International Cotton Advisory Committee

CSITC
Global - Round Trial 2017 - 2
General Evaluation

Section One: Result Distribution
Section Two: Instrument Evaluation
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Section One: Result Distribution

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Optional Parameters
- -Summary Table
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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 2017 - 2

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

Micronaire							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			4.596	4.176	3.599	3.674	
Reference Values for Evaluation			4.596	4.176	3.599	3.674	
Number Of Instruments			124	124	124	124	**124**
Inter-Instrument Variation	based on 30 tests	SD	0.043	0.059	0.068	0.060	**0.058**
		CV %	0.9	1.4	1.9	1.6	**1.5**
	based on 6 tests	SD	0.048	0.062	0.072	0.063	**0.061**
		CV %	1.1	1.5	2.0	1.7	**1.6**
	based on single tests	SD	0.060	0.073	0.080	0.073	**0.071**
		CV %	1.3	1.7	2.2	2.0	**1.8**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.022	0.020	0.022	0.022	**0.022**
		CV %	0.5	0.5	0.6	0.6	**0.5**
	between single tests on one day	SD	0.034	0.033	0.033	0.036	**0.034**
		CV %	0.7	0.8	0.9	1.0	**0.9**
	between all tests on different days	SD	0.042	0.041	0.042	0.043	**0.042**
		CV %	0.9	1.0	1.2	1.2	**1.1**

Strength							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			26.966	32.088	25.974	22.280	
Reference Values for Evaluation			26.966	32.088	25.974	22.280	
Number Of Instruments			124	124	124	124	**124**
Inter-Instrument Variation	based on 30 tests	SD	0.488	1.052	0.552	0.658	**0.687**
		CV %	1.8	3.3	2.1	3.0	**2.5**
	based on 6 tests	SD	0.729	1.110	0.712	0.731	**0.821**
		CV %	2.7	3.5	2.7	3.3	**3.0**
	based on single tests	SD	0.850	1.240	0.857	0.866	**0.953**
		CV %	3.2	3.9	3.3	3.9	**3.6**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.263	0.355	0.283	0.255	**0.289**
		CV %	1.0	1.1	1.1	1.1	**1.1**
	between single tests on one day	SD	0.452	0.550	0.500	0.494	**0.499**
		CV %	1.7	1.7	1.9	2.2	**1.9**
	between all tests on different days	SD	0.533	0.675	0.587	0.549	**0.586**
		CV %	2.0	2.1	2.3	2.5	**2.2**

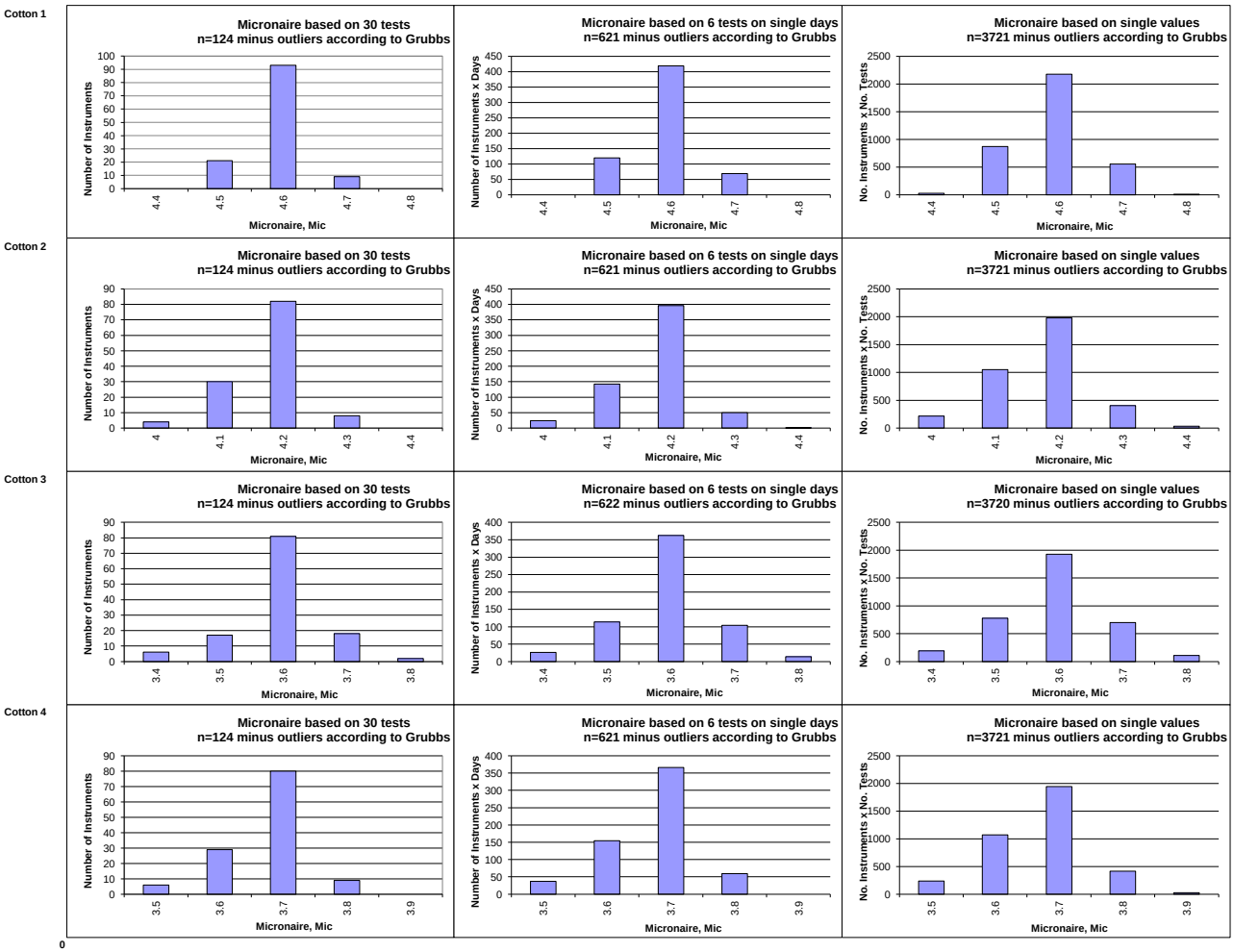
Length							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			1.0329	1.1601	1.0870	0.9811	
Reference Values for Evaluation			1.0329	1.1601	1.0870	0.9811	
Number Of Instruments			124	124	124	124	**124**
Inter-Instrument Variation	based on 30 tests	SD	0.0098	0.0128	0.0098	0.0110	**0.0108**
		CV %	0.9	1.1	0.9	1.1	**1.0**
	based on 6 tests	SD	0.0111	0.0138	0.0118	0.0124	**0.0123**
		CV %	1.1	1.2	1.1	1.3	**1.2**
	based on single tests	SD	0.0143	0.0166	0.0157	0.0155	**0.0155**
		CV %	1.4	1.4	1.4	1.6	**1.5**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.0051	0.0058	0.0058	0.0047	**0.0053**
		CV %	0.5	0.5	0.5	0.5	**0.5**
	between single tests on one day	SD	0.0089	0.0100	0.0114	0.0106	**0.0102**
		CV %	0.9	0.9	1.1	1.1	**1.0**
	between all tests on different days	SD	0.0100	0.0113	0.0126	0.0112	**0.0113**
		CV %	1.0	1.0	1.2	1.1	**1.1**

Uniformity							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			80.428	83.835	79.632	77.770	
Reference Values for Evaluation			80.428	83.835	79.632	77.770	
Number Of Instruments			124	124	124	124	**124**
Inter-Instrument Variation	based on 30 tests	SD	0.292	0.364	0.511	0.431	**0.400**
		CV %	0.4	0.4	0.6	0.6	**0.5**
	based on 6 tests	SD	0.438	0.462	0.575	0.535	**0.503**
		CV %	0.5	0.6	0.7	0.7	**0.6**
	based on single tests	SD	0.635	0.624	0.829	0.777	**0.716**
		CV %	0.8	0.7	1.0	1.0	**0.9**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.246	0.257	0.269	0.287	**0.265**
		CV %	0.3	0.3	0.3	0.4	**0.3**
	between single tests on one day	SD	0.502	0.465	0.561	0.560	**0.522**
		CV %	0.6	0.6	0.7	0.7	**0.7**
	between all tests on different days	SD	0.563	0.516	0.612	0.638	**0.582**
		CV %	0.7	0.6	0.8	0.8	**0.7**

Color Rd							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			77.593	74.814	72.787	76.717	
Reference Values for Evaluation			77.593	74.814	72.787	76.717	
Number Of Instruments			123	123	123	123	**123**
Inter-Instrument Variation	based on 30 tests	SD	0.326	0.569	0.623	0.437	**0.489**
		CV %	0.4	0.8	0.9	0.6	**0.7**
	based on 6 tests	SD	0.369	0.612	0.666	0.537	**0.546**
		CV %	0.5	0.8	0.9	0.7	**0.7**
	based on single tests	SD	0.428	0.646	0.693	0.585	**0.588**
		CV %	0.6	0.9	1.0	0.8	**0.8**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.132	0.149	0.156	0.166	**0.151**
		CV %	0.2	0.2	0.2	0.2	**0.2**
	between single tests on one day	SD	0.159	0.181	0.171	0.195	**0.176**
		CV %	0.2	0.2	0.2	0.3	**0.2**
	between all tests on different days	SD	0.234	0.264	0.243	0.301	**0.260**
		CV %	0.3	0.4	0.3	0.4	**0.3**

