International Cotton Advisory Committee

CSITC
Global - Round Trial 2015 - 4
General Evaluation

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

Section One: Result Distribution

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- -Distribution Graphs

Optional Parameters
- -Summary Table
- -Distribution Graphs

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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 2015 - 4

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

Micronaire							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			4.395	3.703	3.254	4.250	
Reference Values for Evaluation			4.395	3.703	3.254	4.250	
Number Of Instruments			150	150	150	150	**150**
Inter-Instrument Variation	based on 30 tests	SD	0.063	0.061	0.056	0.056	**0.059**
		CV %	1.4	1.7	1.7	1.3	**1.5**
	based on 6 tests	SD	0.067	0.066	0.059	0.065	**0.064**
		CV %	1.5	1.8	1.8	1.5	**1.7**
	based on single tests	SD	0.078	0.078	0.068	0.080	**0.076**
		CV %	1.8	2.1	2.1	1.9	**2.0**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.025	0.022	0.019	0.023	**0.022**
		CV %	0.6	0.6	0.6	0.5	**0.6**
	between single tests on one day	SD	0.038	0.032	0.032	0.035	**0.035**
		CV %	0.9	0.9	1.0	0.8	**0.9**
	between all tests on different days	SD	0.045	0.040	0.039	0.043	**0.042**
		CV %	1.0	1.1	1.2	1.0	**1.1**

Strength							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			25.018	33.909	30.854	27.630	
Reference Values for Evaluation			25.018	33.909	30.854	27.630	
Number Of Instruments			149	149	149	149	**149**
Inter-Instrument Variation	based on 30 tests	SD	0.637	0.877	0.992	0.845	**0.838**
		CV %	2.5	2.6	3.2	3.1	**2.9**
	based on 6 tests	SD	0.706	0.951	1.007	0.840	**0.876**
		CV %	2.8	2.8	3.3	3.0	**3.0**
	based on single tests	SD	0.821	1.106	1.147	0.978	**1.013**
		CV %	3.3	3.3	3.7	3.5	**3.4**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.287	0.351	0.338	0.280	**0.314**
		CV %	1.1	1.0	1.1	1.0	**1.1**
	between single tests on one day	SD	0.425	0.512	0.518	0.472	**0.482**
		CV %	1.7	1.5	1.7	1.7	**1.6**
	between all tests on different days	SD	0.503	0.618	0.641	0.561	**0.581**
		CV %	2.0	1.8	2.1	2.0	**2.0**

Length							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			1.0037	1.1863	1.0585	1.0239	
Reference Values for Evaluation			1.0037	1.1863	1.0585	1.0239	
Number Of Instruments			150	150	150	150	**150**
Inter-Instrument Variation	based on 30 tests	SD	0.0102	0.0091	0.0121	0.0106	**0.0105**
		CV %	1.0	0.8	1.1	1.0	**1.0**
	based on 6 tests	SD	0.0127	0.0113	0.0132	0.0141	**0.0128**
		CV %	1.3	1.0	1.3	1.4	**1.2**
	based on single tests	SD	0.0156	0.0153	0.0161	0.0176	**0.0161**
		CV %	1.6	1.3	1.5	1.7	**1.5**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.0056	0.0051	0.0053	0.0058	**0.0054**
		CV %	0.6	0.4	0.5	0.6	**0.5**
	between single tests on one day	SD	0.0092	0.0095	0.0100	0.0099	**0.0096**
		CV %	0.9	0.8	0.9	1.0	**0.9**
	between all tests on different days	SD	0.0107	0.0110	0.0115	0.0114	**0.0112**
		CV %	1.1	0.9	1.1	1.1	**1.1**

