

CSITC Round Trial 2007-1

Inter-Laboratory Averages, Inter-Laboratory Variations, Typical In-Laboratory Variations

Micronaire								
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average	Cotton 5
Average of Laboratories (Grubbs)			4,084	4,239	4,295	5,037		3,477
Reference Values for Evaluation			4,084	4,239	4,295	5,037		3,477
Number Of Laboratories			70	70	70	70	70	70
Interlab. Variation	based on 30 tests	SD	0,070	0,083	0,075	0,080	0,077	0,062
		CV %	1,7	2,0	1,7	1,6	1,8	1,8
	based on 6 tests	SD	0,078	0,087	0,079	0,089	0,083	0,067
		CV %	1,9	2,0	1,8	1,8	1,9	1,9
	based on single tests	SD	0,089	0,097	0,088	0,099	0,093	0,077
		CV %	2,2	2,3	2,0	2,0	2,1	2,2
Typical In-Lab. Variation (Median)	between different days with each 6 tests	SD	0,026	0,029	0,025	0,034	0,029	0,025
		CV %	0,6	0,7	0,6	0,7	0,6	0,7
	between single tests on one day	SD	0,045	0,045	0,043	0,046	0,045	0,038
		CV %	1,1	1,1	1,0	0,9	1,0	1,1
	between all tests on different days	SD	0,051	0,052	0,049	0,058	0,052	0,047
		CV %	1,2	1,2	1,1	1,2	1,2	1,3

Strength								
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average	Cotton 5
Average of Laboratories (Grubbs)			32,283	28,261	24,530	28,771		42,678
Reference Values for Evaluation			32,283	28,261	24,530	28,771		42,678
Number Of Laboratories			70	70	70	70	70	70
Interlab. Variation	based on 30 tests	SD	1,172	1,360	1,364	1,455	1,338	2,219
		CV %	3,6	4,8	5,6	5,1	4,8	5,2
	based on 6 tests	SD	1,272	1,415	1,386	1,561	1,408	2,420
		CV %	3,9	5,0	5,6	5,4	5,0	5,7
	based on single tests	SD	1,480	1,494	1,526	1,687	1,547	2,599
		CV %	4,6	5,3	6,2	5,9	5,5	6,1
Typical In-Lab. Variation (Median)	between different days with each 6 tests	SD	0,458	0,402	0,398	0,437	0,424	0,803
		CV %	1,4	1,4	1,6	1,5	1,5	1,9
	between single tests on one day	SD	0,675	0,578	0,600	0,666	0,630	0,943
		CV %	2,1	2,0	2,4	2,3	2,2	2,2
	between all tests on different days	SD	0,847	0,698	0,741	0,796	0,771	1,253
		CV %	2,6	2,5	3,0	2,8	2,7	2,9

