



International Cotton Advisory Committee



CSITC

Global - Round Trial 2013 - 3

General Evaluation

Section One: Result Distribution

Section Two: Instrument Evaluation

Section Three: Within Limits Evaluation

Section One: Result Distribution

Content:

Mandatory Parameters

- Summary Table
- Distribution Graphs

Optional Parameters

- Summary Table
- Distribution Graphs

Executed By:

Faserinstitut Bremen e.V., Bremen, Germany*

USDA-AMS, Memphis, TN, USA

System Provided by:

Generation 10 Limited



This report is an outcome of the Project CFC/ICAC/33 – CSITC, which benefitted from support from the Common Fund for Commodities and the European Union, partners in Commodity Development.



* Faserinstitut Bremen are a Cooperation Partner with ICA Bremen

Global - Round Trial 2013 - 3

Inter-Instrument Averages, Inter-Instrument Variations, Typical within-instrument Variations

Micronaire							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			5.239	5.045	3.098	4.229	
Reference Values for Evaluation			5.239	5.045	3.098	4.229	
Number Of Instruments			147	147	147	147	147
Inter-Instrument Variation	based on 30 tests	SD	0.063	0.053	0.056	0.050	0.055
		CV %	1.2	1.0	1.8	1.2	1.3
	based on 6 tests	SD	0.069	0.061	0.059	0.057	0.062
		CV %	1.3	1.2	1.9	1.3	1.4
	based on single tests	SD	0.082	0.070	0.072	0.066	0.073
		CV %	1.6	1.4	2.3	1.6	1.7
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.026	0.025	0.022	0.022	0.024
		CV %	0.5	0.5	0.7	0.5	0.6
	between single tests on one day	SD	0.036	0.038	0.034	0.032	0.035
		CV %	0.7	0.7	1.1	0.7	0.8
	between all tests on different days	SD	0.044	0.046	0.043	0.041	0.044
		CV %	0.8	0.9	1.4	1.0	1.0

Strength							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			27.023	29.447	29.365	33.487	
Reference Values for Evaluation			27.023	29.447	29.365	33.487	
Number Of Instruments			148	148	148	148	148
Inter-Instrument Variation	based on 30 tests	SD	0.920	0.844	0.846	0.707	0.829
		CV %	3.4	2.9	2.9	2.1	2.8
	based on 6 tests	SD	0.840	0.890	0.949	0.859	0.884
		CV %	3.1	3.0	3.2	2.6	3.0
	based on single tests	SD	1.067	1.114	1.132	1.023	1.084
		CV %	3.9	3.8	3.9	3.1	3.7
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.302	0.314	0.344	0.351	0.328
		CV %	1.1	1.1	1.2	1.0	1.1
	between single tests on one day	SD	0.528	0.509	0.547	0.565	0.537
		CV %	2.0	1.7	1.9	1.7	1.8
	between all tests on different days	SD	0.613	0.601	0.624	0.675	0.628
		CV %	2.3	2.0	2.1	2.0	2.1

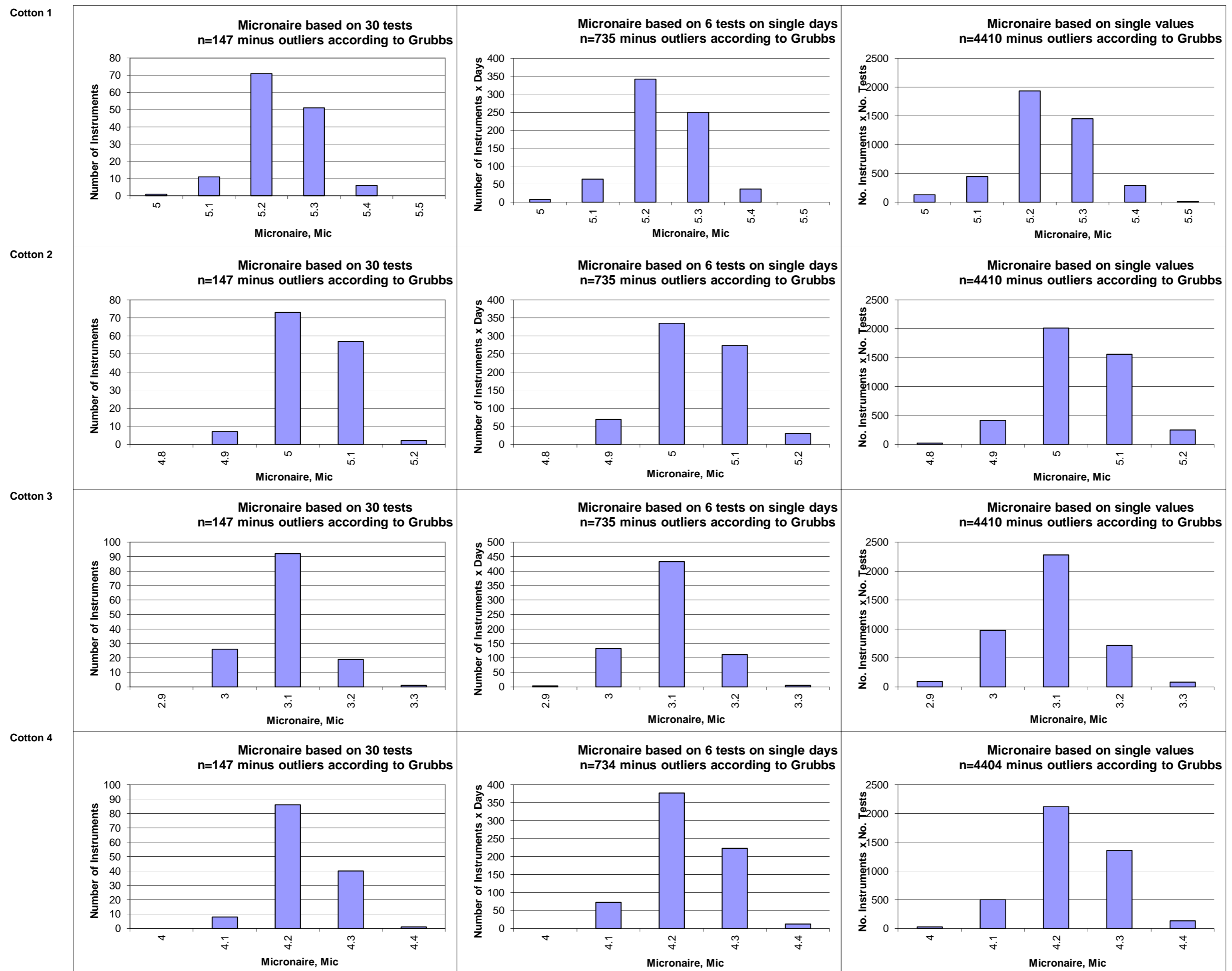
Length							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			1.0069	1.0791	1.1185	1.2134	
Reference Values for Evaluation			1.0069	1.0791	1.1185	1.2134	
Number Of Instruments			148	148	148	148	148
Inter-Instrument Variation	based on 30 tests	SD	0.0129	0.0113	0.0100	0.0104	0.0112
		CV %	1.3	1.1	0.9	0.9	1.0
	based on 6 tests	SD	0.0134	0.0129	0.0128	0.0124	0.0129
		CV %	1.3	1.2	1.1	1.0	1.2
	based on single tests	SD	0.0169	0.0161	0.0161	0.0164	0.0164
		CV %	1.7	1.5	1.4	1.4	1.5
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.0060	0.0050	0.0063	0.0052	0.0056
		CV %	0.6	0.5	0.6	0.4	0.5
	between single tests on one day	SD	0.0105	0.0090	0.0101	0.0100	0.0099
		CV %	1.0	0.8	0.9	0.8	0.9
	between all tests on different days	SD	0.0117	0.0104	0.0117	0.0115	0.0113
		CV %	1.2	1.0	1.0	0.9	1.0

Uniformity							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			79.572	83.307	81.066	83.913	
Reference Values for Evaluation			79.572	83.307	81.066	83.913	
Number Of Instruments			148	148	148	148	148
Inter-Instrument Variation	based on 30 tests	SD	0.583	0.667	0.503	0.422	0.544
		CV %	0.7	0.8	0.6	0.5	0.7
	based on 6 tests	SD	0.685	0.688	0.614	0.534	0.630
		CV %	0.9	0.8	0.8	0.6	0.8
	based on single tests	SD	0.857	0.827	0.837	0.709	0.807
		CV %	1.1	1.0	1.0	0.8	1.0
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.293	0.257	0.287	0.268	0.276
		CV %	0.4	0.3	0.4	0.3	0.3
	between single tests on one day	SD	0.520	0.440	0.524	0.473	0.489
		CV %	0.7	0.5	0.6	0.6	0.6
	between all tests on different days	SD	0.582	0.497	0.585	0.554	0.555
		CV %	0.7	0.6	0.7	0.7	0.7

Color Rd							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			79.742	73.644	75.719	79.197	
Reference Values for Evaluation			79.742	73.644	75.719	79.197	
Number Of Instruments			146	146	146	146	146
Inter-Instrument Variation	based on 30 tests	SD	0.828	0.827	1.335	1.239	1.057
		CV %	1.0	1.1	1.8	1.6	1.4
	based on 6 tests	SD	0.883	0.800	1.352	1.169	1.051
		CV %	1.1	1.1	1.8	1.5	1.4
	based on single tests	SD	0.990	0.855	1.358	1.186	1.097
		CV %	1.2	1.2	1.8	1.5	1.4
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.221	0.206	0.205	0.187	0.205
		CV %	0.3	0.3	0.3	0.2	0.3
	between single tests on one day	SD	0.240	0.215	0.216	0.179	0.212
		CV %	0.3	0.3	0.3	0.2	0.3
	between all tests on different days	SD	0.343	0.311	0.309	0.268	0.308
		CV %	0.4	0.4	0.4	0.3	0.4

