



International Cotton Advisory Committee



CSITC Global - Round Trial 2018 - 1 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 2018 - 1

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

Micronaire							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			3.784	4.356	4.816	5.474	
Reference Values for Evaluation			3.784	4.356	4.816	5.474	
Number Of Instruments			124	124	124	121	123
Inter-Instrument Variation	based on 30 tests	SD	0.065	0.059	0.047	0.046	0.054
		CV %	1.7	1.4	1.0	0.8	1.2
		SD	0.070	0.065	0.052	0.055	0.060
	based on 6 tests	CV %	1.8	1.5	1.1	1.0	1.4
		SD	0.080	0.073	0.062	0.065	0.070
		CV %	2.1	1.7	1.3	1.2	1.6
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.030	0.023	0.024	0.027	0.026
		CV %	0.8	0.5	0.5	0.5	0.6
	between single tests on one day	SD	0.040	0.033	0.031	0.035	0.035
		CV %	1.1	0.8	0.6	0.6	0.8
	between all tests on different days	SD	0.049	0.041	0.040	0.045	0.044
		CV %	1.3	0.9	0.8	0.8	1.0

Strength							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			23.913	27.363	31.115	27.835	
Reference Values for Evaluation			23.913	27.363	31.115	27.835	
Number Of Instruments			125	125	125	122	124
Inter-Instrument Variation	based on 30 tests	SD	0.693	0.623	0.810	0.703	0.707
		CV %	2.9	2.3	2.6	2.5	2.6
		SD	0.778	0.755	1.036	0.780	0.837
	based on 6 tests	CV %	3.3	2.8	3.3	2.8	3.0
		SD	1.017	0.930	1.199	0.928	1.018
		CV %	4.3	3.4	3.9	3.3	3.7
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.336	0.365	0.370	0.342	0.353
		CV %	1.4	1.3	1.2	1.2	1.3
	between single tests on one day	SD	0.591	0.503	0.536	0.498	0.532
		CV %	2.5	1.8	1.7	1.8	2.0
	between all tests on different days	SD	0.656	0.598	0.640	0.611	0.626
		CV %	2.7	2.2	2.1	2.2	2.3

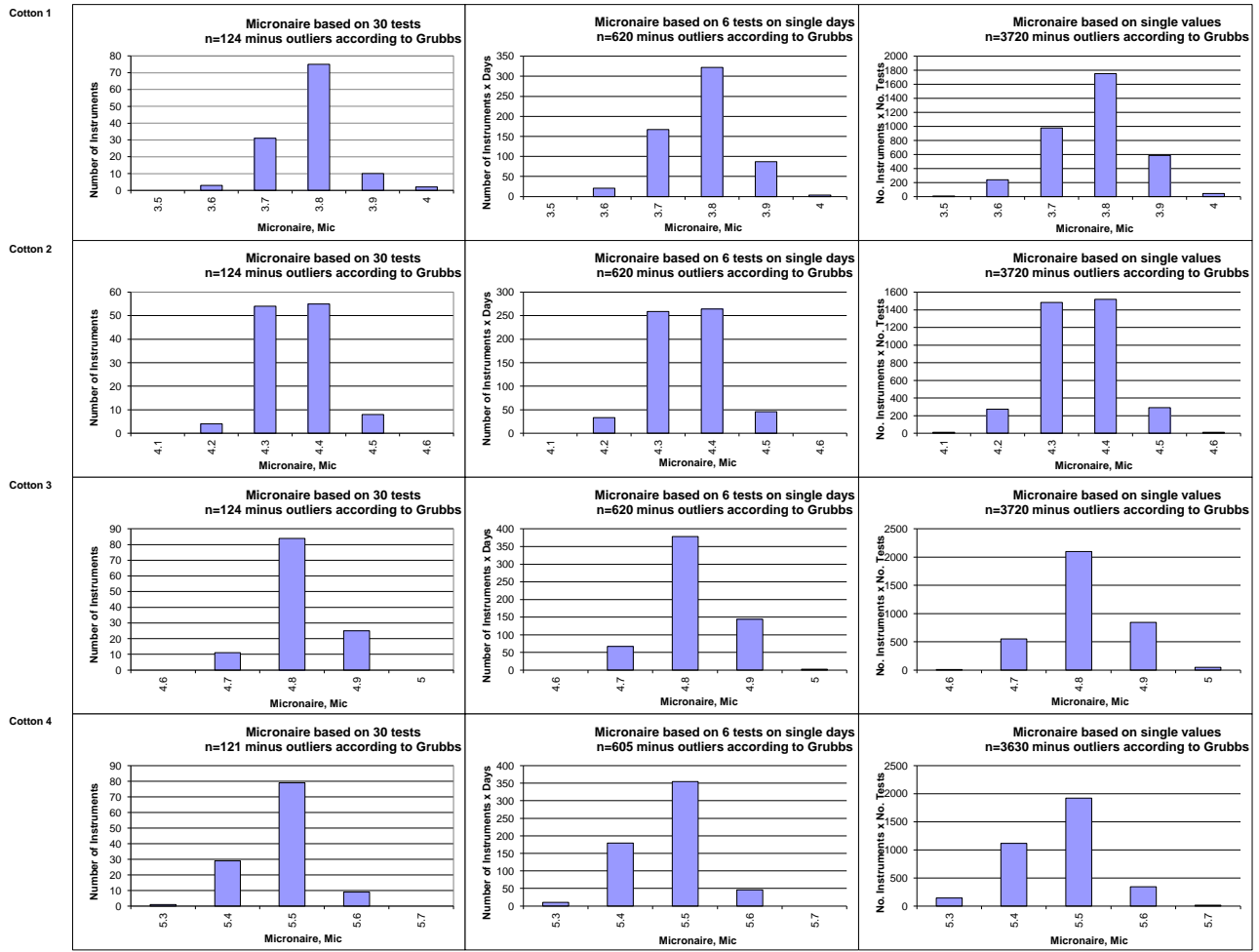
Length							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			0.9909	1.0929	1.1096	1.0333	
Reference Values for Evaluation			0.9909	1.0929	1.1096	1.0333	
Number Of Instruments			125	125	125	122	124
Inter-Instrument Variation	based on 30 tests	SD	0.0103	0.0081	0.0076	0.0081	0.0086
		CV %	1.0	0.7	0.7	0.8	0.8
		SD	0.0123	0.0097	0.0102	0.0101	0.0106
	based on 6 tests	CV %	1.2	0.9	0.9	1.0	1.0
		SD	0.0172	0.0140	0.0137	0.0146	0.0149
		CV %	1.7	1.3	1.2	1.4	1.4
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.0064	0.0050	0.0050	0.0056	0.0055
		CV %	0.6	0.5	0.5	0.5	0.5
	between single tests on one day	SD	0.0116	0.0093	0.0093	0.0092	0.0098
		CV %	1.2	0.8	0.8	0.9	0.9
	between all tests on different days	SD	0.0129	0.0108	0.0105	0.0111	0.0113
		CV %	1.3	1.0	0.9	1.1	1.1

Uniformity							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			77.600	81.355	82.043	80.605	
Reference Values for Evaluation			77.600	81.355	82.043	80.605	
Number Of Instruments			125	125	125	122	124
Inter-Instrument Variation	based on 30 tests	SD	0.525	0.486	0.424	0.383	0.455
		CV %	0.7	0.6	0.5	0.5	0.6
	based on 6 tests	SD	0.641	0.515	0.486	0.491	0.533
		CV %	0.8	0.6	0.6	0.6	0.7
	based on single tests	SD	0.878	0.719	0.716	0.685	0.749
		CV %	1.1	0.9	0.9	0.8	0.9
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.344	0.271	0.256	0.258	0.282
		CV %	0.4	0.3	0.3	0.3	0.4
	between single tests on one day	SD	0.614	0.506	0.478	0.486	0.521
		CV %	0.8	0.6	0.6	0.6	0.6
	between all tests on different days	SD	0.712	0.555	0.535	0.531	0.583
		CV %	0.9	0.7	0.7	0.7	0.7

Color Rd							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			75.245	78.416	80.956	78.739	
Reference Values for Evaluation			75.245	78.416	80.956	78.739	
Number Of Instruments			122	122	122	119	121
Inter-Instrument Variation	based on 30 tests	SD	0.558	0.489	0.558	0.498	0.526
		CV %	0.7	0.6	0.7	0.6	0.7
	based on 6 tests	SD	0.608	0.521	0.597	0.510	0.559
		CV %	0.8	0.7	0.7	0.6	0.7
	based on single tests	SD	0.654	0.578	0.611	0.526	0.592
		CV %	0.9	0.7	0.8	0.7	0.8
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.199	0.156	0.140	0.156	0.163
		CV %	0.3	0.2	0.2	0.2	0.2
	between single tests on one day	SD	0.172	0.158	0.133	0.165	0.157
		CV %	0.2	0.2	0.2	0.2	0.2
	between all tests on different days	SD	0.297	0.255	0.203	0.236	0.248
		CV %	0.4	0.3	0.3	0.3	0.3