Color +b							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			8.644	14.933	16.056	9.103	
Reference Values for Evaluation			8.644	14.933	16.056	9.103	
Number Of Instruments			123	123	123	123	**123**
Inter-Instrument Variation	based on 30 tests	SD	0.193	0.362	0.349	0.169	**0.268**
		CV %	2.2	2.4	2.2	1.9	**2.2**
	based on 6 tests	SD	0.209	0.381	0.375	0.207	**0.293**
		CV %	2.4	2.6	2.3	2.3	**2.4**
	based on single tests	SD	0.237	0.399	0.394	0.240	**0.318**
		CV %	2.7	2.7	2.5	2.6	**2.6**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.074	0.100	0.095	0.074	**0.086**
		CV %	0.9	0.7	0.6	0.8	**0.7**
	between single tests on one day	SD	0.079	0.126	0.111	0.092	**0.102**
		CV %	0.9	0.8	0.7	1.0	**0.9**
	between all tests on different days	SD	0.116	0.168	0.154	0.128	**0.141**
		CV %	1.3	1.1	1.0	1.4	**1.2**

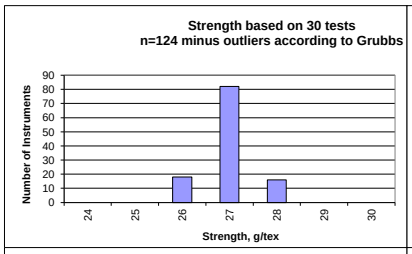
Test Result Distributions
Micronaire

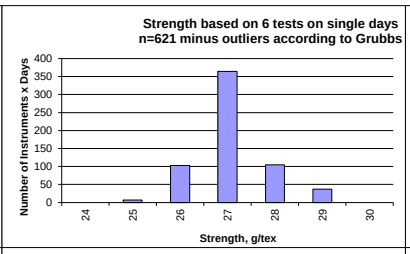


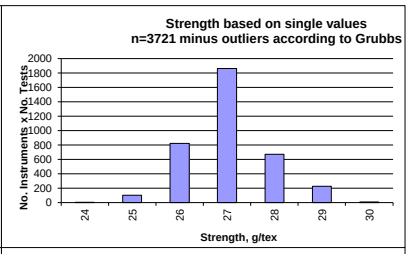
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method.)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Strength

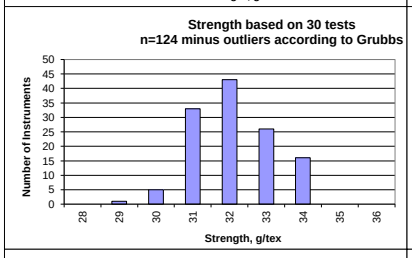
Cotton 1

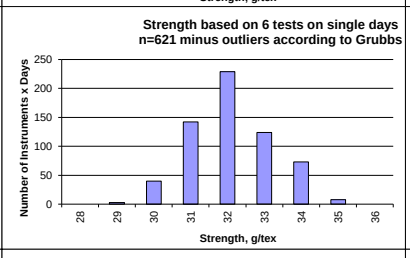


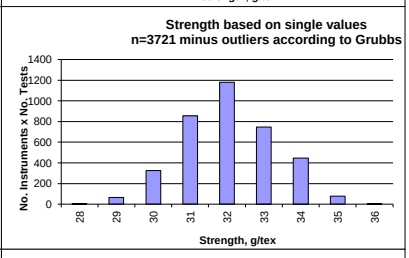




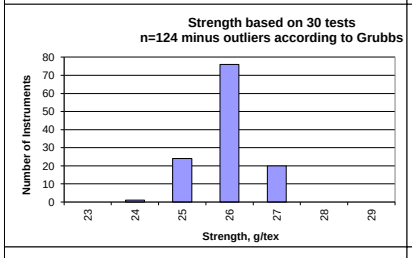
Cotton 2

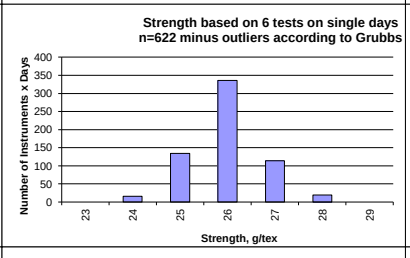


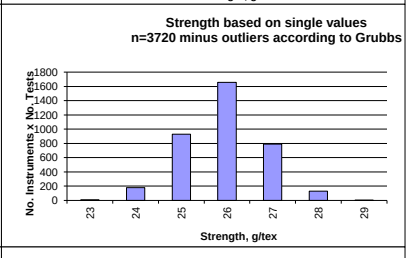




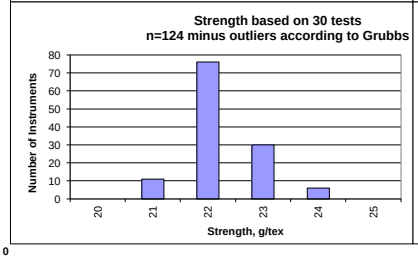
Cotton 3

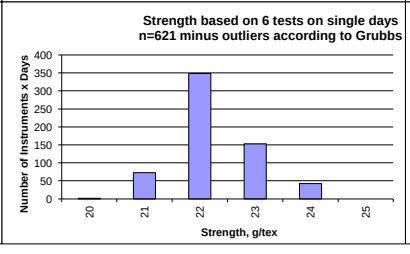


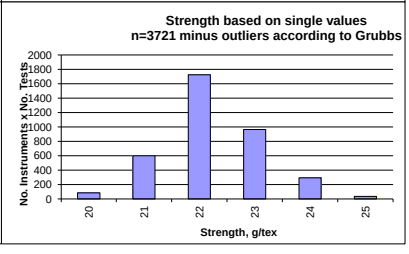




Cotton 4







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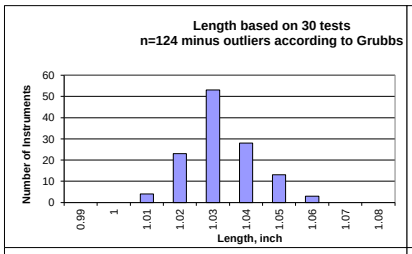
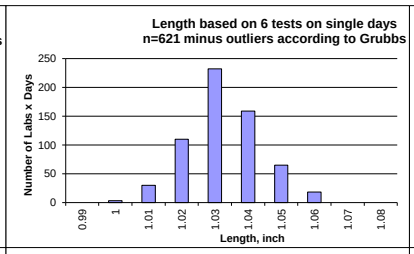
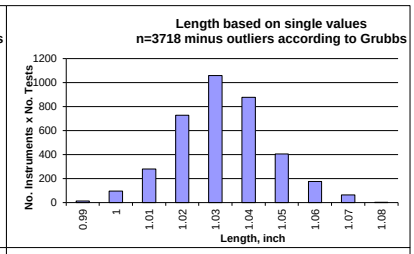
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Length