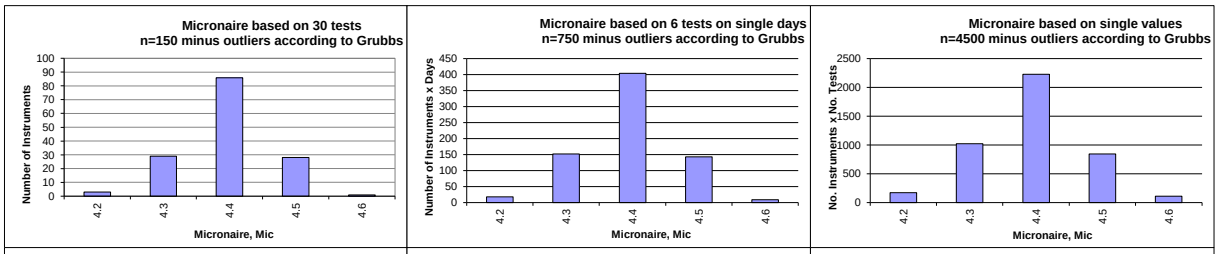
Uniformity							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			79.517	83.698	79.950	79.026	
Reference Values for Evaluation			79.517	83.698	79.950	79.026	
Number Of Instruments			149	149	149	149	**149**
Inter-Instrument Variation	based on 30 tests	SD	0.455	0.522	0.517	0.511	**0.501**
		CV %	0.6	0.6	0.6	0.6	**0.6**
	based on 6 tests	SD	0.565	0.576	0.587	0.586	**0.579**
		CV %	0.7	0.7	0.7	0.7	**0.7**
	based on single tests	SD	0.746	0.711	0.762	0.773	**0.748**
		CV %	0.9	0.8	1.0	1.0	**0.9**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.257	0.238	0.261	0.269	**0.256**
		CV %	0.3	0.3	0.3	0.3	**0.3**
	between single tests on one day	SD	0.522	0.446	0.489	0.508	**0.491**
		CV %	0.7	0.5	0.6	0.6	**0.6**
	between all tests on different days	SD	0.583	0.493	0.552	0.589	**0.554**
		CV %	0.7	0.6	0.7	0.7	**0.7**

Color Rd							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			78.017	75.915	77.362	80.022	
Reference Values for Evaluation			78.017	75.915	77.362	80.022	
Number Of Instruments			148	148	148	148	**148**
Inter-Instrument Variation	based on 30 tests	SD	0.606	0.665	0.618	0.540	**0.607**
		CV %	0.8	0.9	0.8	0.7	**0.8**
	based on 6 tests	SD	0.654	0.673	0.611	0.558	**0.624**
		CV %	0.8	0.9	0.8	0.7	**0.8**
	based on single tests	SD	0.690	0.706	0.657	0.584	**0.659**
		CV %	0.9	0.9	0.8	0.7	**0.8**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.149	0.159	0.175	0.144	**0.157**
		CV %	0.2	0.2	0.2	0.2	**0.2**
	between single tests on one day	SD	0.149	0.153	0.176	0.130	**0.152**
		CV %	0.2	0.2	0.2	0.2	**0.2**
	between all tests on different days	SD	0.233	0.239	0.291	0.220	**0.246**
		CV %	0.3	0.3	0.4	0.3	**0.3**