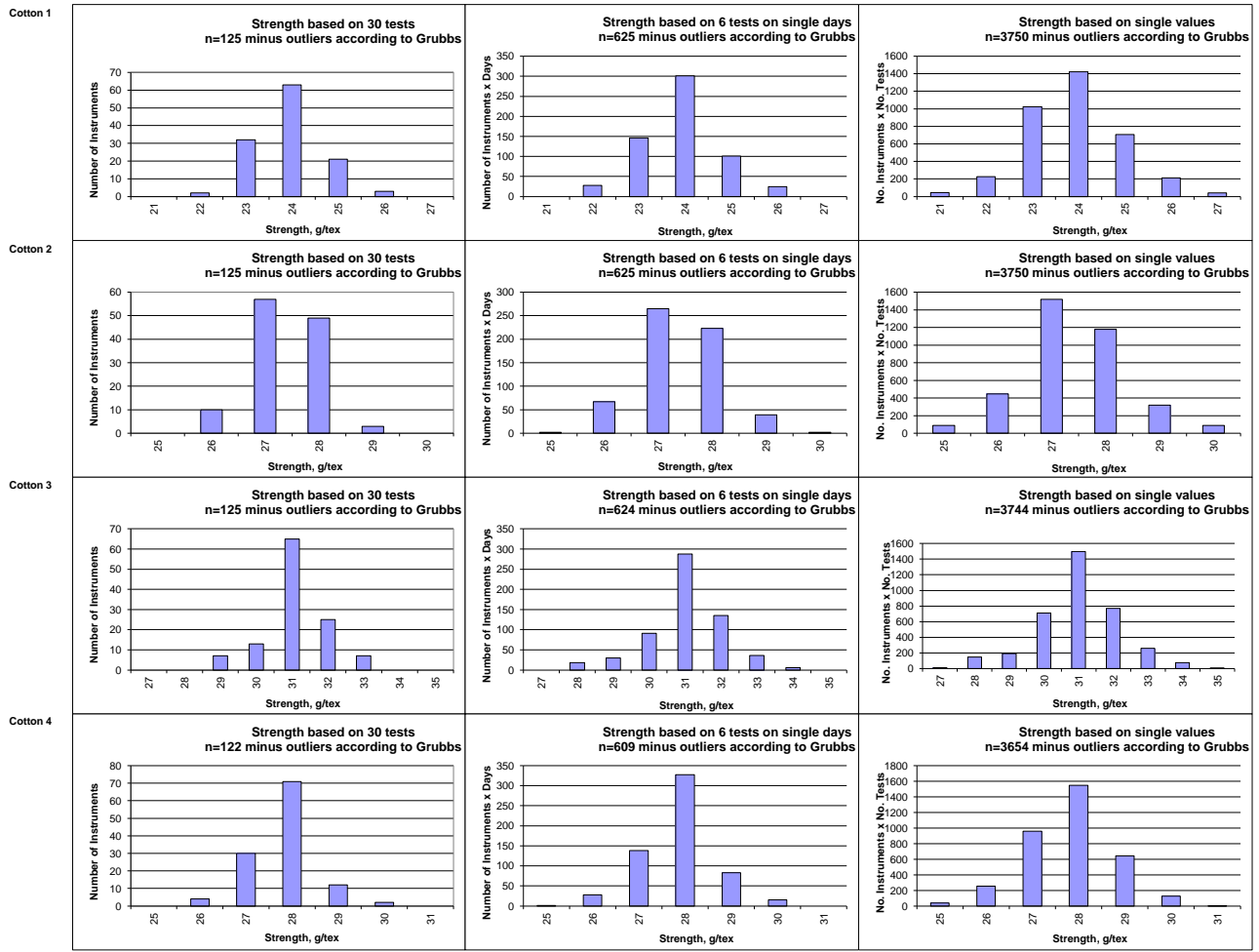
Color +b							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			14.021	12.323	10.817	9.438	
Reference Values for Evaluation			14.021	12.323	10.817	9.438	
Number Of Instruments			122	122	122	119	121
Inter-Instrument Variation	based on 30 tests	SD	0.365	0.249	0.245	0.229	0.272
		CV %	2.6	2.0	2.3	2.4	2.3
	based on 6 tests	SD	0.352	0.272	0.263	0.267	0.288
		CV %	2.5	2.2	2.4	2.8	2.5
	based on single tests	SD	0.373	0.296	0.289	0.285	0.311
		CV %	2.7	2.4	2.7	3.0	2.7
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.114	0.114	0.098	0.091	0.104
		CV %	0.8	0.9	0.9	1.0	0.9
	between single tests on one day	SD	0.107	0.088	0.089	0.085	0.092
		CV %	0.8	0.7	0.8	0.9	0.8
	between all tests on different days	SD	0.171	0.138	0.133	0.122	0.141
		CV %	1.2	1.1	1.2	1.3	1.2

Test Result Distributions
Micronaire



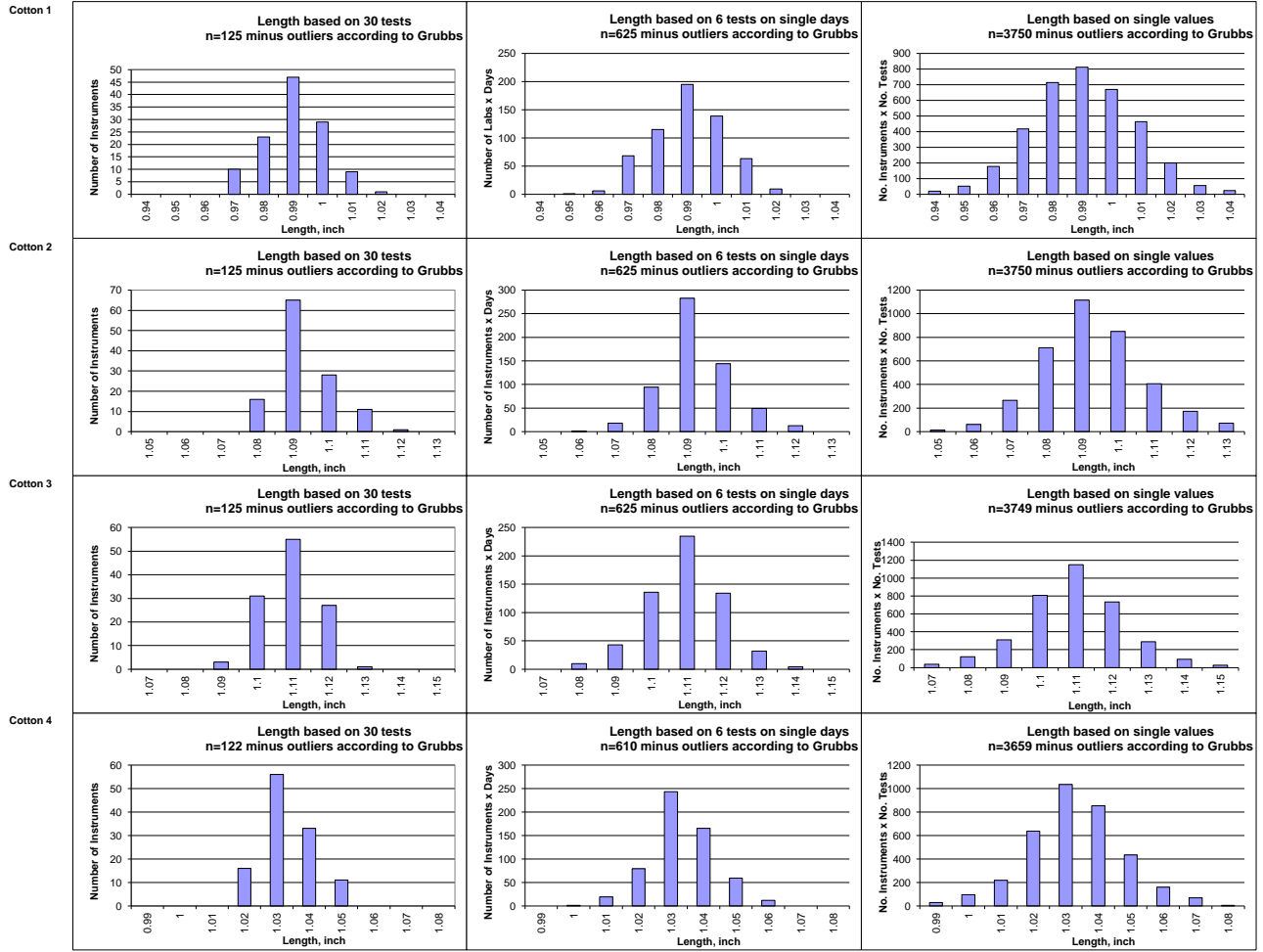
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method.)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Strength