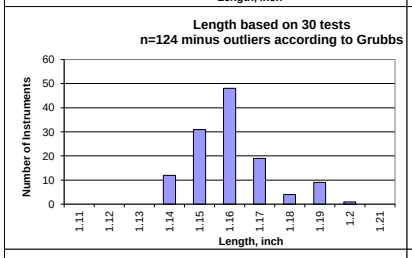
Cotton 1

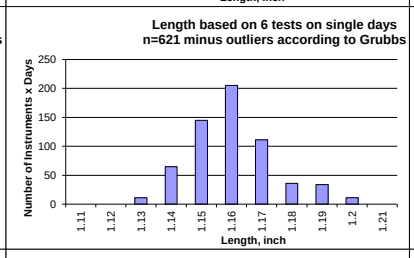


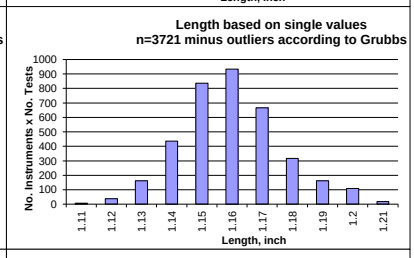




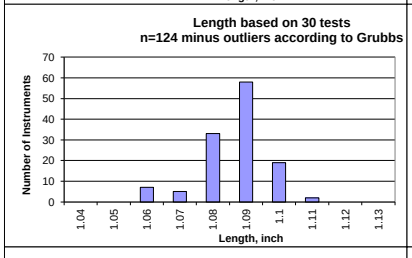
Cotton 2

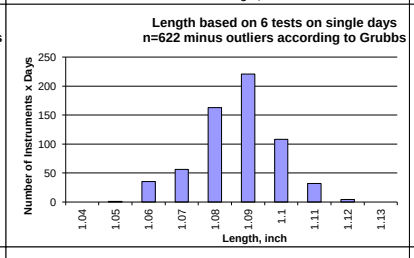


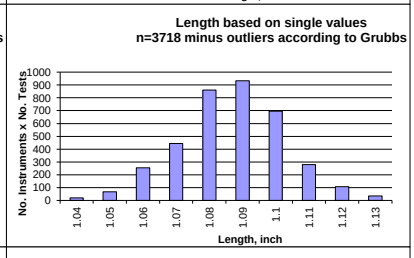




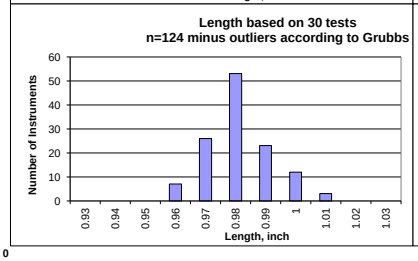
Cotton 3

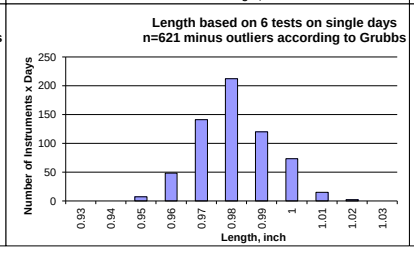


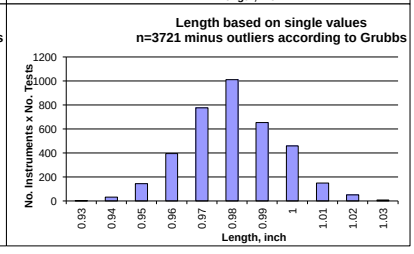




Cotton 4







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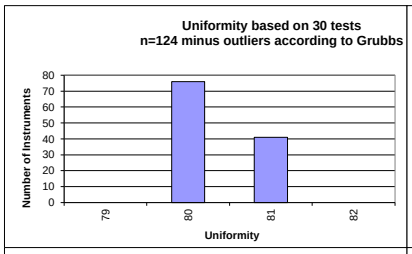
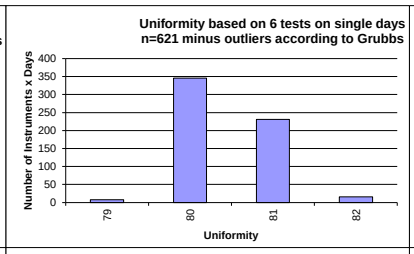
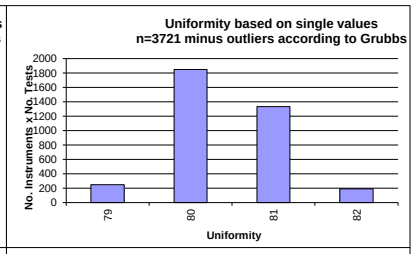
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Uniformity

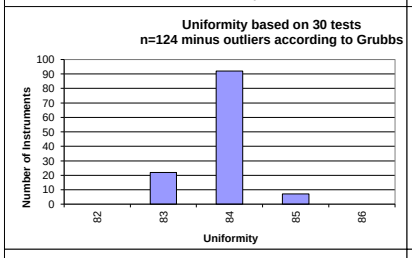
Cotton 1

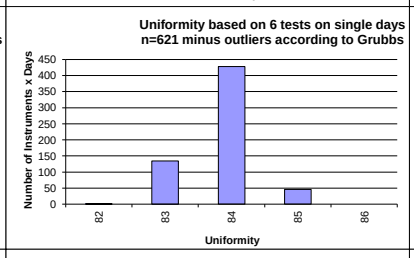


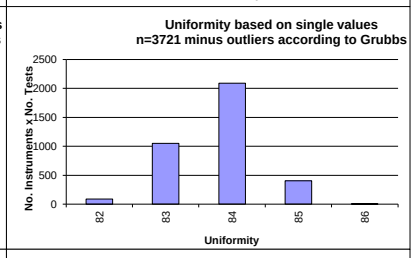




Cotton 2







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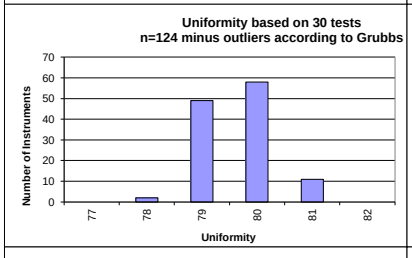
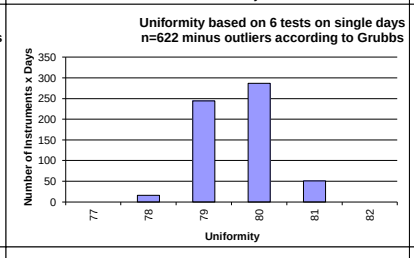
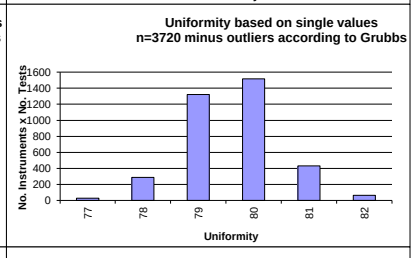
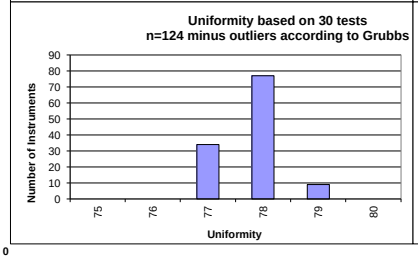
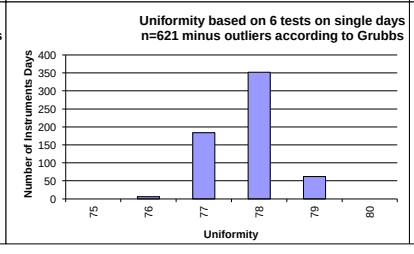


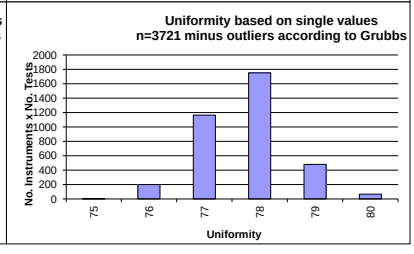




Cotton 4







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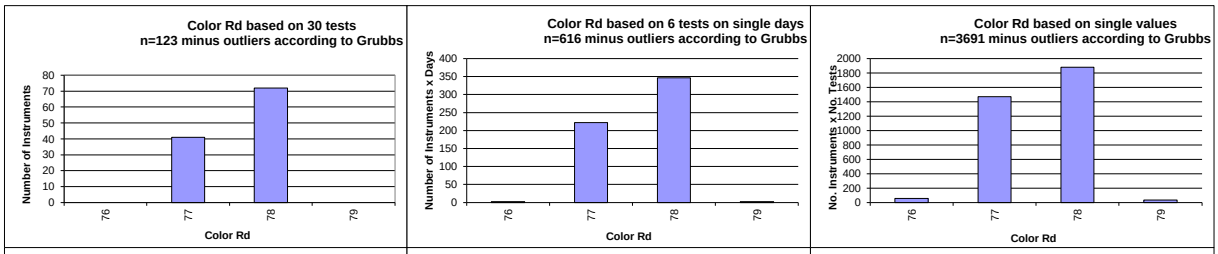
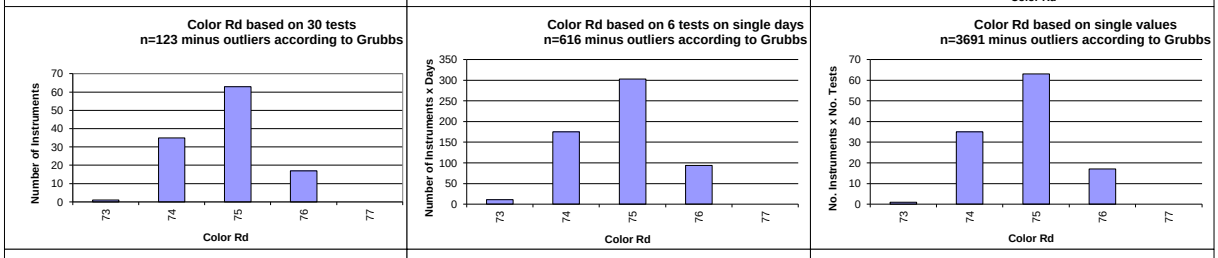
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Color Rd