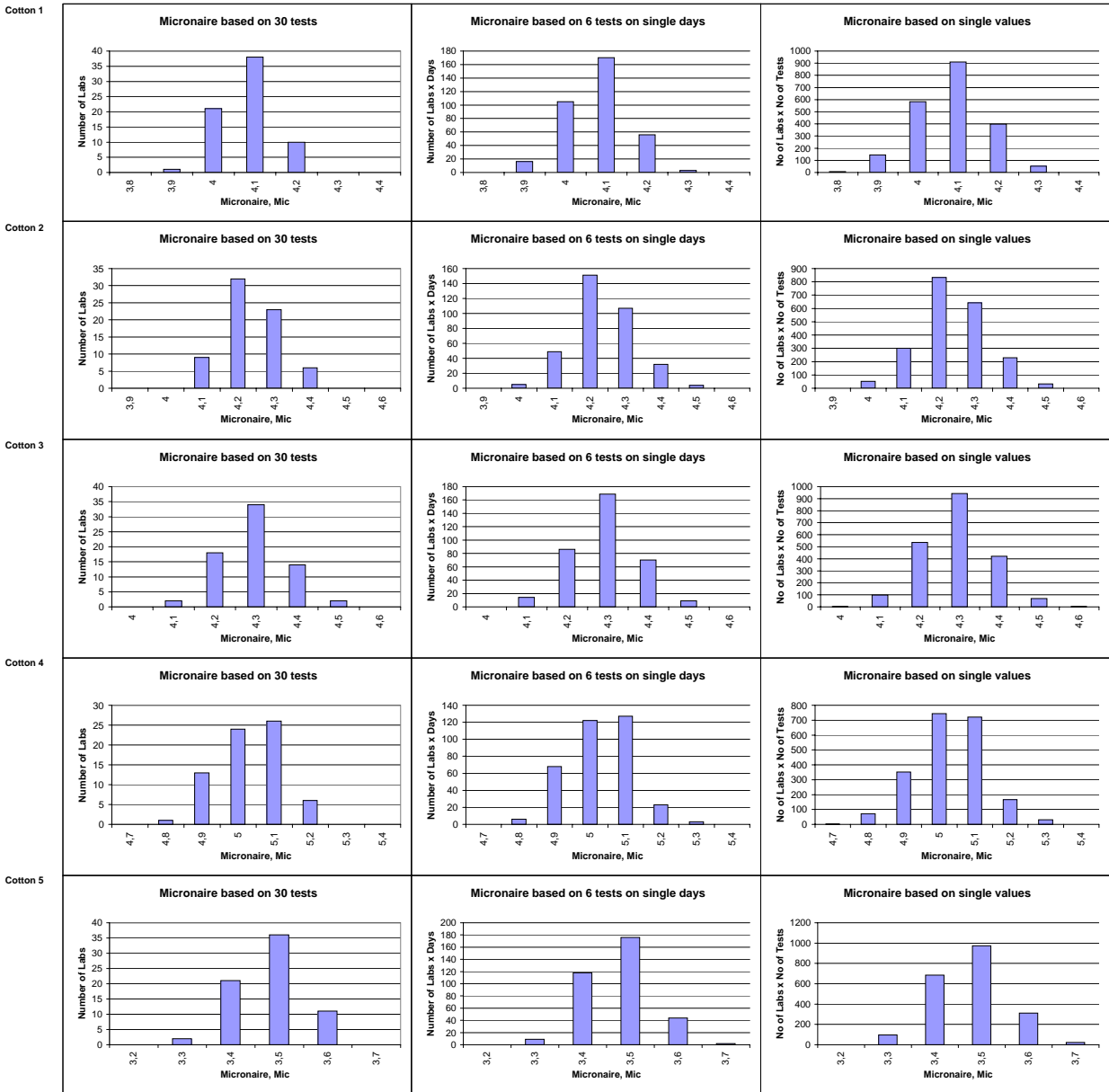
Length								
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average	Cotton 5
Average of Laboratories (Grubbs)			1,2048	1,0998	0,9921	1,0753		1,3647
Reference Values for Evaluation			1,2048	1,0998	0,9921	1,0753		1,3647
Number Of Laboratories			70	70	70	70	70	70
Interlab. Variation	based on 30 tests	SD	0,0106	0,0119	0,0145	0,0100	0,0118	0,0139
		CV %	0,9	1,1	1,5	0,9	1,1	1,0
	based on 6 tests	SD	0,0130	0,0132	0,0157	0,0121	0,0135	0,0171
		CV %	1,1	1,2	1,6	1,1	1,2	1,3
	based on single tests	SD	0,0172	0,0162	0,0194	0,0165	0,0173	0,0235
		CV %	1,4	1,5	2,0	1,5	1,6	1,7
Typical In-Lab. Variation (Median)	between different days with each 6 tests	SD	0,0073	0,0058	0,0064	0,0063	0,0064	0,0076
		CV %	0,6	0,5	0,6	0,6	0,6	0,6
	between single tests on one day	SD	0,0113	0,0101	0,0110	0,0106	0,0108	0,0119
		CV %	0,9	0,9	1,1	1,0	1,0	0,9
	between all tests on different days	SD	0,0134	0,0113	0,0122	0,0120	0,0122	0,0145
		CV %	1,1	1,0	1,2	1,1	1,1	1,1

Uniformity								
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average	Cotton 5
Average of Laboratories (Grubbs)			83,988	82,285	78,114	83,071		85,306
Reference Values for Evaluation			83,988	82,285	78,114	83,071		85,306
Number Of Laboratories			70	70	70	70	70	70
Interlab. Variation	based on 30 tests	SD	0,535	0,378	0,642	0,509	0,516	0,785
		CV %	0,6	0,5	0,8	0,6	0,6	0,9
	based on 6 tests	SD	0,637	0,473	0,736	0,575	0,605	0,878
		CV %	0,8	0,6	0,9	0,7	0,7	1,0
	based on single tests	SD	0,864	0,716	0,928	0,820	0,832	1,005
		CV %	1,0	0,9	1,2	1,0	1,0	1,2
Typical In-Lab. Variation (Median)	between different days with each 6 tests	SD	0,285	0,287	0,325	0,274	0,293	0,293
		CV %	0,3	0,3	0,4	0,3	0,4	0,3
	between single tests on one day	SD	0,544	0,508	0,563	0,550	0,541	0,494
		CV %	0,6	0,6	0,7	0,7	0,7	0,6
	between all tests on different days	SD	0,609	0,573	0,646	0,585	0,603	0,568
		CV %	0,7	0,7	0,8	0,7	0,7	0,7

Color Rd								
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average	Cotton 5
Average of Laboratories (Grubbs)			74,986	75,993	80,763	76,409		68,178
Reference Values for Evaluation			74,986	75,993	80,763	76,409		68,178
Number Of Laboratories			67	67	67	67	67	67
Interlab. Variation	based on 30 tests	SD	0,686	0,601	0,914	0,752	0,738	0,989
		CV %	0,9	0,8	1,1	1,0	1,0	1,5
	based on 6 tests	SD	0,758	0,740	1,011	0,933	0,860	0,969
		CV %	1,0	1,0	1,3	1,2	1,1	1,4
	based on single tests	SD	0,880	0,858	1,114	0,998	0,963	0,981
		CV %	1,2	1,1	1,4	1,3	1,2	1,4
Typical In-Lab. Variation (Median)	between different days with each 6 tests	SD	0,298	0,257	0,299	0,249	0,276	0,288
		CV %	0,4	0,3	0,4	0,3	0,4	0,4
	between single tests on one day	SD	0,394	0,261	0,273	0,290	0,305	0,303
		CV %	0,5	0,3	0,3	0,4	0,4	0,4
	between all tests on different days	SD	0,510	0,407	0,422	0,383	0,431	0,467
		CV %	0,7	0,5	0,5	0,5	0,6	0,7