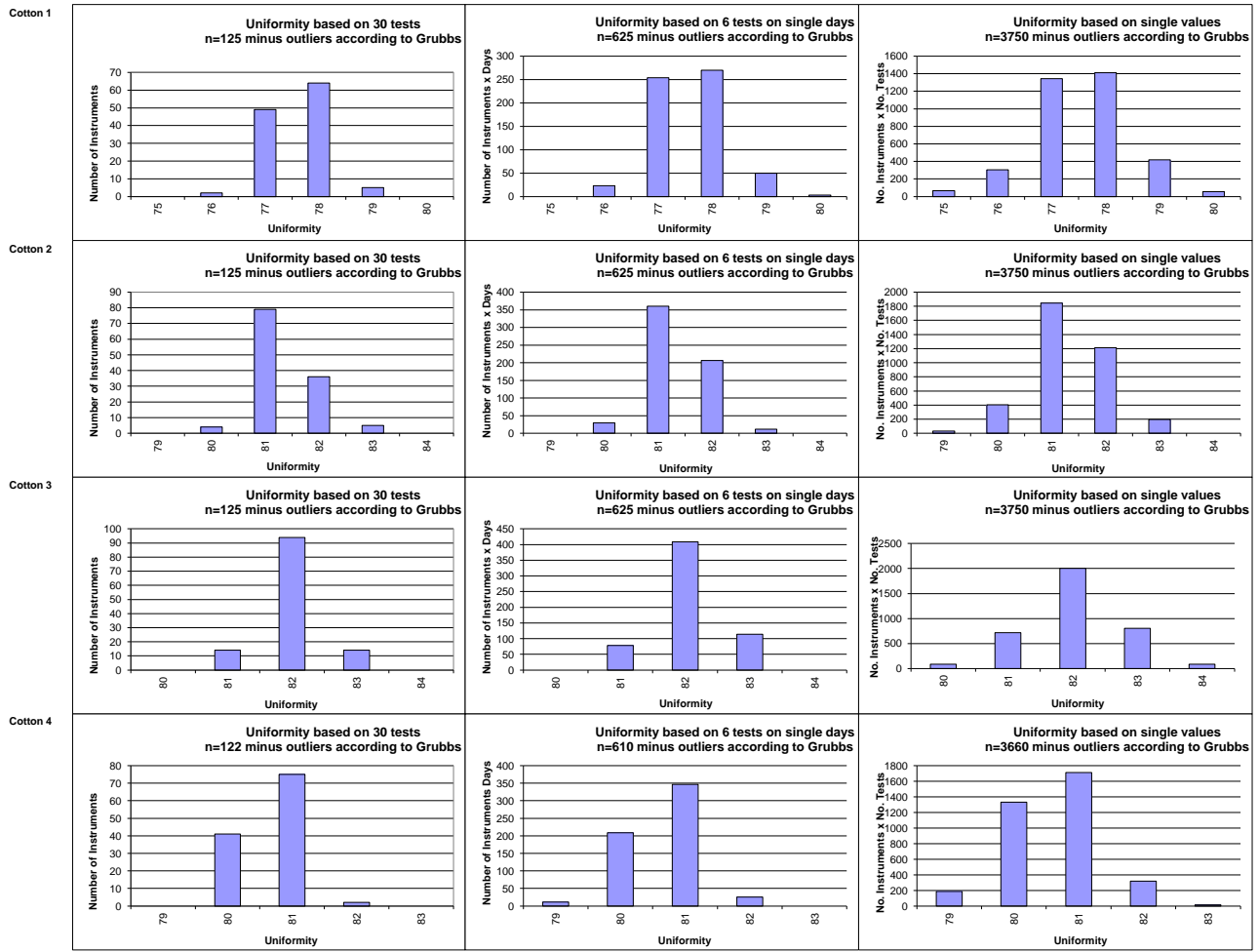
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method) (classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Length



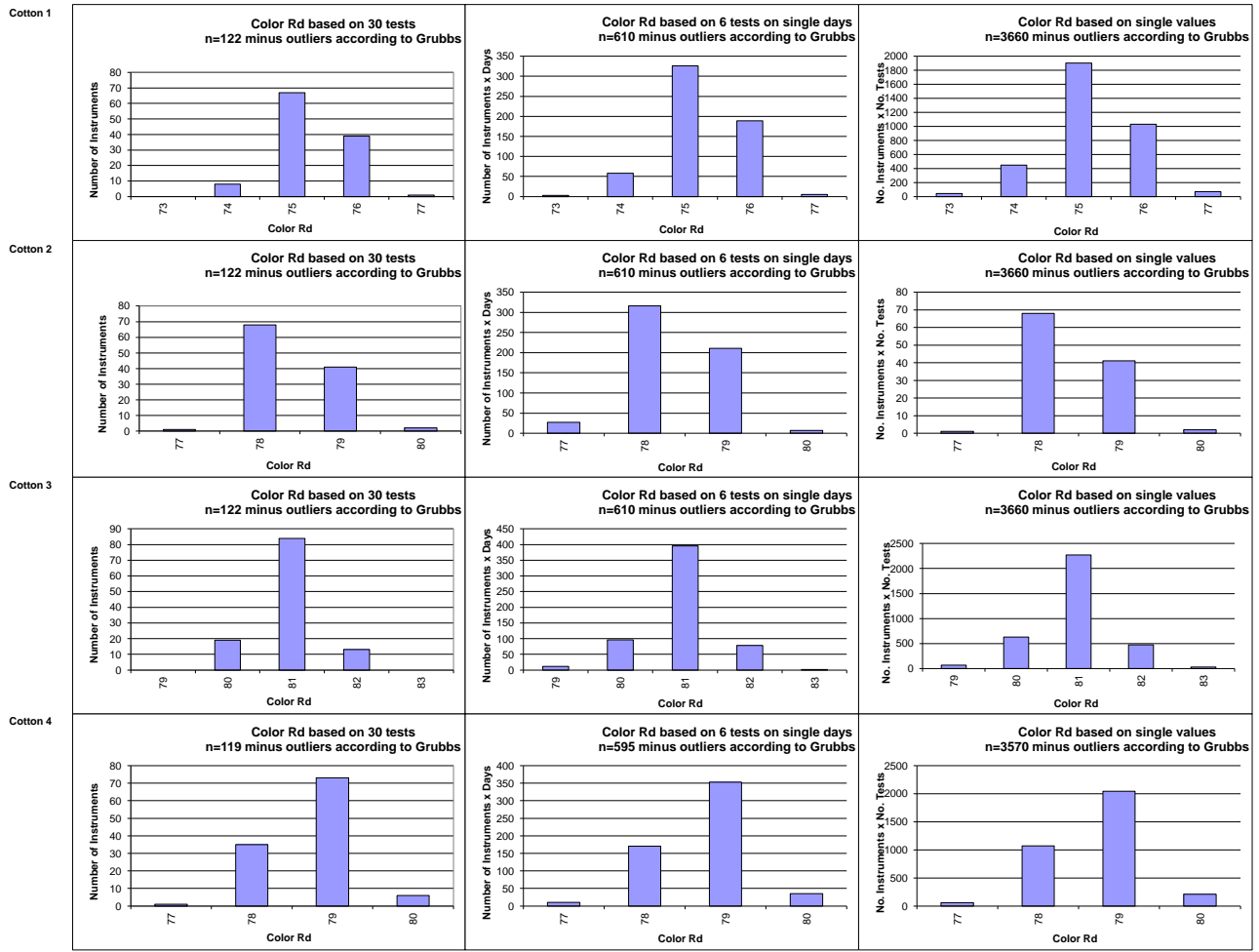
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method) (classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Uniformity