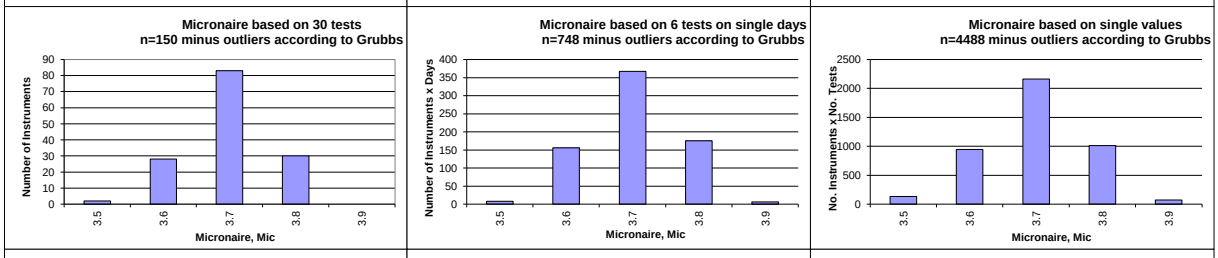
Color +b							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			12.198	12.776	12.232	10.011	
Reference Values for Evaluation			12.198	12.776	12.232	10.011	
Number Of Instruments			148	148	148	148	**148**
Inter-Instrument Variation	based on 30 tests	SD	0.315	0.324	0.289	0.266	**0.298**
		CV %	2.6	2.5	2.4	2.7	**2.5**
	based on 6 tests	SD	0.352	0.364	0.304	0.289	**0.327**
		CV %	2.9	2.9	2.5	2.9	**2.8**
	based on single tests	SD	0.375	0.386	0.329	0.308	**0.350**
		CV %	3.1	3.0	2.7	3.1	**3.0**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.104	0.112	0.102	0.078	**0.099**
		CV %	0.9	0.9	0.8	0.8	**0.8**
	between single tests on one day	SD	0.104	0.102	0.094	0.087	**0.097**
		CV %	0.9	0.8	0.8	0.9	**0.8**
	between all tests on different days	SD	0.172	0.164	0.148	0.125	**0.153**
		CV %	1.4	1.3	1.2	1.3	**1.3**

Test Result Distributions
Micronaire

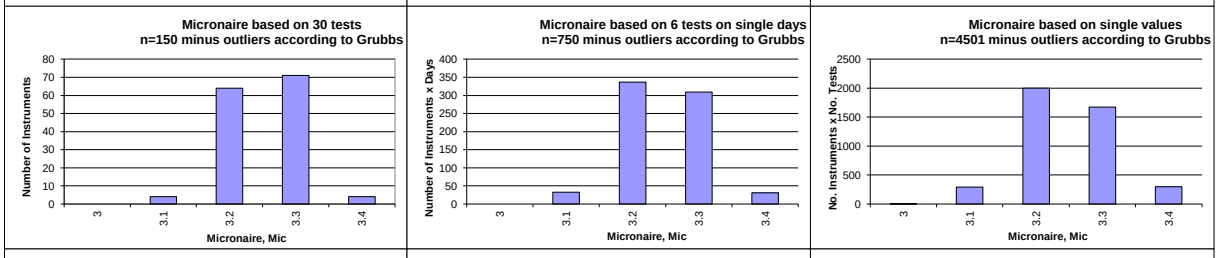
Cotton 1



Cotton 2



Cotton 3



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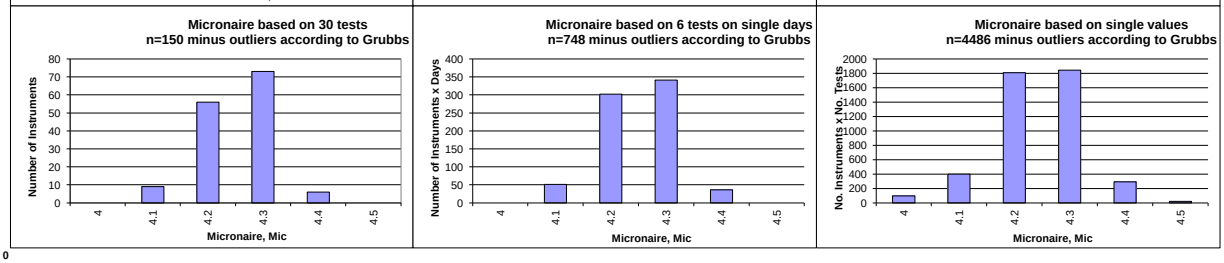

