

CSITC Round Trial RT 2008-1

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)			3,879	4,090	4,170	3,793		4,860
Reference Values for Evaluation			3,879	4,090	4,170	3,793		4,860
Number Of Laboratories			72	72	72	72	72	72
Interlab. Variation	based on 30 tests	SD	0,058	0,062	0,062	0,066	0,062	0,072
		CV %	1,5	1,5	1,5	1,7	1,6	1,5
	based on 6 tests	SD	0,064	0,070	0,066	0,070	0,067	0,069
		CV %	1,6	1,7	1,6	1,8	1,7	1,4
	based on single tests	SD	0,077	0,083	0,077	0,080	0,079	0,079
		CV %	2,0	2,0	1,9	2,1	2,0	1,6
Typical In-Lab. Variation (Median)	between different days with each 6 tests	SD	0,028	0,030	0,029	0,029	0,029	0,026
		CV %	0,7	0,7	0,7	0,8	0,7	0,5
	between single tests on one day	SD	0,037	0,042	0,038	0,041	0,039	0,041
		CV %	0,9	1,0	0,9	1,1	1,0	0,9
	between all tests on different days	SD	0,047	0,054	0,049	0,050	0,050	0,050
		CV %	1,2	1,3	1,2	1,3	1,3	1,0

Strength								
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average	Cotton 5
Average of Laboratories (Grubbs)			33,251	22,273	28,969	27,168		27,474
Reference Values for Evaluation			33,251	22,273	28,969	27,168		27,474
Number Of Laboratories			72	72	72	72	72	72
Interlab. Variation	based on 30 tests	SD	0,863	1,385	0,837	1,311	1,099	0,940
		CV %	2,6	6,2	2,9	4,8	4,1	3,4
	based on 6 tests	SD	1,065	1,345	0,958	1,410	1,195	1,081
		CV %	3,2	6,0	3,3	5,2	4,4	3,9
	based on single tests	SD	1,284	1,502	1,190	1,526	1,376	1,224
		CV %	3,9	6,7	4,1	5,6	5,1	4,5
Typical In-Lab. Variation (Median)	between different days with each 6 tests	SD	0,535	0,425	0,442	0,508	0,478	0,450
		CV %	1,6	1,9	1,5	1,9	1,7	1,6
	between single tests on one day	SD	0,666	0,601	0,590	0,647	0,626	0,552
		CV %	2,0	2,7	2,0	2,4	2,3	2,0
	between all tests on different days	SD	0,874	0,726	0,714	0,812	0,782	0,685
		CV %	2,6	3,3	2,5	3,0	2,8	2,5