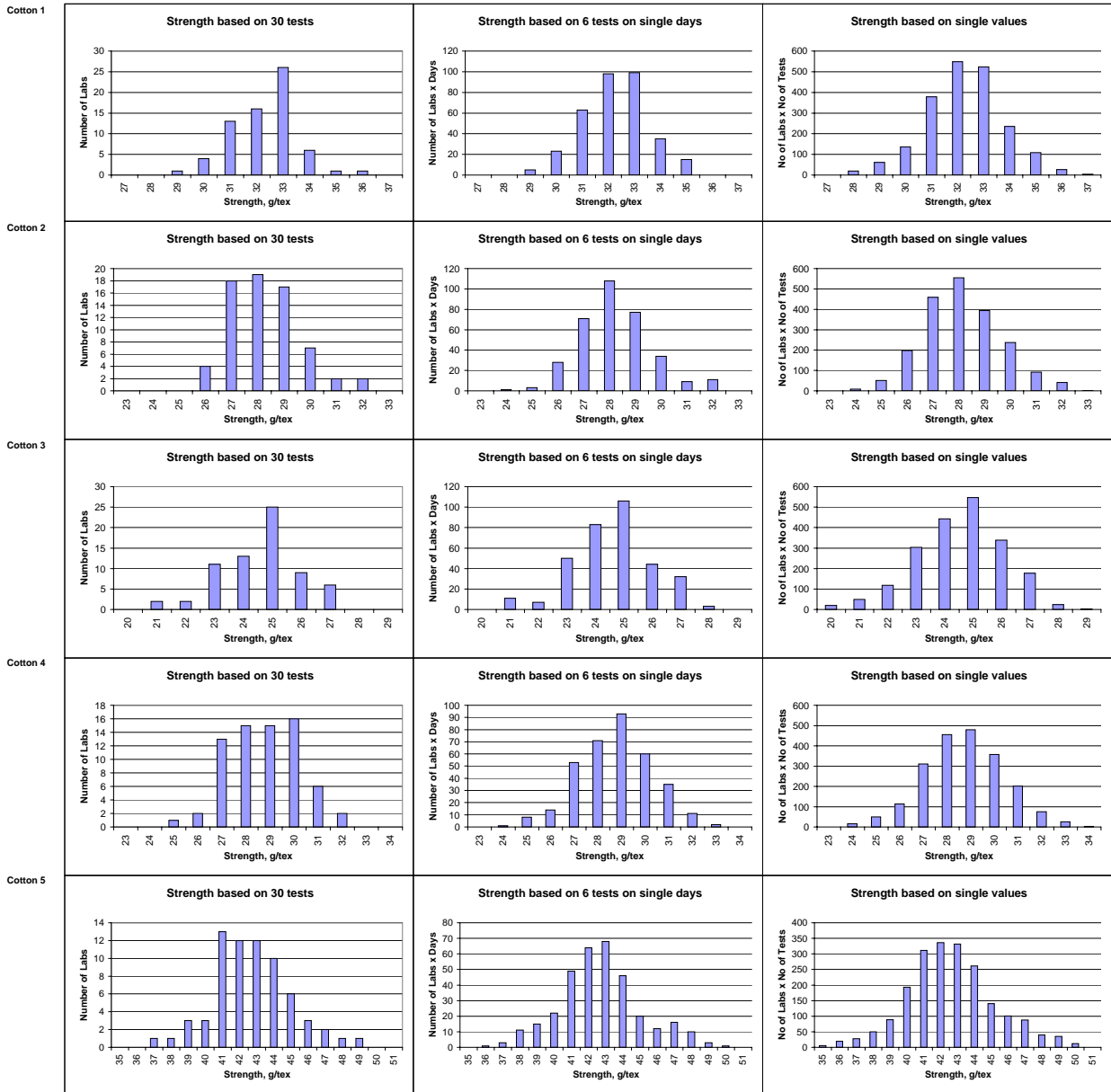
Color +b								
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average	Cotton 5
Average of Laboratories (Grubbs)			9,677	9,248	8,770	11,723		13,732
Reference Values for Evaluation			9,677	9,248	8,770	11,723		13,732
Number Of Laboratories			67	67	67	67	67	67
Interlab. Variation	based on 30 tests	SD	0,304	0,328	0,259	0,268	0,290	0,389
		CV %	3,1	3,5	3,0	2,3	3,0	2,8
	based on 6 tests	SD	0,323	0,342	0,289	0,312	0,317	0,425
		CV %	3,3	3,7	3,3	2,7	3,3	3,1
	based on single tests	SD	0,352	0,357	0,325	0,378	0,353	0,454
		CV %	3,6	3,9	3,7	3,2	3,6	3,3
Typical In-Lab. Variation (Median)	between different days with each 6 tests	SD	0,114	0,105	0,109	0,113	0,110	0,124
		CV %	1,2	1,1	1,2	1,0	1,1	0,9
	between single tests on one day	SD	0,120	0,122	0,109	0,131	0,120	0,126
		CV %	1,2	1,3	1,2	1,1	1,2	0,9
	between all tests on different days	SD	0,172	0,176	0,157	0,178	0,171	0,178
		CV %	1,8	1,9	1,8	1,5	1,7	1,3