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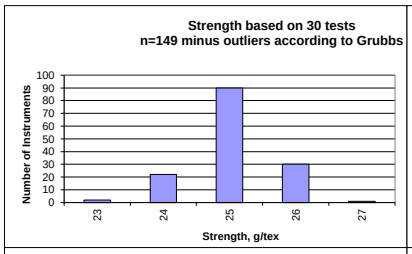
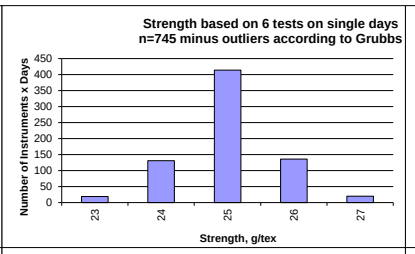
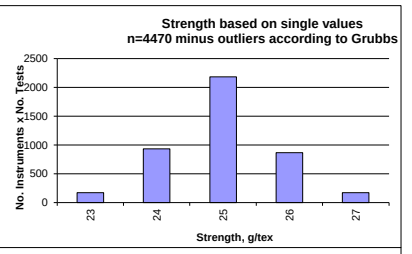
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method.)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Strength

Cotton 1







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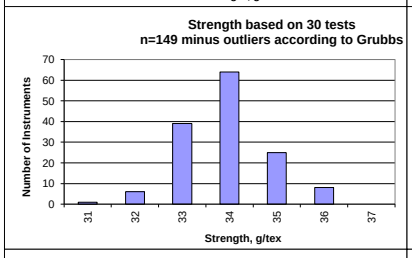
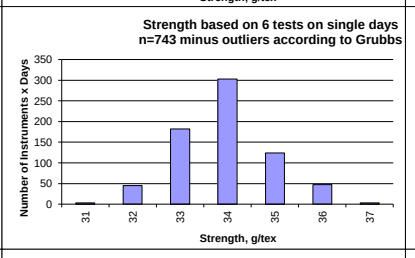
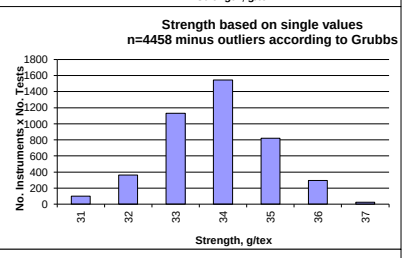
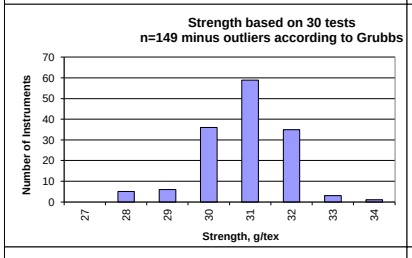
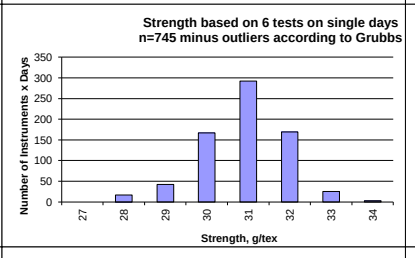