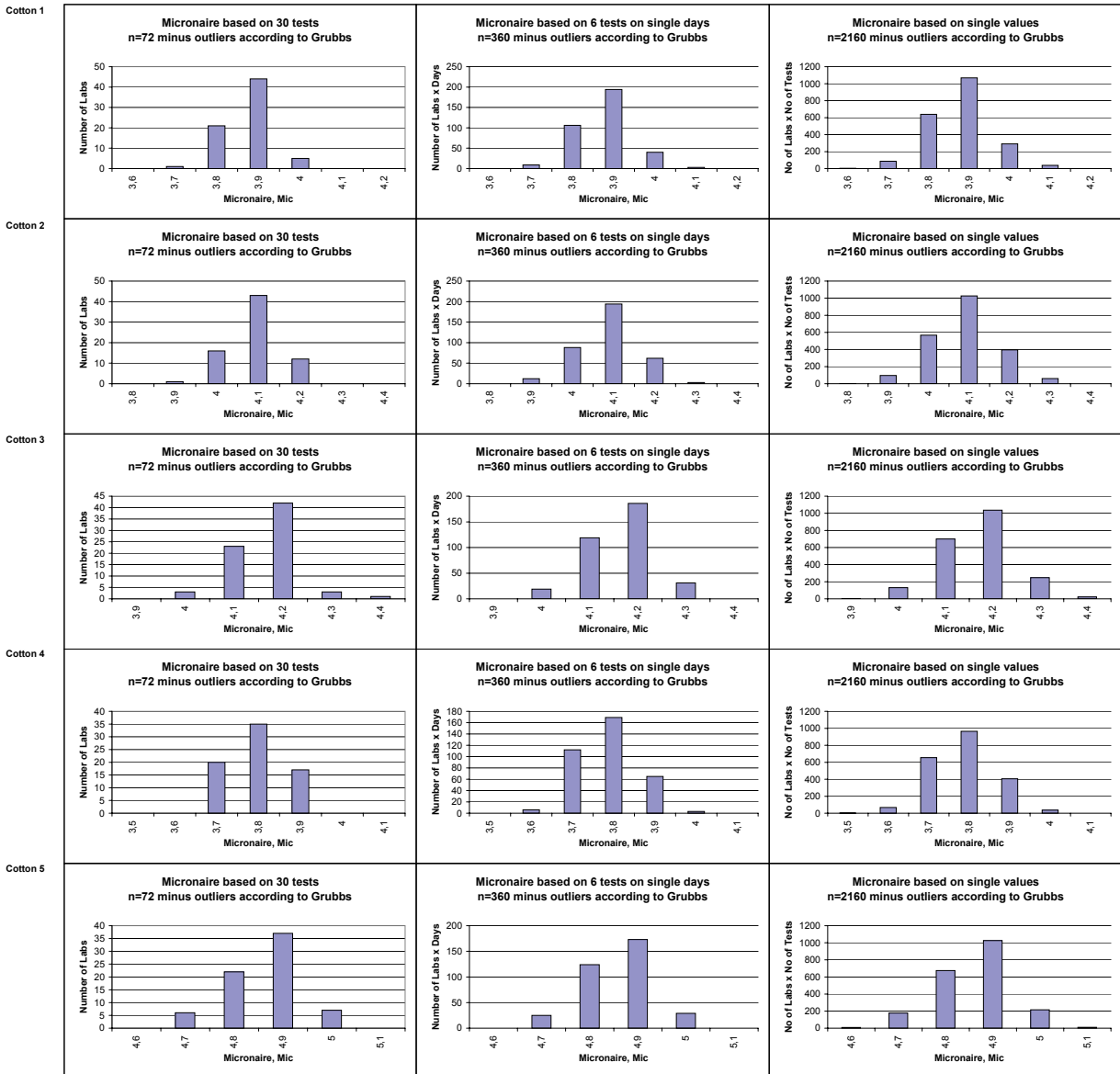
Length								
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average	Cotton 5
Average of Laboratories (Grubbs)			1,1763	0,9756	1,0928	1,0116		1,0581
Reference Values for Evaluation			1,1763	0,9756	1,0928	1,0116		1,0581
Number Of Laboratories			72	72	72	72	72	72
Interlab. Variation	based on 30 tests	SD	0,0115	0,0165	0,0127	0,0167	0,0143	0,0112
		CV %	1,0	1,7	1,2	1,6	1,4	1,1
	based on 6 tests	SD	0,0123	0,0188	0,0141	0,0183	0,0158	0,0150
		CV %	1,0	1,9	1,3	1,8	1,5	1,4
	based on single tests	SD	0,0160	0,0204	0,0182	0,0207	0,0188	0,0187
		CV %	1,4	2,1	1,7	2,0	1,8	1,8
Typical In-Lab. Variation (Median)	between different days with each 6 tests	SD	0,0057	0,0071	0,0055	0,0062	0,0061	0,0063
		CV %	0,5	0,7	0,5	0,6	0,6	0,6
	between single tests on one day	SD	0,0092	0,0112	0,0097	0,0103	0,0101	0,0095
		CV %	0,8	1,2	0,9	1,0	1,0	0,9
	between all tests on different days	SD	0,0111	0,0134	0,0112	0,0116	0,0118	0,0116
		CV %	0,9	1,4	1,0	1,1	1,1	1,1