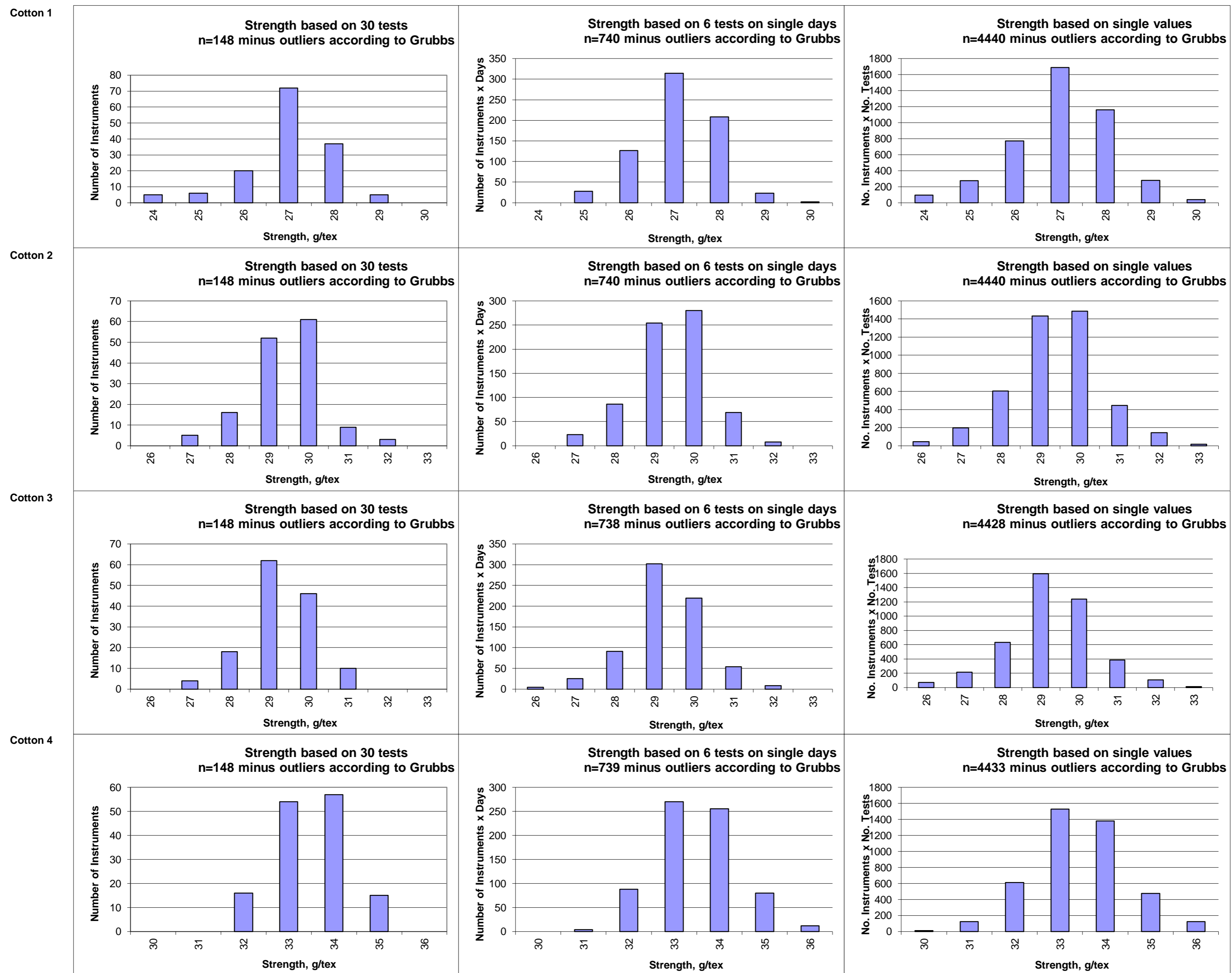
Color +b							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			8.891	10.697	13.767	11.577	
Reference Values for Evaluation			8.891	10.697	13.767	11.577	
Number Of Instruments			146	146	146	146	146
Inter-Instrument Variation	based on 30 tests	SD	0.381	0.326	0.422	0.321	0.363
		CV %	4.3	3.1	3.1	2.8	3.3
	based on 6 tests	SD	0.391	0.357	0.435	0.340	0.381
		CV %	4.4	3.3	3.2	2.9	3.5
	based on single tests	SD	0.417	0.376	0.463	0.378	0.409
		CV %	4.7	3.5	3.4	3.3	3.7
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.112	0.109	0.117	0.115	0.113
		CV %	1.3	1.0	0.8	1.0	1.0
	between single tests on one day	SD	0.116	0.101	0.122	0.108	0.112
		CV %	1.3	0.9	0.9	0.9	1.0
	between all tests on different days	SD	0.178	0.153	0.180	0.171	0.171
		CV %	2.0	1.4	1.3	1.5	1.6

Test Result Distributions
Micronaire



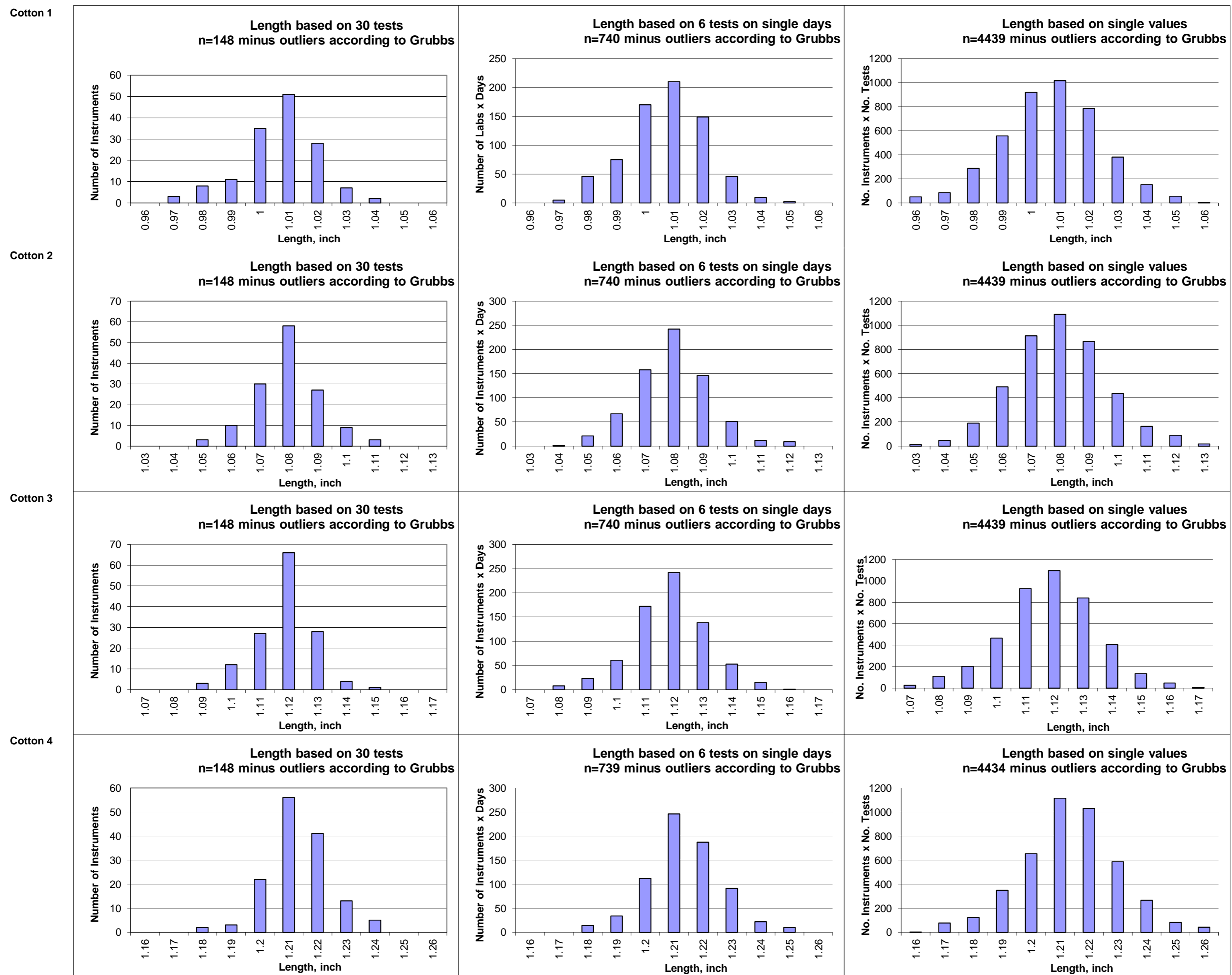
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method.)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Strength