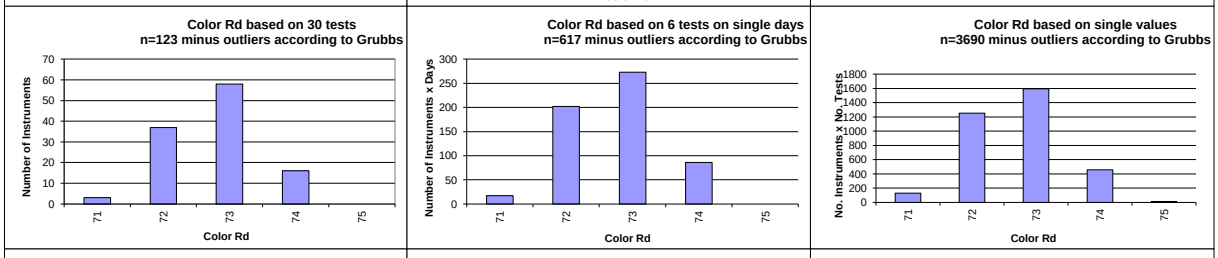
Cotton 1



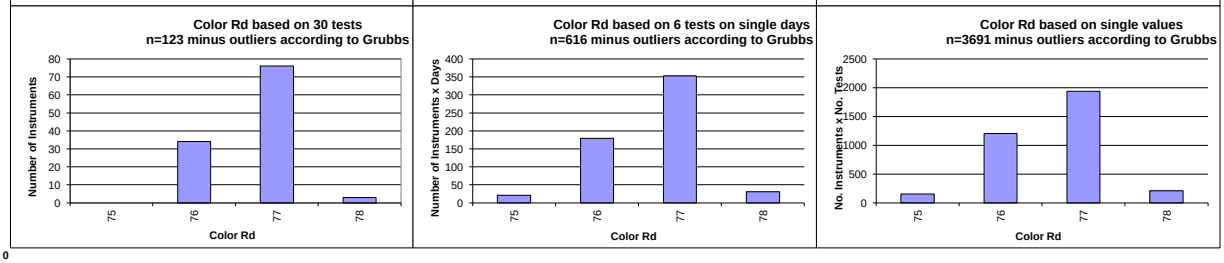
Cotton 2



Cotton 3



Cotton 4



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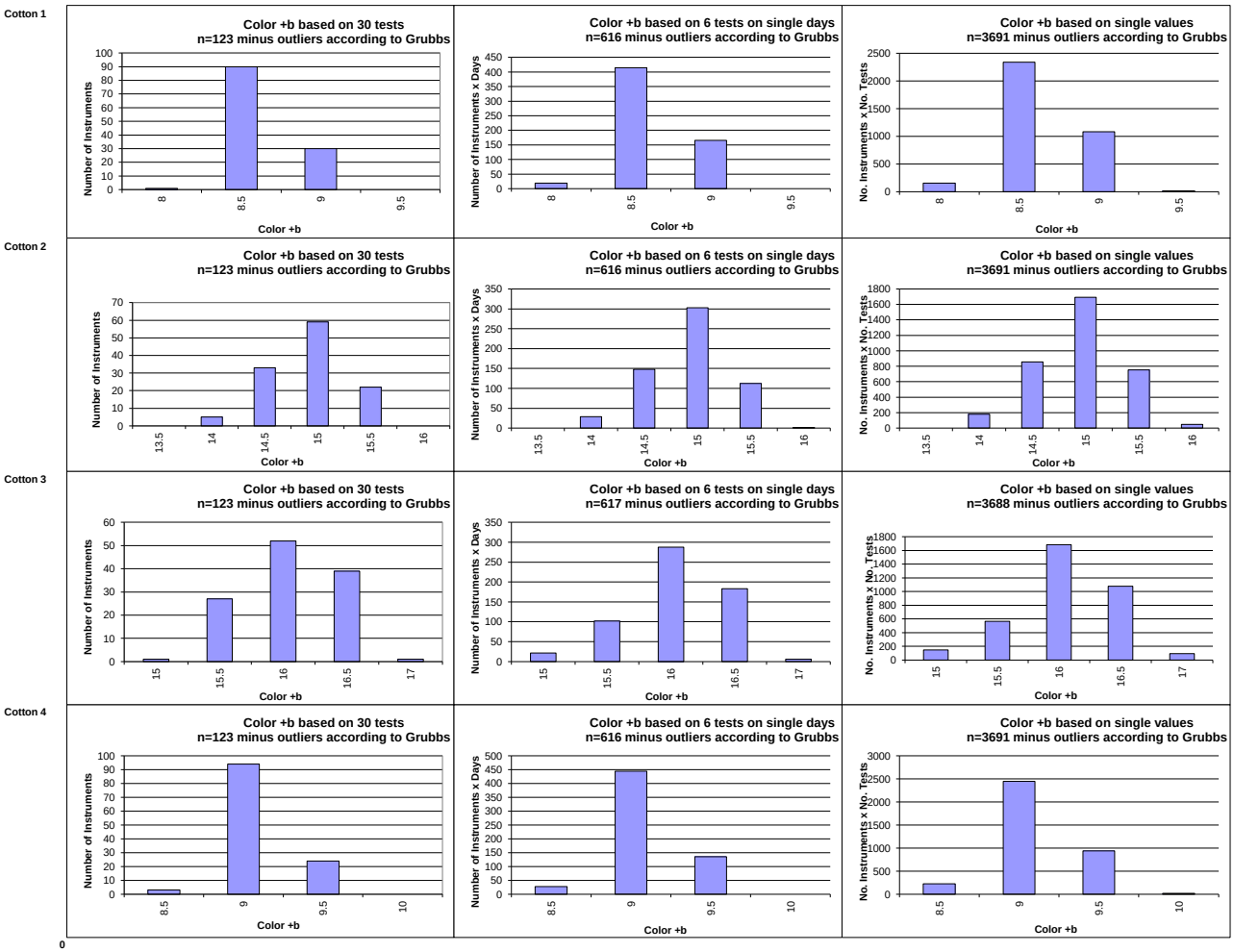
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

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)			12.98	17.13	11.08	33.03	
Reference Values for Evaluation			12.98	17.13	11.08	33.03	
Number Of Instruments			99	99	99	99	**99**
Inter-Instrument Variation	based on 30 tests	SD	3.68	5.36	3.25	9.29	**5.39**
		CV %	28.4	31.3	29.3	28.1	**29.3**
	based on 6 tests	SD	3.99	5.59	3.42	9.87	**5.72**
		CV %	30.8	32.6	30.9	29.9	**31.0**
	based on single tests	SD	4.66	6.06	3.84	10.48	**6.26**
		CV %	35.9	35.4	34.7	31.7	**34.4**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	1.37	1.63	1.18	2.52	**1.67**
		CV %	10.5	9.5	10.6	7.6	**9.6**
	between single tests on one day	SD	1.92	2.30	1.71	3.17	**2.27**
		CV %	14.8	13.4	15.4	9.6	**13.3**
	between all tests on different days	SD	2.46	2.75	2.17	4.51	**2.97**
		CV %	18.9	16.1	19.6	13.6	**17.1**

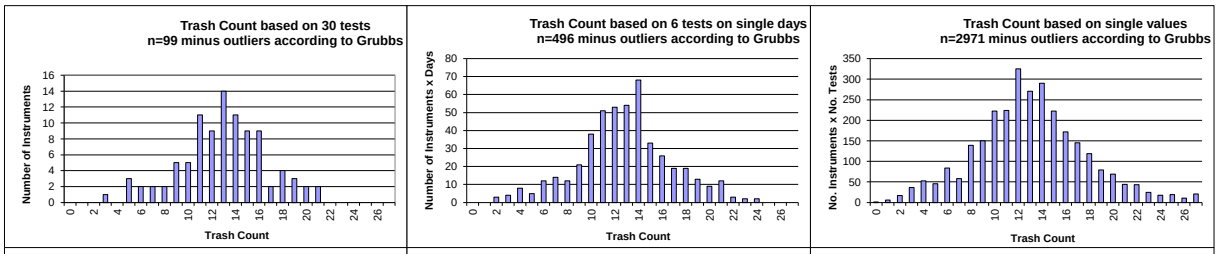
Trash Area							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			0.142	0.142	0.114	0.283	
Reference Values for Evaluation			0.142	0.142	0.114	0.283	
Number Of Instruments			99	99	99	99	**99**
Inter-Instrument Variation	based on 30 tests	SD	0.035	0.034	0.028	0.075	**0.043**
		CV %	24.4	24.1	24.7	26.6	**25.0**
	based on 6 tests	SD	0.042	0.038	0.031	0.082	**0.048**
		CV %	29.9	26.9	27.1	29.0	**28.2**
	based on single tests	SD	0.049	0.045	0.037	0.091	**0.055**
		CV %	34.4	31.6	32.6	32.0	**32.6**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.022	0.017	0.014	0.031	**0.021**
		CV %	15.3	12.0	12.4	11.1	**12.7**
	between single tests on one day	SD	0.028	0.023	0.021	0.043	**0.029**
		CV %	19.6	16.5	18.3	15.3	**17.4**
	between all tests on different days	SD	0.038	0.030	0.027	0.053	**0.037**
		CV %	26.7	20.9	23.6	18.9	**22.5**

Maturity							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			86.62	85.45	83.59	83.99	
Reference Values for Evaluation			86.62	85.45	83.59	83.99	
Number Of Instruments			104	104	104	104	**104**
Inter-Instrument Variation	based on 30 tests	SD	1.44	1.20	0.94	2.63	**1.55**
		CV %	1.7	1.4	1.1	3.1	**1.8**
	based on 6 tests	SD	1.45	1.20	0.93	2.63	**1.55**
		CV %	1.7	1.4	1.1	3.1	**1.8**
	based on single tests	SD	1.34	1.47	0.98	2.66	**1.61**
		CV %	1.5	1.7	1.2	3.2	**1.9**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.15	0.20	0.22	0.18	**0.19**
		CV %	0.2	0.2	0.3	0.2	**0.2**
	between single tests on one day	SD	0.16	0.27	0.29	0.26	**0.24**
		CV %	0.2	0.3	0.3	0.3	**0.3**
	between all tests on different days	SD	0.35	0.41	0.44	0.41	**0.40**
		CV %	0.4	0.5	0.5	0.5	**0.5**

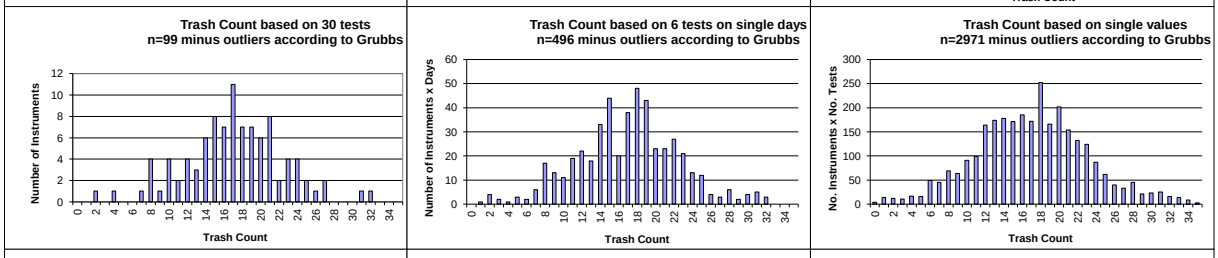
SFI							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			11.39	7.49	11.84	15.42	
Reference Values for Evaluation			11.39	7.49	11.84	15.42	
Number Of Instruments			112	112	112	112	**112**
Inter-Instrument Variation	based on 30 tests	SD	0.89	0.57	1.21	1.73	**1.10**
		CV %	7.9	7.7	10.2	11.2	**9.2**
	based on 6 tests	SD	0.92	0.57	1.28	1.74	**1.13**
		CV %	8.1	7.6	10.8	11.3	**9.5**
	based on single tests	SD	1.08	0.64	1.43	1.92	**1.27**
		CV %	9.5	8.6	12.1	12.5	**10.7**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.29	0.16	0.30	0.40	**0.29**
		CV %	2.6	2.2	2.5	2.6	**2.5**
	between single tests on one day	SD	0.53	0.30	0.53	0.72	**0.52**
		CV %	4.6	3.9	4.5	4.6	**4.4**
	between all tests on different days	SD	0.60	0.34	0.62	0.82	**0.60**
		CV %	5.3	4.5	5.2	5.3	**5.1**