Uniformity								
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average	Cotton 5
Average of Laboratories (Grubbs)			83,704	79,135	80,642	78,619		82,158
Reference Values for Evaluation			83,704	79,135	80,642	78,619		82,158
Number Of Laboratories			72	72	72	72	72	72
Interlab. Variation	based on 30 tests	SD	0,477	0,691	0,552	0,617	0,584	0,481
		CV %	0,6	0,9	0,7	0,8	0,7	0,6
	based on 6 tests	SD	0,562	0,737	0,600	0,711	0,652	0,586
		CV %	0,7	0,9	0,7	0,9	0,8	0,7
	based on single tests	SD	0,728	0,927	0,786	0,912	0,838	0,726
		CV %	0,9	1,2	1,0	1,2	1,0	0,9
Typical In-Lab. Variation (Median)	between different days with each 6 tests	SD	0,271	0,326	0,307	0,306	0,303	0,346
		CV %	0,3	0,4	0,4	0,4	0,4	0,4
	between single tests on one day	SD	0,464	0,553	0,525	0,512	0,513	0,464
		CV %	0,6	0,7	0,7	0,7	0,6	0,6
	between all tests on different days	SD	0,529	0,640	0,600	0,596	0,591	0,587
		CV %	0,6	0,8	0,7	0,8	0,7	0,7

Color Rd								
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average	Cotton 5
Average of Laboratories (Grubbs)			76,046	74,866	80,127	78,635		79,397
Reference Values for Evaluation			76,046	74,866	80,127	78,635		79,397
Number Of Laboratories			70	70	70	70	70	70
Interlab. Variation	based on 30 tests	SD	0,812	0,886	0,889	1,193	0,945	0,933
		CV %	1,1	1,2	1,1	1,5	1,2	1,2
	based on 6 tests	SD	0,884	0,934	0,939	1,020	0,944	0,992
		CV %	1,2	1,2	1,2	1,3	1,2	1,2
	based on single tests	SD	0,914	0,971	1,009	1,058	0,988	1,010
		CV %	1,2	1,3	1,3	1,3	1,3	1,3
Typical In-Lab. Variation (Median)	between different days with each 6 tests	SD	0,264	0,238	0,249	0,293	0,261	0,272
		CV %	0,3	0,3	0,3	0,4	0,3	0,3
	between single tests on one day	SD	0,279	0,241	0,212	0,235	0,242	0,224
		CV %	0,4	0,3	0,3	0,3	0,3	0,3
	between all tests on different days	SD	0,391	0,381	0,359	0,409	0,385	0,392
		CV %	0,5	0,5	0,4	0,5	0,5	0,5