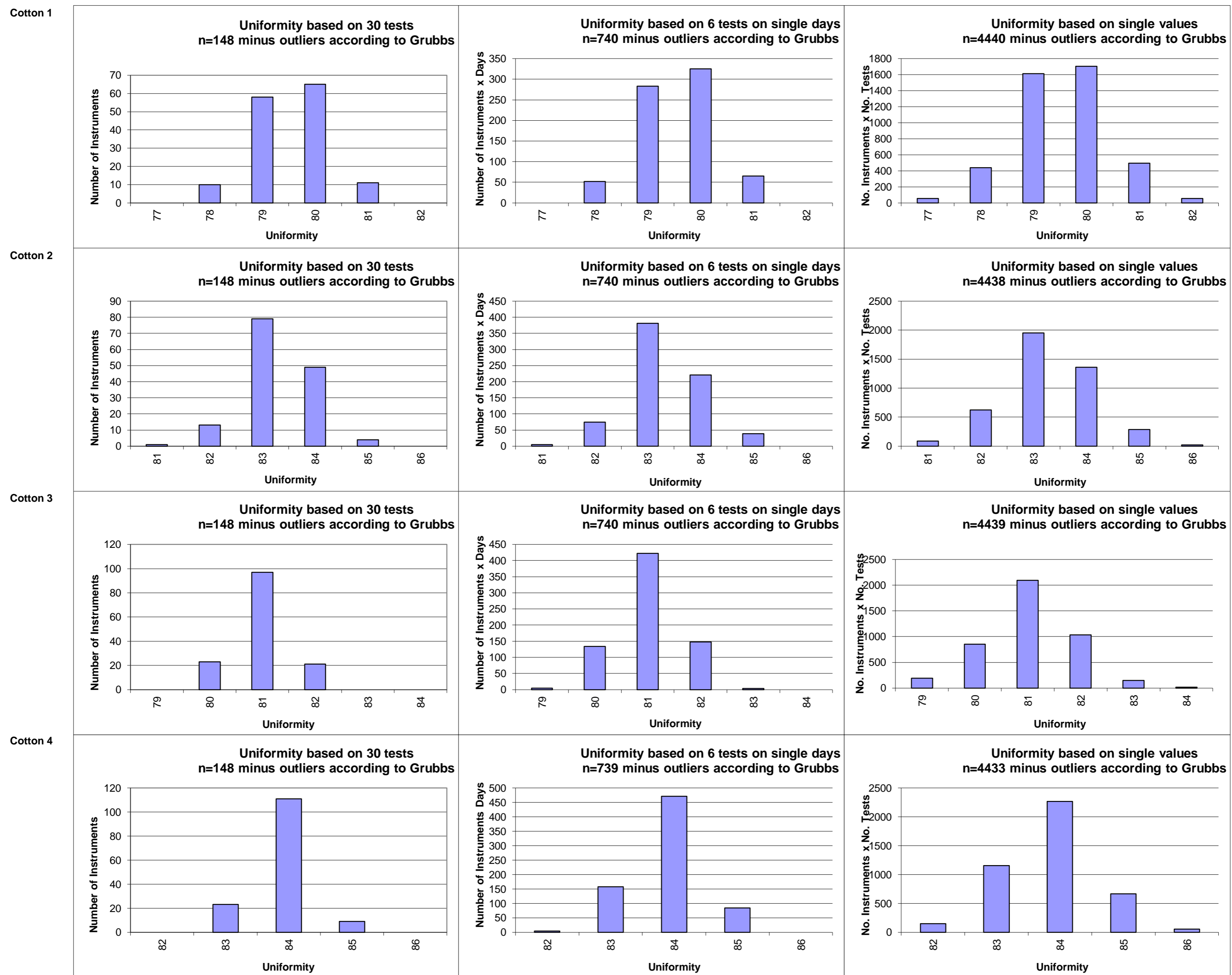
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Length



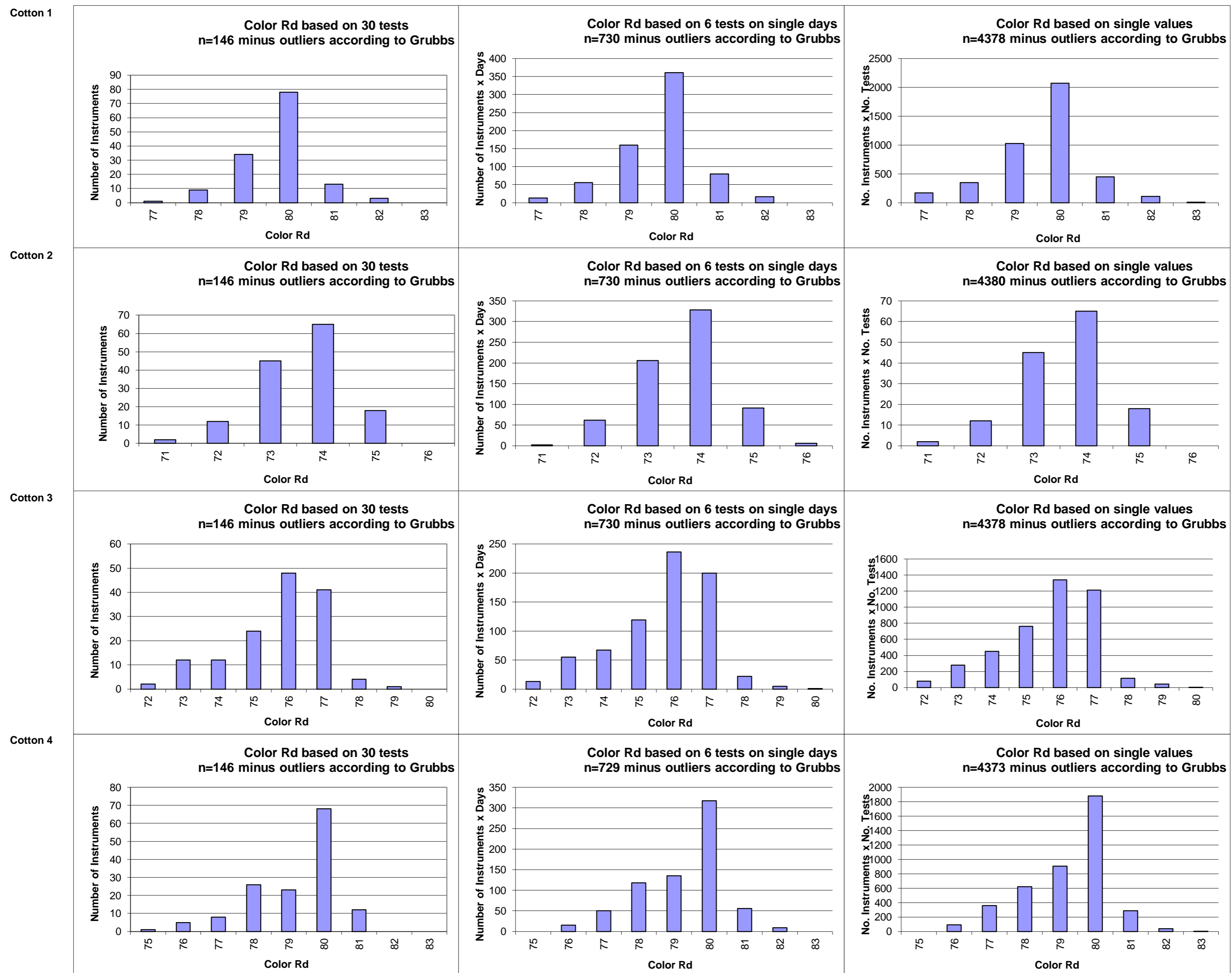
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Uniformity



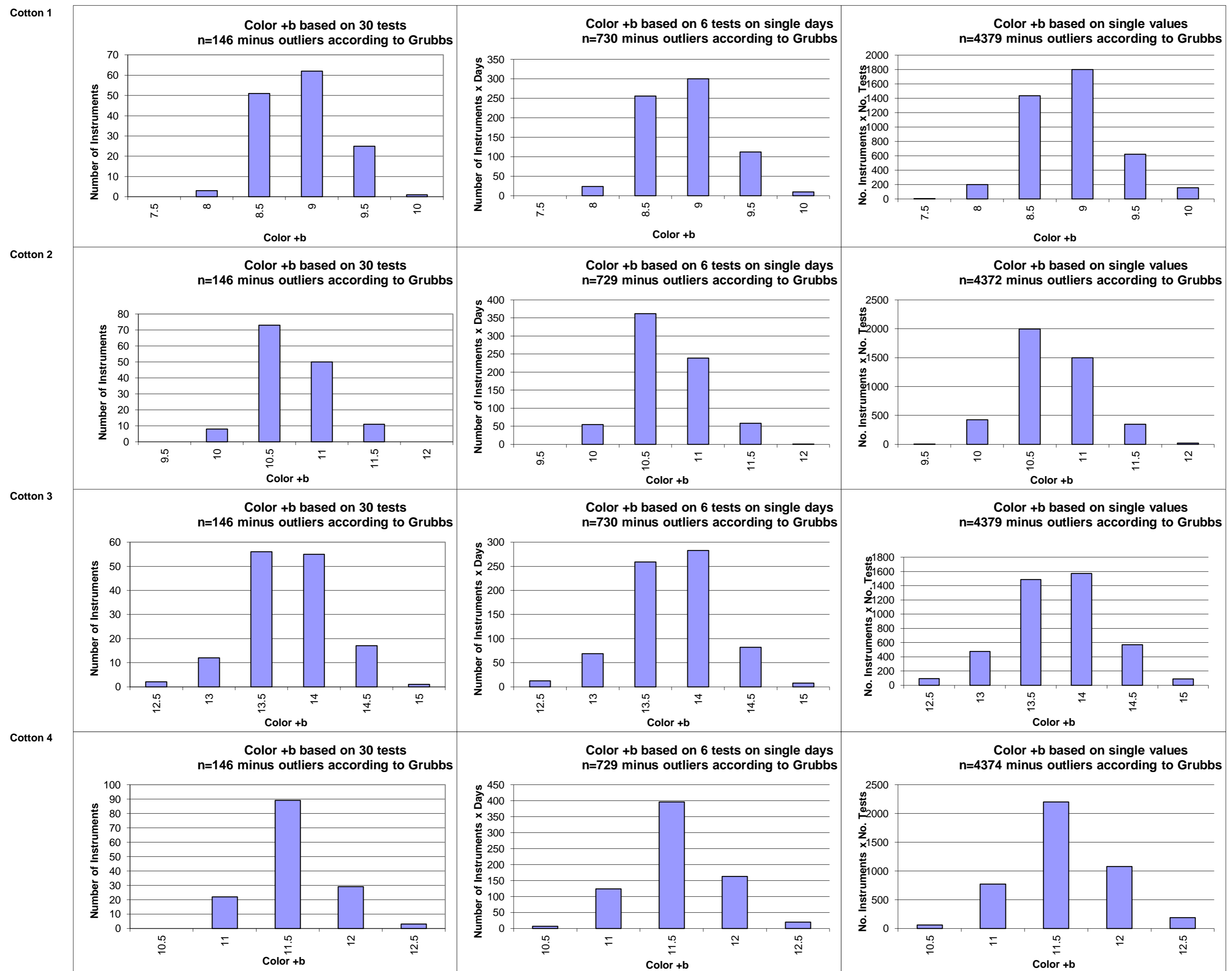
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Color Rd