Test Result Distributions
Trash Count

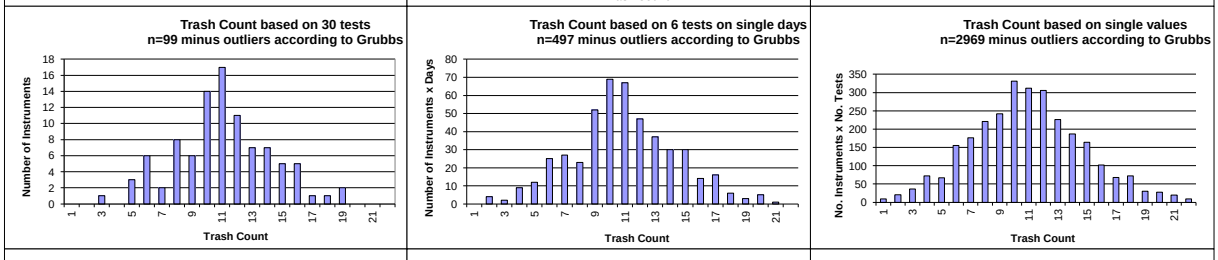
Cotton 1



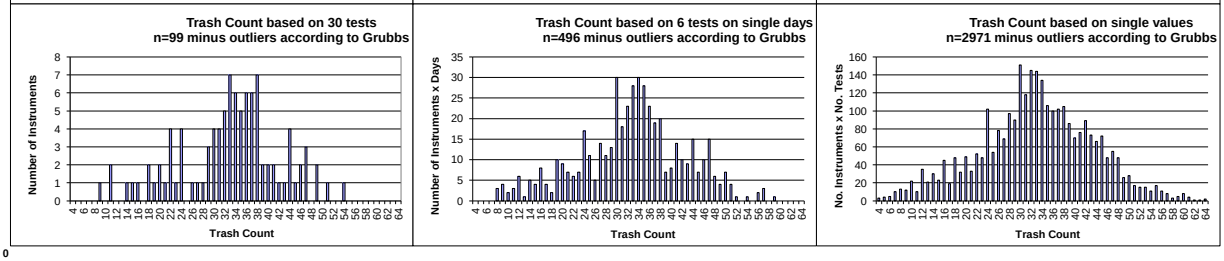
Cotton 2



Cotton 3



Cotton 4



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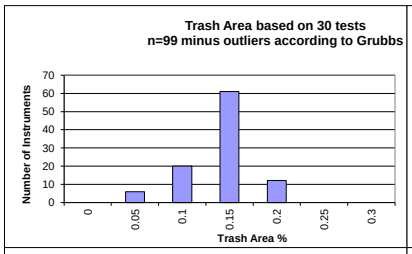
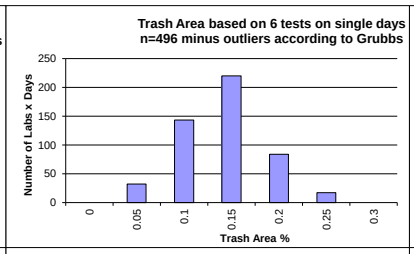
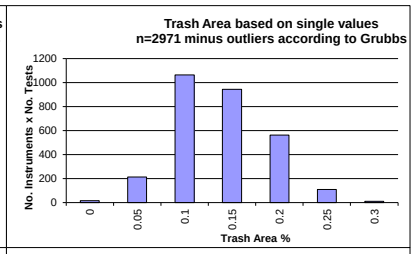
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Trash Area

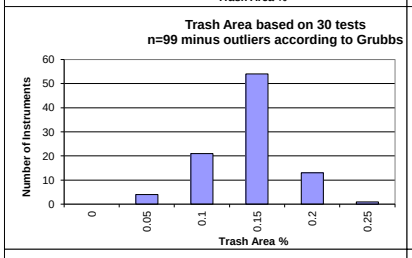
Cotton 1

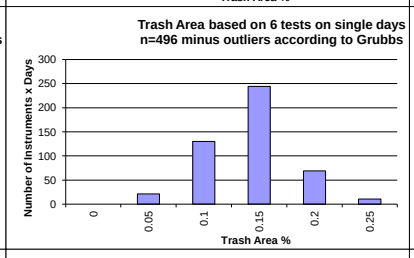


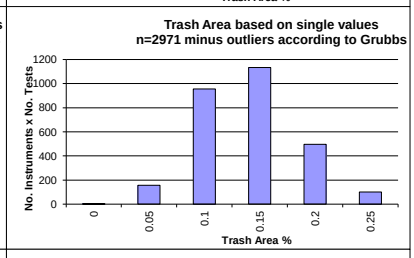




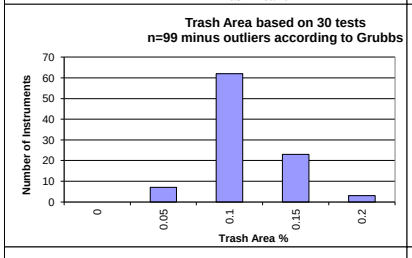
Cotton 2

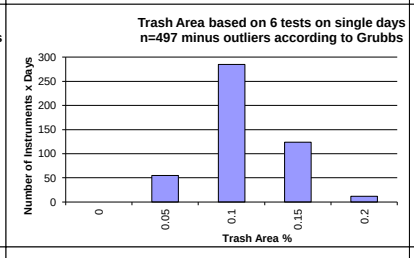


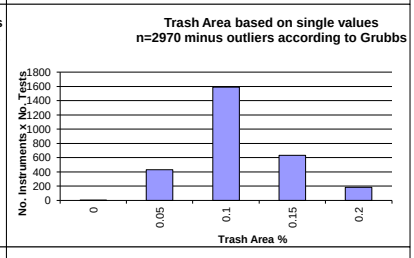




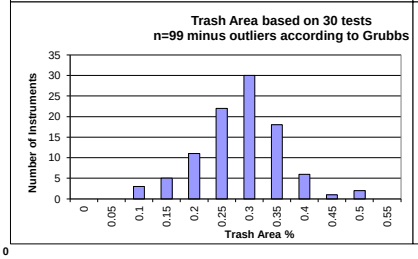
Cotton 3

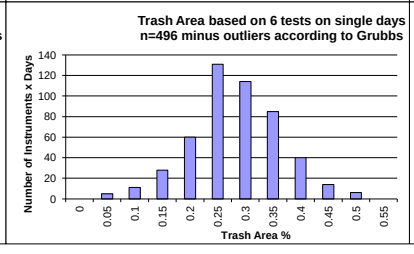


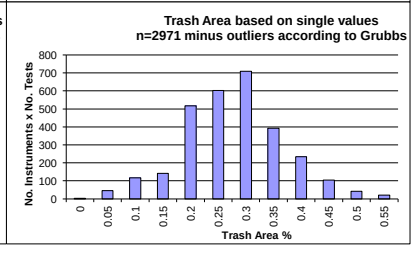




Cotton 4







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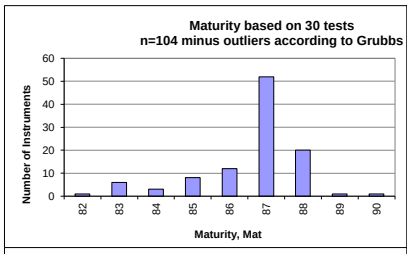
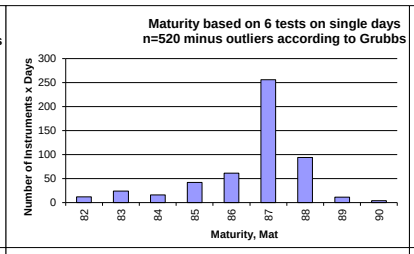
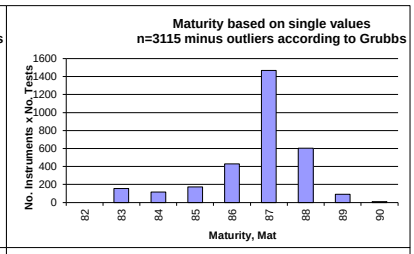
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Maturity