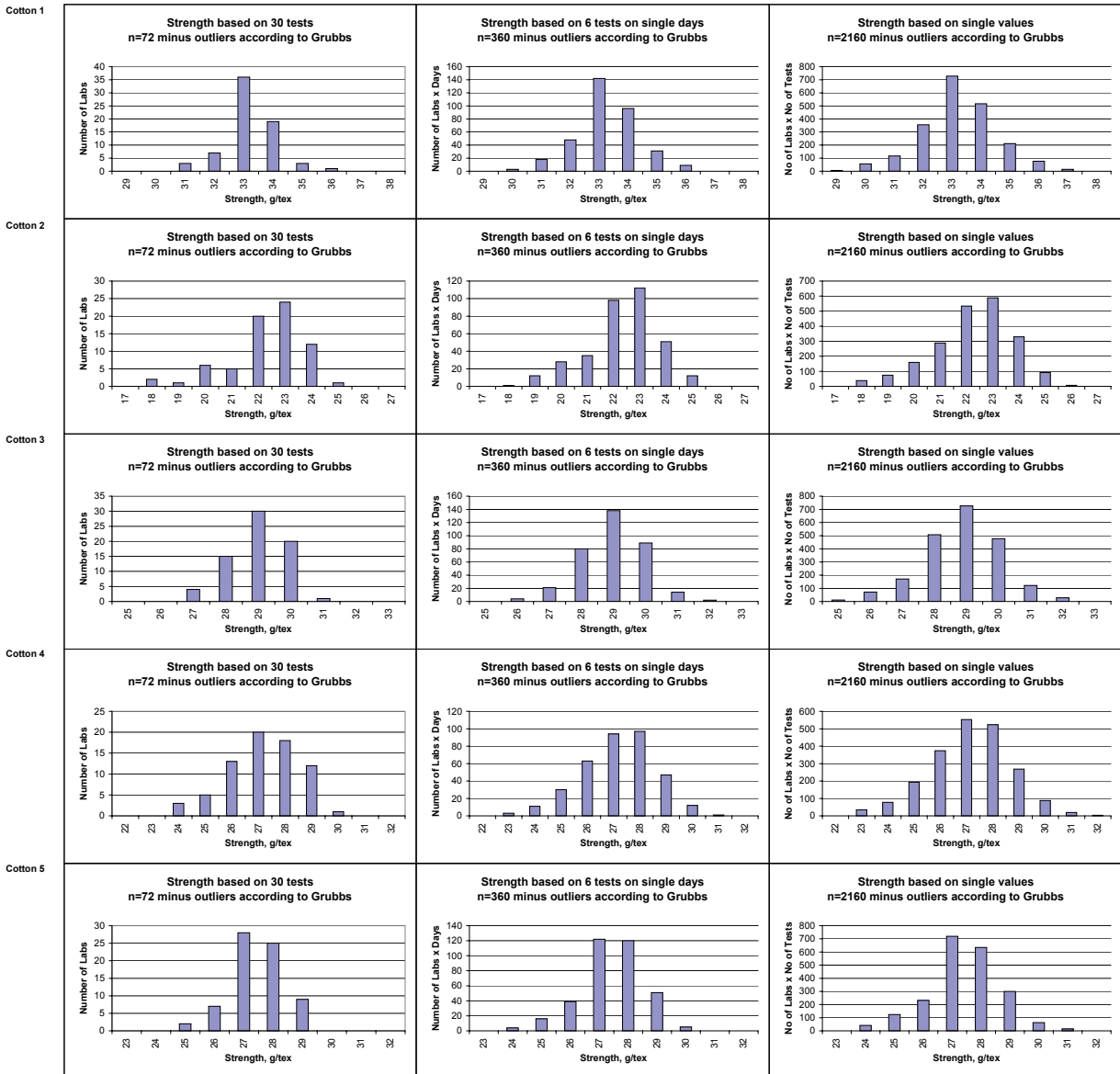
Color +b								
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average	Cotton 5
Average of Laboratories (Grubbs)			11,110	12,602	11,048	12,162		10,109
Reference Values for Evaluation			11,110	12,602	11,048	12,162		10,109
Number Of Laboratories			70	70	70	70	70	70
Interlab. Variation	based on 30 tests	SD	0,249	0,351	0,339	0,355	0,324	0,330
		CV %	2,2	2,8	3,1	2,9	2,8	3,3
	based on 6 tests	SD	0,321	0,358	0,349	0,374	0,350	0,331
		CV %	2,9	2,8	3,2	3,1	3,0	3,3
	based on single tests	SD	0,364	0,378	0,355	0,419	0,379	0,333
		CV %	3,3	3,0	3,2	3,4	3,2	3,3
Typical In-Lab. Variation (Median)	between different days with each 6 tests	SD	0,124	0,118	0,119	0,123	0,121	0,116
		CV %	1,1	0,9	1,1	1,0	1,0	1,1
	between single tests on one day	SD	0,114	0,095	0,094	0,104	0,102	0,089
		CV %	1,0	0,8	0,9	0,9	0,9	0,9
	between all tests on different days	SD	0,176	0,163	0,153	0,175	0,167	0,162
		CV %	1,6	1,3	1,4	1,4	1,4	1,6

