3	1181.5	1181.7	1181.8	1183.1	1184.4	1185.7	1187.0	1187.0
170°	1192.1	1191.8	1191.8	1191.8	1191.8	1191.8	1193.2	1194.7	1196.2	1197.7	1197.7
172.5°	1200.5	1200.1	1200.1	1200.1	1200.1	1200.1	1201.5	1202.8	1204.1	1205.4	1205.3
175°	1209.4	1208.9	1208.9	1208.9	1208.9	1208.9	1210.2	1211.4	1212.8	1214.0	1213.9
177.5°	1213.6	1213.3	1213.3	1213.3	1213.3	1213.3	1214.3	1215.3	1216.4	1217.4	1217.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



TEST NUMBER: P332399-830

CATALOG NUMBER: S123RDIW-S340D1030U830-4F0-1E-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°	12.0	11.7	11.8	12.1	11.8	11.7	12.0	11.5	11.4	11.2	10.9
90°	27.3	27.8	28.2	28.7	28.2	27.8	27.3	27.0	26.3	25.4	24.6
92.5°	39.3	39.1	38.8	38.5	38.8	39.1	39.3	39.6	39.4	38.7	38.0
95°	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.1	73.2	72.4
97.5°	114.8	114.8	114.7	114.6	114.7	114.8	114.8	114.9	114.5	113.5	112.5
100°	143.8	144.3	144.7	145.2	144.7	144.3	143.8	143.5	142.9	142.3	141.7
102.5°	176.7	176.6	176.5	176.4	176.5	176.6	176.7	176.8	176.5	175.9	175.2
105°	226.0	226.4	226.9	227.2	226.9	226.4	226.0	225.6	225.4	225.4	225.4
107.5°	281.0	280.7	280.4	280.1	280.4	280.7	281.0	281.2	281.0	280.3	279.7
110°	317.4	316.9	316.5	316.0	316.5	316.9	317.4	317.7	317.5	316.7	315.8



TEST NUMBER: P332399-830

CATALOG NUMBER: S123RDIW-S340D1030U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	354.5	354.4	354.4	354.3	354.4	354.4	354.5	354.6	354.1	353.1	352.1
115°	407.5	407.2	407.0	406.8	407.0	407.2	407.5	407.6	407.6	407.5	407.2
117.5°	461.8	461.3	460.6	460.1	460.6	461.3	461.8	462.4	462.8	462.8	462.9
120°	498.8	498.3	497.9	497.5	497.9	498.3	498.8	499.2	499.5	499.7	499.9
122.5°	535.2	534.6	534.0	533.4	534.0	534.6	535.2	535.7	536.4	536.9	537.4
125°	589.8	589.0	588.1	587.3	588.1	589.0	589.8	590.7	591.5	592.4	593.2
127.5°	643.9	642.9	641.9	640.9	641.9	642.9	643.9	644.8	645.9	647.1	648.3
130°	680.5	679.0	677.6	676.1	677.6	679.0	680.5	682.0	683.2	684.0	684.9
132.5°	716.1	715.0	713.9	712.8	713.9	715.0	716.1	717.4	718.4	719.4	720.5
135°	770.9	770.5	770.1	769.7	770.1	770.5	770.9	771.4	771.9	772.8	773.6
137.5°	822.3	821.5	820.7	819.9	820.7	821.5	822.3	823.1	824.0	824.8	825.8
140°	857.1	855.7	854.2	852.7	854.2	855.7	857.1	858.7	859.5	859.7	860.0
142.5°	889.8	888.6	887.5	886.4	887.5	888.6	889.8	890.9	891.6	891.8	892.0
145°	937.4	936.5	935.7	934.8	935.7	936.5	937.4	938.2	938.8	939.0	939.2
147.5°	981.8	980.5	979.3	978.0	979.3	980.5	981.8	983.1	983.7	983.7	983.7
150°	1009.4	1008.0	1006.8	1005.5	1006.8	1008.0	1009.4	1010.6	1011.3	1011.3	1011.3
152.5°	1035.6	1034.4	1033.3	1032.3	1033.3	1034.4	1035.6	1036.7	1037.1	1036.7	1036.3
155°	1073.0	1071.5	1070.1	1068.6	1070.1	1071.5	1073.0	1074.5	1074.8	1073.9	1073.1
157.5°	1105.1	1104.0	1102.8	1101.5	1102.8	1104.0	1105.1	1106.4	1106.5	1105.6	1104.7
160°	1125.5	1124.6	1123.8	1122.9	1123.8	1124.6	1125.5	1126.3	1126.2	1125.2	1124.2
162.5°	1143.1	1141.7	1140.4	1139.0	1140.4	1141.7	1143.1	1144.4	1144.6	1143.5	1142.5
165°	1166.6	1165.1	1163.6	1162.2	1163.6	1165.1	1166.6	1168.1	1168.2	1166.9	1165.6
167.5°	1185.7	1184.4	1183.1	1181.8	1183.1	1184.4	1185.7	1187.0	1187.0	1185.7	1184.4
170°	1196.2	1194.7	1193.2	1191.8	1193.2	1194.7	1196.2	1197.7	1197.7	1196.2	1194.7
172.5°	1203.8	1202.3	1200.8	1199.4	1200.8	1202.3	1203.8	1205.3	1205.4	1204.1	1202.8
175°	1212.4	1210.9	1209.5	1208.0	1209.5	1210.9	1212.4	1213.9	1214.0	1212.8	1211.4
177.5°	1216.1	1214.9	1213.7	1212.6	1213.7	1214.9	1216.1	1217.3	1217.4	1216.4	1215.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