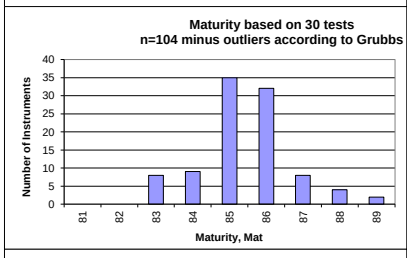
Cotton 1

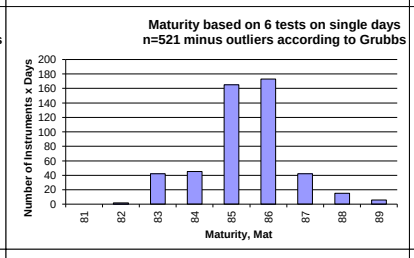


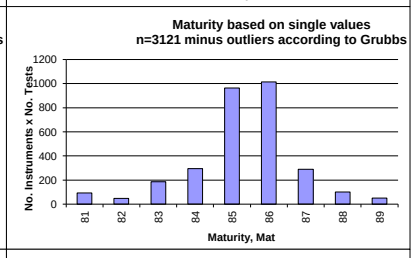




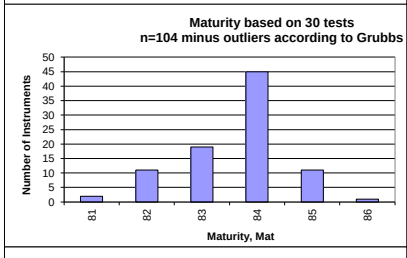
Cotton 2

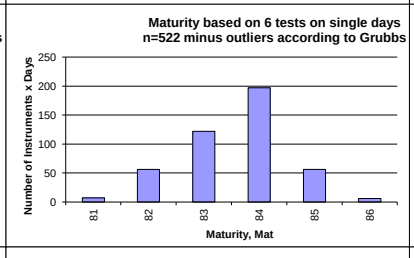


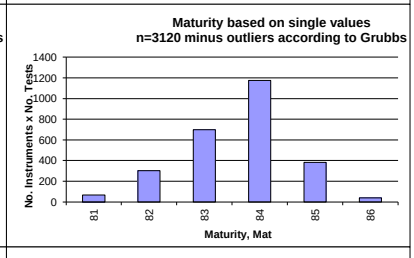




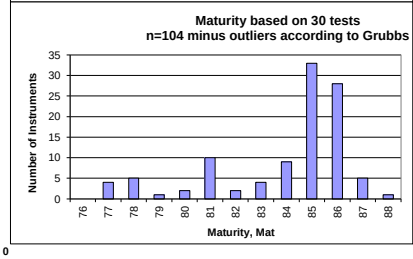
Cotton 3

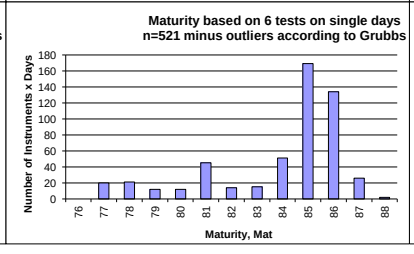


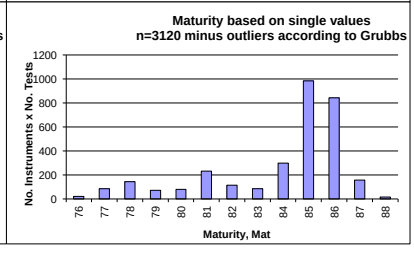




Cotton 4







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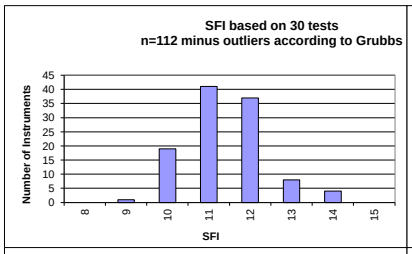
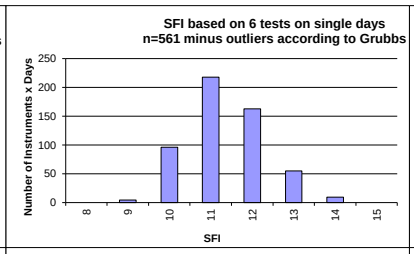
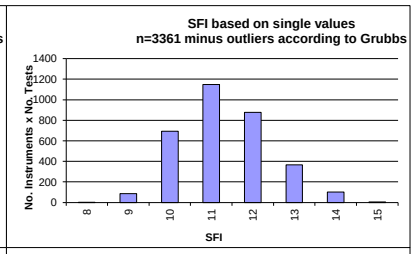
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method.)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
SFI

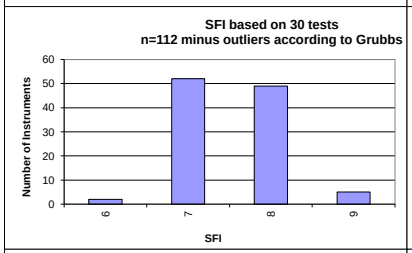
Cotton 1

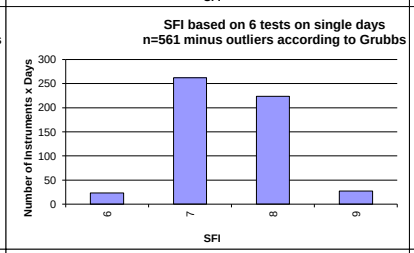


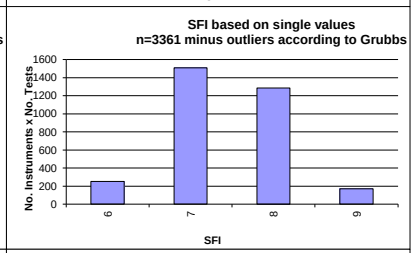




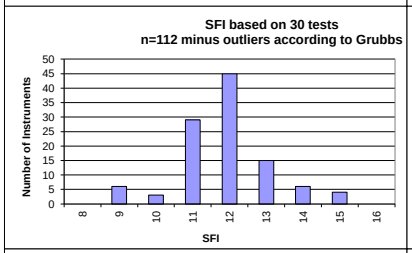
Cotton 2

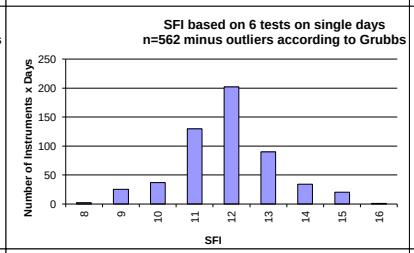


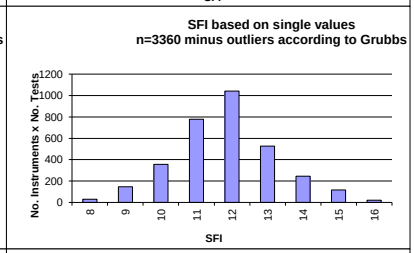




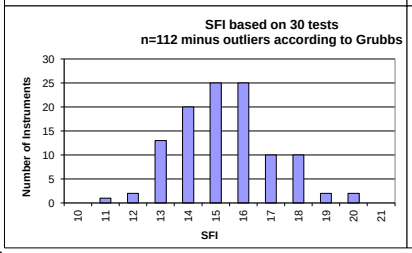
Cotton 3

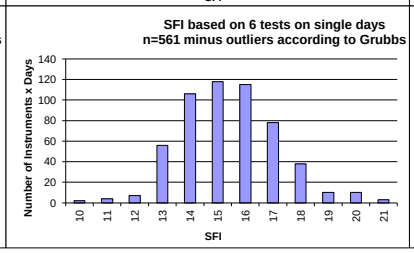


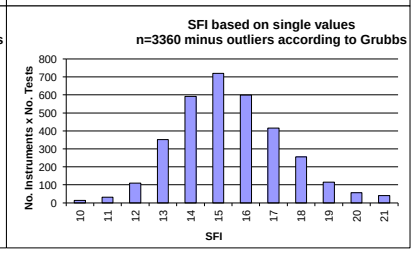




Cotton 4







0

(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 - 2
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*