(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Color +b



(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Optional Parameters

Inter-Instrument Averages, Inter-Instrument Variations, Typical within-instrument Variations

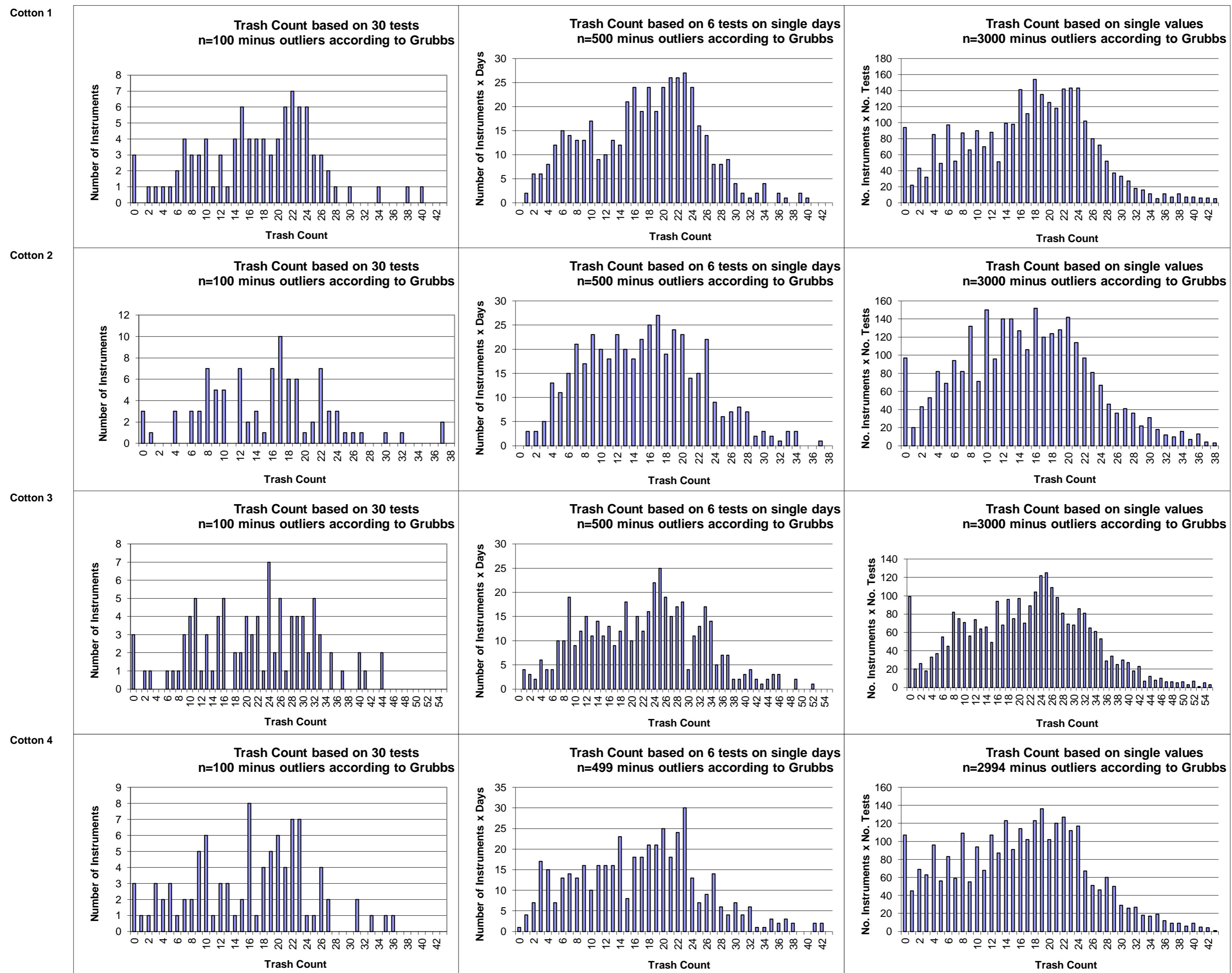
Trash Count							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			17.17	15.20	21.53	16.06	
Reference Values for Evaluation			17.17	15.20	21.53	16.06	
Number Of Instruments			100	100	100	100	100
Inter-Instrument Variation	based on 30 tests	SD	8.01	7.47	10.21	8.35	8.51
		CV %	46.7	49.2	47.4	52.0	48.8
	based on 6 tests	SD	8.19	7.49	10.74	8.99	8.85
		CV %	47.7	49.3	49.9	56.0	50.7
	based on single tests	SD	8.66	7.86	11.15	9.10	9.19
		CV %	50.4	51.7	51.8	56.6	52.6
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	2.14	2.27	2.66	2.05	2.28
		CV %	12.5	15.0	12.4	12.7	13.1
	between single tests on one day	SD	2.37	2.33	2.68	2.17	2.39
		CV %	13.8	15.3	12.4	13.5	13.8
	between all tests on different days	SD	3.24	3.21	4.02	3.21	3.42
		CV %	18.9	21.1	18.7	20.0	19.7

Trash Area							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			0.178	0.143	0.209	0.144	
Reference Values for Evaluation			0.178	0.143	0.209	0.144	
Number Of Instruments			100	100	100	100	100
Inter-Instrument Variation	based on 30 tests	SD	0.061	0.049	0.073	0.050	0.058
		CV %	34.3	34.7	34.8	34.5	34.6
	based on 6 tests	SD	0.072	0.059	0.085	0.057	0.068
		CV %	40.5	41.6	40.6	39.3	40.5
	based on single tests	SD	0.079	0.064	0.091	0.067	0.075
		CV %	44.3	44.7	43.4	46.8	44.8
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.031	0.025	0.032	0.022	0.027
		CV %	17.2	17.4	15.2	14.9	16.2
	between single tests on one day	SD	0.035	0.029	0.038	0.026	0.032
		CV %	19.6	20.4	18.0	18.1	19.0
	between all tests on different days	SD	0.049	0.041	0.051	0.039	0.045
		CV %	27.6	28.9	24.4	27.2	27.0

Maturity							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			88.42	87.84	81.32	86.00	
Reference Values for Evaluation			88.42	87.84	81.32	86.00	
Number Of Instruments			103	103	104	103	103
Inter-Instrument Variation	based on 30 tests	SD	2.57	2.44	2.59	2.18	2.45
		CV %	2.9	2.8	3.2	2.5	2.9
	based on 6 tests	SD	2.50	2.43	1.62	2.25	2.20
		CV %	2.8	2.8	2.0	2.6	2.5
	based on single tests	SD	2.32	2.41	2.48	2.19	2.35
		CV %	2.6	2.7	3.0	2.5	2.7
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.24	0.24	0.22	0.24	0.23
		CV %	0.3	0.3	0.3	0.3	0.3
	between single tests on one day	SD	0.35	0.33	0.32	0.37	0.34
		CV %	0.4	0.4	0.4	0.4	0.4
	between all tests on different days	SD	0.47	0.48	0.47	0.49	0.48
		CV %	0.5	0.5	0.6	0.6	0.6

