



International Cotton Advisory Committee



CSITC Global - Round Trial 2017 - 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.



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Global - Round Trial 2017 - 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)			4.232	5.098	5.064	4.231	
Reference Values for Evaluation			4.232	5.098	5.064	4.231	
Number Of Instruments			154	154	154	154	154
Inter-Instrument Variation	based on 30 tests	SD	0.058	0.047	0.043	0.069	0.054
		CV %	1.4	0.9	0.8	1.6	1.2
		SD	0.063	0.054	0.049	0.073	0.060
	based on 6 tests	CV %	1.5	1.1	1.0	1.7	1.3
		SD	0.069	0.065	0.062	0.084	0.070
		CV %	1.6	1.3	1.2	2.0	1.5
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.020	0.028	0.024	0.023	0.024
		CV %	0.5	0.5	0.5	0.6	0.5
	between single tests on one day	SD	0.035	0.037	0.033	0.037	0.035
		CV %	0.8	0.7	0.7	0.9	0.8
	between all tests on different days	SD	0.042	0.045	0.042	0.044	0.043
		CV %	1.0	0.9	0.8	1.0	0.9

Strength							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			33.594	25.806	29.541	22.679	
Reference Values for Evaluation			33.594	25.806	29.541	22.679	
Number Of Instruments			155	155	155	155	155
Inter-Instrument Variation	based on 30 tests	SD	0.707	0.624	0.764	0.709	0.701
		CV %	2.1	2.4	2.6	3.1	2.6
		SD	0.778	0.692	0.844	0.741	0.764
	based on 6 tests	CV %	2.3	2.7	2.9	3.3	2.8
		SD	0.976	0.830	0.976	0.887	0.918
		CV %	2.9	3.2	3.3	3.9	3.3
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.305	0.244	0.273	0.270	0.273
		CV %	0.9	0.9	0.9	1.2	1.0
	between single tests on one day	SD	0.566	0.472	0.514	0.480	0.508
		CV %	1.7	1.8	1.7	2.1	1.8
	between all tests on different days	SD	0.620	0.526	0.578	0.560	0.571
		CV %	1.8	2.0	2.0	2.5	2.1

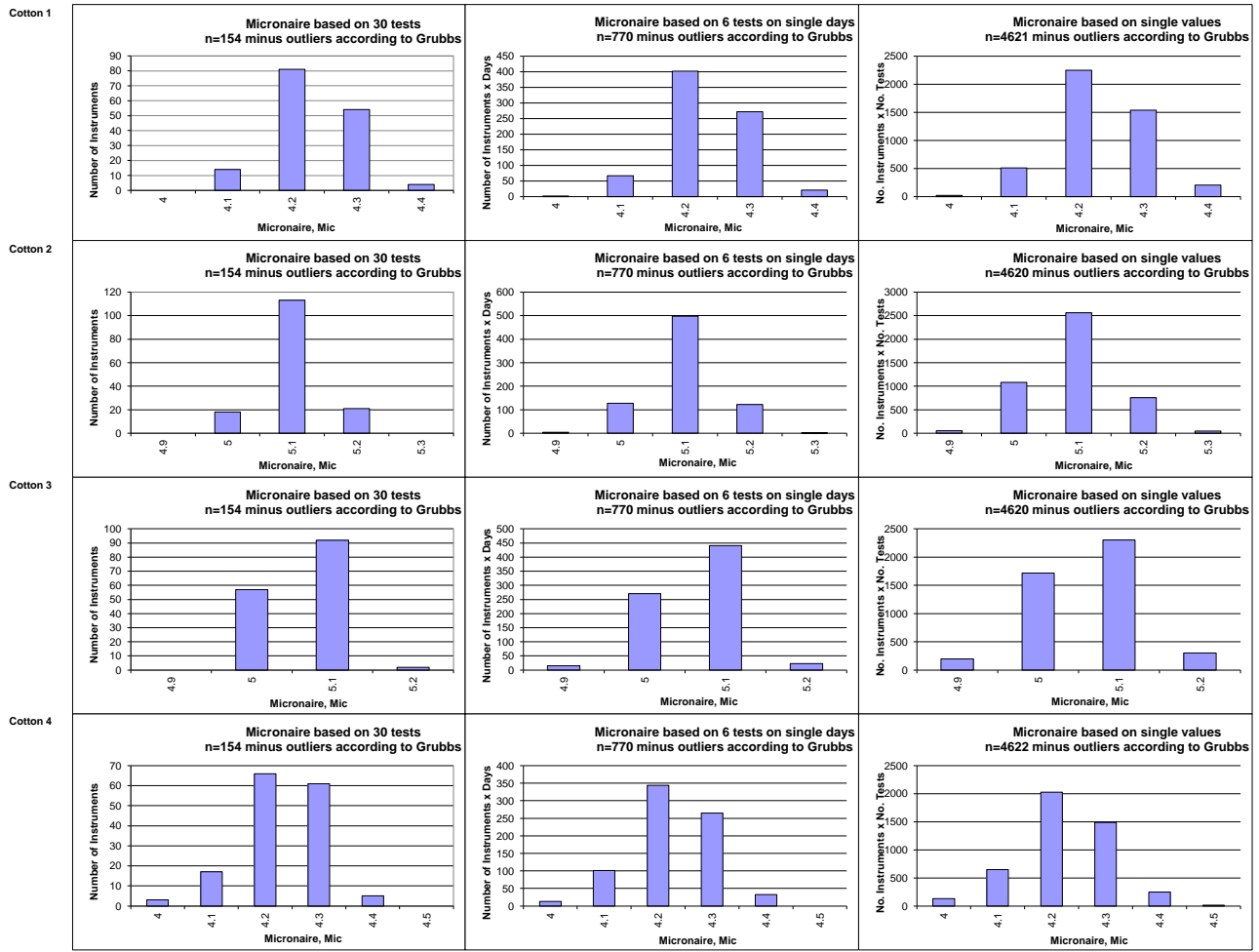
Length							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			1.2174	1.0271	1.0773	0.9523	
Reference Values for Evaluation			1.2174	1.0271	1.0773	0.9523	
Number Of Instruments			155	155	155	155	155
Inter-Instrument Variation	based on 30 tests	SD	0.0102	0.0102	0.0100	0.0135	0.0110
		CV %	0.8	1.0	0.9	1.4	1.0
		SD	0.0113	0.0111	0.0110	0.0145	0.0120
	based on 6 tests	CV %	0.9	1.1	1.0	1.5	1.1
		SD	0.0154	0.0155	0.0145	0.0178	0.0158
		CV %	1.3	1.5	1.3	1.9	1.5
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.0054	0.0054	0.0044	0.0054	0.0051
		CV %	0.4	0.5	0.4	0.6	0.5
	between single tests on one day	SD	0.0099	0.0097	0.0094	0.0109	0.0100
		CV %	0.8	0.9	0.9	1.1	0.9
	between all tests on different days	SD	0.0112	0.0109	0.0104	0.0116	0.0110
		CV %	0.9	1.1	1.0	1.2	1.0

Uniformity							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			84.885	79.870	83.261	76.944	
Reference Values for Evaluation			84.885	79.870	83.261	76.944	
Number Of Instruments			155	155	155	155	155
Inter-Instrument Variation	based on 30 tests	SD	0.342	0.445	0.546	0.554	0.472
		CV %	0.4	0.6	0.7	0.7	0.6
	based on 6 tests	SD	0.437	0.533	0.605	0.643	0.554
		CV %	0.5	0.7	0.7	0.8	0.7
	based on single tests	SD	0.640	0.733	0.751	0.813	0.734
		CV %	0.8	0.9	0.9	1.1	0.9
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.213	0.270	0.230	0.276	0.247
		CV %	0.3	0.3	0.3	0.4	0.3
	between single tests on one day	SD	0.460	0.535	0.467	0.547	0.502
		CV %	0.5	0.7	0.6	0.7	0.6
	between all tests on different days	SD	0.504	0.605	0.522	0.614	0.561
		CV %	0.6	0.8	0.6	0.8	0.7

Color Rd							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			77.493	74.114	74.148	78.365	
Reference Values for Evaluation			77.493	74.114	74.148	78.365	
Number Of Instruments			152	152	152	152	152
Inter-Instrument Variation	based on 30 tests	SD	0.523	0.584	0.764	0.634	0.626
		CV %	0.7	0.8	1.0	0.8	0.8
	based on 6 tests	SD	0.570	0.593	0.769	0.671	0.651
		CV %	0.7	0.8	1.0	0.9	0.9
	based on single tests	SD	0.623	0.639	0.755	0.676	0.673
		CV %	0.8	0.9	1.0	0.9	0.9
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.148	0.149	0.158	0.157	0.153
		CV %	0.2	0.2	0.2	0.2	0.2
	between single tests on one day	SD	0.202	0.194	0.190	0.158	0.186
		CV %	0.3	0.3	0.3	0.2	0.2
	between all tests on different days	SD	0.258	0.248	0.267	0.251	0.256
		CV %	0.3	0.3	0.4	0.3	0.3