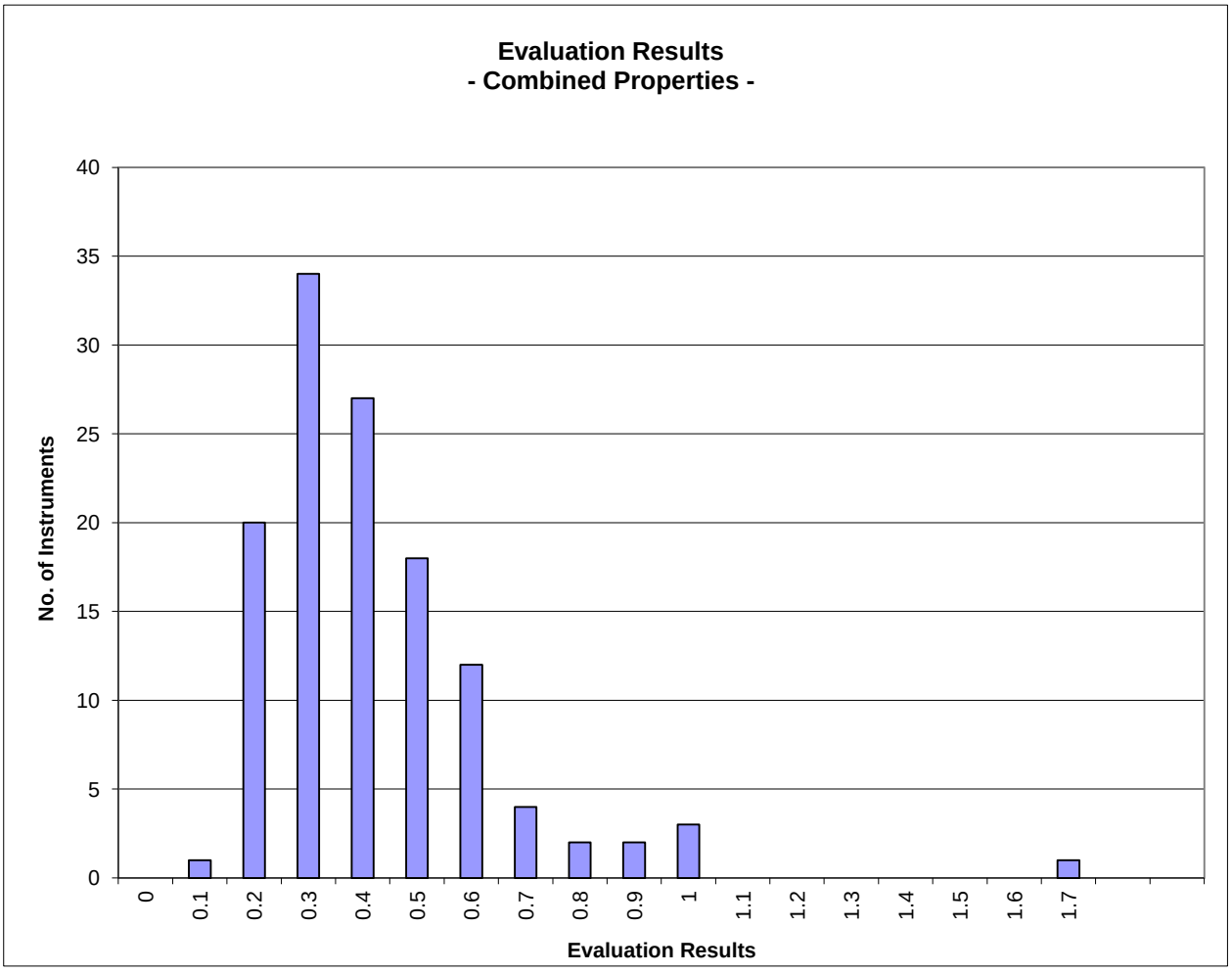
Instrument Evaluation

- Graph of Combined Properties -

According to ICAC CSITC Task Force Recommendations

Global - Round Trial 2017 - 2

		Evaluation Combined Prop.
Statistics	Average	0.42
	Median	0.38
	Best Instrument	0.13
	Worst Instrument	1.68



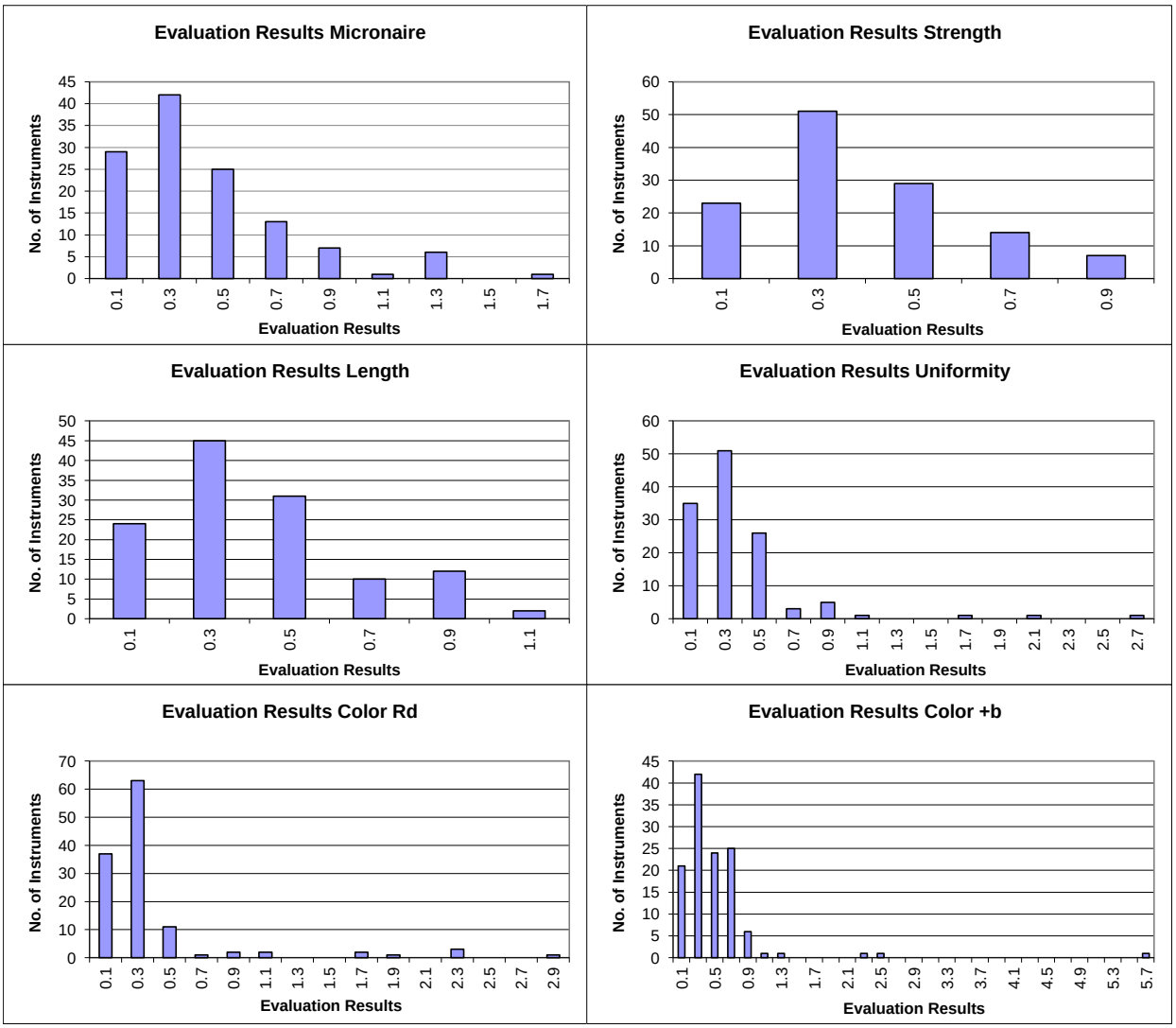
x-Axis shows midpoints of classes

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 - 2

		Evaluation Micronaire	Evaluation Strength	Evaluation Length	Evaluation Uniformity	Evaluation Color Rd	Evaluation Color +b
Statistics	Average	0.44	0.39	0.41	0.37	0.39	0.51
	Median	0.35	0.35	0.34	0.30	0.27	0.39
	Best Instr.	0.04	0.10	0.07	0.03	0.07	0.10
	Worst Instr.	1.78	0.97	1.09	2.61	2.81	5.64



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 - 2
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

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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	100.0	97.2	99.0	98.2	92.9	91.1
Completely within limits	100.0	88.7	96.0	96.0	90.2	75.6
% of Instruments ≥75% within limits	100.0	100.0	100.0	98.4	92.7	90.2
% of Instruments ≥50% within limits	100.0	100.0	100.0	99.2	93.5	99.2

Percentage of Results Within Limits						
Instrument	**Micronaire**	**Strength**	**Length**	**Uniformity**	**Color Rd**	**Color +b**
GL172-001-01	100	100	100	100	100	100
GL172-002-01	100	100	100	100	100	100
GL172-002-02	100	100	100	100	100	100
GL172-002-03	100	100	100	100	100	100
GL172-002-04	100	100	100	100	100	100
GL172-003-20	100	100	100	100	100	100
GL172-003-24	100	100	100	100	100	100
GL172-004-01	100	75	100	100	100	100
GL172-004-02	100	75	100	100	100	75
GL172-005-01	100	100	100	100	0	50
GL172-005-02	100	100	100	100	0	50
GL172-005-03	100	100	100	100	100	50
GL172-005-04	100	100	100	100	100	75
GL172-007-03	100	100	100	100	100	75
GL172-007-04	100	100	100	100	100	75
GL172-007-05	100	100	100	100	100	75
GL172-008-06	100	75	100	100	100	75
GL172-009-01	100	100	100	100	100	75
GL172-010-01	100	100	100	100	100	100
GL172-010-02	100	100	100	100	100	100
GL172-011-01	100	100	100	100	100	100
GL172-014-01	100	100	100	100	100	100
GL172-015-03	100	100	100	100	100	100
GL172-015-07	100	100	100	100	100	100
GL172-015-08	100	100	100	100	100	75
GL172-015-09	100	100	100	100	100	100
GL172-015-10	100	100	100	100	100	100
GL172-015-11	100	100	100	100	100	100
GL172-015-12	100	100	100	100	100	100
GL172-015-13	100	100	100	100	100	100
GL172-015-14	100	100	100	100	100	100
GL172-016-01	100	100	100	100	100	100
GL172-016-02	100	100	100	100	75	100
GL172-017-01	100	100	100	100	100	100

GL172-018-01	100	75	100	100	100	100
GL172-018-02	100	75	100	100	100	100
GL172-020-01	100	100	100	100	100	75
GL172-021-01	100	100	100	100	100	75
GL172-024-03	100	100	100	100	100	100
GL172-024-06	100	100	100	100	100	100
GL172-025-02	100	100	100	100		
GL172-025-03	100	100	100	100	100	100
GL172-026-03	100	100	100	100	100	100
GL172-027-01	100	100	100	100	100	100
GL172-030-01	100	100	100	100	100	100
GL172-030-02	100	100	100	100	100	100
GL172-032-02	100	100	75	100	100	75
GL172-033-01	100	100	100	100	100	100
GL172-034-01	100	100	100	100	100	100
GL172-034-02	100	100	100	100	100	100
GL172-034-05	100	100	100	100	100	100
GL172-034-07	100	100	100	100	100	50
GL172-035-03	100	100	100	100	100	100
GL172-036-01	100	75	100	100	0	100
GL172-036-02	100	100	100	100	100	100
GL172-036-04	100	100	100	100	0	100
GL172-036-07	100	100	100	0	100	100
GL172-037-02	100	100	100	100	100	75
GL172-038-01	100	100	100	100	100	100
GL172-038-02	100	100	100	100	100	100
GL172-038-03	100	100	100	100	100	100
GL172-038-04	100	100	100	100	100	100
GL172-040-26	100	100	100	100	100	75
GL172-040-58	100	100	100	100	100	75
GL172-042-01	100	100	100	100	100	100
GL172-043-03	100	100	100	100	100	100
GL172-044-01	100	100	100	100	100	100
GL172-045-01	100	100	100	100	25	100
GL172-046-01	100	100	100	100	100	50
GL172-046-02	100	100	100	100	100	100
GL172-046-04	100	100	100	100	100	100
GL172-048-01	100	100	100	100	100	100
GL172-052-01	100	100	100	100	100	100
GL172-052-02	100	100	100	100	100	100
GL172-055-02	100	100	100	100	100	75
GL172-056-04	100	100	100	75	100	100
GL172-058-01	100	100	75	100	100	100
GL172-060-01	100	100	100	100	100	100
GL172-060-02	100	100	100	100	100	100
GL172-061-01	100	100	100	100	100	100
GL172-061-04	100	100	100	100	100	100
GL172-061-05	100	100	100	100	100	100
GL172-062-01	100	100	100	100	100	100
GL172-064-01	100	75	100	100	100	50
GL172-065-01	100	100	75	100	100	75
GL172-066-01	100	100	100	100	100	100
GL172-067-01	100	100	100	100	75	100
GL172-068-06	100	100	100	100	100	100
GL172-068-07	100	100	100	100	100	100