Test Result Distributions
 Micronaire
 p. 1



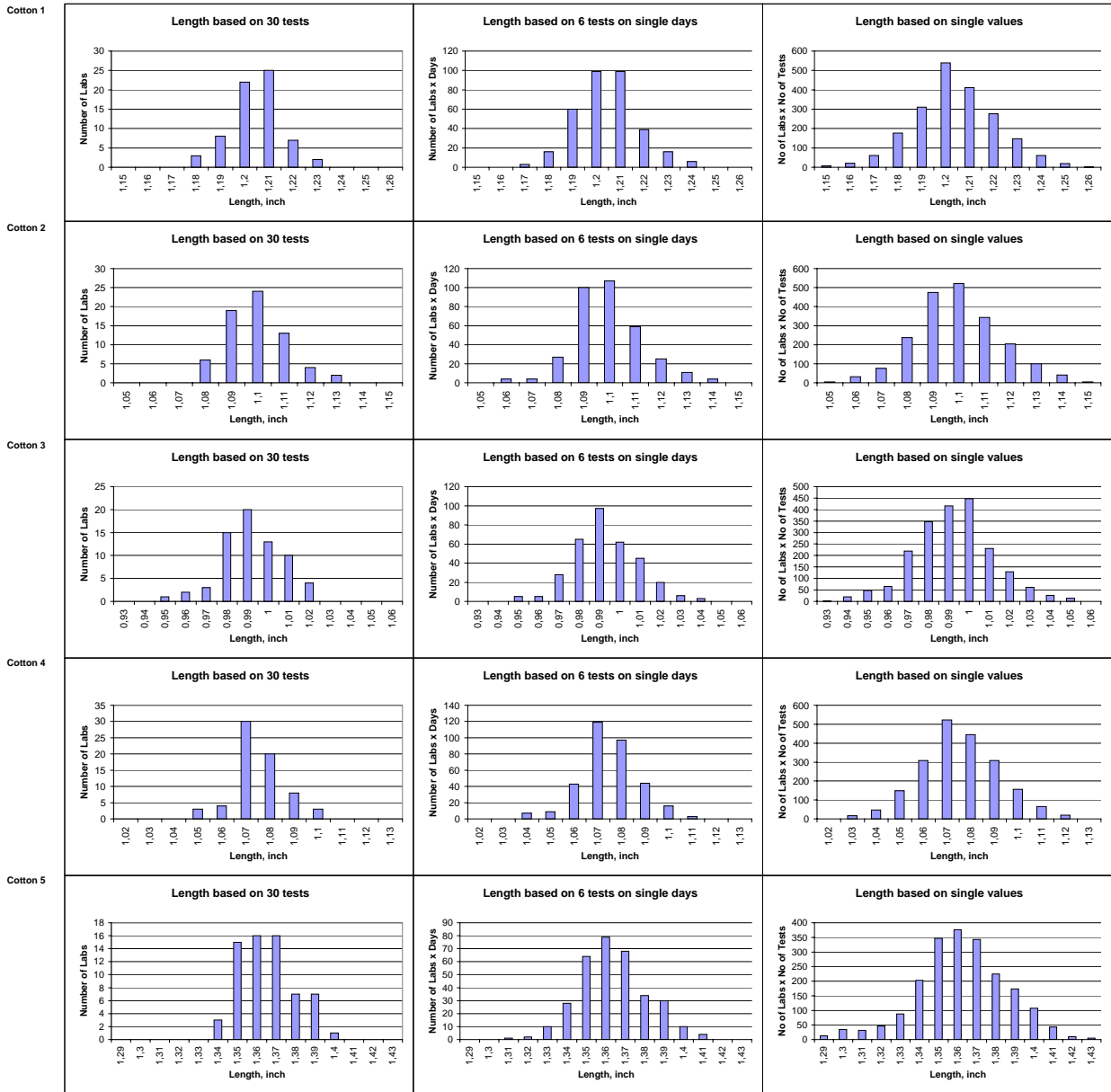
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)