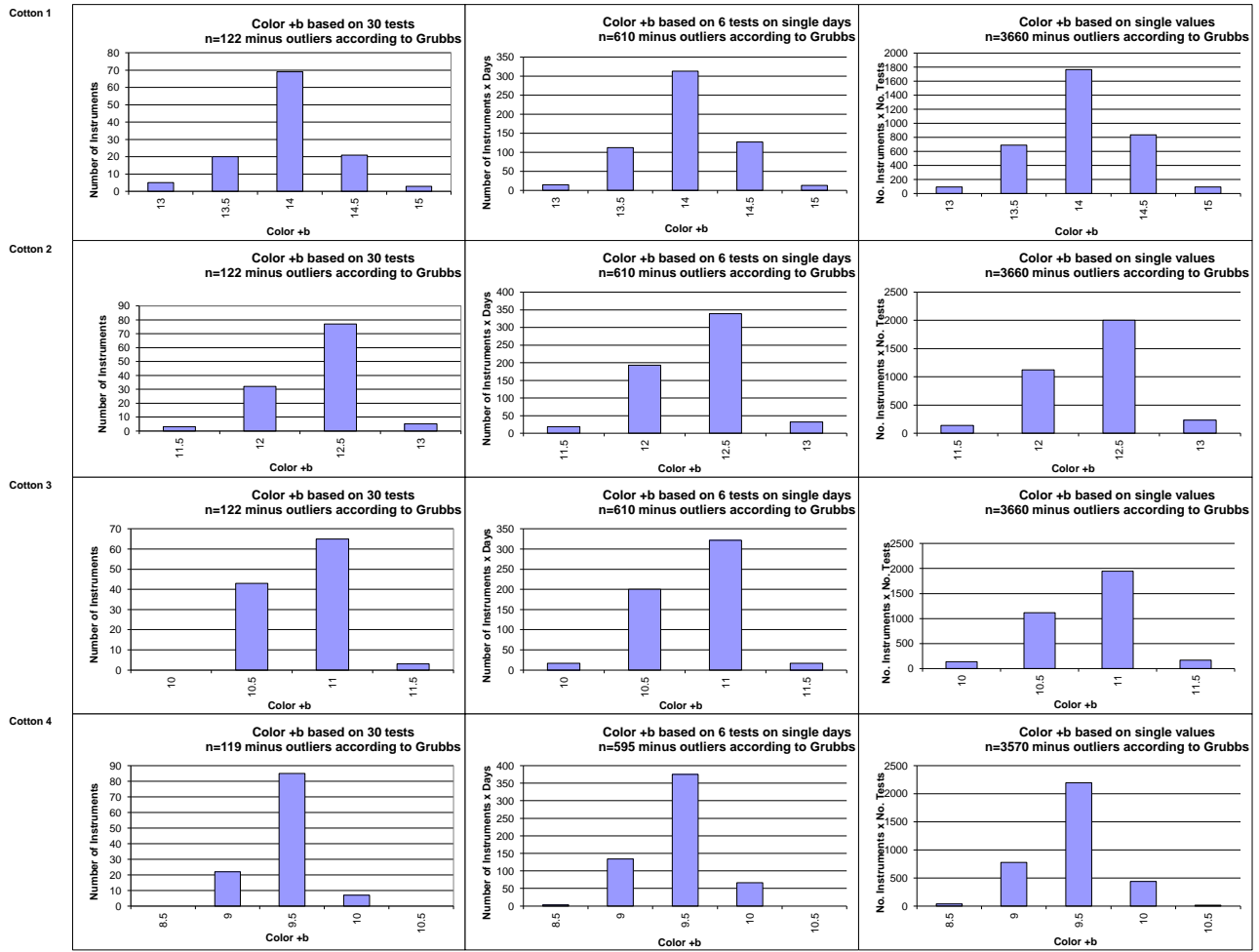
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

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

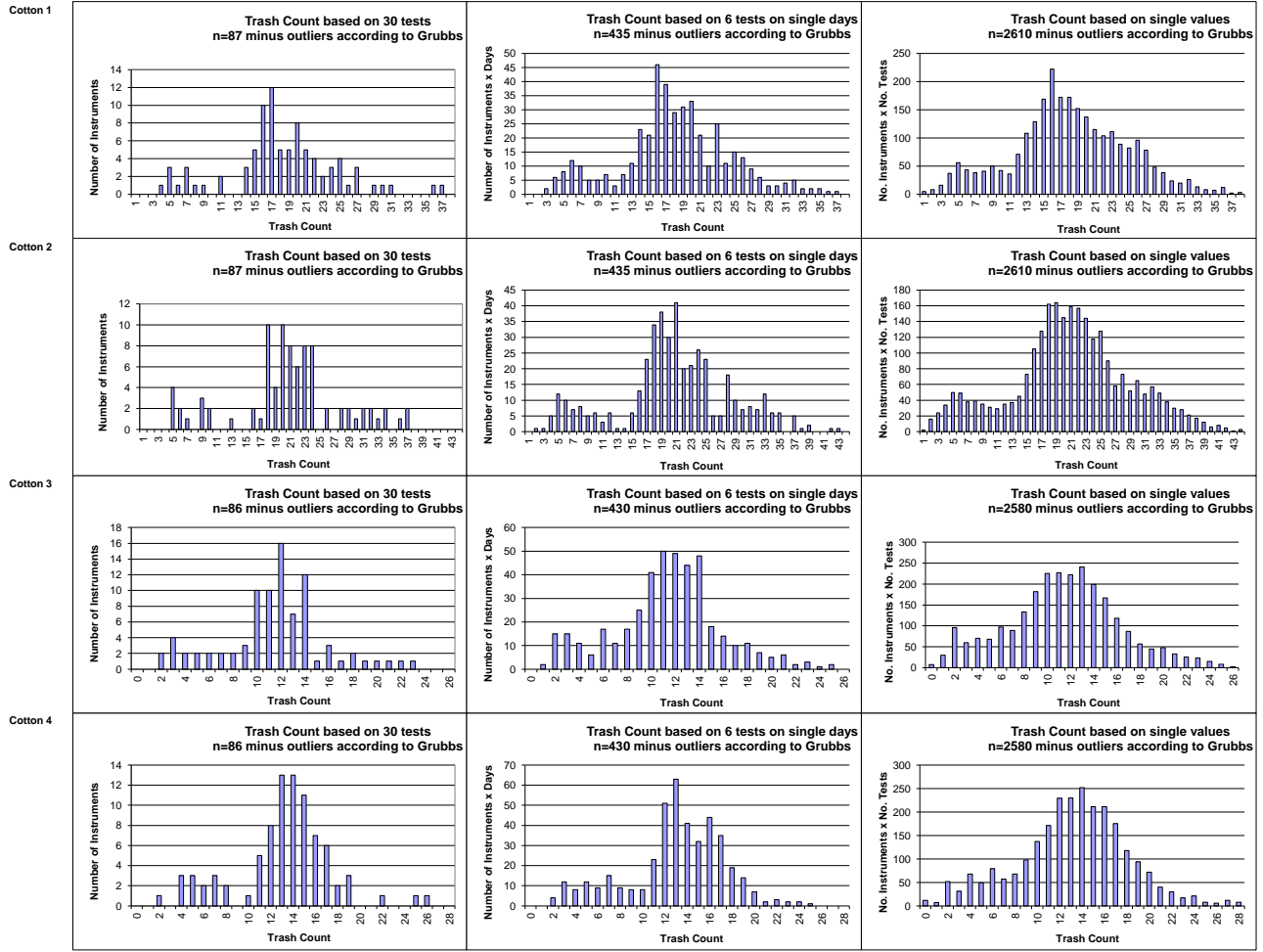
Trash Count							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			18.37	20.87	11.44	13.26	
Reference Values for Evaluation			18.37	20.87	11.44	13.26	
Number Of Instruments			87	87	86	86	87
Inter-Instrument Variation	based on 30 tests	SD	6.43	7.39	4.27	4.33	5.61
		CV %	35.0	35.4	37.3	32.7	35.1
		SD	6.44	7.67	4.54	4.39	5.76
	based on 6 tests	CV %	35.0	36.8	39.7	33.1	36.2
		SD	6.74	8.13	4.92	4.98	6.19
		CV %	36.7	38.9	43.0	37.5	39.0
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	1.62	1.75	1.39	1.33	1.52
		CV %	8.8	8.4	12.1	10.0	9.8
	between single tests on one day	SD	2.01	2.54	1.64	1.83	2.01
		CV %	11.0	12.2	14.3	13.8	12.8
	between all tests on different days	SD	2.74	3.33	2.20	2.60	2.72
		CV %	14.9	15.9	19.2	19.6	17.4

Trash Area							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			0.169	0.173	0.099	0.122	
Reference Values for Evaluation			0.169	0.173	0.099	0.122	
Number Of Instruments			87	87	86	86	87
Inter-Instrument Variation	based on 30 tests	SD	0.053	0.048	0.022	0.026	0.037
		CV %	31.6	28.0	22.4	21.2	25.8
		SD	0.060	0.051	0.028	0.031	0.042
	based on 6 tests	CV %	35.8	29.4	28.2	25.0	29.6
		SD	0.065	0.056	0.035	0.038	0.048
		CV %	38.5	32.6	35.0	30.8	34.2
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.021	0.022	0.010	0.014	0.017
		CV %	12.4	12.5	10.5	11.2	11.7
	between single tests on one day	SD	0.024	0.025	0.016	0.018	0.021
		CV %	14.3	14.4	16.3	14.8	14.9
	between all tests on different days	SD	0.035	0.033	0.020	0.026	0.029
		CV %	20.6	19.1	20.6	21.4	20.4