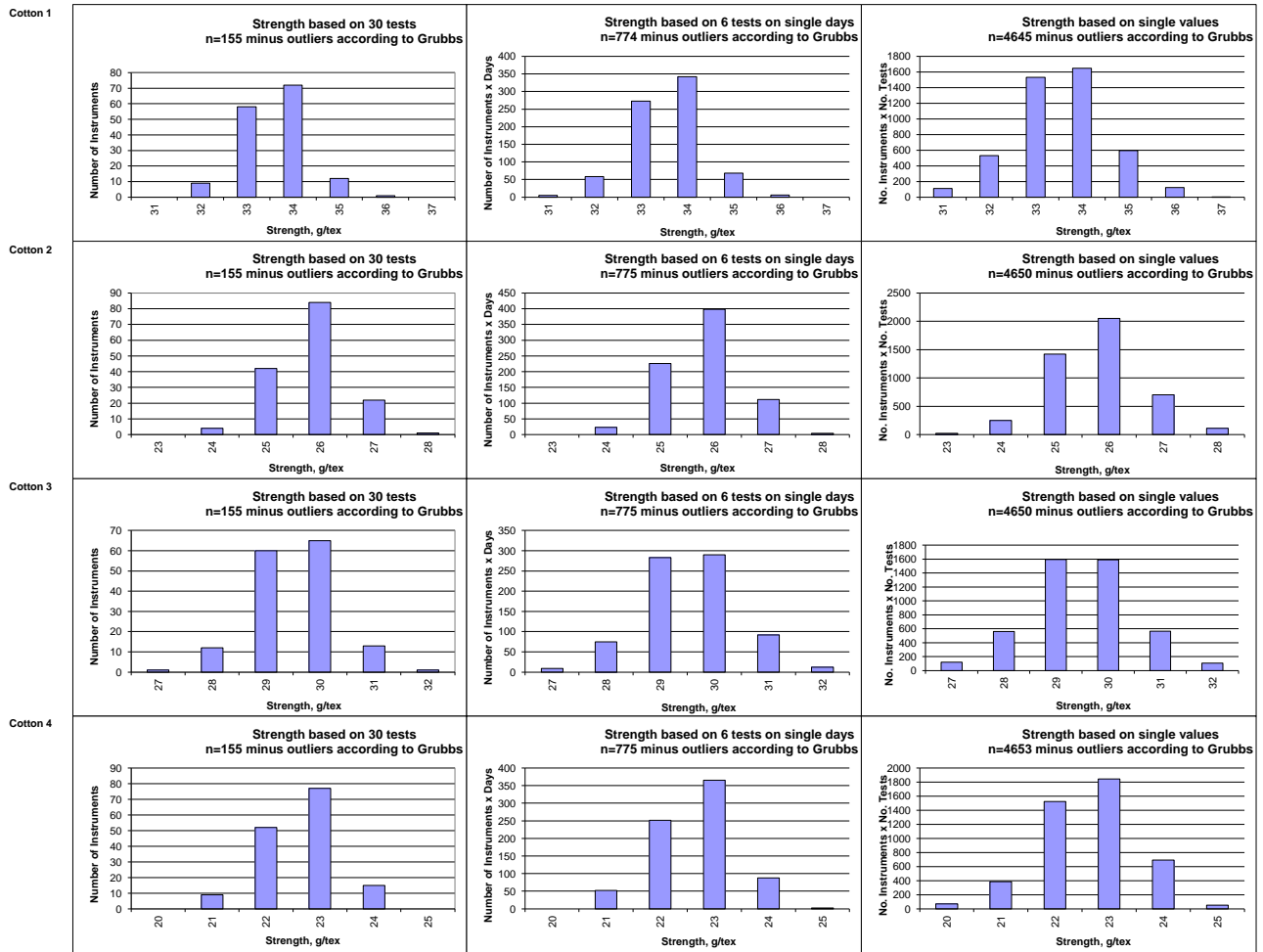
Color +b							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			12.861	8.294	10.897	9.001	
Reference Values for Evaluation			12.861	8.294	10.897	9.001	
Number Of Instruments			152	152	152	152	152
Inter-Instrument Variation	based on 30 tests	SD	0.332	0.194	0.251	0.232	0.252
		CV %	2.6	2.3	2.3	2.6	2.5
	based on 6 tests	SD	0.356	0.213	0.264	0.251	0.271
		CV %	2.8	2.6	2.4	2.8	2.6
	based on single tests	SD	0.404	0.244	0.301	0.273	0.306
		CV %	3.1	2.9	2.8	3.0	3.0
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.107	0.072	0.088	0.082	0.087
		CV %	0.8	0.9	0.8	0.9	0.9
	between single tests on one day	SD	0.113	0.084	0.087	0.077	0.090
		CV %	0.9	1.0	0.8	0.9	0.9
	between all tests on different days	SD	0.172	0.119	0.133	0.117	0.135
		CV %	1.3	1.4	1.2	1.3	1.3

Test Result Distributions
Micronaire



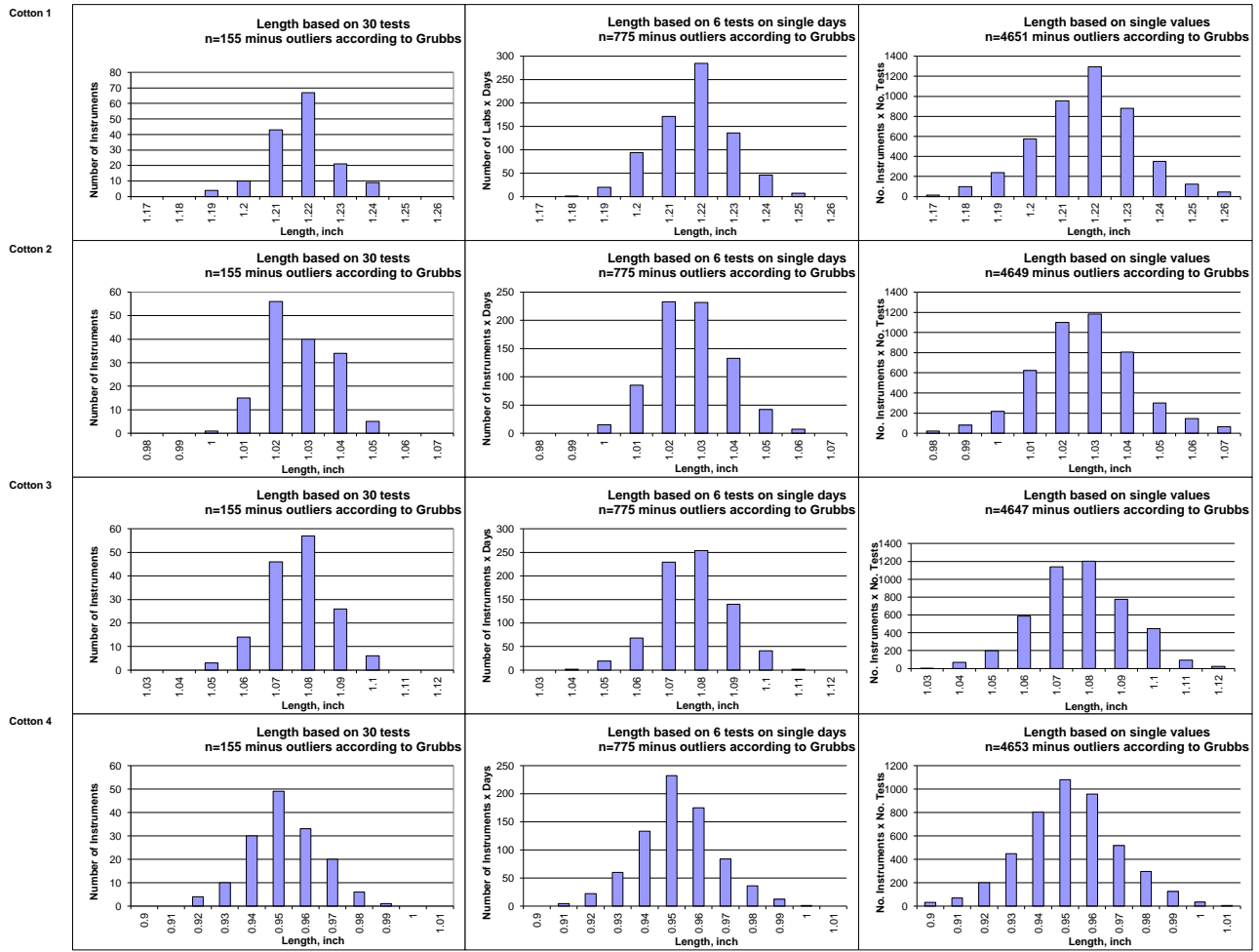
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method.)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Strength