Test Result Distributions
Micronaire



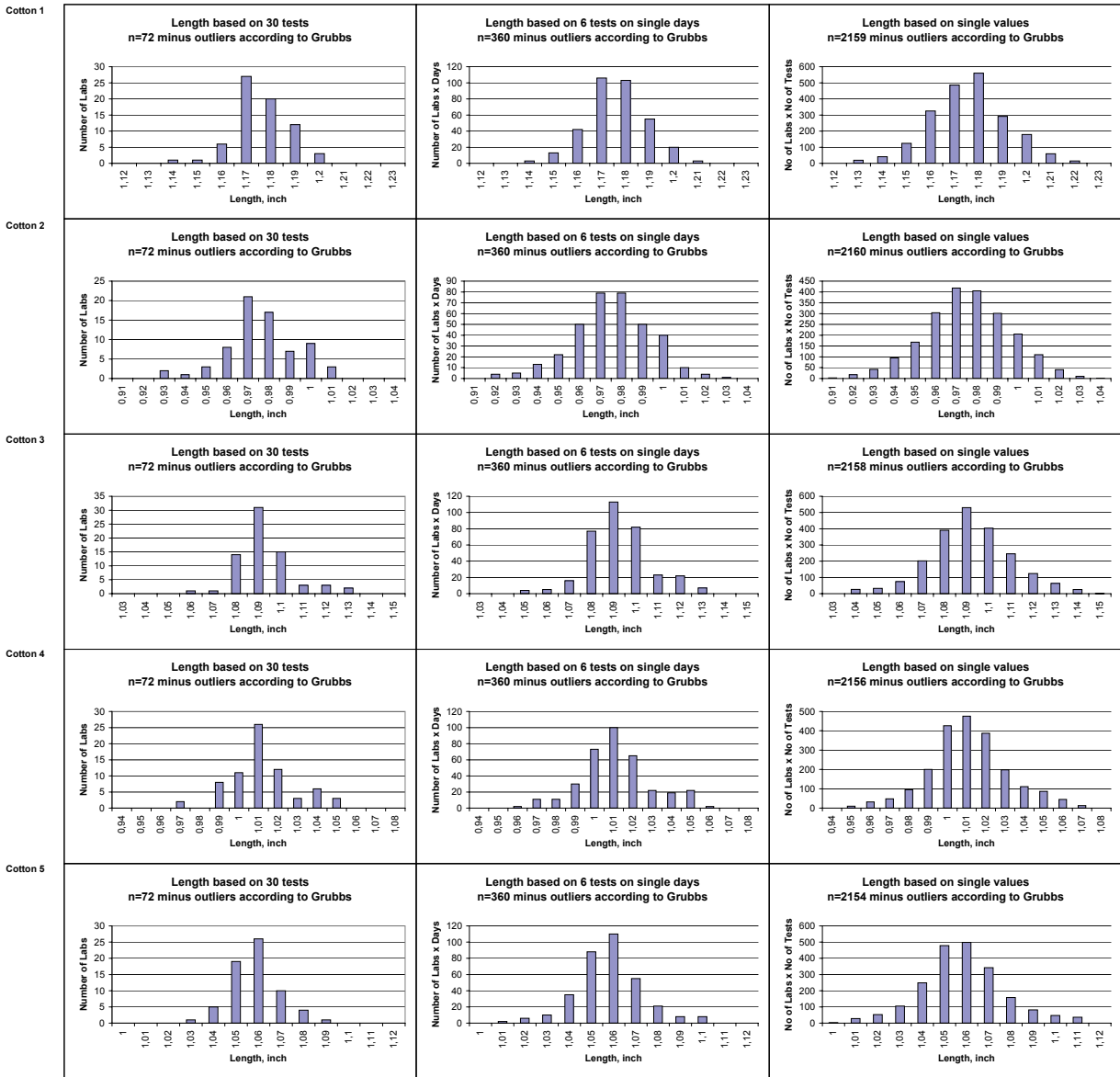
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)