Maturity							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			84.38	85.15	86.63	88.47	
Reference Values for Evaluation			84.38	85.15	86.63	88.47	
Number Of Instruments			83	83	82	82	83
Inter-Instrument Variation	based on 30 tests	SD	1.16	1.52	1.92	1.78	1.60
		CV %	1.4	1.8	2.2	2.0	1.8
		SD	1.14	1.51	1.90	1.78	1.58
	based on 6 tests	CV %	1.4	1.8	2.2	2.0	1.8
		SD	1.20	1.55	1.83	1.83	1.61
		CV %	1.4	1.8	2.1	2.1	1.9
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.16	0.15	0.15	0.15	0.15
		CV %	0.2	0.2	0.2	0.2	0.2
	between single tests on one day	SD	0.22	0.19	0.26	0.18	0.21
		CV %	0.3	0.2	0.3	0.2	0.2
	between all tests on different days	SD	0.35	0.31	0.38	0.31	0.33
		CV %	0.4	0.4	0.4	0.3	0.4

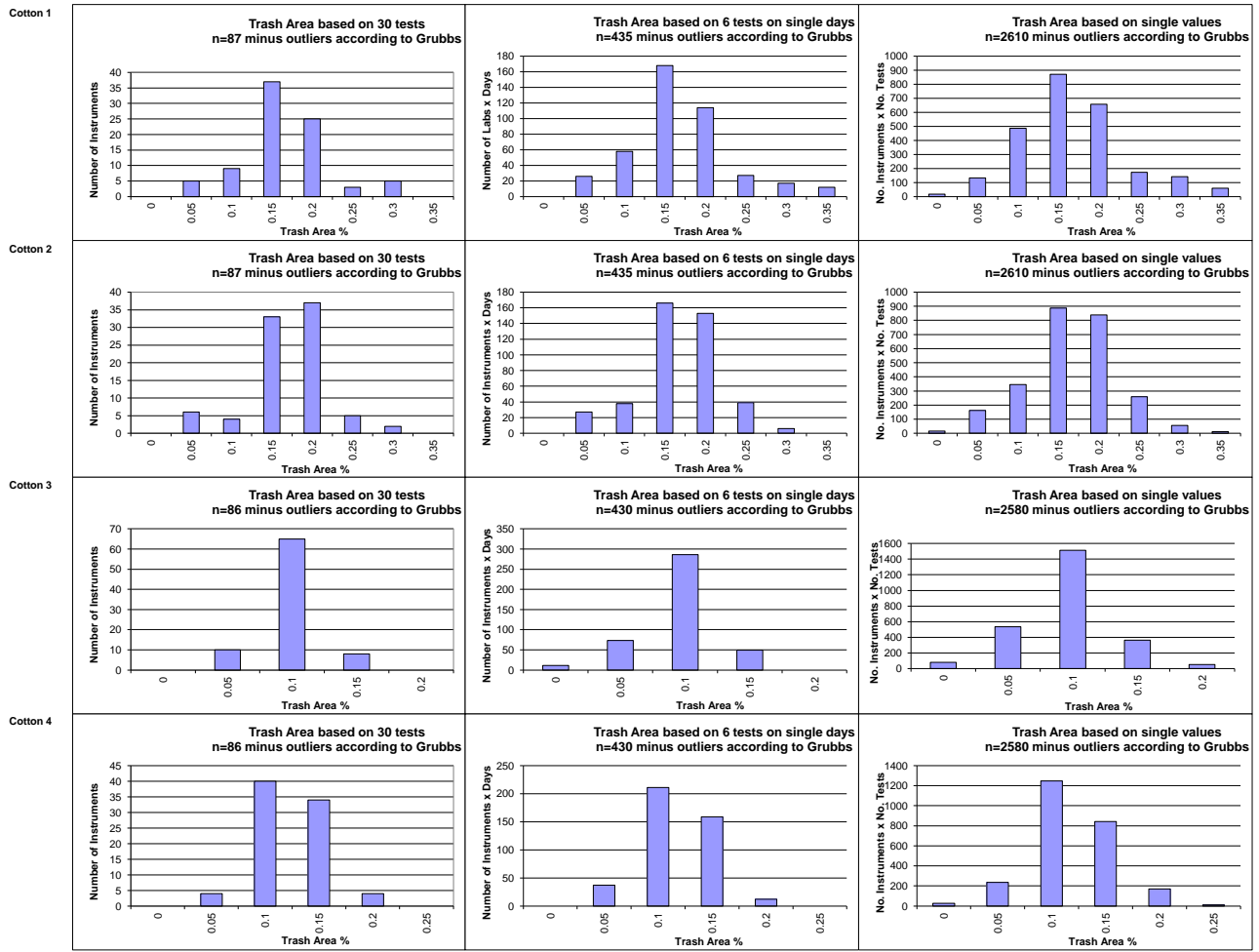
SFI							
			Cotton 1	Cotton 2	Cotton 3	Cotton 4	Average
Average of Instruments (Grubbs)			15.55	10.25	9.16	10.81	
Reference Values for Evaluation			15.55	10.25	9.16	10.81	
Number Of Instruments			91	91	90	90	91
Inter-Instrument Variation	based on 30 tests	SD	1.60	0.91	0.74	0.86	1.03
		CV %	10.3	8.9	8.1	8.0	8.8
	based on 6 tests	SD	1.67	0.96	0.77	0.93	1.08
		CV %	10.8	9.3	8.4	8.6	9.3
	based on single tests	SD	1.87	1.07	0.87	1.06	1.22
		CV %	12.0	10.4	9.5	9.8	10.5
Typical within-instrument Variation (Median)	between different days	SD	0.46	0.27	0.21	0.31	0.31
		CV %	2.9	2.6	2.3	2.8	2.7
	between single tests on one day	SD	0.84	0.53	0.42	0.53	0.58
		CV %	5.4	5.2	4.6	4.9	5.0
	between all tests on different days	SD	0.93	0.58	0.48	0.63	0.66
		CV %	6.0	5.7	5.2	5.8	5.7

Test Result Distributions
Trash Count



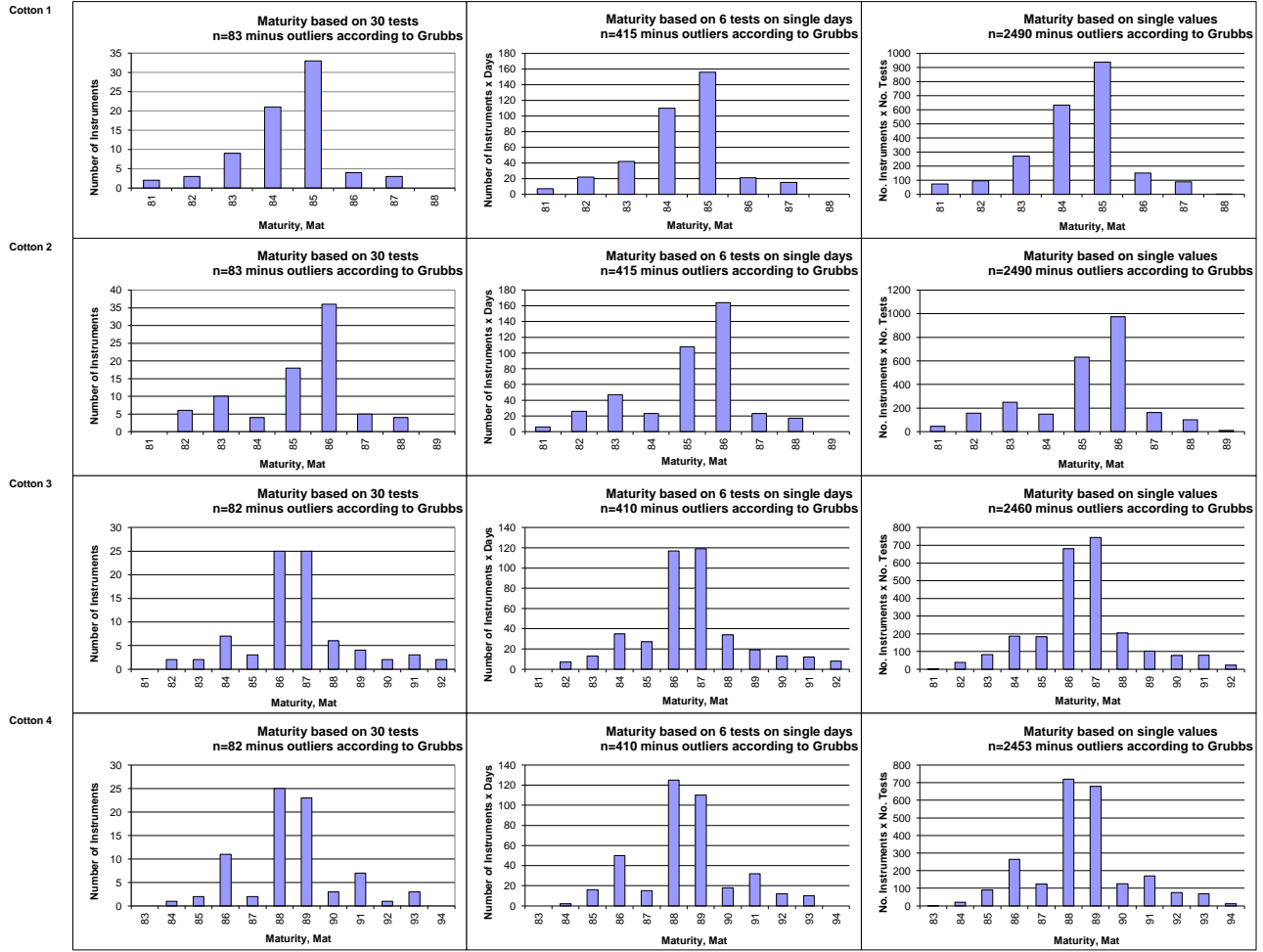
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Trash Area