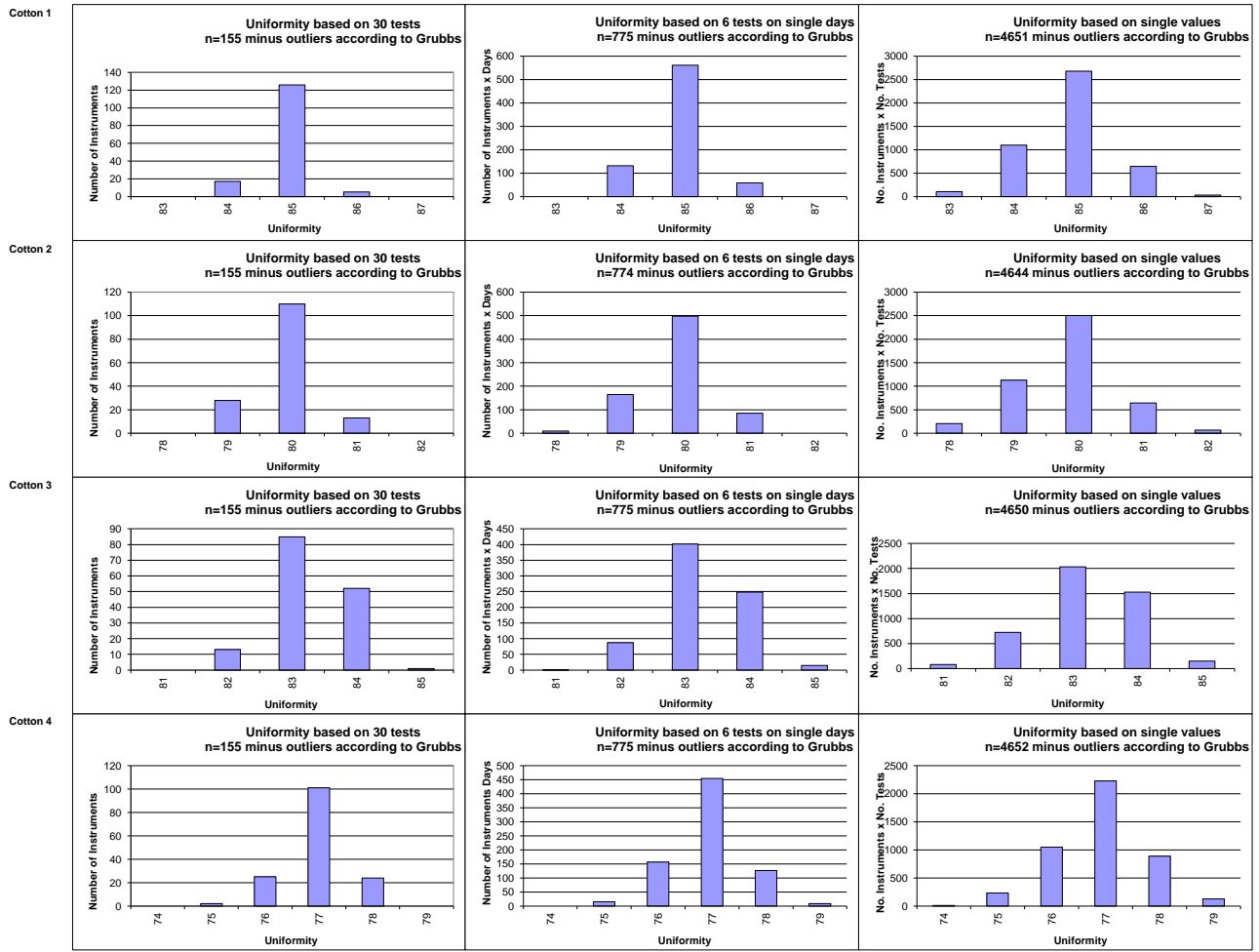
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method) (classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Length



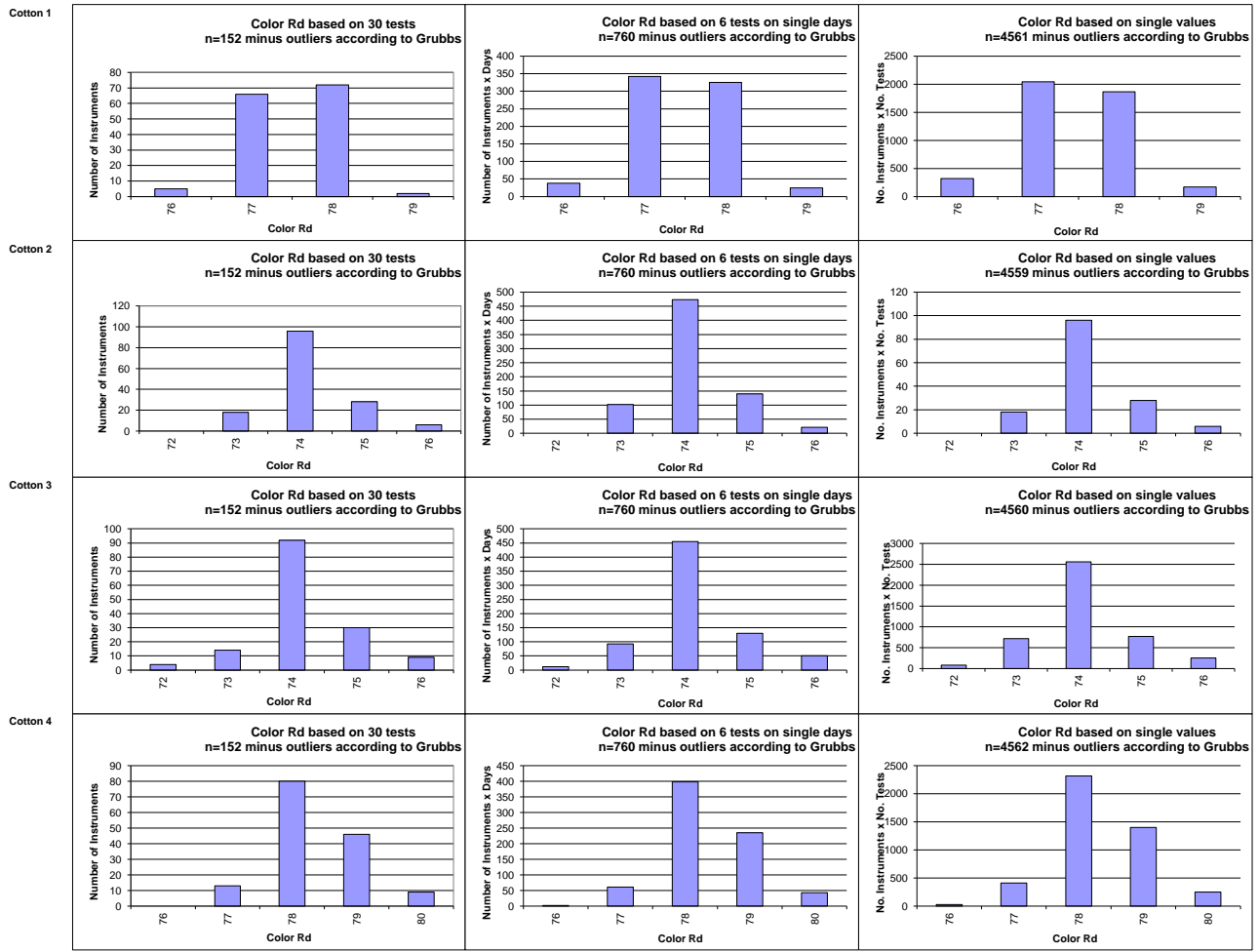
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method) (classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Uniformity



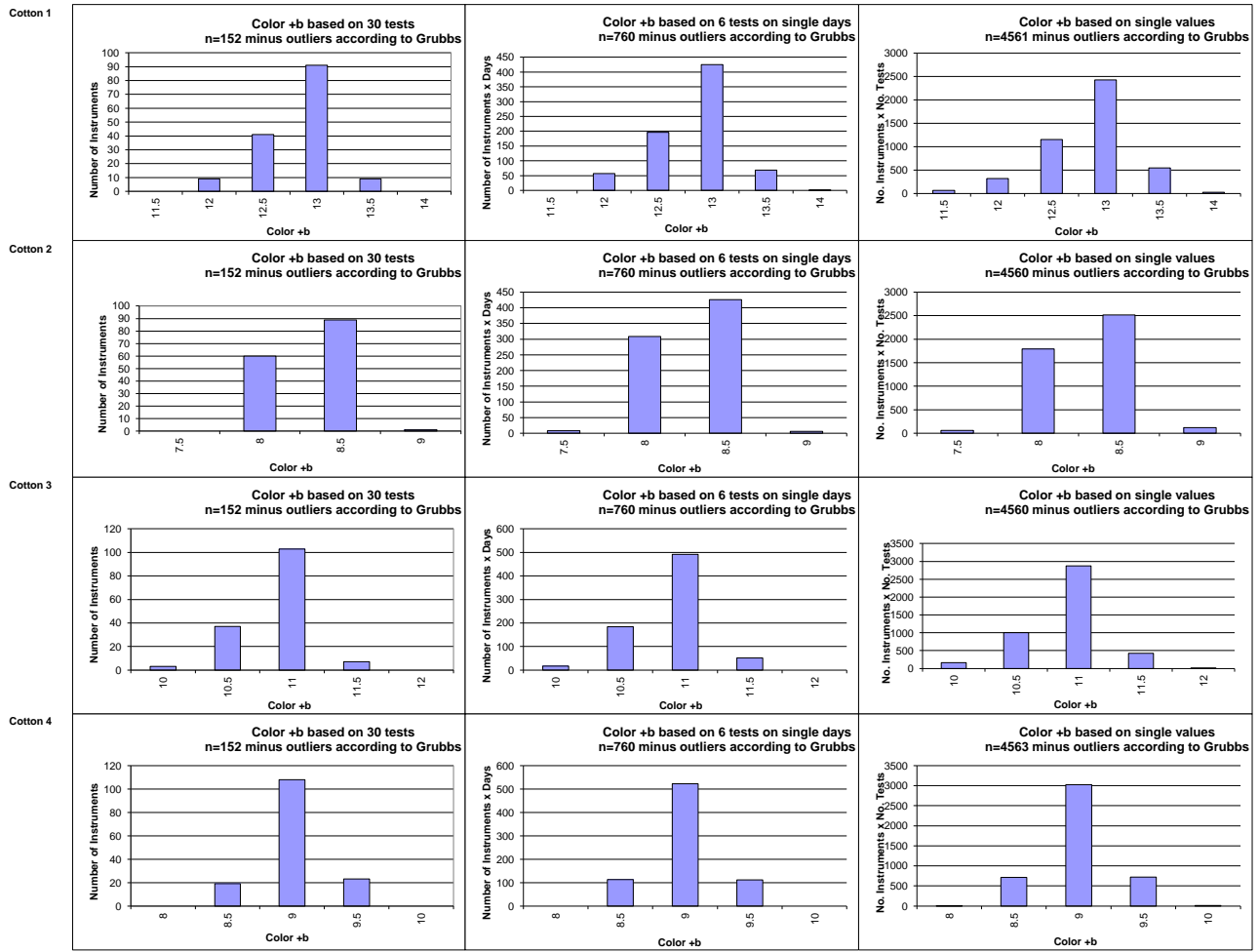
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
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Test Result Distributions
Color Rd