TEST NUMBER: P332399-830

CATALOG NUMBER: S123RDIW-S340D1030U830-4F0-1E-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°	10.7	10.4	10.0	9.2	8.6	7.8	6.8	6.6	6.1	6.4	5.8
90°	23.8	22.9	20.2	17.4	14.6	11.9	9.4	7.4	5.2	3.1	0.9
92.5°	37.3	36.7	35.1	33.6	32.0	30.3	28.8	27.4	26.0	24.5	23.1
95°	71.5	70.7	69.0	67.3	65.6	63.9	62.3	60.8	59.3	57.8	56.4
97.5°	111.6	110.6	109.3	108.1	106.9	105.7	104.5	103.4	102.3	101.1	100.1
100°	141.0	140.3	139.3	138.3	137.2	136.1	135.0	133.7	132.4	131.1	129.9
102.5°	174.7	174.0	172.6	171.2	169.8	168.3	167.3	166.5	165.8	165.0	164.3
105°	225.4	225.4	223.5	221.5	219.6	217.7	216.6	216.1	215.7	215.3	214.9
107.5°	278.9	278.2	277.5	276.7	276.0	275.2	274.7	274.5	274.2	273.9	273.7
110°	315.0	314.1	313.8	313.3	312.9	312.5	312.1	311.6	311.2	310.8	310.4



TEST NUMBER: P332399-830

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	351.1	350.1	350.0	349.9	349.8	349.7	349.6	349.3	349.0	348.8	348.6
115°	407.0	406.8	407.2	407.6	408.0	408.5	408.4	407.7	407.1	406.4	405.9
117.5°	462.9	463.0	463.4	464.0	464.6	465.1	465.2	464.8	464.4	463.9	463.5
120°	500.1	500.4	501.4	502.5	503.5	504.6	504.5	503.2	502.0	500.7	499.5
122.5°	538.0	538.6	539.1	539.7	540.3	540.7	540.5	539.6	538.8	537.8	536.9
125°	594.1	594.9	595.3	595.8	596.2	596.6	596.5	595.9	595.2	594.6	594.0
127.5°	649.5	650.6	651.1	651.6	652.1	652.5	652.1	650.7	649.4	648.0	646.7
130°	685.7	686.5	687.2	687.9	688.5	689.1	688.6	686.9	685.2	683.5	681.8
132.5°	721.4	722.5	722.9	723.4	723.9	724.3	723.8	722.1	720.3	718.6	716.9
135°	774.5	775.3	775.6	775.8	776.0	776.2	775.7	774.4	773.2	771.8	770.6
137.5°	826.6	827.6	827.0	826.4	825.9	825.3	824.5	823.4	822.4	821.3	820.3
140°	860.2	860.4	860.2	860.0	859.7	859.5	858.8	857.8	856.8	855.7	854.6
142.5°	892.2	892.5	892.1	891.6	891.3	890.9	890.2	889.1	888.1	887.0	886.0
145°	939.4	939.6	939.0	938.4	937.7	937.1	936.5	936.1	935.7	935.3	934.8
147.5°	983.7	983.7	983.2	982.6	981.9	981.4	980.7	980.0	979.1	978.4	977.6
150°	1011.3	1011.3	1010.8	1010.4	1009.9	1009.6	1009.1	1008.7	1008.2	1007.9	1007.4
152.5°	1036.0	1035.7	1035.5	1035.2	1034.9	1034.6	1034.3	1033.7	1033.0	1032.5	1031.9
155°	1072.2	1071.4	1071.2	1071.0	1070.7	1070.5	1070.4	1070.4	1070.4	1070.4	1070.4
157.5°	1103.8	1102.9	1102.8	1102.6	1102.4	1102.2	1102.3	1102.5	1102.8	1103.1	1103.3
160°	1123.0	1122.0	1122.0	1122.0	1122.0	1122.0	1122.2	1122.7	1123.0	1123.5	1123.9
162.5°	1141.4	1140.4	1140.2	1140.0	1139.8	1139.6	1139.9	1140.5	1141.0	1141.7	1142.3
165°	1164.3	1163.1	1163.1	1163.1	1163.1	1163.1	1163.4	1164.0	1164.7	1165.3	1165.9
167.5°	1183.1	1181.8	1181.7	1181.5	1181.3	1181.1	1181.5	1182.3	1183.2	1184.0	1184.9
170°	1193.2	1191.8	1191.8	1191.8	1191.8	1191.8	1192.1	1193.0	1193.8	1194.7	1195.5
172.5°	1201.5	1200.1	1200.1	1200.1	1200.1	1200.1	1200.5	1201.4	1202.2	1203.1	1203.9
175°	1210.2	1208.9	1208.9	1208.9	1208.9	1208.9	1209.4	1210.2	1211.1	1211.9	1212.8
177.5°	1214.3	1213.3	1213.3	1213.3	1213.3	1213.3	1213.6	1214.3	1215.0	1215.7	1216.4
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