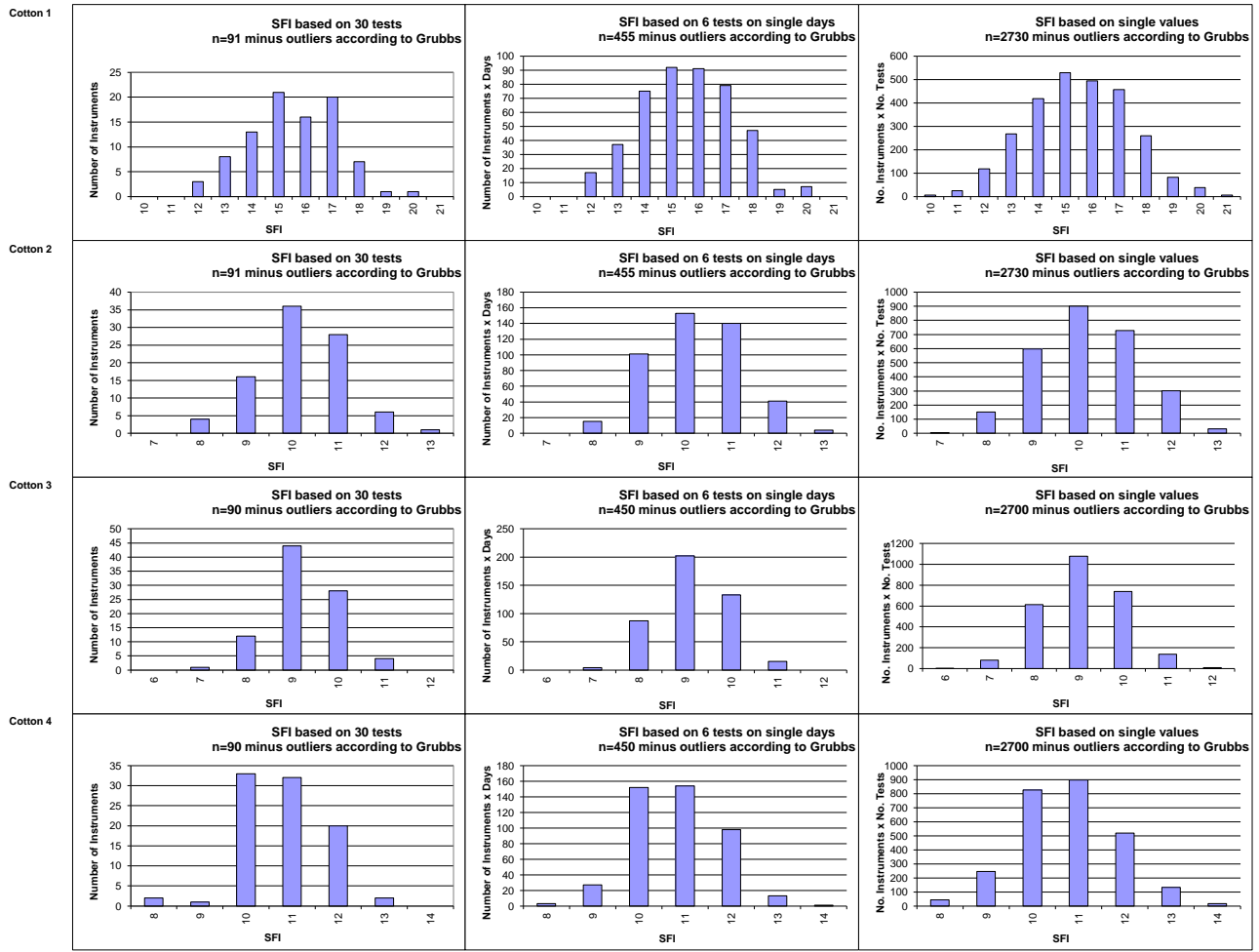
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method) (classes are defined as > lower limit and <= upper limit)

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 2018 - 1 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

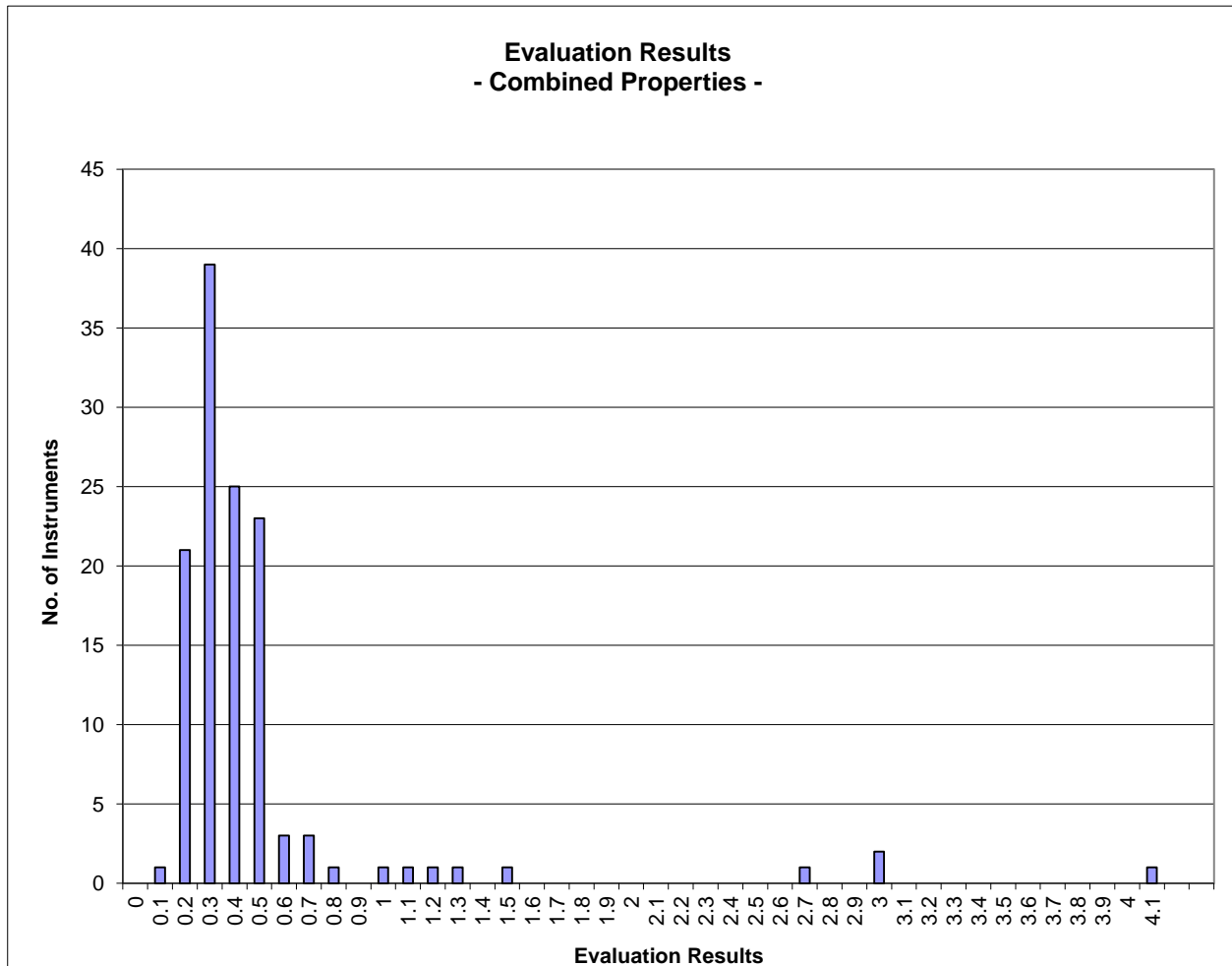
Instrument Evaluation

- Graph of Combined Properties -

According to ICAC CSITC Task Force Recommendations

Global - Round Trial 2018 - 1

		Evaluation Combined Prop.
Statistics	Average	0.49
	Median	0.35
	Best Instrument	0.14
	Worst Instrument	4.07