(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

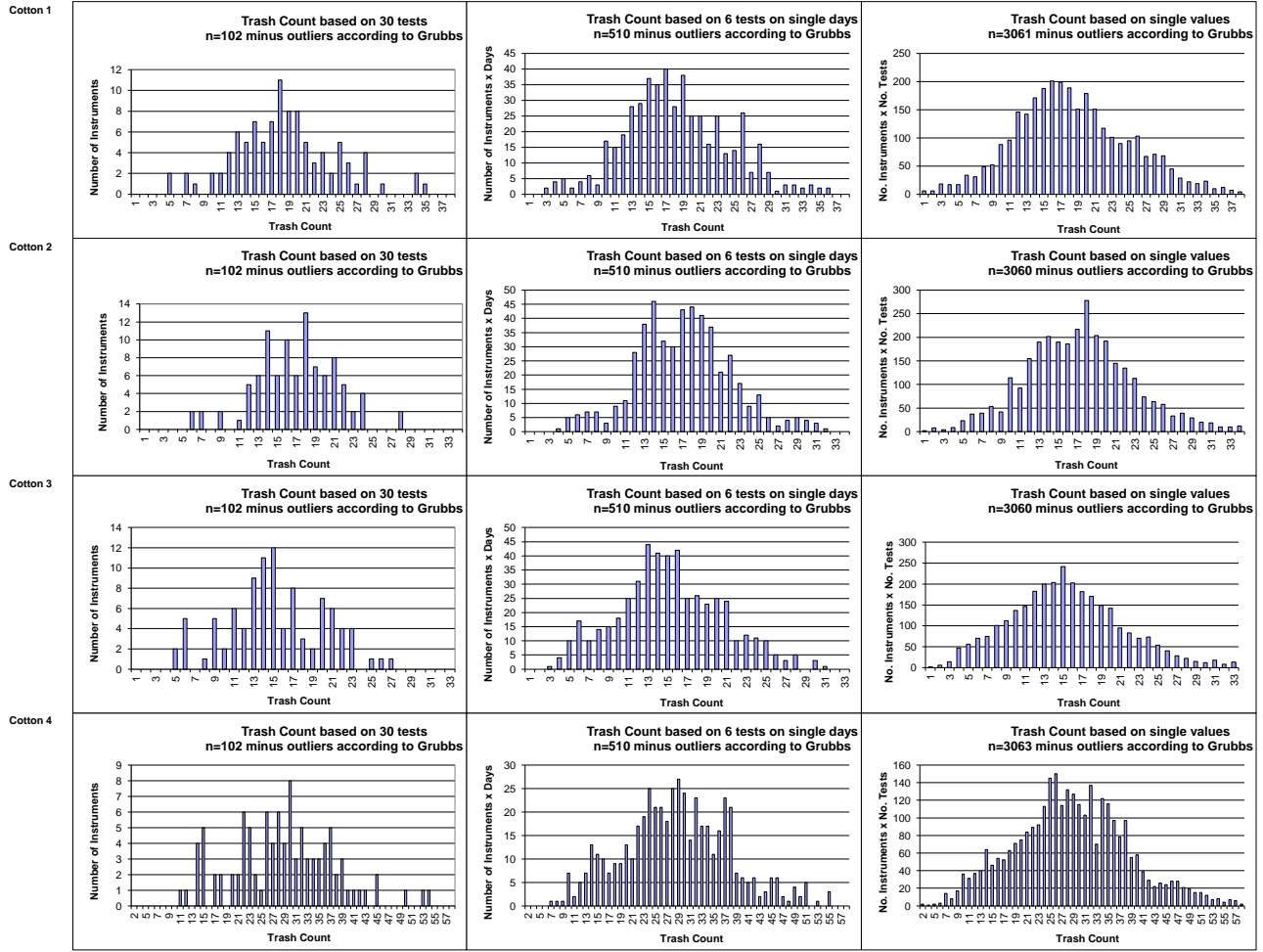
Trash Count							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			18.52	16.98	15.22	28.82	
Reference Values for Evaluation			18.52	16.98	15.22	28.82	
Number Of Instruments			102	102	102	102	102
Inter-Instrument Variation	based on 30 tests	SD	5.89	4.36	4.96	8.93	6.04
		CV %	31.8	25.7	32.6	31.0	30.3
		SD	6.09	5.02	5.38	9.29	6.44
	based on 6 tests	CV %	32.9	29.5	35.3	32.2	32.5
		SD	6.67	5.61	5.89	9.79	6.99
		CV %	36.0	33.0	38.7	34.0	35.4
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	1.77	1.61	1.46	2.32	1.79
		CV %	9.6	9.5	9.6	8.1	9.2
	between single tests on one day	SD	2.58	2.41	1.94	2.82	2.44
		CV %	13.9	14.2	12.7	9.8	12.7
	between all tests on different days	SD	3.35	3.00	2.53	3.82	3.18
		CV %	18.1	17.7	16.6	13.2	16.4

Trash Area							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			0.227	0.190	0.152	0.228	
Reference Values for Evaluation			0.227	0.190	0.152	0.228	
Number Of Instruments			102	102	102	102	102
Inter-Instrument Variation	based on 30 tests	SD	0.059	0.052	0.046	0.067	0.056
		CV %	26.1	27.3	30.4	29.2	28.3
		SD	0.068	0.054	0.046	0.065	0.058
	based on 6 tests	CV %	30.0	28.3	30.4	28.3	29.3
		SD	0.088	0.062	0.054	0.070	0.069
		CV %	38.7	32.9	35.5	30.5	34.4
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.032	0.025	0.018	0.021	0.024
		CV %	13.9	13.2	11.7	9.2	12.0
	between single tests on one day	SD	0.043	0.033	0.021	0.027	0.031
		CV %	19.0	17.3	14.0	11.9	15.6
	between all tests on different days	SD	0.055	0.045	0.033	0.035	0.042
		CV %	24.4	23.9	21.9	15.3	21.4

Maturity							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			85.26	88.30	87.25	85.53	
Reference Values for Evaluation			85.26	88.30	87.25	85.53	
Number Of Instruments			107	107	107	107	107
Inter-Instrument Variation	based on 30 tests	SD	1.64	1.08	1.04	1.05	1.20
		CV %	1.9	1.2	1.2	1.2	1.4
		SD	1.62	1.06	1.05	1.07	1.20
	based on 6 tests	CV %	1.9	1.2	1.2	1.2	1.4
		SD	1.58	1.13	1.22	1.72	1.41
		CV %	1.9	1.3	1.4	2.0	1.6
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.14	0.15	0.15	0.14	0.14
		CV %	0.2	0.2	0.2	0.2	0.2
	between single tests on one day	SD	0.21	0.27	0.27	0.27	0.25
		CV %	0.2	0.3	0.3	0.3	0.3
	between all tests on different days	SD	0.34	0.38	0.41	0.38	0.38
		CV %	0.4	0.4	0.5	0.4	0.4