Test Result Distributions
Strength



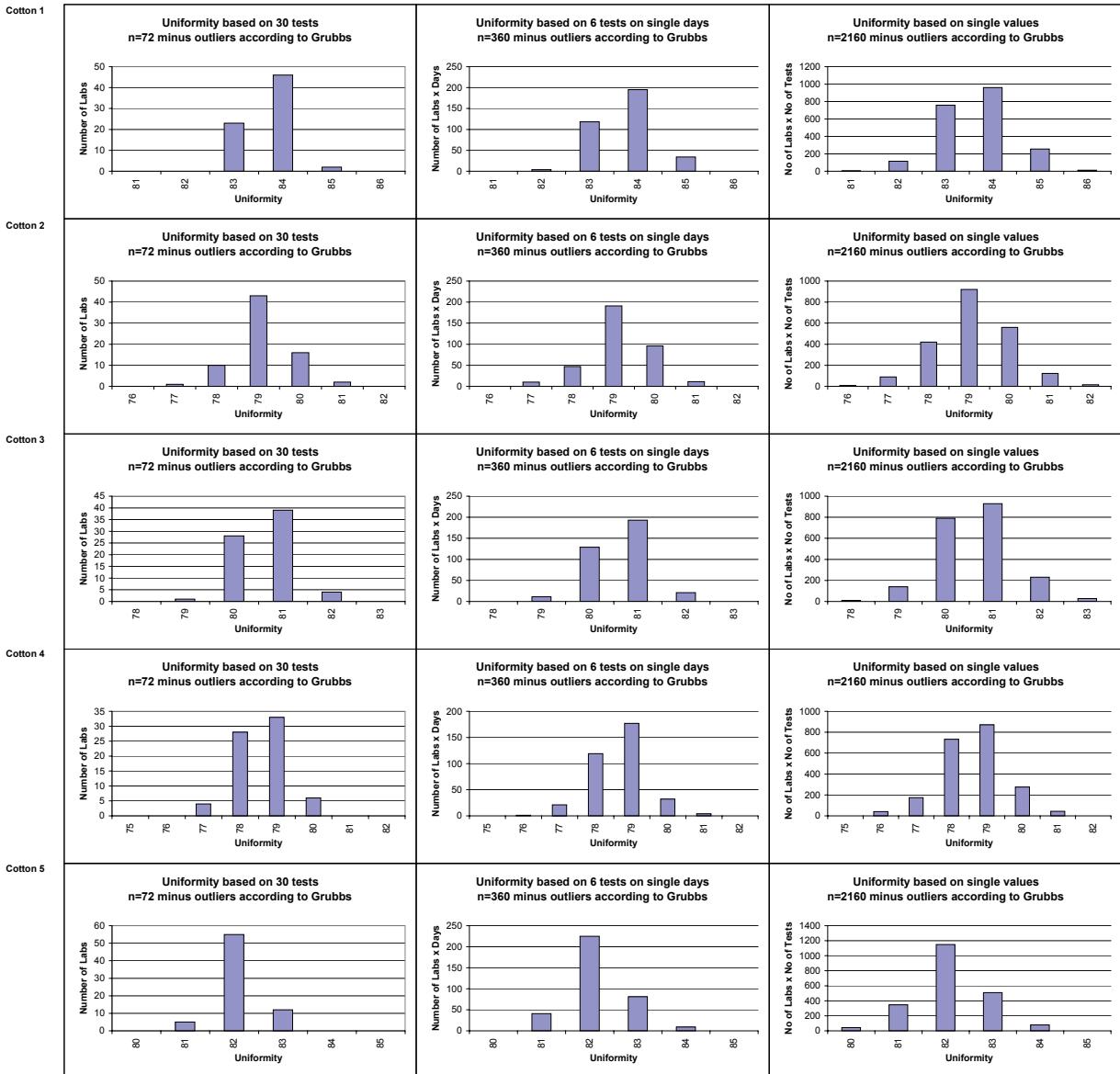
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Test Result Distributions
Length