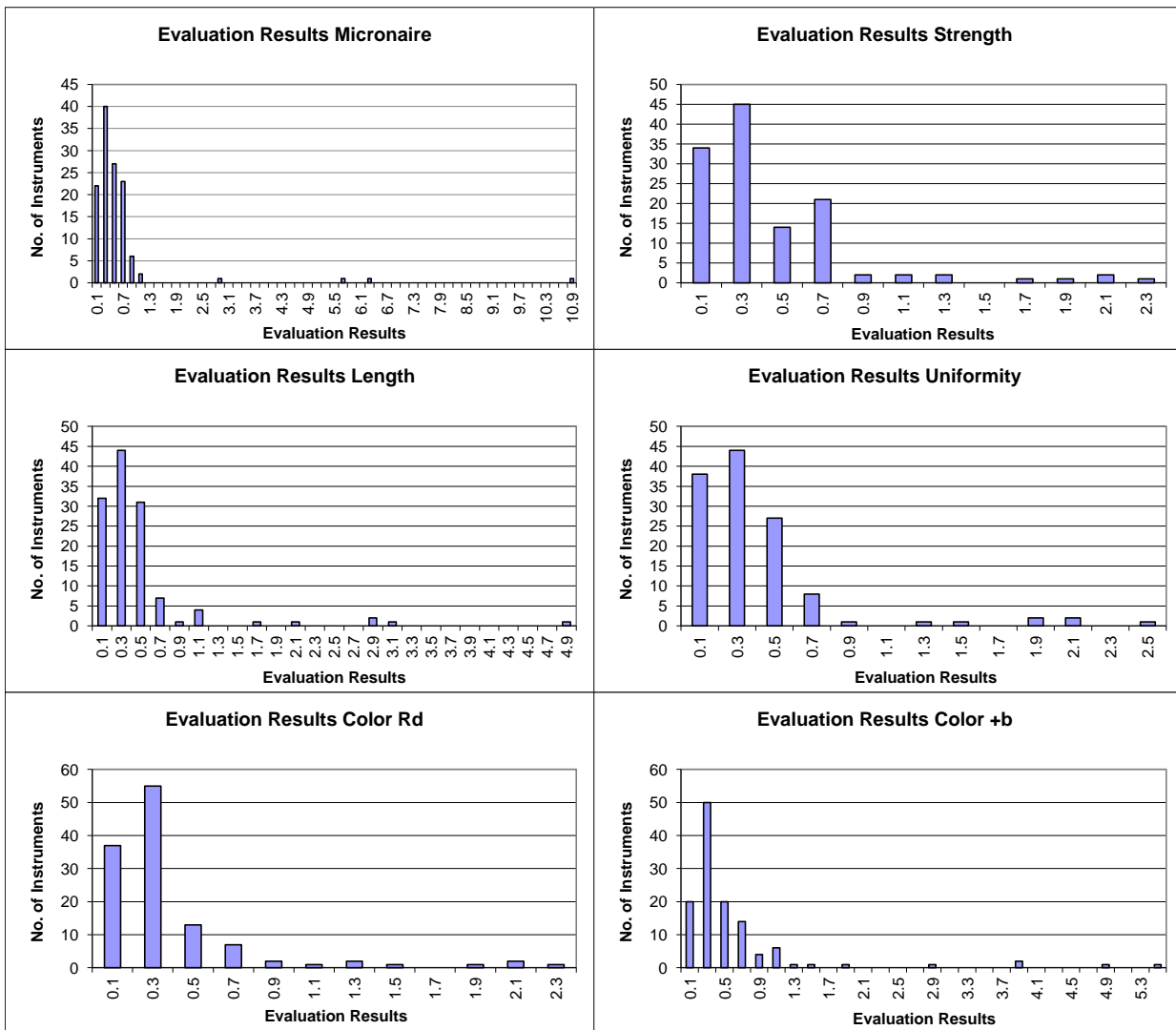


x-Axis shows midpoints of classes

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 2018 - 1

	Evaluation Micronaire	Evaluation Strength	Evaluation Length	Evaluation Uniformity	Evaluation Color Rd	Evaluation Color +b
Statistics	Average	0.62	0.44	0.48	0.41	0.37
	Median	0.40	0.28	0.34	0.31	0.27
	Best Instr.	0.06	0.04	0.07	0.06	0.05
	Worst Instr.	11.00	2.31	4.84	2.45	2.22



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



International Cotton Advisory Committee



CSITC
Global - Round Trial 2018 - 1
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	0.5
	units	g/tex	inch	%	units	units
Average % Results within Limits	97.2	94.9	95.4	98.2	93.8	88.5
Completely within limits	96.8	91.2	92.8	96.0	90.2	77.9
% of Instruments $\geq 75\%$ within limits	96.8	94.4	95.2	96.0	92.6	88.5
% of Instruments $\geq 50\%$ within limits	97.6	96.0	95.2	99.2	94.3	92.6

Percentage of Results Within Limits						
Instrument	Micronaire	Strength	Length	Uniformity	Color Rd	Color +b
GL181-001-03	100	100	100	100	100	100
GL181-001-06	100	100	100	100	100	100
GL181-002-01	100	100	100	100	100	100
GL181-003-02	100	100	100	100	100	100
GL181-003-06	100	100	100	100	0	75
GL181-003-07	100	100	100	100	100	100
GL181-003-08	100	100	100	100	100	100
GL181-004-01	100	100	100	100	100	100
GL181-004-02	100	100	100	100	100	100
GL181-004-03	100	100	100	100	100	100
GL181-004-04	100	100	100	100	100	100
GL181-005-06	100	75	100	100	100	75
GL181-008-01	100	100	100	100	50	100
GL181-009-01	100	100	100	100	100	100
GL181-009-02	100	100	100	100	100	100
GL181-009-03	100	100	100	100	100	100
GL181-009-04	100	100	100	100	100	75
GL181-011-02	100	100	100	100	100	100
GL181-011-03	100	100	100	100	100	100
GL181-012-53	100	100	100	100	100	100
GL181-012-60	100	100	100	100	100	100
GL181-014-01	100	100	100	100	100	100
GL181-016-04	100	100	100	100	100	75
GL181-016-05	100	100	100	100	100	75
GL181-016-06	100	100	100	100	100	100
GL181-018-05	100	100	100	100	75	25
GL181-018-06	100	100	100	100	100	50
GL181-019-01	100	100	100	100	100	75
GL181-019-02	100	100	100	100	100	100
GL181-020-01	100	100	100	100	100	100
GL181-022-01	100	100	100	100	100	100
GL181-022-03	100	100	100	100	100	100
GL181-023-01	100	100	100	100	100	100
GL181-023-02	100	100	100	100	100	100

GL181-024-01	100	100	100	100	100	100
GL181-026-01	0	0	33	67	0	0
GL181-026-02	0	0	33	67	33	0
GL181-026-03	0	33	33	67	33	0
GL181-028-01	100	100	100	100	100	100
GL181-028-02	100	100	100	100	100	100
GL181-029-01	100	100	100	100	100	100
GL181-031-01	100	100	100	100	100	100
GL181-031-02	100	100	100	100	100	100
GL181-033-01	100	100	75	25		
GL181-034-01	100	100	75	100	100	25
GL181-035-01	100	100	100	100	100	50
GL181-036-03	100	100	100	100	75	0
GL181-037-01	100	0	0	100	100	100
GL181-038-04	100	100	100	100	100	100
GL181-039-01	100	100	100	100	100	100
GL181-039-02	100	100	100	100	100	100
GL181-040-01	100	100	100	100	100	25
GL181-041-01	100	100	100	100	100	50
GL181-042-01	100	100	100	100	100	100
GL181-043-31	100	100	100	100	100	100
GL181-043-33	100	100	100	100	100	100
GL181-044-21	100	100	100	100	100	100
GL181-044-25	100	100	100	100	100	100
GL181-045-01	100	100	100	100	100	100
GL181-047-01	100	100	100	100	100	100
GL181-048-19	100	100	100	100	100	100
GL181-049-01	100	100	100	100	100	100
GL181-050-02	100	100	100	100	100	100
GL181-050-03	100	100	100	100	100	75
GL181-050-07	100	100	100	100	50	100
GL181-050-08	100	100	100	100	100	100
GL181-051-01	100	100	100	100	100	75
GL181-052-41	100	100	100	100	100	100
GL181-052-42	100	100	100	100	100	100
GL181-053-01	100	100	100	100	100	100
GL181-056-01	100	100	100	100	100	100
GL181-057-02	100	100	100	100		
GL181-057-03	100	100	100	100	100	100
GL181-058-02	100	100	100	100	100	100
GL181-059-01	100	75	100	100	100	75
GL181-059-02	100	75	100	100	100	75
GL181-061-03	100	100	100	100	100	50
GL181-061-04	100	100	100	100	100	75
GL181-061-05	100	100	100	100	100	75
GL181-062-01	100	100	100	100	100	100
GL181-064-01	100	100	100	100	100	100
GL181-064-02	100	100	100	100	100	100
GL181-066-04	50	50	0	50	25	0
GL181-067-15		100	100	100		
GL181-068-01	100	100	100	100	100	100
GL181-069-02	100	75	100	100	25	0
GL181-070-08	100	100	100	100	100	100
GL181-070-09	100	100	100	100	100	100
GL181-071-01	100	100	100	100	100	100