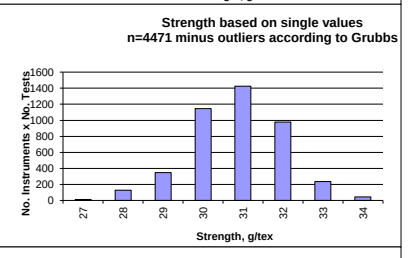




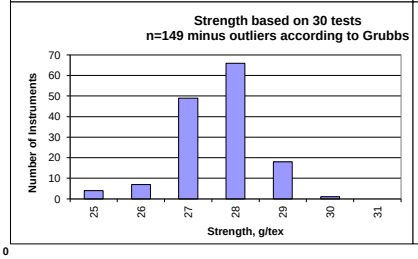
Cotton 3

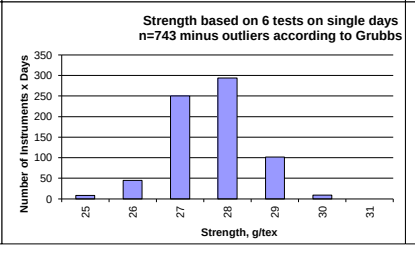


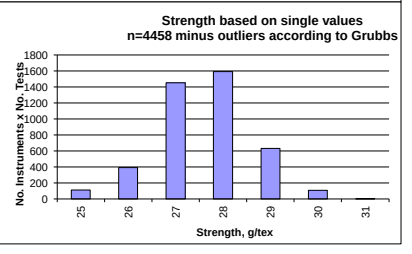




Cotton 4







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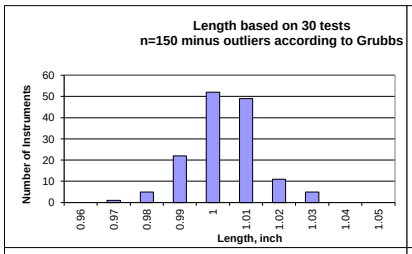
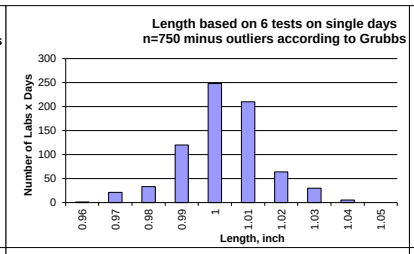
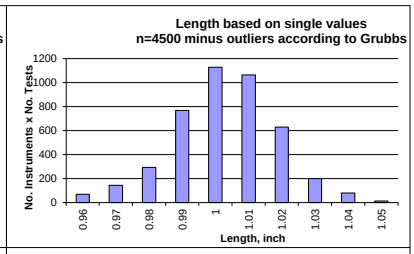
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Length