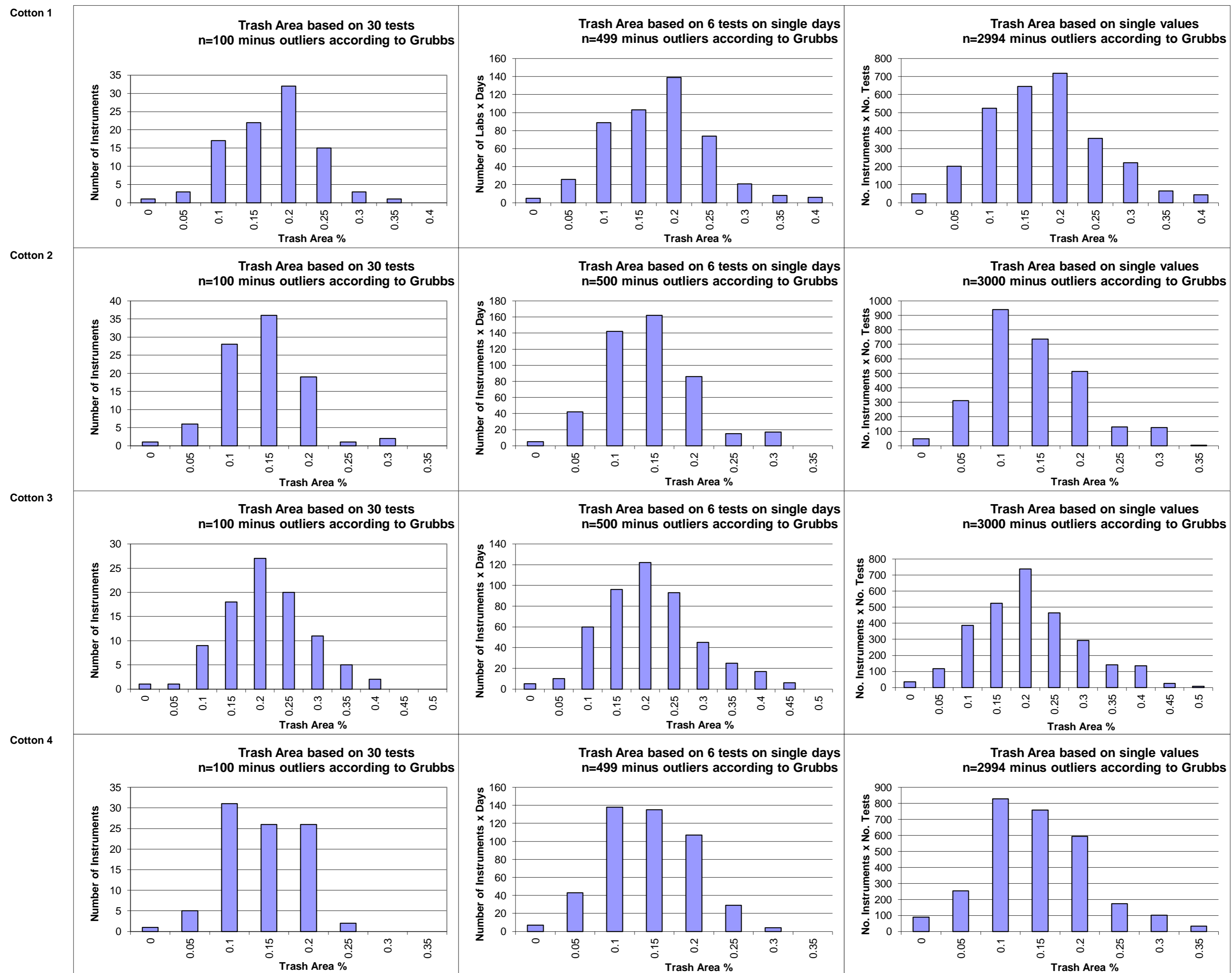
SFI							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			12.20	7.90	9.87	7.12	
Reference Values for Evaluation			12.20	7.90	9.87	7.12	
Number Of Instruments			111	111	111	111	111
Inter-Instrument Variation	based on 30 tests	SD	1.41	0.94	1.09	0.83	1.07
		CV %	11.6	11.9	11.0	11.6	11.5
	based on 6 tests	SD	1.42	0.96	1.21	0.74	1.09
		CV %	11.7	12.2	12.3	10.5	11.7
	based on single tests	SD	1.58	1.03	1.30	0.79	1.17
		CV %	12.9	13.0	13.2	11.1	12.6
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.36	0.25	0.27	0.19	0.27
		CV %	2.9	3.2	2.8	2.7	2.9
	between single tests on one day	SD	0.60	0.36	0.47	0.27	0.43
		CV %	4.9	4.6	4.8	3.8	4.5
	between all tests on different days	SD	0.69	0.43	0.55	0.33	0.50
		CV %	5.7	5.4	5.5	4.6	5.3

Test Result Distributions
Trash Count



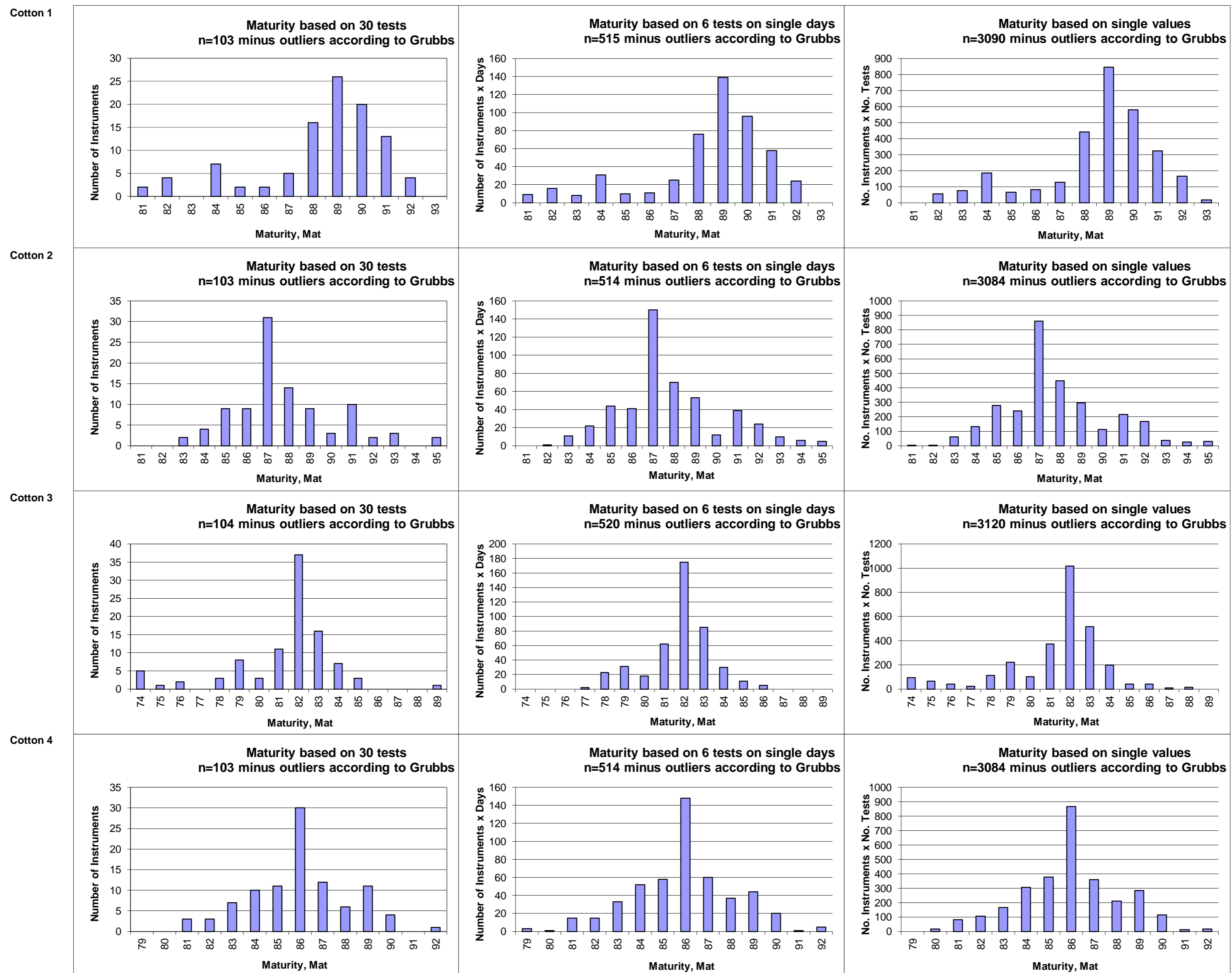
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Trash Area