GL181-071-02	100	100	100	100	100	100
GL181-071-06	100	100	100	100	100	100
GL181-072-01	100	50	100	100	0	100
GL181-073-03	100	100	100	100	100	100
GL181-074-01	100	100	100	100	100	100
GL181-074-02	100	100	100	100	100	100
GL181-074-04	100	100	100	100	100	100
GL181-075-01	100	100	0	100	100	100
GL181-076-01	100	100	100	100	100	100
GL181-078-32	100	100	100	100	100	100
GL181-078-33	100	100	100	100	100	100
GL181-079-01	100	100	100	100	100	100
GL181-079-02	100	100	100	100	100	100
GL181-080-05	100	100	75	100	100	100
GL181-080-12	100	100	100	100	100	100
GL181-081-01	100	100	100	100	100	100
GL181-082-03	100	100	100	100	100	100
GL181-083-01	100	100	100	100	100	100
GL181-084-21	100	100	100	100	100	100
GL181-084-22	100	100	100	100	100	100
GL181-085-01	100	100	100	100	100	100
GL181-085-02	100	100	100	100	100	75
GL181-086-01	100	100	100	100	100	100
GL181-086-02	100	100	100	100	100	100
GL181-087-02	100	100	100	100	100	100
GL181-088-01	100	100	100	100	100	100
GL181-088-02	100	100	100	100	100	100
GL181-089-01	100	100	100	100	100	100
GL181-089-02	100	100	100	100	100	100
GL181-090-01	100	100	100	100	100	50
GL181-091-03	100	100	100	100	100	100
GL181-091-06	100	100	100	100	100	100
GL181-092-01	100	100	100	100	100	100
GL181-092-03	100	100	100	100	100	100
GL181-093-01	100	25	100	100	75	100
GL181-094-03	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	95.8	90.9	93.4	96.3	92.2	84.0
% of Instruments 100% within limits	60.5	36.8	33.6	50.4	60.7	31.1
% of Instruments ≥95% within limits	88.7	64.0	76.8	86.4	79.5	44.3
% of Instruments ≥75% within limits	96.0	90.4	93.6	96.0	91.0	80.3
% of Instruments ≥65% within limits	96.0	93.6	95.2	97.6	91.8	84.4
% of Instruments ≥50% within limits	96.8	96.0	96.0	98.4	93.4	91.0

Percentage of Results Within Limits						
Instrument	Micronaire	Strength	Length	Uniformity	Color Rd	Color +b
GL181-001-03	100	100	100	100	100	100
GL181-001-06	100	100	100	100	100	100
GL181-002-01	98	90	98	100	100	99
GL181-003-02	100	100	99	100	88	93
GL181-003-06	98	95	94	97	13	77
GL181-003-07	92	94	83	95	81	83
GL181-003-08	100	82	98	98	99	79
GL181-004-01	100	98	100	100	100	100
GL181-004-02	100	100	100	100	100	100
GL181-004-03	100	100	100	100	100	88
GL181-004-04	99	99	100	100	100	83
GL181-005-06	86	74	96	99	98	70
GL181-008-01	98	92	95	95	40	84
GL181-009-01	99	100	99	100	100	100
GL181-009-02	100	100	100	100	100	100
GL181-009-03	100	100	100	100	100	100
GL181-009-04	100	100	93	100	100	79
GL181-011-02	99	85	100	100	100	90
GL181-011-03	100	99	99	99	100	94
GL181-012-53	100	97	89	85	100	100
GL181-012-60	100	99	100	100	100	100
GL181-014-01	97	91	99	99	100	98
GL181-016-04	100	100	90	100	100	56
GL181-016-05	100	99	93	100	100	72
GL181-016-06	100	100	93	98	100	83
GL181-018-05	98	98	99	93	68	27
GL181-018-06	94	96	99	98	100	53
GL181-019-01	100	98	98	100	77	57
GL181-019-02	100	100	100	100	100	99
GL181-020-01	100	98	98	98	100	100

GL181-022-01	98	100	100	100	100	100
GL181-022-03	98	100	100	100	100	100
GL181-023-01	98	93	100	100	100	88
GL181-023-02	99	88	95	100	100	93
GL181-024-01	99	82	99	95	100	90
GL181-026-01	0	16	32	62	22	0
GL181-026-02	12	19	42	66	37	9
GL181-026-03	7	22	39	67	28	7
GL181-028-01	100	100	100	100	100	100
GL181-028-02	100	100	100	100	100	100
GL181-029-01	100	100	98	100	99	93
GL181-031-01	98	87	93	98	98	82
GL181-031-02	98	87	93	98	98	82
GL181-033-01	100	98	83	35		
GL181-034-01	100	91	78	100	78	51
GL181-035-01	100	99	100	100	98	45
GL181-036-03	63	87	100	100	59	10
GL181-037-01	100	10	18	82	100	95
GL181-038-04	98	98	91	94	100	95
GL181-039-01	100	99	96	100	100	100
GL181-039-02	100	100	98	100	99	99
GL181-040-01	100	100	96	100	88	30
GL181-041-01	95	80	98	100	99	39
GL181-042-01	100	100	100	100	100	94
GL181-043-31	100	98	97	91	100	93
GL181-043-33	100	100	96	98	100	94
GL181-044-21	100	98	100	99	100	100
GL181-044-25	100	100	99	96	100	100
GL181-045-01	99	98	98	100	99	92
GL181-047-01	100	98	96	99	87	77
GL181-048-19	100	99	98	100	98	100
GL181-049-01	98	88	98	98	100	95
GL181-050-02	98	93	99	99	100	98
GL181-050-03	91	82	83	84	89	85
GL181-050-07	98	93	96	98	63	94
GL181-050-08	99	98	96	97	100	100
GL181-051-01	95	81	92	98	100	70
GL181-052-41	93	93	99	97	100	100
GL181-052-42	98	91	99	100	100	100
GL181-053-01	100	99	100	100	100	98
GL181-056-01	100	88	100	99	100	98
GL181-057-02	100	81	99	99		
GL181-057-03	100	100	99	100	100	98
GL181-058-02	100	100	96	100	99	84
GL181-059-01	87	74	88	96	94	66
GL181-059-02	88	76	92	98	97	66
GL181-061-03	98	100	100	100	100	53
GL181-061-04	97	100	96	98	100	38
GL181-061-05	100	99	99	98	98	53
GL181-062-01	100	96	100	99	100	100
GL181-064-01	100	98	94	100	100	95
GL181-064-02	100	99	98	98	100	90
GL181-066-04	48	56	0	43	26	12
GL181-067-15		64	73	83		
GL181-068-01	100	100	100	100	100	100

GL181-069-02	99	86	83	88	23	13
GL181-070-08	100	80	100	100	100	97
GL181-070-09	100	89	100	99	100	93
GL181-071-01	100	100	100	100	100	100
GL181-071-02	100	100	100	100	100	100
GL181-071-06	100	100	100	100	100	100
GL181-072-01	91	56	71	85	18	93
GL181-073-03	99	95	98	98	100	100
GL181-074-01	100	86	100	100	90	77
GL181-074-02	99	66	93	100	98	100
GL181-074-04	100	99	99	100	100	100
GL181-075-01	96	74	55	97	90	100
GL181-076-01	100	100	100	100	100	99
GL181-078-32	100	100	99	98	100	100
GL181-078-33	100	100	98	97	100	100
GL181-079-01	100	100	100	99	100	100
GL181-079-02	100	100	100	99	100	100
GL181-080-05	100	99	78	100	99	89
GL181-080-12	100	100	98	100	98	93
GL181-081-01	100	100	100	100	100	94
GL181-082-03	98	96	100	98	98	97
GL181-083-01	100	89	98	99	100	97
GL181-084-21	100	100	100	89	100	100
GL181-084-22	100	90	99	98	100	100
GL181-085-01	100	100	98	100	93	82
GL181-085-02	88	86	99	100	77	64
GL181-086-01	100	100	98	100	100	87
GL181-086-02	100	100	100	100	96	91
GL181-087-02	100	100	98	100	98	93
GL181-088-01	100	100	99	100	98	93
GL181-088-02	100	100	100	100	100	94
GL181-089-01	99	98	97	100	99	87
GL181-089-02	99	98	98	98	99	91
GL181-090-01	99	83	100	98	88	51
GL181-091-03	100	100	100	100	100	100
GL181-091-06	100	100	100	100	100	100
GL181-092-01	100	93	99	99	100	92
GL181-092-03	100	98	98	99	100	92
GL181-093-01	100	24	83	91	75	92
GL181-094-03	99	98	99	92	97	89