Test Result Distributions
Strength
p. 2



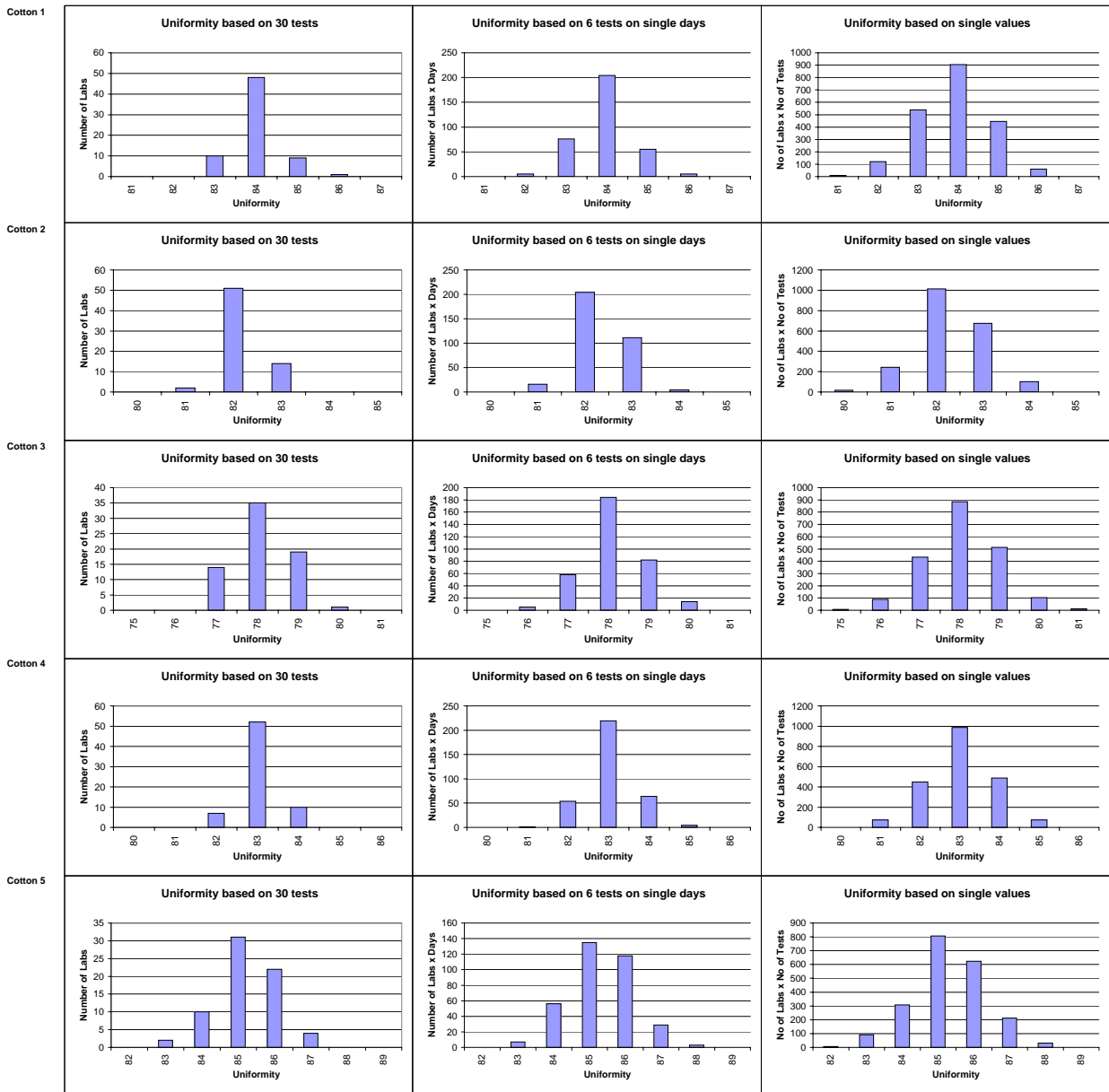
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)

Test Result Distributions
Length
p. 3



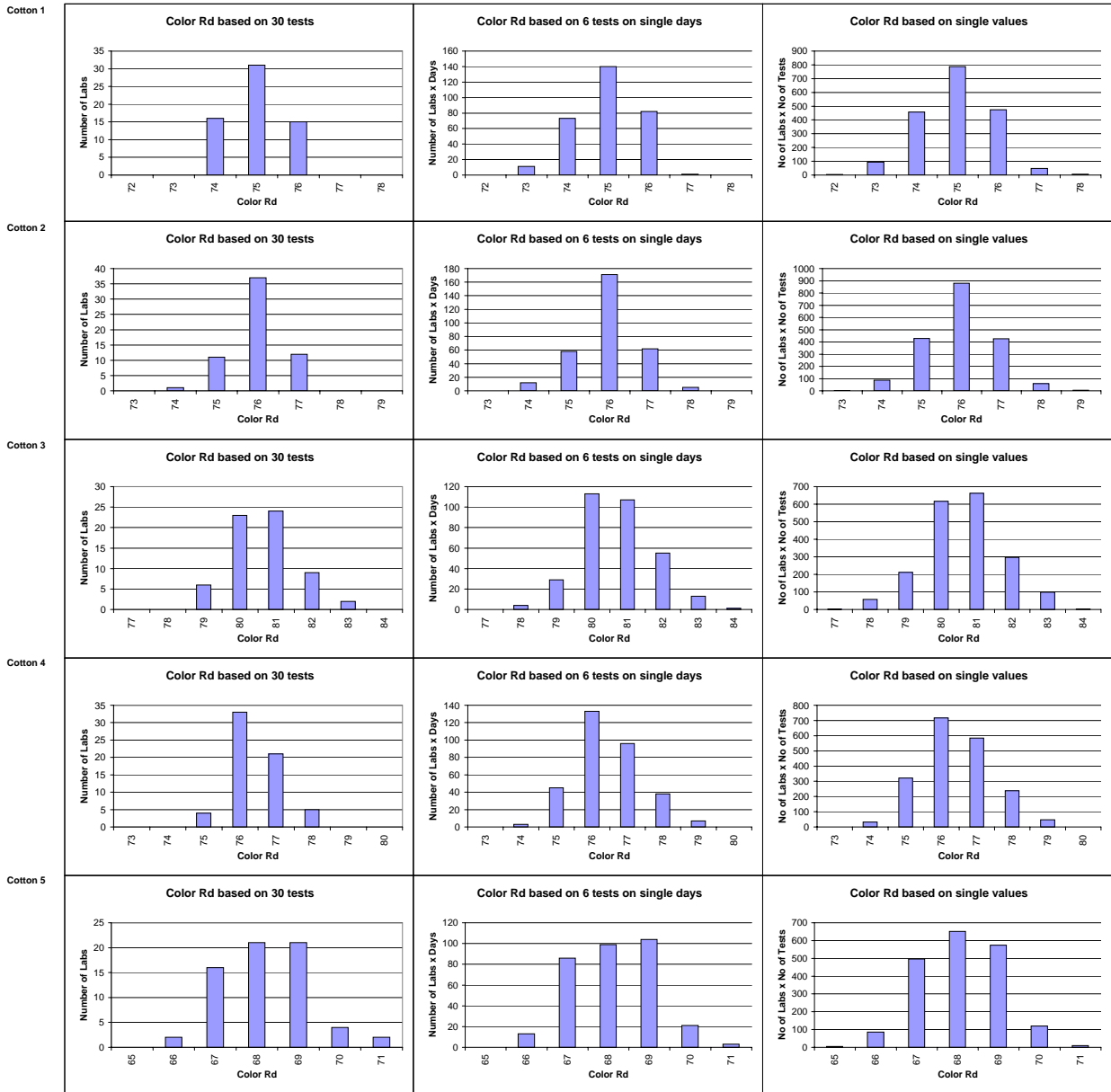
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)