TEST NUMBER: P332399-830

CATALOG NUMBER: S123RDIW-S340D1030U830-4F0-1E-UDD-A1

**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°	5.4	4.7	5.0	4.9	5.4	5.6	6.3	6.5	6.9	7.3	7.1
90°	3.1	5.2	7.4	9.4	11.9	14.6	17.4	20.2	22.9	23.8	24.6
92.5°	24.5	26.0	27.4	28.8	30.3	32.0	33.6	35.1	36.7	37.3	38.0
95°	57.8	59.3	60.8	62.3	63.9	65.6	67.3	69.0	70.7	71.5	72.4
97.5°	101.1	102.3	103.4	104.5	105.7	106.9	108.1	109.3	110.6	111.6	112.5
100°	131.1	132.4	133.7	135.0	136.1	137.2	138.3	139.3	140.3	141.0	141.7
102.5°	165.0	165.8	166.5	167.3	168.3	169.8	171.2	172.6	174.0	174.7	175.2
105°	215.3	215.7	216.1	216.6	217.7	219.6	221.5	223.5	225.4	225.4	225.4
107.5°	273.9	274.2	274.5	274.7	275.2	276.0	276.7	277.5	278.2	278.9	279.7
110°	310.8	311.2	311.6	312.1	312.5	312.9	313.3	313.8	314.1	315.0	315.8





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	348.8	349.0	349.3	349.6	349.7	349.8	349.9	350.0	350.1	351.1	352.1
115°	406.4	407.1	407.7	408.4	408.5	408.0	407.6	407.2	406.8	407.0	407.2
117.5°	463.9	464.4	464.8	465.2	465.1	464.6	464.0	463.4	463.0	462.9	462.9
120°	500.7	502.0	503.2	504.5	504.6	503.5	502.5	501.4	500.4	500.1	499.9
122.5°	537.8	538.8	539.6	540.5	540.7	540.3	539.7	539.1	538.6	538.0	537.4
125°	594.6	595.2	595.9	596.5	596.6	596.2	595.8	595.3	594.9	594.1	593.2
127.5°	648.0	649.4	650.7	652.1	652.5	652.1	651.6	651.1	650.6	649.5	648.3
130°	683.5	685.2	686.9	688.6	689.1	688.5	687.9	687.2	686.5	685.7	684.9
132.5°	718.6	720.3	722.1	723.8	724.3	723.9	723.4	722.9	722.5	721.4	720.5
135°	771.8	773.2	774.4	775.7	776.2	776.0	775.8	775.6	775.3	774.5	773.6
137.5°	821.3	822.4	823.4	824.5	825.3	825.9	826.4	827.0	827.6	826.6	825.8
140°	855.7	856.8	857.8	858.8	859.5	859.7	860.0	860.2	860.4	860.2	860.0
142.5°	887.0	888.1	889.1	890.2	890.9	891.3	891.6	892.1	892.5	892.2	892.0
145°	935.3	935.7	936.1	936.5	937.1	937.7	938.4	939.0	939.6	939.4	939.2
147.5°	978.4	979.1	980.0	980.7	981.4	981.9	982.6	983.2	983.7	983.7	983.7
150°	1007.9	1008.2	1008.7	1009.1	1009.6	1009.9	1010.4	1010.8	1011.3	1011.3	1011.3
152.5°	1032.5	1033.0	1033.7	1034.3	1034.6	1034.9	1035.2	1035.5	1035.7	1036.0	1036.3
155°	1070.4	1070.4	1070.4	1070.4	1070.5	1070.7	1071.0	1071.2	1071.4	1072.2	1073.1
157.5°	1103.1	1102.8	1102.5	1102.3	1102.2	1102.4	1102.6	1102.8	1102.9	1103.8	1104.7
160°	1123.5	1123.0	1122.7	1122.2	1122.0	1122.0	1122.0	1122.0	1122.0	1123.0	1124.2
162.5°	1141.7	1141.0	1140.5	1139.9	1139.6	1139.8	1140.0	1140.2	1140.4	1141.4	1142.5
165°	1165.3	1164.7	1164.0	1163.4	1163.1	1163.1	1163.1	1163.1	1163.1	1164.3	1165.6
167.5°	1184.0	1183.2	1182.3	1181.5	1181.1	1181.3	1181.5	1181.7	1181.8	1183.1	1184.4
170°	1194.7	1193.8	1193.0	1192.1	1191.8	1191.8	1191.8	1191.8	1191.8	1193.2	1194.7
172.5°	1203.1	1202.2	1201.4	1200.5	1200.1	1200.1	1200.1	1200.1	1200.1	1201.5	1202.8
175°	1211.9	1211.1	1210.2	1209.4	1208.9	1208.9	1208.9	1208.9	1208.9	1210.2	1211.4
177.5°	1215.7	1215.0	1214.3	1213.6	1213.3	1213.3	1213.3	1213.3	1213.3	1214.3	1215.3
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