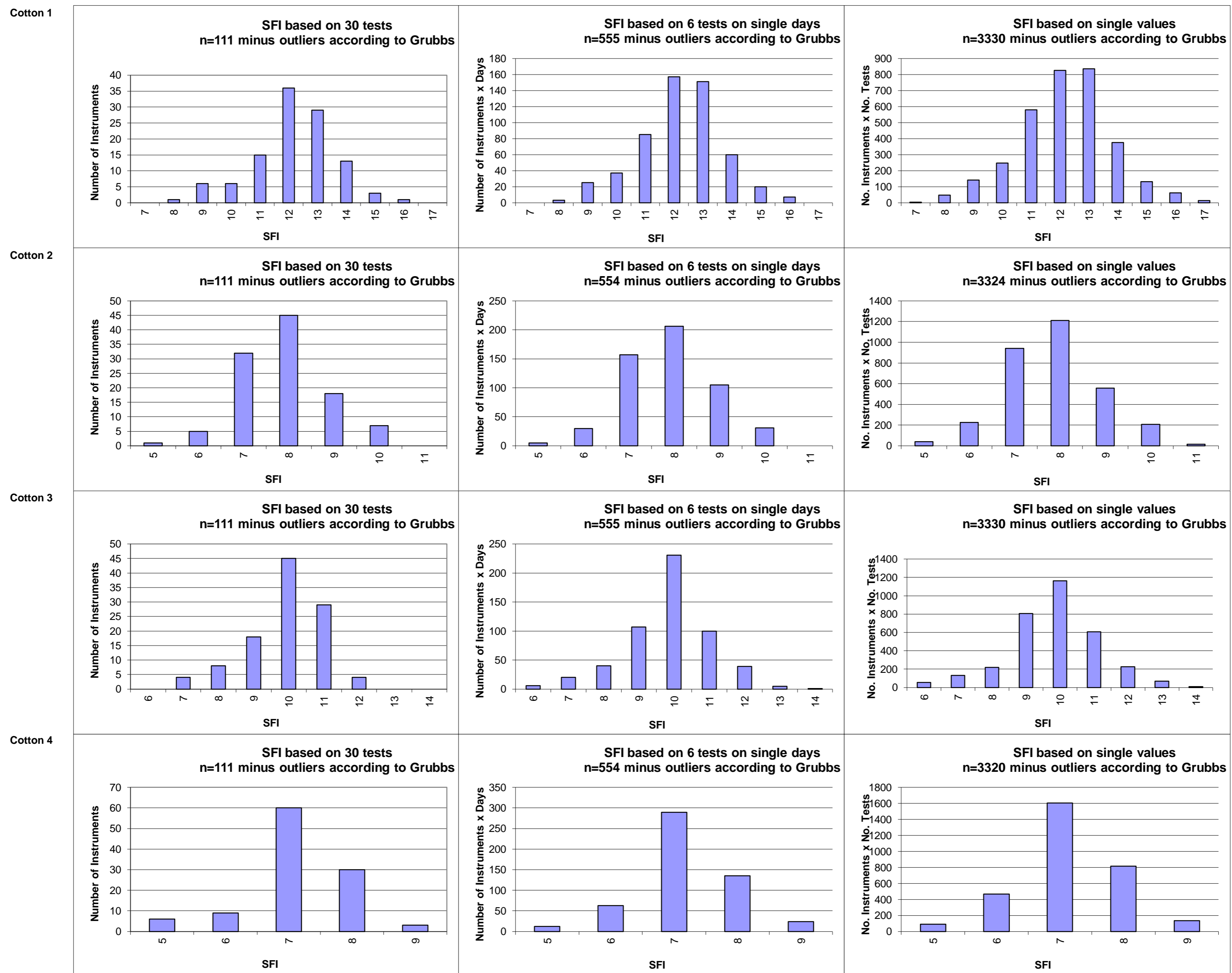
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Maturity



(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method.)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
SFI



(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)



International Cotton Advisory Committee



CSITC

Global - Round Trial 2013 - 3

General Evaluation

Section One: Result Distribution

Section Two: Instrument Evaluation

Section Three: Within Limits Evaluation

Section Two: Instrument Evaluation

Content:

- Evaluation of Combined Parameters
- Evaluation of Single Parameters

Executed By:

Faserinstitut Bremen e.V., Bremen, Germany*

USDA-AMS, Memphis, TN, USA

System Provided by:

Generation 10 Limited



This report is an outcome of the Project CFC/ICAC/33 – CSITC, which benefitted from support from the Common Fund for Commodities and the European Union, partners in Commodity Development.



* Faserinstitut Bremen are a Cooperation Partner with ICA Bremen

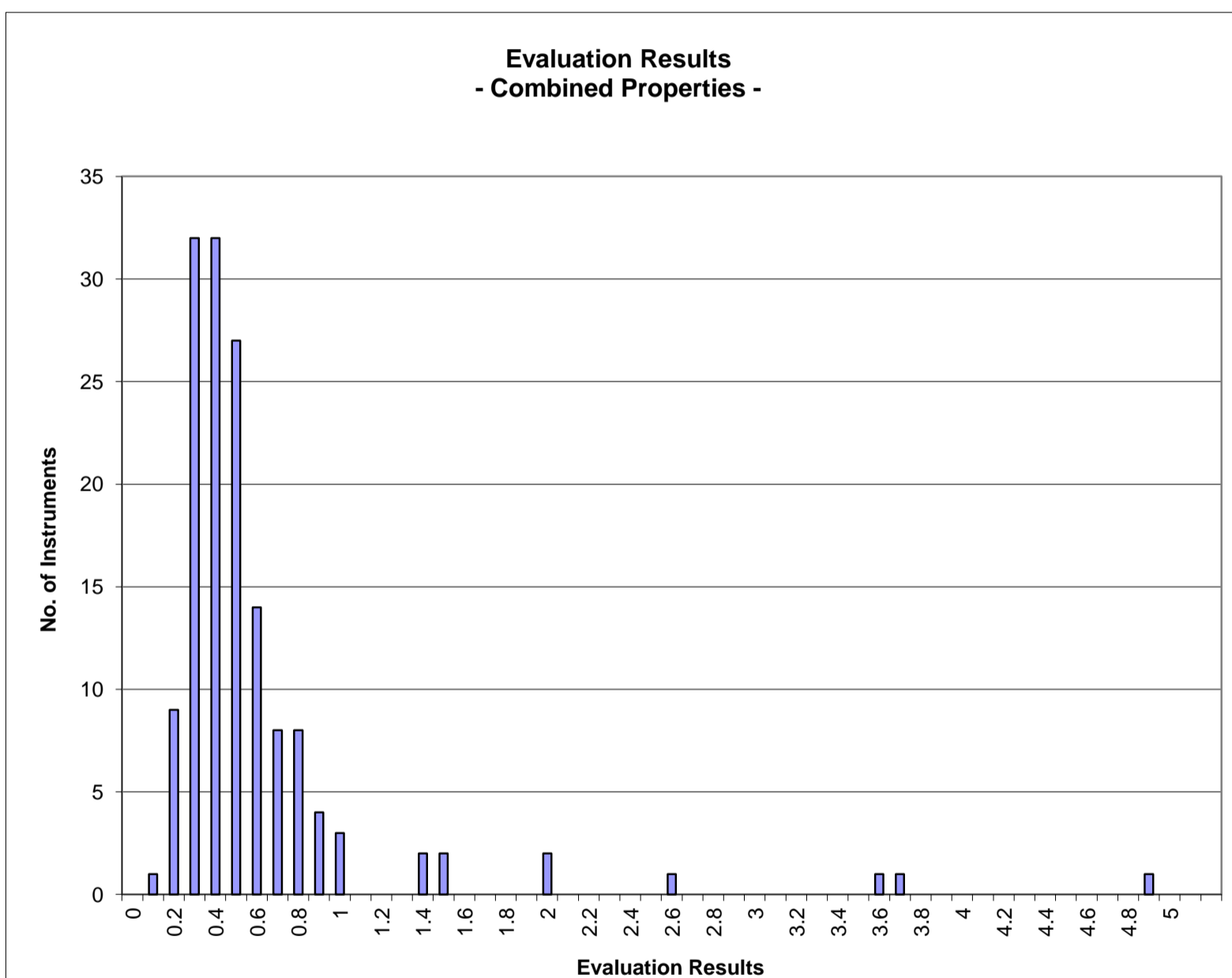
Instrument Evaluation

- Graph of Combined Properties -

According to ICAC CSITC Task Force Recommendations

Global - Round Trial 2013 - 3

		Evaluation Combined Prop.
Statistics	Average	0.61
	Median	0.45
	Best Instrument	0.15
	Worst Instrument	4.91

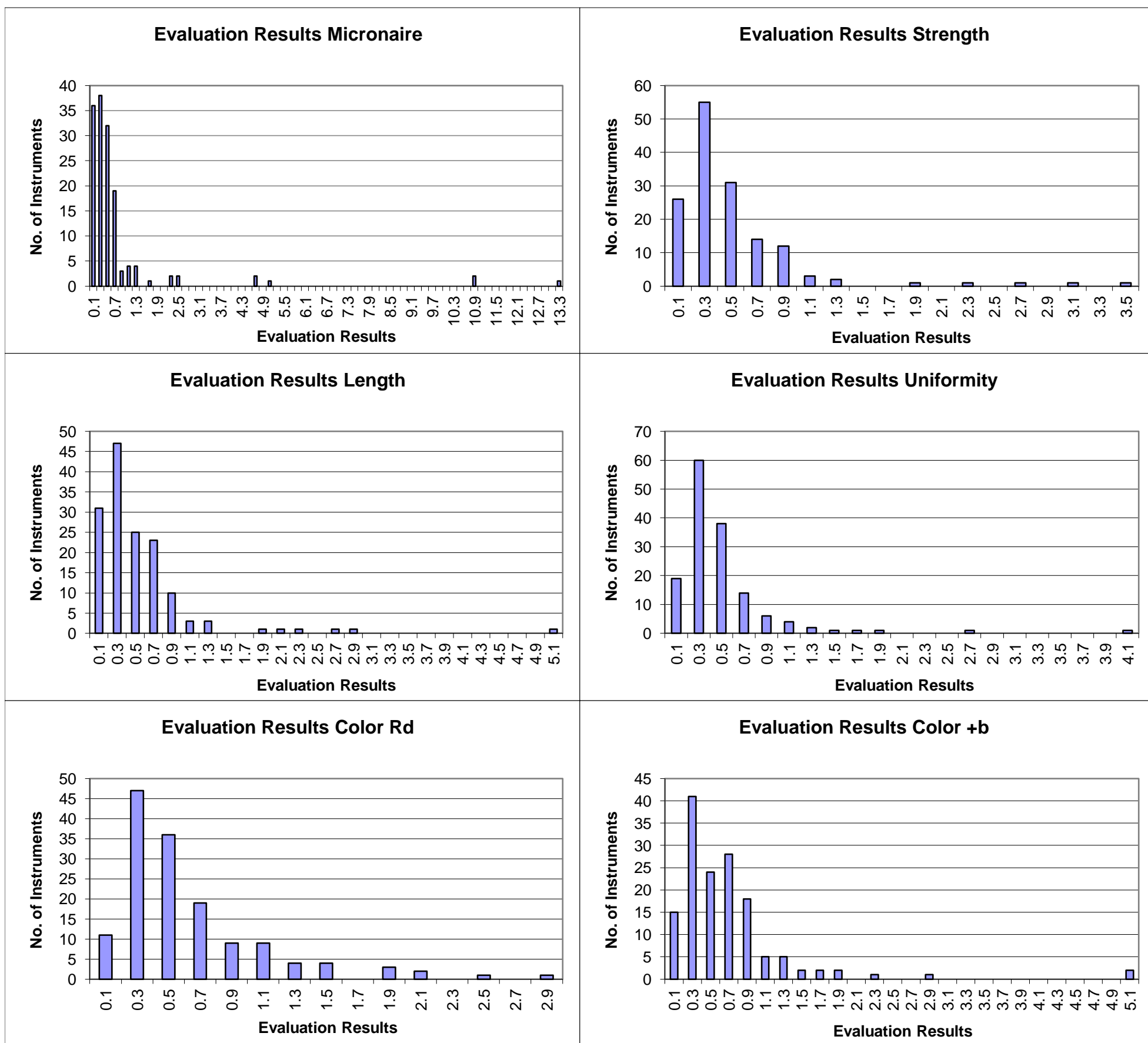


x-Axis shows midpoints of classes

The evaluation results are entered based on the unrounded values
(classes are defined as > lower limit and <= upper limit)