Test Result Distributions
 Uniformity
 p. 4



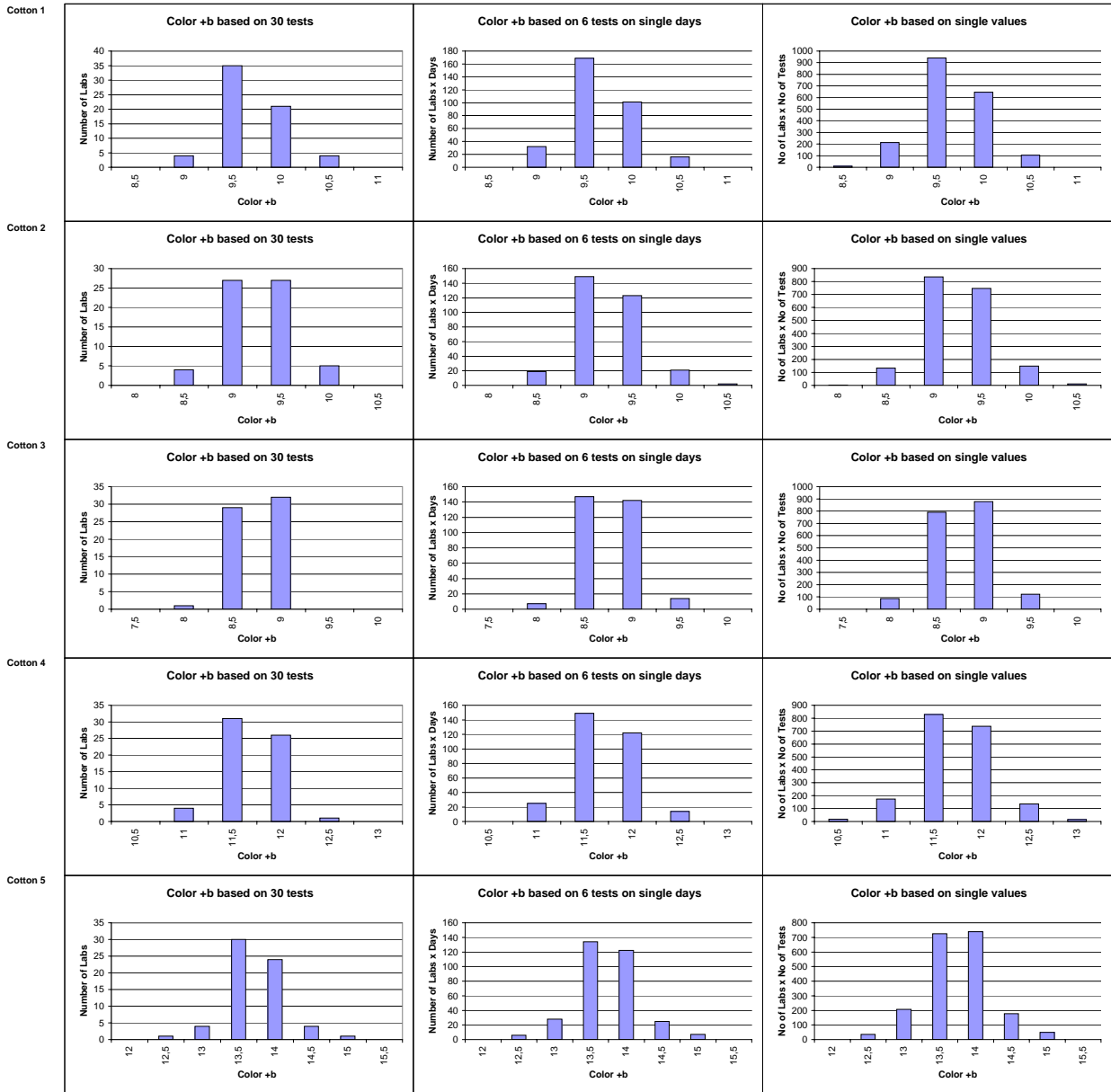
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)