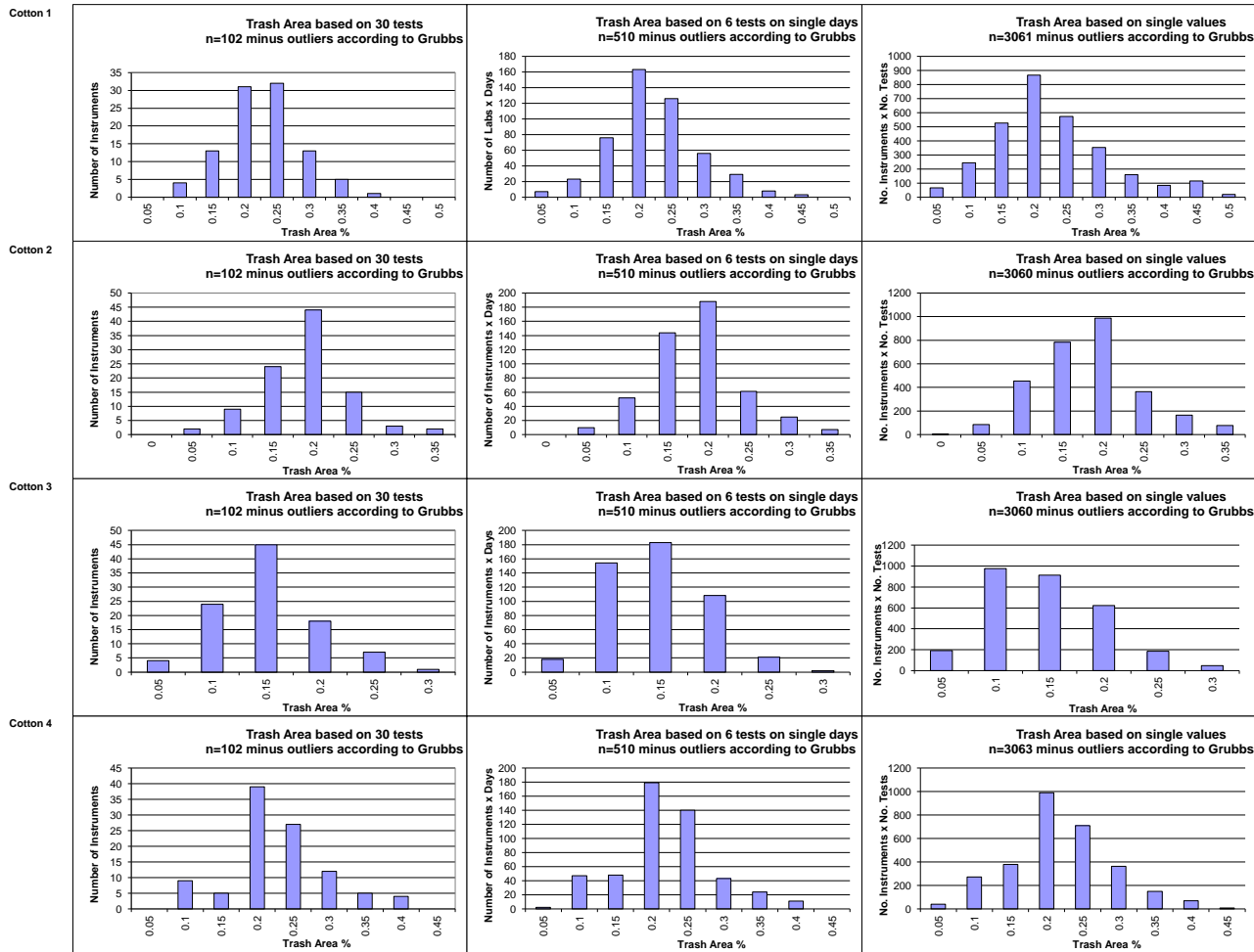
SFI							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			6.58	12.22	8.00	17.38	
Reference Values for Evaluation			6.58	12.22	8.00	17.38	
Number Of Instruments			114	114	114	114	114
Inter-Instrument Variation	based on 30 tests	SD	0.80	0.97	1.11	2.01	1.22
		CV %	12.2	8.0	13.9	11.6	11.4
	based on 6 tests	SD	0.82	1.05	1.13	2.04	1.26
		CV %	12.4	8.6	14.1	11.7	11.7
	based on single tests	SD	0.84	1.24	1.19	2.19	1.36
		CV %	12.8	10.1	14.8	12.6	12.6
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.13	0.35	0.24	0.46	0.29
		CV %	2.0	2.8	3.1	2.6	2.6
	between single tests on one day	SD	0.26	0.61	0.43	0.79	0.52
		CV %	3.9	5.0	5.3	4.6	4.7
	between all tests on different days	SD	0.31	0.70	0.49	0.93	0.61
		CV %	4.7	5.7	6.1	5.3	5.5

Test Result Distributions
Trash Count



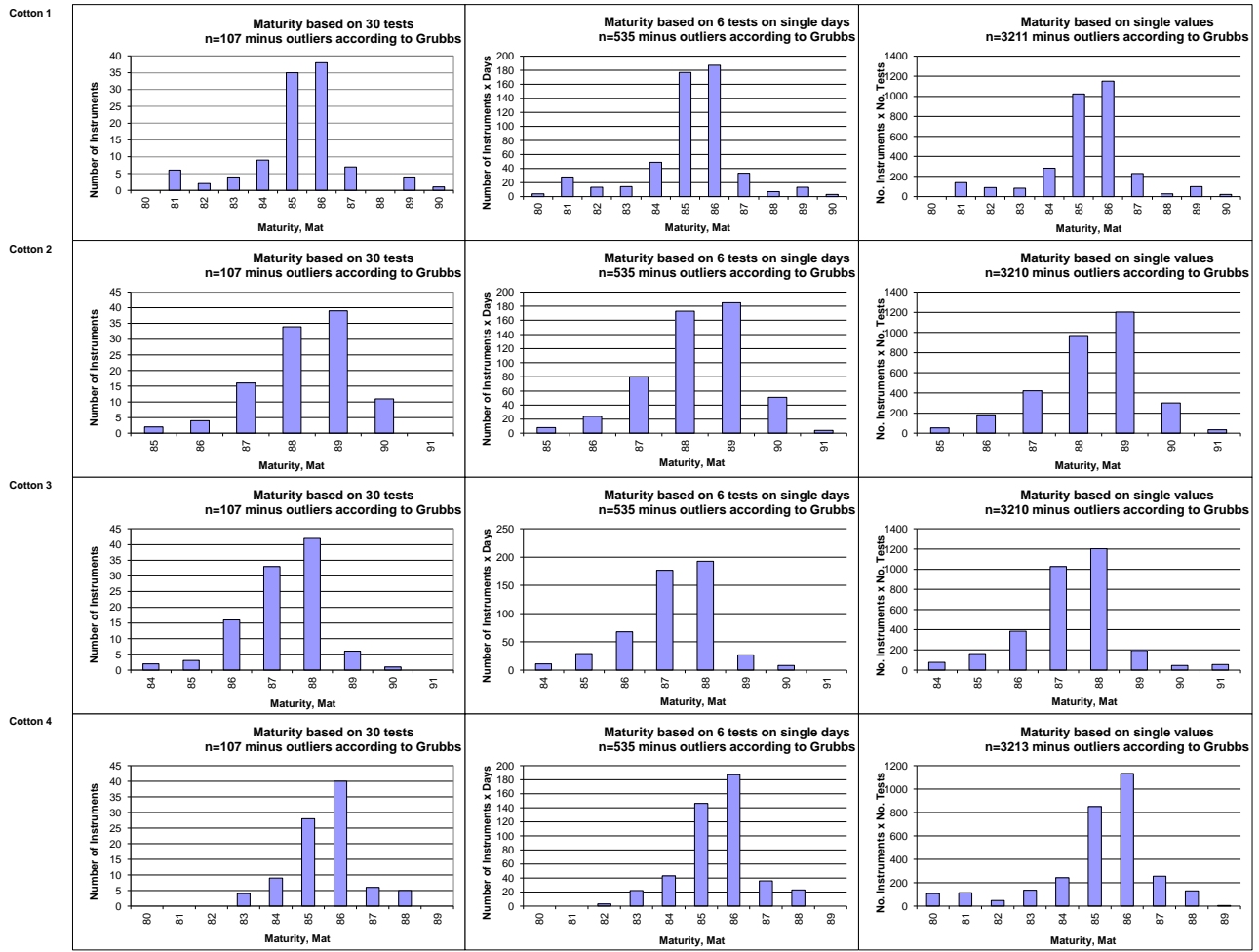
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Trash Area