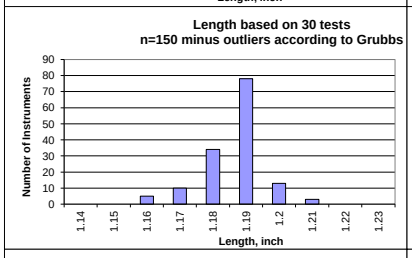
Cotton 1

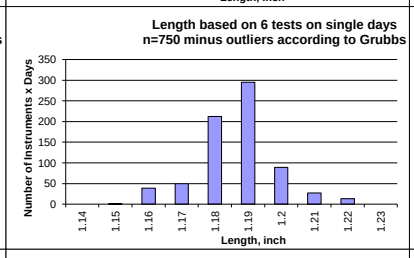


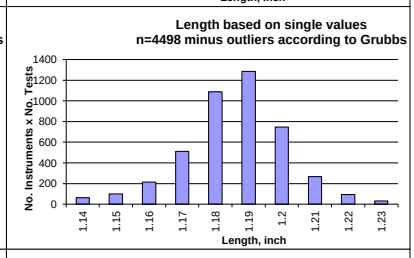




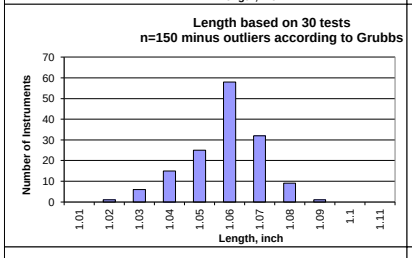
Cotton 2

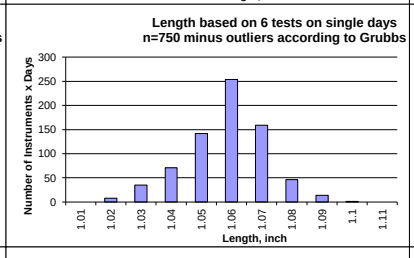


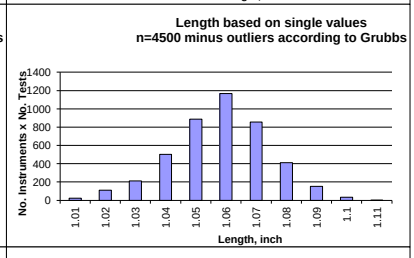




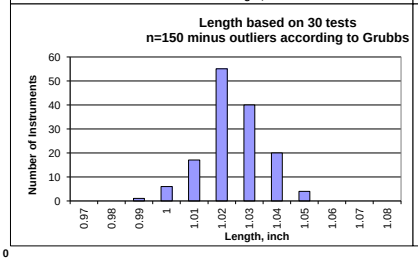
Cotton 3

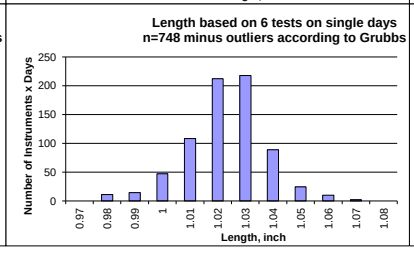


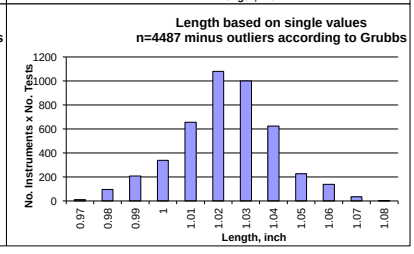




Cotton 4







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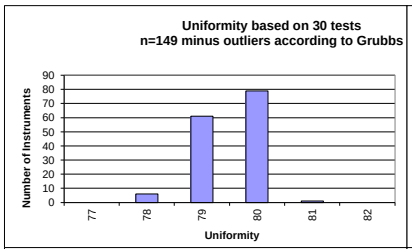
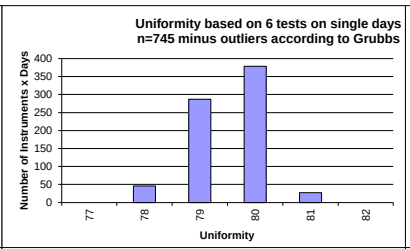
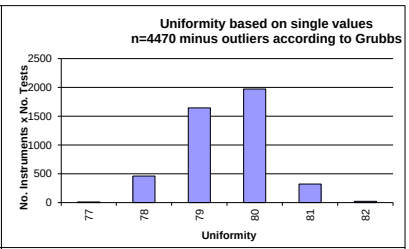
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Uniformity

Cotton 1







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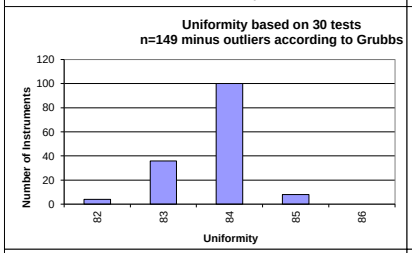
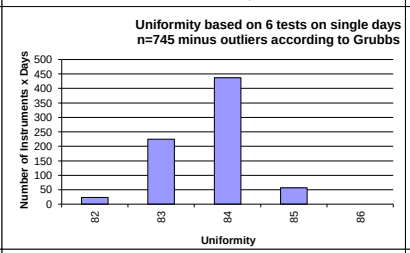
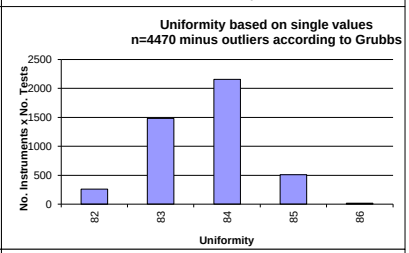
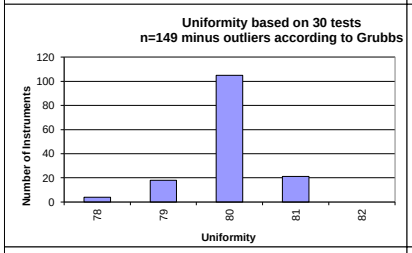
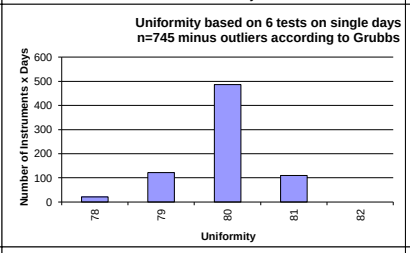