Test Result Distributions
Color Rd
p. 5



(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)

Test Result Distributions
 Color +b
 p. 6



(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)

Laboratory Evaluation
 - Combined Properties -
 According to ICAC CSITC Task Force Recommendations
 Round Trial No.: 2007-1

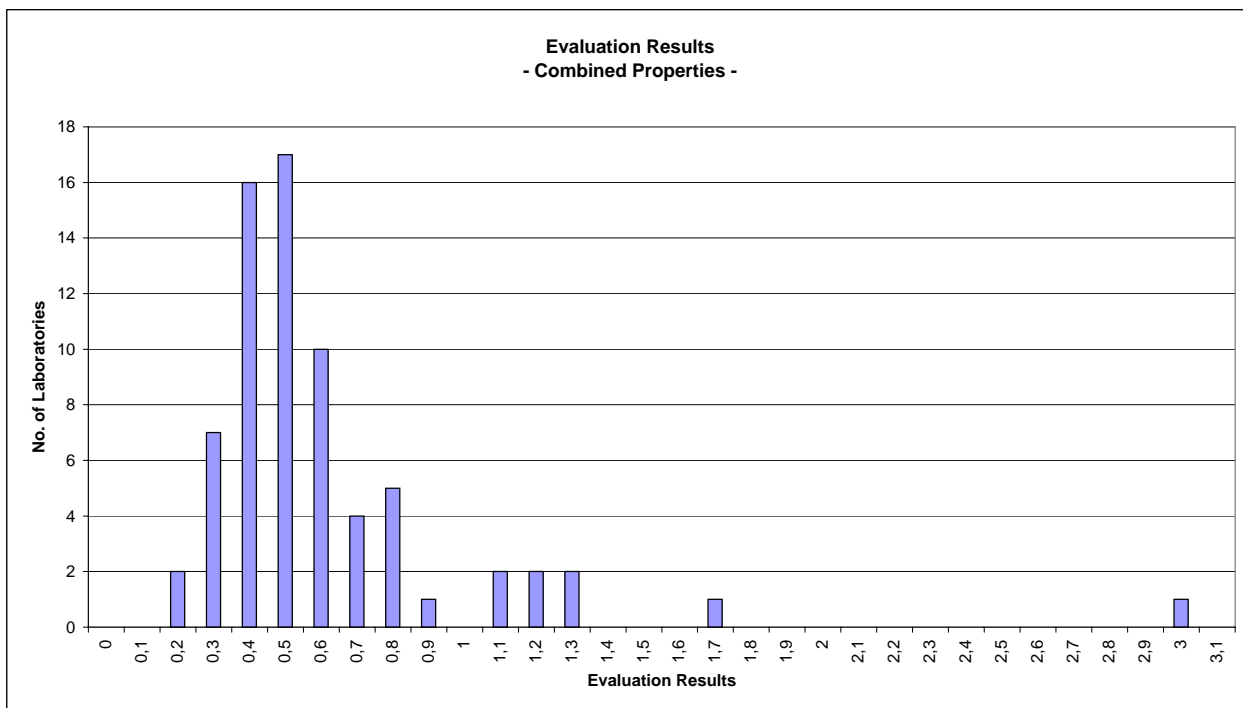
Page 1

		Evaluation Combined Prop.
Statistics	Average	0,61
	Median	0,50
	Best Lab.	0,22
	Worst Lab.	3,02

Laboratory No.	Evaluation Combined Prop.
71035-1	0,22
71050-1	0,25
71010-2	0,25
71058-1	0,26
71019-1	0,34
71026-2	0,34
71025-1	0,35
71009-1	0,35
71014-1	0,35
71001-1	0,35
71053-1	0,37
71002-2	0,37
71010-1	0,37
71005-2	0,38
71018-1	0,38
71013-1	0,40
71056-2	0,41
71026-1	0,42
71046-1	0,43
71052-1	0,43
71055-1	0,44
71018-2	0,44
71020-1	0,44
71041-1	0,45
71039-1	0,45
71028-1	0,45
71013-2	0,46
71039-2	0,46
71040-1	0,47
71038-1	0,48
71011-1	0,48
71049-1	0,49
71056-1	0,49
71012-1	0,49
71008-1	0,49
71037-2	0,50
71015-1	0,50
71022-1	0,50
71041-2	0,51
71032-1	0,52
71002-1	0,53
71042-1	0,54
71043-1	0,56
71016-1	0,56
71047-1	0,56
71003-1	0,56
71057-1	0,57
71017-1	0,57
71006-1	0,59
71007-2	0,59
71051-1	0,59
71007-3	0,64
71050-2	0,67
71048-1	0,69
71029-1	0,71
71007-1	0,72
71045-1	0,75
71044-1	0,76
71031-1	0,76
71005-1	0,78
71061-1	0,81
71030-1	0,87
71054-1	1,08
71060-1	1,10
71007-4	1,22
71024-1	1,25
71034-1	1,29
71045-2	1,31
71037-1	1,72
71036-1	3,02