Instrument Evaluation
 - Graph of Single Properties -
 According to ICAC CSITC Task Force Recommendations
 Global - Round Trial 2013 - 3

		Evaluation Micronaire	Evaluation Strength	Evaluation Length	Evaluation Uniformity	Evaluation Color Rd	Evaluation Color +b
Statistics	Average	0.81	0.50	0.54	0.49	0.62	0.68
	Median	0.40	0.36	0.37	0.38	0.47	0.53
	Best Instr.	0.05	0.06	0.07	0.03	0.06	0.09
	Worst Instr.	13.30	3.44	5.04	4.02	2.94	5.03



x-Axis shows midpoints of classes
 The evaluation results are entered based on the unrounded values



International Cotton Advisory Committee



CSITC

Global - Round Trial 2013 - 3

General Evaluation

Section One: Result Distribution
Section Two: Instrument Evaluation
Section Three: Within Limits Evaluation

Section Three: Within Limits Evaluation

Content:

- Based on Average of 30 Test Results
- Based on Single Test Results

Executed By:
Faserinstitut Bremen e.V., Bremen, Germany*
USDA-AMS, Memphis, TN, USA

System Provided by:
Generation 10 Limited



This report is an outcome of the Project CFC/ICAC/33 – CSITC, which benefitted from support from the Common Fund for Commodities and the European Union, partners in Commodity Development.



* Faserinstitut Bremen are a Cooperation Partner with ICA Bremen

Within Limits Evaluation

Based on average of 30 test results for each sample

	Micronaire	Strength	Length	Uniformity	Color Rd	Color +b
Limits	0.20	2.0	0.030	2.0	1.5	1.0
	units	g/tex	inch	%	units	units
Average % Results within Limits	95.2	94.1	94.6	97.8	82.4	97.1
Completely within limits	91.2	85.1	86.5	95.3	71.2	93.8
% of Instruments $\geq 75\%$ within limits	93.9	95.3	95.9	98.0	77.4	96.6
% of Instruments $\geq 50\%$ within limits	97.3	97.3	98.0	98.6	86.3	98.6

Percentage of Results Within Limits						
Instrument	Micronaire	Strength	Length	Uniformity	Color Rd	Color +b
GL133-001-01	100	100	100	100	100	100
GL133-001-08	100	100	100	100	100	100
GL133-002-01	100	100	100	100	100	100
GL133-003-01	100	100	100	100	100	100
GL133-004-08	100	100	100	100	100	100
GL133-004-09	100	100	100	100	100	100
GL133-005-01	100	100	75	100	100	100
GL133-006-01	100	100	75	100	50	100
GL133-006-02	100	100	75	100	50	100
GL133-006-03	100	100	75	100	50	100
GL133-006-06	100	100	75	100	50	100
GL133-007-01	100	100	100	100	100	100
GL133-009-01	100	100	100	100	25	75
GL133-009-02	100	100	100	100	0	100
GL133-010-01	100	100	100	100	100	100
GL133-010-02	100	100	100	100	100	100
GL133-010-03	100	100	100	100	100	100
GL133-010-04	100	100	100	100	100	100
GL133-011-16	100	100	75	100	75	100
GL133-012-04	50	0	75	75	50	25
GL133-013-02	100	100	100	100	50	100
GL133-014-01	100	100	100	100	100	100
GL133-015-01	100	100	100	100	100	100
GL133-016-03	100	100	100	100	100	100
GL133-016-04	100	75	100	100	100	100
GL133-016-05	100	100	100	100	100	100
GL133-017-01	100	100	100	100	100	100
GL133-019-03	100	100	100	100	100	100
GL133-019-04	100	100	100	100	100	100
GL133-019-06	100	100	100	100	100	100
GL133-021-05	50	50	50	100	25	50
GL133-021-06	50	100	50	100	50	50
GL133-022-01	100	100	100	100	75	100
GL133-023-01	100	100	100	100		
GL133-023-02	100	100	100	100	100	100
GL133-028-01	100	100	100	100	75	100
GL133-029-01	100	100	100	100	100	100
GL133-029-02	100	100	100	100	100	100
GL133-030-02	100	100	100	100	25	100

GL133-031-01	100	75	100	100	100	100
GL133-032-01	100	100	100	100	100	100
GL133-032-05	100	100	100	100	100	100
GL133-032-07	100	100	100	100	100	100
GL133-032-08	100	100	100	100	0	100
GL133-034-01	100	75	100	100	50	100
GL133-034-03	100	100	100	100	100	100
GL133-035-01	75	75	100	100	100	100
GL133-036-01	100	75	100	100	25	75
GL133-037-01	100	100	100	100	100	100
GL133-038-01	100	50	100	100	100	100
GL133-039-01	100	100	100	100	100	100
GL133-039-02	100	100	100	100	100	100
GL133-040-01	100	100	100	100	100	100
GL133-041-01	25	25	0	25	25	50
GL133-042-01	100	100	100	100	100	100
GL133-043-01	100	100	100	100	100	100
GL133-043-02	100	100	100	100	100	100
GL133-044-01	100	100	100	100	100	100
GL133-045-01	100	75	50	100	100	100
GL133-046-01	100	75	100	100	0	100
GL133-047-03	100	100	100	100	100	100
GL133-048-01	100	100	100	100	100	100
GL133-049-03	100	100	100	100	100	100
GL133-049-04	100	100	100	100	100	100
GL133-049-05	100	100	100	100	100	100
GL133-049-06	100	100	100	100	100	100
GL133-050-01	0	75	75	100	25	100
GL133-050-02	0	75	75	100	25	100
GL133-051-01	100	100	100	100	100	100
GL133-053-02	100	100	100	100	100	100
GL133-053-03	100	100	100	100	100	100
GL133-054-01	75	100	100	100	100	100
GL133-054-02	75	100	75	75	0	100
GL133-056-01	100	100	100	100	0	100
GL133-057-01	100	100	100	100	100	100
GL133-057-03	100	75	100	100	100	100
GL133-058-01	100	100	100	100	100	100
GL133-061-01	100	100	100	100	100	100
GL133-061-04	100	100	100	100	100	100
GL133-061-05	100	100	100	100	100	100
GL133-062-01	100	75	100	100	100	100
GL133-062-02	100	75	100	100	100	100
GL133-063-03	50	100	100	100	25	100
GL133-063-04	50	100	100	100	25	100
GL133-064-01	100	75	100	100	100	100
GL133-065-01	100	100	100	100	100	100
GL133-065-02	100	100	100	100	100	100
GL133-065-03	100	100	100	100	100	100
GL133-065-04	100	100	100	100	100	100
GL133-066-01	100	100	75	100	75	100
GL133-067-06		100	100	100		
GL133-068-01	100	100	100	100	25	100
GL133-068-02	100	100	100	100	25	100
GL133-069-01	100	100	100	100	100	100
GL133-070-04	100	100	100	100	100	100
GL133-071-01	100	100	100	100	100	100
GL133-071-04	100	100	100	100	75	100
GL133-072-01	100	100	100	100	50	100
GL133-073-18	100	100	100	100	100	100