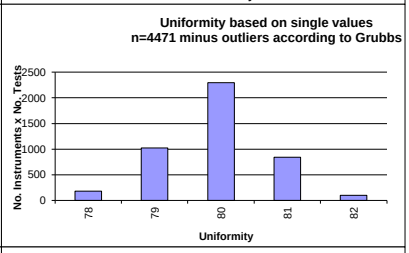




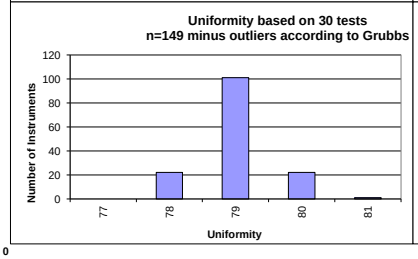
Cotton 3

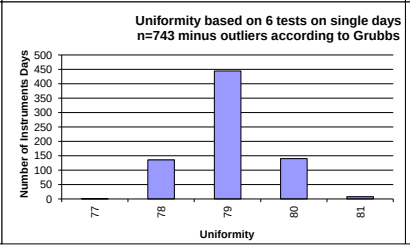


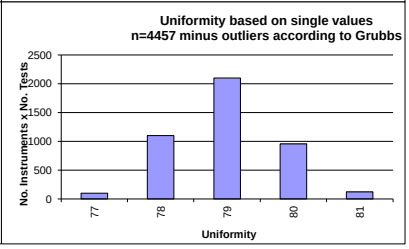




Cotton 4







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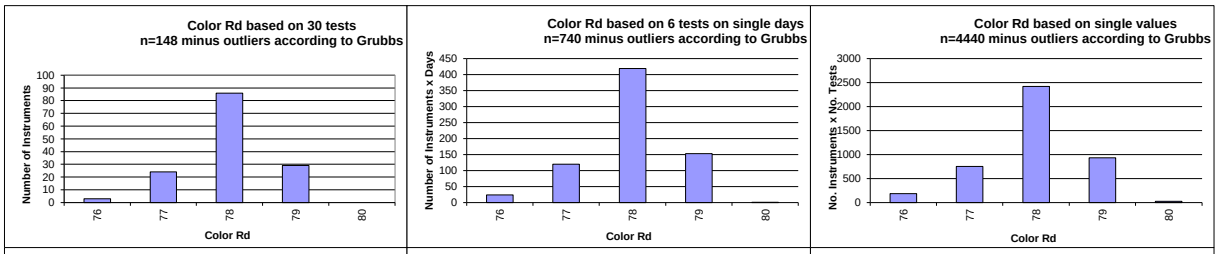
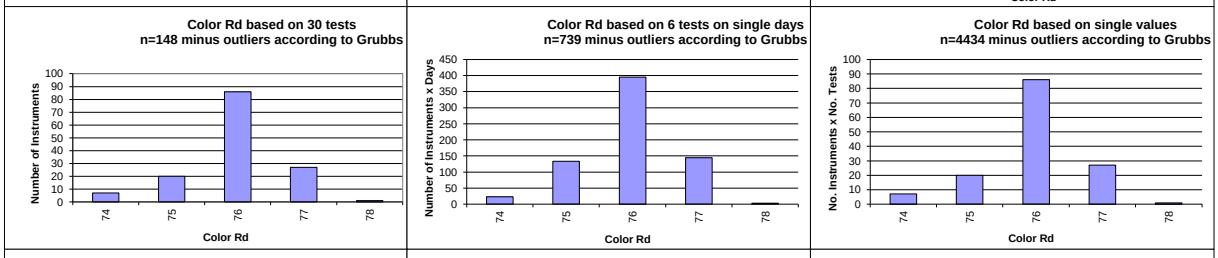
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Color Rd