Laboratory Evaluation Page 2
 - Graph of Combined Properties -
 According to ICAC CSITC Task Force Recommendations
 Round Trial No.: 2007-1

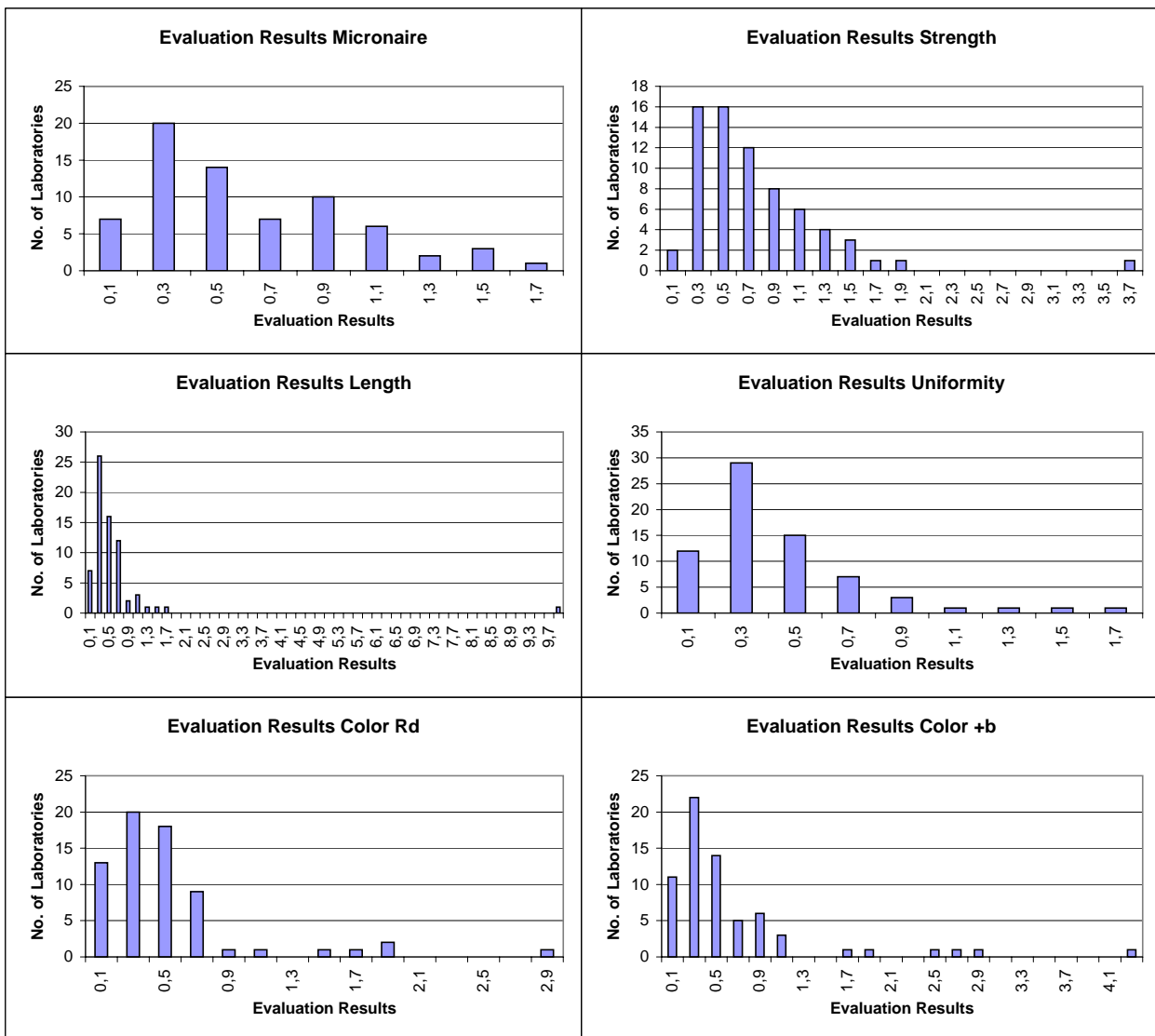
		Evaluation Combined Prop.
Statistics	Average	0,61
	Median	0,50
	Best Lab.	0,22
	Worst Lab.	3,02



x-Axis shows midpoints of classes
 The results equal to the border between two classes belong to the class below the border

Laboratory Evaluation Page 4
 - Graph of Single Properties -
 According to ICAC CSITC Task Force Recommendations
 Round Trial No.: 2007-1

		Evaluation Micronaire	Evaluation Strength	Evaluation Length	Evaluation Uniformity	Evaluation Color Rd	Evaluation Color +b
Statistics	Average	0,61	0,76	0,63	0,43	0,53	0,63
	Median	0,51	0,64	0,42	0,35	0,40	0,42
	Best Lab.	0,09	0,16	0,07	0,10	0,06	0,07
	Worst Lab.	1,64	3,72	9,97	1,62	3,00	4,24



x-Axis shows midpoints of classes
 The results equal to the border between two classes belong to the class below the border