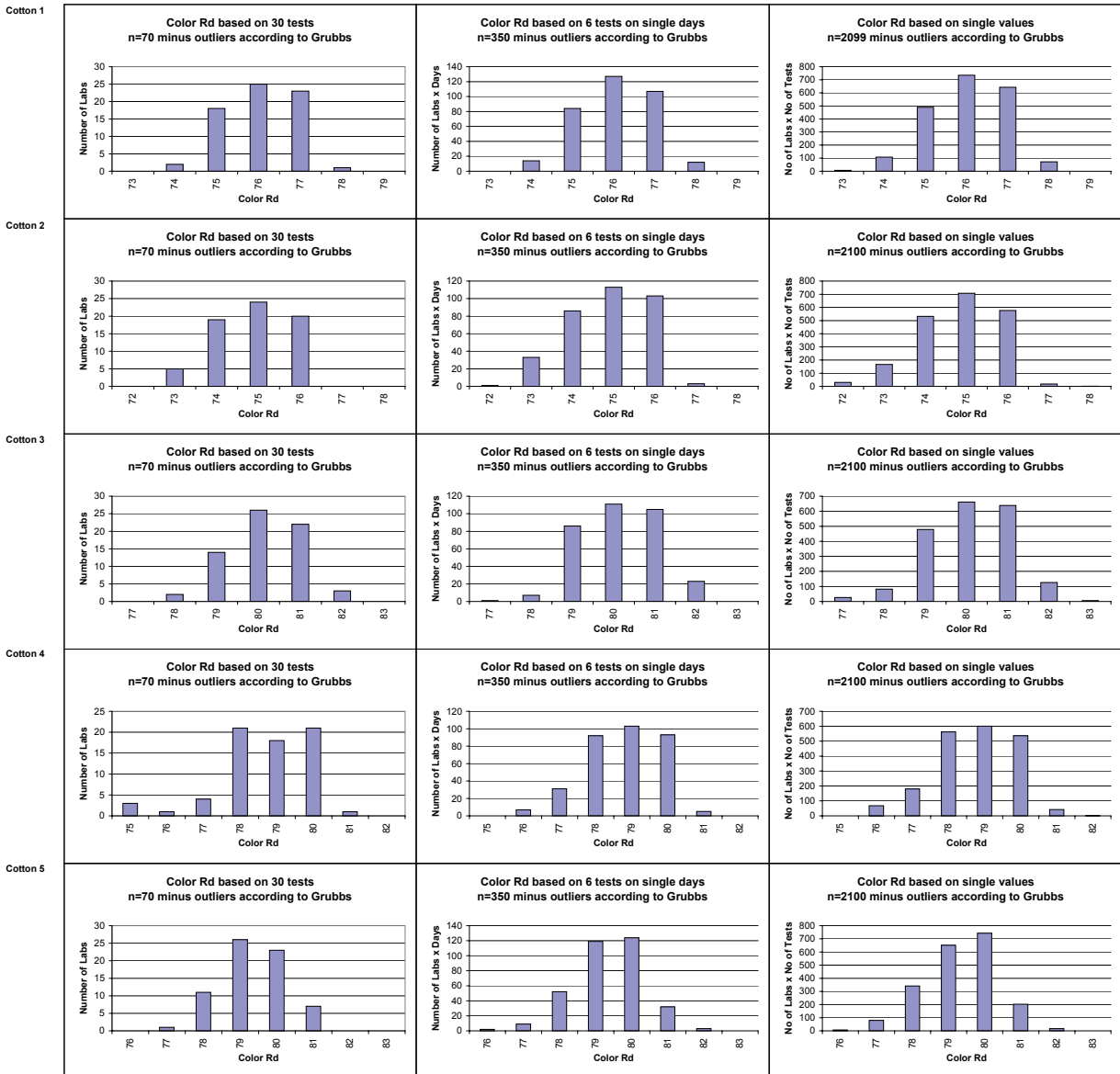
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Test Result Distributions
Uniformity