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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°	7.2	7.4	7.4	7.4	7.4	7.7	7.4
90°	25.4	26.3	27.0	27.3	27.8	28.2	28.7
92.5°	38.7	39.4	39.6	39.3	39.1	38.8	38.5
95°	73.2	74.1	74.5	74.5	74.5	74.5	74.5
97.5°	113.5	114.5	114.9	114.8	114.8	114.7	114.6
100°	142.3	142.9	143.5	143.8	144.3	144.7	145.2
102.5°	175.9	176.5	176.8	176.7	176.6	176.5	176.4
105°	225.4	225.4	225.6	226.0	226.4	226.9	227.2
107.5°	280.3	281.0	281.2	281.0	280.7	280.4	280.1
110°	316.7	317.5	317.7	317.4	316.9	316.5	316.0



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	353.1	354.1	354.6	354.5	354.4	354.4	354.3
115°	407.5	407.6	407.6	407.5	407.2	407.0	406.8
117.5°	462.8	462.8	462.4	461.8	461.3	460.6	460.1
120°	499.7	499.5	499.2	498.8	498.3	497.9	497.5
122.5°	536.9	536.4	535.7	535.2	534.6	534.0	533.4
125°	592.4	591.5	590.7	589.8	589.0	588.1	587.3
127.5°	647.1	645.9	644.8	643.9	642.9	641.9	640.9
130°	684.0	683.2	682.0	680.5	679.0	677.6	676.1
132.5°	719.4	718.4	717.4	716.1	715.0	713.9	712.8
135°	772.8	771.9	771.4	770.9	770.5	770.1	769.7
137.5°	824.8	824.0	823.1	822.3	821.5	820.7	819.9
140°	859.7	859.5	858.7	857.1	855.7	854.2	852.7
142.5°	891.8	891.6	890.9	889.8	888.6	887.5	886.4
145°	939.0	938.8	938.2	937.4	936.5	935.7	934.8
147.5°	983.7	983.7	983.1	981.8	980.5	979.3	978.0
150°	1011.3	1011.3	1010.6	1009.4	1008.0	1006.8	1005.5
152.5°	1036.7	1037.1	1036.7	1035.6	1034.4	1033.3	1032.3
155°	1073.9	1074.8	1074.5	1073.0	1071.5	1070.1	1068.6
157.5°	1105.6	1106.5	1106.4	1105.1	1104.0	1102.8	1101.5
160°	1125.2	1126.2	1126.3	1125.5	1124.6	1123.8	1122.9
162.5°	1143.5	1144.6	1144.4	1143.1	1141.7	1140.4	1139.0
165°	1166.9	1168.2	1168.1	1166.6	1165.1	1163.6	1162.2
167.5°	1185.7	1187.0	1187.0	1185.7	1184.4	1183.1	1181.8
170°	1196.2	1197.7	1197.7	1196.2	1194.7	1193.2	1191.8
172.5°	1204.1	1205.4	1205.3	1203.8	1202.3	1200.8	1199.4
175°	1212.8	1214.0	1213.9	1212.4	1210.9	1209.5	1208.0
177.5°	1216.4	1217.4	1217.3	1216.1	1214.9	1213.7	1212.6
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6

(END OF REPORT)