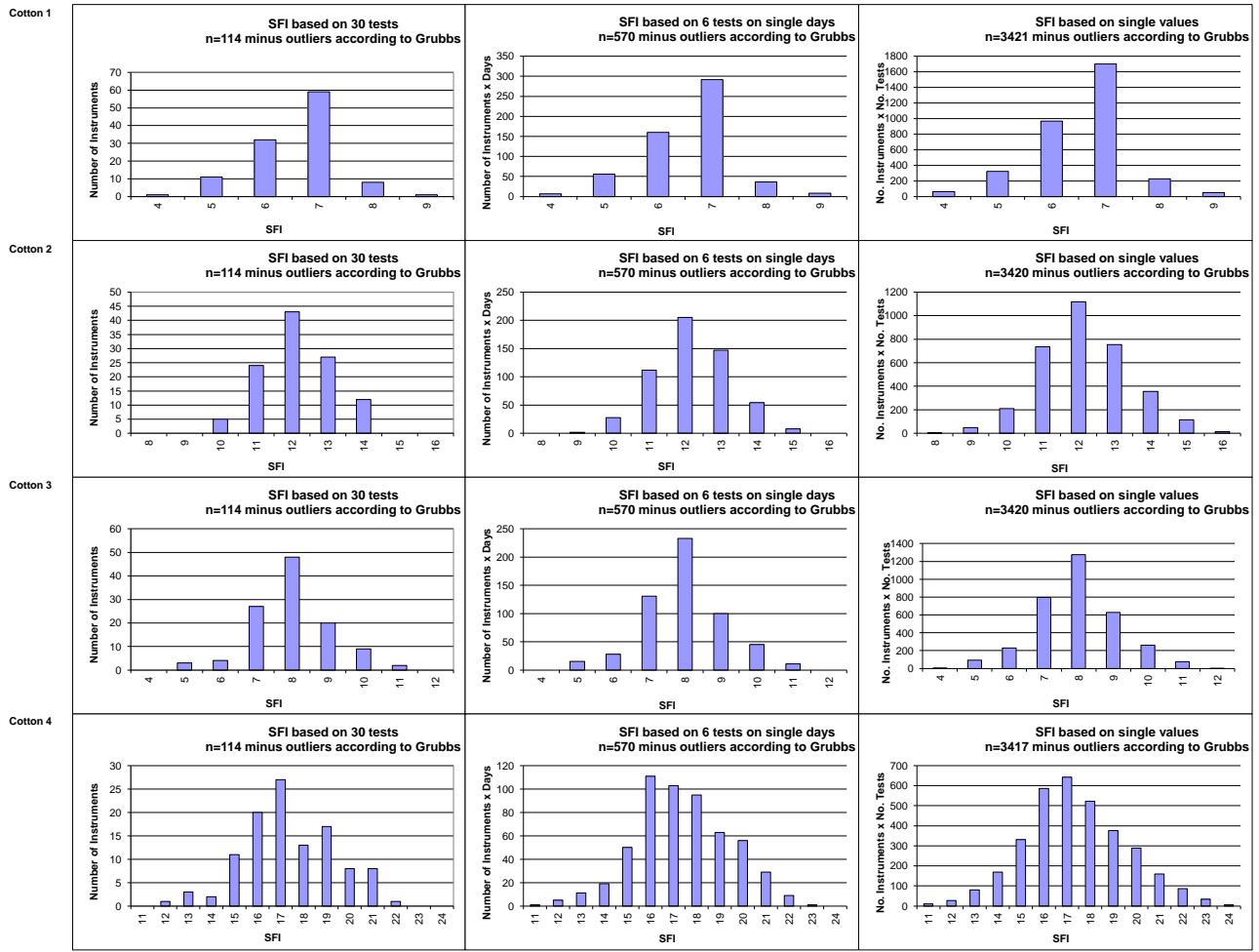
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method) (classes are defined as > lower limit and <= upper limit)

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 2017 - 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

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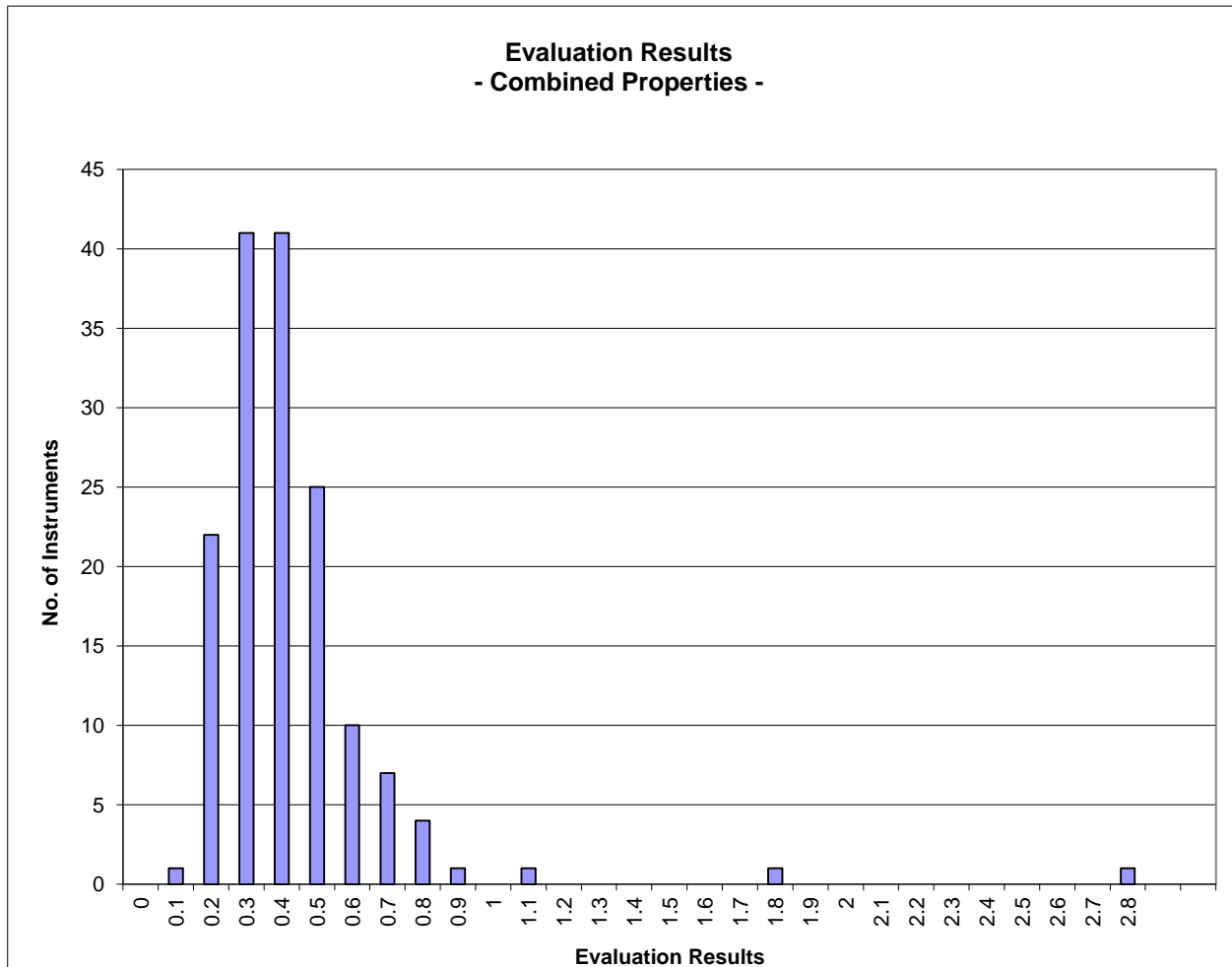
Instrument Evaluation

- Graph of Combined Properties -

According to ICAC CSITC Task Force Recommendations

Global - Round Trial 2017 - 3

		Evaluation Combined Prop.
Statistics	Average	0.43
	Median	0.39
	Best Instrument	0.14
	Worst Instrument	2.79