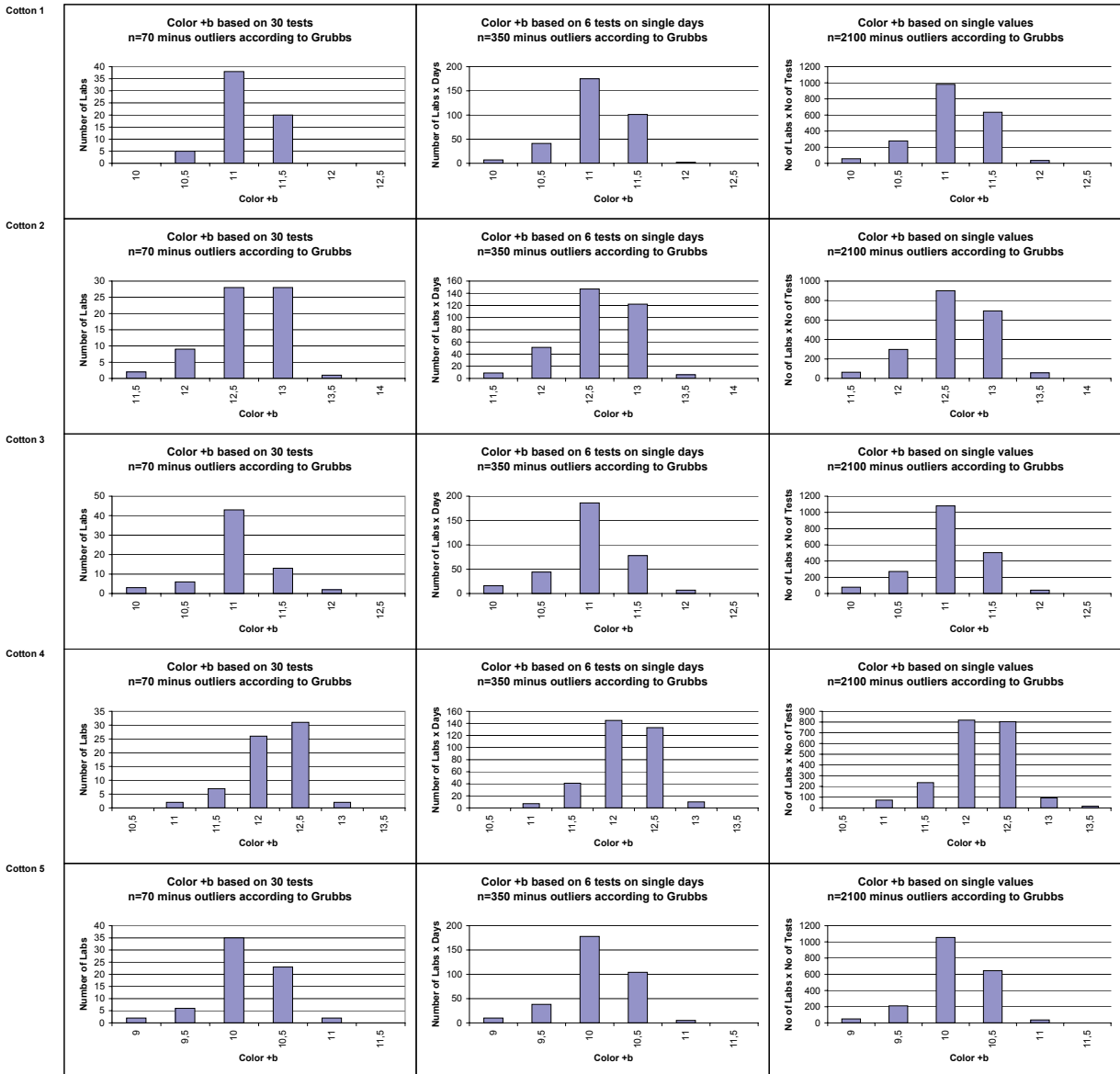
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)

Test Result Distributions
Color Rd



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

Test Result Distributions
Color +b



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