GL133-073-26	100	100	100	100	100	100
GL133-074-01	100	100	100	100	100	100
GL133-074-02	100	100	100	100	100	100
GL133-075-01	100	100	100	100	100	100
GL133-075-02	100	100	100	100	100	100
GL133-076-01	100	100	100	100	50	100
GL133-076-02	100	100	100	100	100	100
GL133-076-03	100	100	100	100	100	100
GL133-076-04	100	100	100	75	100	100
GL133-077-01	100	75	75	100	100	100
GL133-077-02	100	75	100	100	100	100
GL133-078-01	100	100	100	100	50	100
GL133-079-01	100	100	0	100	25	100
GL133-080-01	100	100	100	100	100	100
GL133-081-01	100	100	100	100	100	100
GL133-082-01	100	100	100	100	75	100
GL133-085-01	100	100	100	100	100	100
GL133-086-10	100	100	100	100	100	100
GL133-086-11	100	100	100	100	100	100
GL133-087-02	100	100	100	100	100	100
GL133-087-04	100	100	100	100	0	100
GL133-087-07	100	100	100	100	100	100
GL133-088-01	100	100	100	100	75	100
GL133-089-01	100	100	100	100	100	100
GL133-090-38	100	100	100	100	100	100
GL133-090-51	100	100	100	100	100	100
GL133-093-01	100	100	100	100	100	100
GL133-093-02	100	100	100	100	100	100
GL133-093-04	100	100	100	100	75	100
GL133-095-01	100	100	100	100	100	100
GL133-096-01	100	100	100	100	100	100
GL133-096-02	100	100	100	100	100	100
GL133-097-01	100	100	100	100	50	100
GL133-100-01	75	0	75	75	50	75
GL133-101-01	100	100	100	100	100	75
GL133-102-01	100	100	100	100	100	100
GL133-102-02	100	100	100	100	100	100
GL133-103-01	100	100	100	100	100	100
GL133-104-01	25	25	0	0	0	100
GL133-104-03	100	50	75	50	0	100
GL133-106-03	100	100	100	100	100	100
GL133-107-01	100	100	100	100	100	0
GL133-107-03	100	100	100	100	100	100
GL133-108-01	100	100	100	100	100	100
GL133-108-02	100	100	100	100	75	100
GL133-108-05	100	100	100	100	100	100
GL133-109-01	100	100	100	100	100	100
GL133-110-02	100	100	100	100	100	100
GL133-110-06	100	100	100	100	100	100

Within Limits Evaluation

Based on Single Test Results

	Micronaire	Strength	Length	Uniformity	Color Rd	Color +b
Limits	0.20	2.0	0.030	2.0	1.5	1.0
	units	g/tex	inch	%	units	units
Average % Results within Limits	94.2	89.1	92.6	95.7	80.8	95.5
% of Instruments 100% within limits	61.9	30.4	30.4	52.7	35.6	66.4
% of Instruments ≥95% within limits	85.0	58.1	70.3	82.4	50.0	83.6
% of Instruments ≥75% within limits	93.2	87.2	89.2	95.9	74.0	95.2
% of Instruments ≥65% within limits	93.2	89.9	96.6	98.0	78.8	95.9
% of Instruments ≥50% within limits	95.9	96.6	97.3	98.6	81.5	97.3

Percentage of Results Within Limits						
Instrument	Micronaire	Strength	Length	Uniformity	Color Rd	Color +b
GL133-001-01	100	95	100	100	100	100
GL133-001-08	100	97	100	99	100	100
GL133-002-01	99	92	100	98	100	100
GL133-003-01	98	100	98	100	97	99
GL133-004-08	100	98	96	98	98	100
GL133-004-09	99	99	100	100	98	100
GL133-005-01	98	80	89	99	99	100
GL133-006-01	100	100	70	100	44	92
GL133-006-02	100	100	77	100	51	90
GL133-006-03	100	100	74	100	48	93
GL133-006-06	100	100	77	100	48	92
GL133-007-01	100	100	100	100	100	100
GL133-009-01	100	94	93	89	33	84
GL133-009-02	100	97	83	88	27	97
GL133-010-01	100	100	100	100	94	100
GL133-010-02	100	100	98	100	97	100
GL133-010-03	100	100	100	100	95	100
GL133-010-04	100	100	100	100	90	100
GL133-011-16	88	81	75	99	72	97
GL133-012-04	36	0	70	68	40	28
GL133-013-02	100	93	99	100	40	100
GL133-014-01	100	100	97	98	80	100
GL133-015-01	99	94	91	98	83	87
GL133-016-03	100	92	99	95	100	100
GL133-016-04	100	80	98	100	98	100
GL133-016-05	100	87	98	99	100	100
GL133-017-01	98	90	98	100	95	100
GL133-019-03	100	100	100	100	100	100
GL133-019-04	99	100	100	100	100	100
GL133-019-06	100	100	100	100	100	100
GL133-021-05	48	71	44	96	25	47
GL133-021-06	50	79	50	95	50	50
GL133-022-01	99	99	83	100	69	100
GL133-023-01	98	98	87	100		
GL133-023-02	99	99	97	99	95	100
GL133-028-01	99	100	100	100	86	100

GL133-029-01	100	96	82	98	93	100
GL133-029-02	98	98	100	99	79	100
GL133-030-02	100	70	96	99	43	99
GL133-031-01	100	78	100	100	100	98
GL133-032-01	100	97	98	100	100	100
GL133-032-05	100	96	88	100	80	100
GL133-032-07	100	100	100	93	68	93
GL133-032-08	99	100	93	95	24	96
GL133-034-01	98	50	97	99	62	100
GL133-034-03	99	79	95	97	79	99
GL133-035-01	90	79	99	93	89	78
GL133-036-01	93	77	89	91	33	50
GL133-037-01	99	86	97	100	99	100
GL133-038-01	100	51	98	96	84	100
GL133-039-01	100	98	100	100	100	100
GL133-039-02	100	100	100	100	100	100
GL133-040-01	98	97	96	95	100	95
GL133-041-01	14	21	16	17	27	46
GL133-042-01	96	92	92	99	98	99
GL133-043-01	99	87	99	99	100	100
GL133-043-02	100	97	98	100	100	100
GL133-044-01	100	98	98	100	100	100
GL133-045-01	100	67	68	100	100	99
GL133-046-01	91	57	89	98	8	99
GL133-047-03	100	98	99	100	100	100
GL133-048-01	99	98	97	100	100	100
GL133-049-03	100	100	100	100	100	100
GL133-049-04	100	100	100	100	100	100
GL133-049-05	100	100	100	100	100	100
GL133-049-06	100	100	100	100	100	100
GL133-050-01	2	58	72	92	43	82
GL133-050-02	2	58	71	90	44	80
GL133-051-01	100	83	94	95	76	100
GL133-053-02	100	84	100	100	96	100
GL133-053-03	100	98	99	100	95	100
GL133-054-01	52	95	94	82	100	100
GL133-054-02	78	84	73	72	0	99
GL133-056-01	100	98	100	98	24	100
GL133-057-01	100	98	99	95	85	94
GL133-057-03	99	78	98	100	96	100
GL133-058-01	99	94	85	100	100	100
GL133-061-01	100	100	99	100	100	100
GL133-061-04	100	100	100	100	100	100
GL133-061-05	100	99	99	100	99	99
GL133-062-01	100	61	85	95	98	97
GL133-062-02	100	61	85	95	98	97
GL133-063-03	58	90	98	98	34	98
GL133-063-04	58	90	98	98	34	98
GL133-064-01	100	78	98	98	82	100
GL133-065-01	98	99	100	100	90	100
GL133-065-02	100	98	98	96	93	100
GL133-065-03	100	100	99	99	100	100
GL133-065-04	100	100	100	99	100	100
GL133-066-01	94	98	68	94	77	100
GL133-067-06		62	93	71		
GL133-068-01	100	81	100	99	38	100
GL133-068-02	98	92	100	100	28	100
GL133-069-01	100	100	100	100	100	100
GL133-070-04	100	98	100	100	100	89
GL133-071-01	100	97	99	100	100	100

GL133-071-04	96	72	94	94	68	100
GL133-072-01	100	91	98	95	69	100
GL133-073-18	100	99	100	100	100	100
GL133-073-26	100	100	99	100	100	100
GL133-074-01	100	96	99	100	100	100
GL133-074-02	100	94	95	100	100	100
GL133-075-01	100	100	100	100	98	100
GL133-075-02	100	100	100	100	100	100
GL133-076-01	100	100	99	100	68	98
GL133-076-02	100	100	100	100	80	97
GL133-076-03	100	100	100	98	95	100
GL133-076-04	100	100	93	83	88	100
GL133-077-01	93	53	73	79	84	98
GL133-077-02	93	53	87	79	84	98
GL133-078-01	83	83	96	99	63	100
GL133-079-01	98	88	40	78	41	91
GL133-080-01	100	94	96	100	99	100
GL133-081-01	100	97	97	100	100	100
GL133-082-01	100	100	99	100	74	100
GL133-085-01	100	93	99	98	91	66
GL133-086-10	95	98	99	100	94	100
GL133-086-11	98	89	98	100	100	100
GL133-087-02	98	89	99	98	90	99
GL133-087-04	89	100	96	89	13	99
GL133-087-07	100	98	98	100	96	100
GL133-088-01	100	93	100	100	88	100
GL133-089-01	100	95	98	98	91	100
GL133-090-38	100	98	100	100	100	100
GL133-090-51	100	100	100	100	100	100
GL133-093-01	100	98	97	98	87	100
GL133-093-02	100	93	100	100	100	100
GL133-093-04	100	100	96	87	77	100
GL133-095-01	100	95	83	93	100	91
GL133-096-01	100	99	99	100	100	99
GL133-096-02	100	99	99	100	100	99
GL133-097-01	100	95	100	100	49	100
GL133-100-01	75	8	74	75	49	75
GL133-101-01	76	94	92	93	89	79
GL133-102-01	99	100	100	100	100	100
GL133-102-02	100	100	98	100	100	100
GL133-103-01	100	93	96	98	100	100
GL133-104-01	39	28	48	33	2	100
GL133-104-03	98	37	65	59	3	100
GL133-106-03	100	93	99	100	94	100
GL133-107-01	100	88	93	97	100	19
GL133-107-03	98	85	84	88	80	87
GL133-108-01	98	100	96	100	100	100
GL133-108-02	100	100	100	100	81	100
GL133-108-05	98	100	98	100	100	100
GL133-109-01	100	96	100	100	93	100
GL133-110-02	100	100	100	100	92	100
GL133-110-06	100	100	100	100	88	100