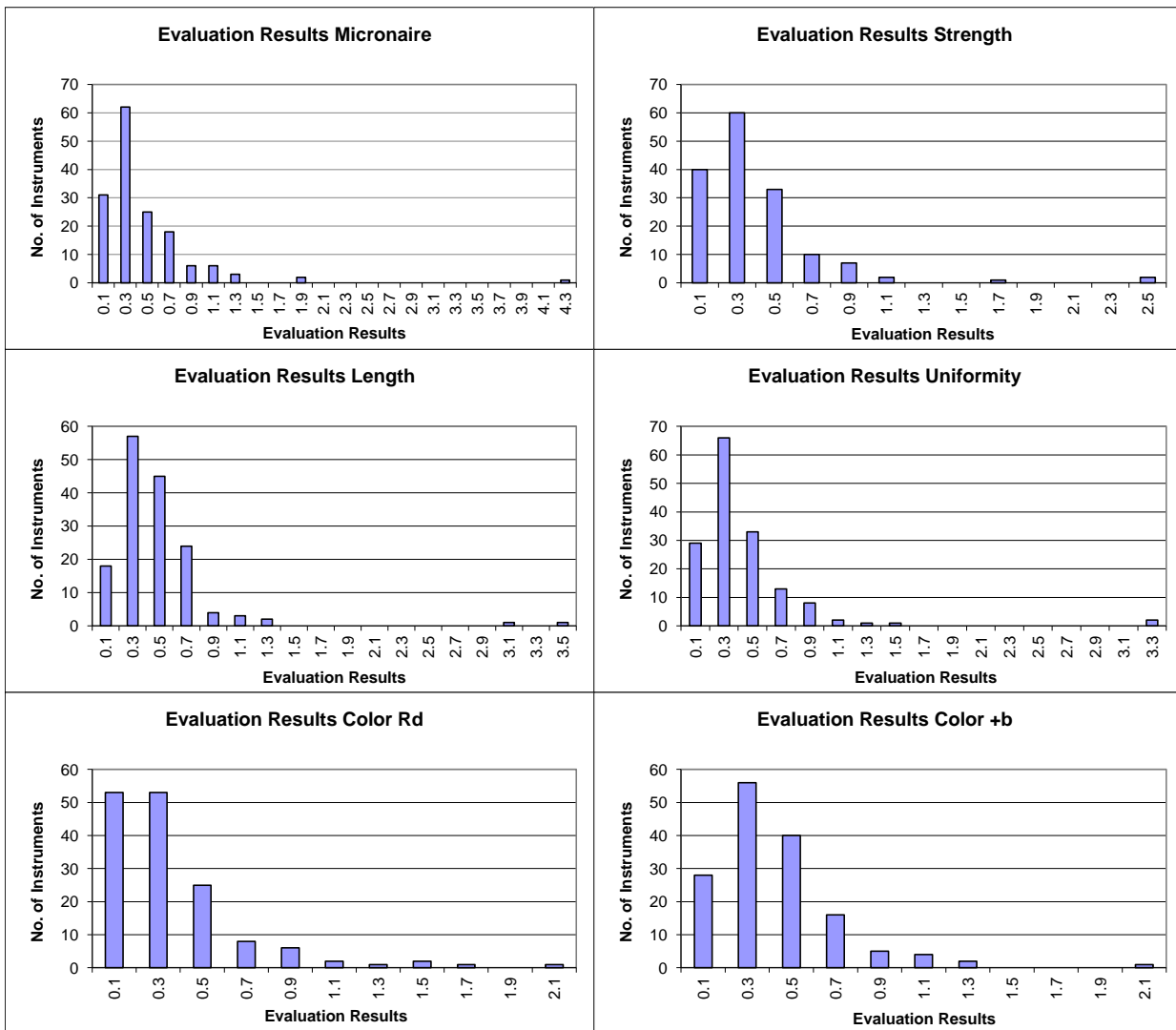
x-Axis shows midpoints of classes

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 2017 - 3

	Evaluation Micronaire	Evaluation Strength	Evaluation Length	Evaluation Uniformity	Evaluation Color Rd	Evaluation Color +b
Statistics	Average	0.47	0.40	0.48	0.36	0.43
	Median	0.35	0.34	0.41	0.36	0.37
	Best Instr.	0.07	0.06	0.08	0.06	0.05
	Worst Instr.	4.33	2.51	3.47	3.32	2.19



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



International Cotton Advisory Committee



CSITC
Global - Round Trial 2017 - 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

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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	0.5
	units	g/tex	inch	%	units	units
Average % Results within Limits	99.0	97.7	97.3	98.4	93.3	93.1
Completely within limits	97.4	94.2	92.9	96.8	86.8	82.2
% of Instruments $\geq 75\%$ within limits	98.7	97.4	97.4	98.1	92.1	92.1
% of Instruments $\geq 50\%$ within limits	100.0	99.4	99.4	99.4	96.7	98.0

Percentage of Results Within Limits						
Instrument	Micronaire	Strength	Length	Uniformity	Color Rd	Color +b
GL173-001-01	100	100	100	100	100	50
GL173-003-01	100	100	100	100	100	100
GL173-003-02	100	100	100	100	100	100
GL173-004-01	100	100	75	100	75	100
GL173-005-01	100	100	100	100	100	100
GL173-005-02	100	100	100	100	100	100
GL173-005-03	100	100	100	100	100	100
GL173-005-04	100	100	100	100	100	50
GL173-005-05	100	100	100	100	100	100
GL173-005-06	100	100	100	100	100	100
GL173-005-07	100	100	100	100	100	75
GL173-005-08	100	100	100	100	100	50
GL173-008-01	100	100	100	100	100	100
GL173-009-01	100	100	100	100	100	25
GL173-009-02	100	100	100	100	100	25
GL173-011-04	100	100	100	100	100	100
GL173-013-01	100	100	100	100	100	100
GL173-014-01	100	100	100	100	100	100
GL173-015-01	100	100	100	100	100	100
GL173-017-06	100	100	75	100	100	100
GL173-018-01	100	100	100	100	100	100
GL173-019-53	100	100	100	100	100	100
GL173-019-60	100	100	100	100	100	50
GL173-020-01	100	100	100	100	100	100
GL173-021-01	100	100	100	100	100	100
GL173-022-01	100	100	100	100	100	100
GL173-022-06	100	100	100	100	100	100
GL173-023-01	100	75	50	100	100	75
GL173-023-02	100	100	100	100	75	75
GL173-023-03	100	100	100	100	100	75
GL173-023-04	100	100	100	100	100	100
GL173-024-02	100	100	50	100	100	100
GL173-026-32	100	100	75	100	100	50
GL173-029-01	100	100	100	100	100	100

GL173-030-05	100	100	100	100	100	100
GL173-030-12	100	100	100	100	100	100
GL173-032-01	100	100	100	100	75	100
GL173-034-03	100	100	100	100	100	100
GL173-034-07	100	100	100	100	100	100
GL173-034-08	100	100	100	100	100	100
GL173-034-09	100	100	100	100	100	100
GL173-034-10	100	100	100	100	100	100
GL173-034-11	100	100	100	100	100	100
GL173-034-12	100	100	100	100	100	100
GL173-034-13	100	100	100	100	100	100
GL173-034-14	100	100	100	100	100	100
GL173-035-01	100	100	100	100	100	100
GL173-037-03	100	100	100	100	100	100
GL173-038-01	100	100	100	100	100	100
GL173-038-02	100	100	100	100	100	100
GL173-039-02	100	100	100	100	100	100
GL173-040-01	100	100	100	100	100	100
GL173-040-02	100	100	100	100	100	100
GL173-040-03	100	100	100	100	100	100
GL173-040-04	100	50	100	100	100	100
GL173-041-01	100	100	100	100	100	100
GL173-041-02	100	100	100	100	100	100
GL173-042-01	100	25	0	0	100	50
GL173-043-02	100	100	100	100	100	100
GL173-044-04	100	100	100	100	100	100
GL173-044-05	100	100	100	100	100	100
GL173-045-01	100	100	100	75	75	75
GL173-046-01	100	75	100	50	0	100
GL173-047-01	100	100	100	100	100	100
GL173-048-01	100	100	100	100	100	100
GL173-050-01	100	100	100	100	100	100
GL173-051-02	100	100	100	100		
GL173-051-03	100	100	100	100	100	100
GL173-054-02	100	100	100	100	100	100
GL173-054-07	50	100	100	100	50	100
GL173-054-08	100	100	100	100	100	100
GL173-055-01	75	75	75	100		
GL173-056-01	100	100	100	100	100	100
GL173-057-01	100	100	100	100	50	100
GL173-058-01	100	100	100	100	100	100
GL173-061-14	100	100	100	100	100	100
GL173-061-16	100	100	100	100	100	100
GL173-062-01	100	75	100	100	100	100
GL173-063-01	100	100	100	100	100	100
GL173-064-01	100	100	100	75	75	75
GL173-066-01	100	50	100	100	75	75
GL173-068-01	100	100	100	100	50	75
GL173-068-02	100	100	100	100	75	100
GL173-069-01	100	100	100	100	100	100
GL173-070-01	100	100	100	100	100	100
GL173-071-03	100	100	100	100	100	100
GL173-071-06	100	100	100	100	100	100
GL173-072-01	100	100	100	100	100	100
GL173-073-01	100	100	100	100	100	100

GL173-073-06	100	100	100	100	100	100
GL173-073-07	100	100	100	100	100	100
GL173-074-03	100	100	100	100	100	100
GL173-074-04	100	100	100	100	100	100
GL173-074-05	100	100	100	100	100	100
GL173-075-01	100	100	100	100	50	75
GL173-076-01	100	100	100	100	100	100
GL173-076-02	100	100	100	100	100	100
GL173-076-03	100	100	100	100	100	100
GL173-077-01	100	100	100	100	0	25
GL173-078-01	100	100	100	100	100	100
GL173-078-02	100	100	75	100	100	50
GL173-078-03	100	100	75	100	50	100
GL173-078-04	100	100	100	100	0	100
GL173-078-06	100	100	100	100	100	100
GL173-078-08	100	100	100	100	100	100
GL173-080-01	100	75	75	100	100	100
GL173-080-07	100	100	100	100	100	100
GL173-080-08	100	100	100	100	100	100
GL173-081-03	100	100	100	100	100	100
GL173-082-01	100	100	100	100	100	100
GL173-082-02	100	100	100	100	100	100
GL173-083-01	100	100	100	100	50	100
GL173-084-01	75	100	100	100	75	100
GL173-085-01	100	100	100	100	0	50
GL173-085-02	100	100	100	100	100	100
GL173-085-03	100	100	100	100	100	100
GL173-086-02	100	100	100	100	100	100
GL173-087-01	100	100	100	100	100	100
GL173-087-03	100	100	100	100	100	100
GL173-088-01	100	100	100	100	100	100
GL173-088-02	100	100	100	100	100	100
GL173-090-14		100	100	100		
GL173-091-01	100	100	100	100	25	100
GL173-093-01	100	100	100	100	100	75
GL173-093-02	100	100	100	100	100	75
GL173-093-03	100	100	100	100	100	75
GL173-093-04	100	100	100	100	100	75
GL173-094-01	100	100	100	100	100	100
GL173-095-01	100	100	100	100	100	100
GL173-095-02	100	100	100	100	100	75
GL173-096-04	100	100	100	100	100	100
GL173-097-09	100	100	100	100	100	100
GL173-097-11	100	100	100	100	100	100
GL173-098-03	100	100	100	100	100	100
GL173-099-01	100	100	100	100	100	100
GL173-101-03	100	100	100	100	100	100
GL173-102-01	100	100	100	100	100	100
GL173-102-02	100	100	100	100	100	100
GL173-103-21	100	100	100	100	100	100
GL173-103-25	100	100	100	100	100	100
GL173-105-01	100	100	100	100	100	75
GL173-105-02	100	100	100	100	100	100
GL173-105-05	100	100	100	100	100	100
GL173-105-07	100	100	100	100	100	100