GL172-070-01	100	100	100	100	100	100
GL172-070-02	100	100	100	100	100	100
GL172-071-01	100	100	100	100	100	50
GL172-072-03	100	100	100	100	100	50
GL172-073-01	100	100	100	100	100	100
GL172-075-01	100	100	100	100	25	100
GL172-076-01	100	100	100	100	100	50
GL172-077-01	100	100	100	100	0	0
GL172-078-04	100	100	100	100	100	100
GL172-080-01	100	100	100	100	100	100
GL172-080-02	100	100	100	100	100	100
GL172-081-01	100	100	100	100	100	100
GL172-082-01	100	75	75	100	100	100
GL172-083-01	100	100	100	100	100	100
GL172-083-03	100	100	100	100	100	100
GL172-084-01	100	100	100	100	100	50
GL172-085-01	100	75	100	100	100	100
GL172-085-02	100	100	100	100	100	75
GL172-085-03	100	100	100	75	100	100
GL172-085-04	100	100	100	100	100	100
GL172-086-01	100	75	100	100	100	50
GL172-087-01	100	100	100	100	100	100
GL172-089-01	100	75	100	100	75	100
GL172-090-04	100	100	100	100	100	100
GL172-091-03	100	100	100	100	100	100
GL172-092-01	100	100	100	100	100	100
GL172-092-02	100	100	100	100	50	100
GL172-093-04	100	100	100	100	100	100
GL172-093-05	100	100	100	100	100	100
GL172-096-01	100	75	75	50	0	100
GL172-097-01	100	75	100	100	100	100
GL172-099-01	100	100	100	100	100	75
GL172-100-01	100	100	100	100	100	100
GL172-101-31	100	75	100	75	100	100
GL172-109-01	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	98.8	94.4	96.0	97.0	92.3	85.5
% of Instruments 100% within limits	74.2	33.1	33.9	54.8	61.8	19.5
% of Instruments ≥95% within limits	92.7	66.9	75.8	91.1	83.7	40.7
% of Instruments ≥75% within limits	100.0	96.0	100.0	96.8	91.1	80.5
% of Instruments ≥65% within limits	100.0	99.2	100.0	98.4	91.9	91.1
% of Instruments ≥50% within limits	100.0	100.0	100.0	98.4	93.5	97.6

Percentage of Results Within Limits						
Instrument	**Micronaire**	**Strength**	**Length**	**Uniformity**	**Color Rd**	**Color +b**
GL172-001-01	100	100	97	97	100	96
GL172-002-01	100	97	97	100	99	99
GL172-002-02	100	100	100	100	100	100
GL172-002-03	99	98	95	99	99	99
GL172-002-04	100	100	99	100	100	100
GL172-003-20	100	99	99	100	100	93
GL172-003-24	100	98	100	99	100	100
GL172-004-01	94	86	91	98	82	56
GL172-004-02	100	83	90	100	93	65
GL172-005-01	93	95	92	98	0	42
GL172-005-02	80	90	96	96	15	28
GL172-005-03	91	95	99	100	100	70
GL172-005-04	98	97	99	100	100	65
GL172-007-03	100	93	98	98	100	84
GL172-007-04	99	100	96	96	100	80
GL172-007-05	98	95	98	99	99	80
GL172-008-06	100	83	90	100	93	65
GL172-009-01	100	94	98	100	99	78
GL172-010-01	100	97	99	100	95	89
GL172-010-02	100	100	100	100	99	97
GL172-011-01	100	100	100	100	100	100
GL172-014-01	100	100	100	100	100	100
GL172-015-03	100	100	100	100	100	96
GL172-015-07	100	98	98	99	100	100
GL172-015-08	100	98	99	99	99	75
GL172-015-09	98	95	98	100	100	100
GL172-015-10	99	98	99	100	100	99
GL172-015-11	98	99	97	99	100	97
GL172-015-12	98	97	98	100	100	100
GL172-015-13	100	93	100	100	100	100

GL172-015-14	100	100	100	98	100	100
GL172-016-01	100	100	100	100	98	92
GL172-016-02	100	100	100	100	83	100
GL172-017-01	100	100	100	100	98	95
GL172-018-01	100	74	99	100	100	92
GL172-018-02	100	76	100	100	100	90
GL172-020-01	100	100	100	100	100	75
GL172-021-01	100	100	100	100	100	78
GL172-024-03	100	100	100	100	100	100
GL172-024-06	100	100	99	100	100	100
GL172-025-02	100	94	98	97		
GL172-025-03	100	95	100	99	100	88
GL172-026-03	100	98	100	100	100	93
GL172-027-01	98	94	76	100	100	79
GL172-030-01	100	99	98	100	100	100
GL172-030-02	100	80	99	100	99	100
GL172-032-02	100	88	80	100	100	75
GL172-033-01	100	100	95	98	100	91
GL172-034-01	100	98	94	100	100	87
GL172-034-02	100	100	91	100	100	92
GL172-034-05	90	100	94	100	100	88
GL172-034-07	97	100	93	100	100	55
GL172-035-03	100	93	95	98	95	93
GL172-036-01	100	64	98	100	0	79
GL172-036-02	100	98	97	100	100	98
GL172-036-04	99	92	93	98	16	96
GL172-036-07	99	73	88	19	96	97
GL172-037-02	100	90	99	100	100	70
GL172-038-01	100	100	100	100	100	99
GL172-038-02	100	100	100	100	100	91
GL172-038-03	100	100	100	100	100	96
GL172-038-04	100	100	100	100	100	100
GL172-040-26	100	95	98	98	100	70
GL172-040-58	98	92	98	98	100	72
GL172-042-01	100	96	100	100	94	95
GL172-043-03	100	100	100	100	89	98
GL172-044-01	95	94	99	97	100	91
GL172-045-01	97	100	96	95	23	73
GL172-046-01	96	95	100	99	73	58
GL172-046-02	100	97	98	98	100	100
GL172-046-04	100	100	98	100	100	88
GL172-048-01	100	99	98	98	100	99
GL172-052-01	100	100	100	99	100	99
GL172-052-02	100	100	100	100	93	81
GL172-055-02	100	93	99	100	87	67
GL172-056-04	99	99	98	83	100	88
GL172-058-01	100	91	82	97	95	93
GL172-060-01	100	100	100	100	100	100
GL172-060-02	100	100	100	100	100	99
GL172-061-01	100	100	100	100	99	98
GL172-061-04	100	100	100	100	100	100
GL172-061-05	100	100	100	100	100	98
GL172-062-01	100	97	98	100	100	99
GL172-064-01	83	77	77	98	98	58
GL172-065-01	100	93	86	100	96	65

GL172-066-01	100	99	99	100	100	93
GL172-067-01	100	99	100	100	75	99
GL172-068-06	100	100	100	100	100	100
GL172-068-07	100	100	100	100	100	100
GL172-070-01	100	90	98	98	100	88
GL172-070-02	100	100	98	99	100	88
GL172-071-01	100	100	100	100	100	50
GL172-072-03	100	82	93	99	100	60
GL172-073-01	100	100	100	100	100	100
GL172-075-01	100	87	89	92	59	93
GL172-076-01	100	98	99	99	99	58
GL172-077-01	89	83	85	86	3	0
GL172-078-04	100	96	100	99	99	93
GL172-080-01	100	96	99	99	100	90
GL172-080-02	100	93	87	99	100	93
GL172-081-01	100	93	100	100	99	78
GL172-082-01	100	83	83	96	95	53
GL172-083-01	100	99	92	99	100	100
GL172-083-03	100	99	100	99	100	100
GL172-084-01	99	99	91	88	98	72
GL172-085-01	100	69	100	98	100	93
GL172-085-02	100	84	97	99	100	78
GL172-085-03	100	98	96	82	95	85
GL172-085-04	98	81	96	95	99	77
GL172-086-01	95	75	94	98	98	69
GL172-087-01	100	100	95	94	100	98
GL172-089-01	90	83	89	93	62	76
GL172-090-04	100	99	97	100	100	98
GL172-091-03	93	91	87	70	98	86
GL172-092-01	100	100	94	98	99	79
GL172-092-02	98	98	93	99	47	97
GL172-093-04	99	98	96	100	100	72
GL172-093-05	100	97	99	100	100	75
GL172-096-01	100	74	78	41	26	78
GL172-097-01	98	88	76	100	100	82
GL172-099-01	100	98	100	100	100	80
GL172-100-01	100	96	98	98	100	98
GL172-101-31	100	81	83	73	99	75
GL172-109-01	100	91	100	100	100	93