GL173-106-01	100	100	100	100	100	100
GL173-107-01	100	100	100	100	100	100
GL173-107-04	100	100	100	100	100	100
GL173-107-05	100	100	100	100	100	100
GL173-108-01	100	100	100	100	100	100
GL173-109-01	100	100	100	100	100	100
GL173-109-02	100	100	100	100	100	100
GL173-110-01	50	50	50	50	50	50
GL173-111-01	100	100	100	100	100	100
GL173-111-02	100	100	100	100	100	100
GL173-112-03	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	0.5
	units	g/tex	inch	%	units	units
Average % Results within Limits	97.2	94.3	94.3	96.8	92.2	89.3
% of Instruments 100% within limits	63.0	35.5	32.3	51.0	61.8	34.2
% of Instruments ≥95% within limits	85.7	74.2	69.7	86.5	78.3	57.2
% of Instruments ≥75% within limits	98.1	94.2	95.5	98.1	88.2	84.2
% of Instruments ≥65% within limits	98.7	97.4	97.4	98.1	90.8	92.1
% of Instruments ≥50% within limits	99.4	98.1	98.7	98.7	96.1	96.1

Percentage of Results Within Limits						
Instrument	Micronaire	Strength	Length	Uniformity	Color Rd	Color +b
GL173-001-01	100	96	98	100	83	57
GL173-003-01	83	86	100	99	100	90
GL173-003-02	83	86	100	99	100	90
GL173-004-01	93	100	77	97	80	48
GL173-005-01	100	100	98	100	96	81
GL173-005-02	100	95	99	94	100	96
GL173-005-03	100	97	99	100	98	95
GL173-005-04	100	95	99	100	100	55
GL173-005-05	100	99	96	100	100	93
GL173-005-06	100	97	100	98	100	96
GL173-005-07	100	100	99	100	100	68
GL173-005-08	100	99	100	100	100	68
GL173-008-01	100	99	100	99	100	98
GL173-009-01	100	100	98	100	100	25
GL173-009-02	100	100	100	100	100	26
GL173-011-04	99	100	92	92	95	98
GL173-013-01	100	98	97	96	100	99
GL173-014-01	97	94	100	100	100	100
GL173-015-01	100	88	95	97	97	86
GL173-017-06	100	99	89	99	93	93
GL173-018-01	100	89	98	99	97	98
GL173-019-53	100	95	100	100	100	100
GL173-019-60	100	85	100	100	100	77
GL173-020-01	100	99	99	100	100	100
GL173-021-01	100	100	99	98	100	98
GL173-022-01	100	100	99	100	100	98
GL173-022-06	100	99	99	100	100	98
GL173-023-01	93	61	59	91	79	68
GL173-023-02	99	97	83	93	66	74
GL173-023-03	96	97	90	95	87	74

GL173-023-04	98	98	92	98	100	93
GL173-024-02	98	100	84	98	99	96
GL173-026-32	99	99	79	99	98	52
GL173-029-01	100	100	99	100	100	95
GL173-030-05	100	100	99	98	98	99
GL173-030-12	100	100	100	99	100	100
GL173-032-01	78	98	85	96	73	87
GL173-034-03	100	100	96	97	100	98
GL173-034-07	97	88	99	89	100	100
GL173-034-08	88	66	100	100	100	100
GL173-034-09	100	93	97	91	100	100
GL173-034-10	100	97	99	100	98	99
GL173-034-11	98	82	95	98	100	100
GL173-034-12	100	98	95	94	100	99
GL173-034-13	100	100	99	100	100	100
GL173-034-14	100	100	100	100	100	100
GL173-035-01	100	96	95	100	100	100
GL173-037-03	100	93	100	100	100	99
GL173-038-01	100	84	93	98	91	88
GL173-038-02	100	89	83	98	93	96
GL173-039-02	100	100	100	100	100	100
GL173-040-01	100	99	100	100	100	100
GL173-040-02	100	99	100	100	100	100
GL173-040-03	95	79	99	100	92	92
GL173-040-04	93	71	97	99	98	98
GL173-041-01	100	100	98	94	93	100
GL173-041-02	100	100	96	100	98	100
GL173-042-01	100	26	0	2	100	64
GL173-043-02	100	98	100	100	100	100
GL173-044-04	99	97	98	100	100	91
GL173-044-05	98	93	94	99	100	89
GL173-045-01	88	99	89	78	68	70
GL173-046-01	100	68	94	64	22	100
GL173-047-01	100	100	98	98	100	94
GL173-048-01	100	100	100	100	100	95
GL173-050-01	99	97	98	100	99	99
GL173-051-02	100	97	97	94		
GL173-051-03	100	100	100	98	100	99
GL173-054-02	97	93	99	100	98	82
GL173-054-07	62	88	94	100	59	83
GL173-054-08	97	95	91	90	100	100
GL173-055-01	65	74	74	99		
GL173-056-01	89	93	90	95	96	83
GL173-057-01	100	100	100	100	50	100
GL173-058-01	100	99	99	100	100	100
GL173-061-14	100	100	100	100	100	100
GL173-061-16	100	94	100	100	100	100
GL173-062-01	100	85	100	100	100	100
GL173-063-01	100	89	100	98	100	100
GL173-064-01	92	99	91	79	72	69
GL173-066-01	89	34	90	98	83	77
GL173-068-01	100	96	93	97	45	72
GL173-068-02	99	96	94	94	54	75
GL173-069-01	95	100	98	100	82	70
GL173-070-01	100	100	100	100	100	100

GL173-071-03	100	100	100	100	100	100
GL173-071-06	100	100	100	100	100	100
GL173-072-01	99	100	94	96	99	100
GL173-073-01	100	100	100	100	100	88
GL173-073-06	100	100	100	100	100	100
GL173-073-07	100	100	100	100	100	100
GL173-074-03	99	99	99	100	100	95
GL173-074-04	94	100	95	100	100	92
GL173-074-05	100	99	98	100	100	98
GL173-075-01	100	100	100	100	50	75
GL173-076-01	99	96	100	100	100	100
GL173-076-02	100	99	100	99	100	100
GL173-076-03	100	100	98	100	100	100
GL173-077-01	100	100	100	100	0	38
GL173-078-01	88	100	83	100	100	93
GL173-078-02	91	93	58	89	86	62
GL173-078-03	89	99	70	97	50	71
GL173-078-04	83	87	74	83	23	71
GL173-078-06	100	98	91	95	100	87
GL173-078-08	100	99	98	100	99	88
GL173-080-01	98	83	87	93	98	99
GL173-080-07	100	78	95	100	98	99
GL173-080-08	98	81	96	98	100	99
GL173-081-03	99	99	99	99	98	99
GL173-082-01	100	100	100	100	100	100
GL173-082-02	100	100	100	100	100	100
GL173-083-01	98	100	93	100	64	95
GL173-084-01	77	99	83	95	63	87
GL173-085-01	100	93	93	98	8	44
GL173-085-02	98	97	98	98	100	55
GL173-085-03	100	98	100	98	100	93
GL173-086-02	100	100	98	100	100	100
GL173-087-01	99	100	95	98	100	100
GL173-087-03	100	95	93	96	98	92
GL173-088-01	100	98	97	100	99	84
GL173-088-02	94	89	98	99	87	97
GL173-090-14		82	85	93		
GL173-091-01	100	74	83	76	54	94
GL173-093-01	100	100	100	100	100	80
GL173-093-02	100	100	100	100	100	75
GL173-093-03	100	100	100	98	95	75
GL173-093-04	100	100	100	100	100	74
GL173-094-01	100	100	100	100	100	100
GL173-095-01	100	100	99	100	100	93
GL173-095-02	100	99	100	98	100	80
GL173-096-04	100	96	98	99	100	98
GL173-097-09	100	98	89	100	92	94
GL173-097-11	100	100	98	100	100	100
GL173-098-03	97	96	90	98	100	93
GL173-099-01	86	97	90	99	100	100
GL173-101-03	98	97	90	98	98	93
GL173-102-01	100	96	100	100	100	100
GL173-102-02	100	96	100	100	100	100
GL173-103-21	100	98	100	98	100	100
GL173-103-25	100	96	98	99	98	100