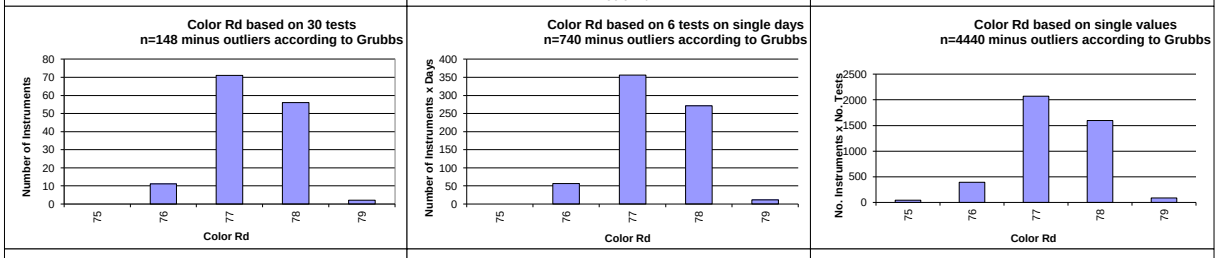
Cotton 1



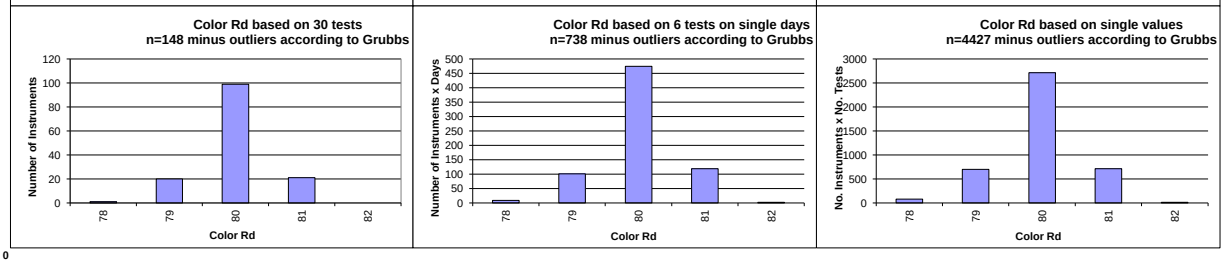
Cotton 2



Cotton 3



Cotton 4



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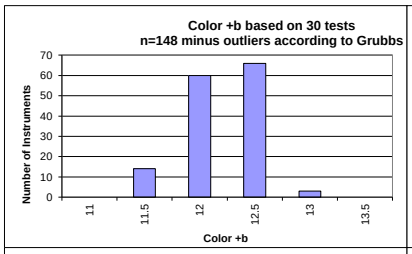
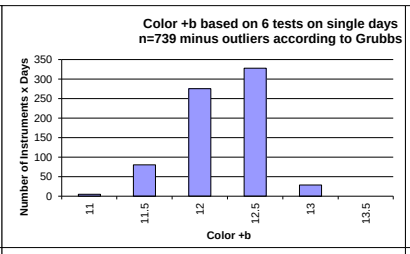
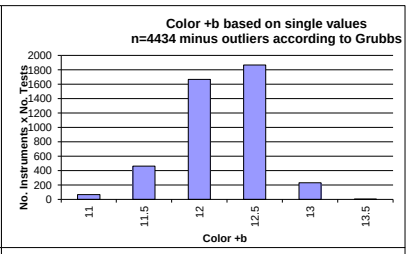
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Color +b

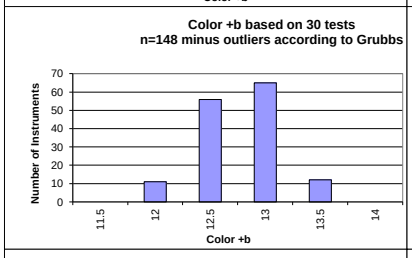
Cotton 1

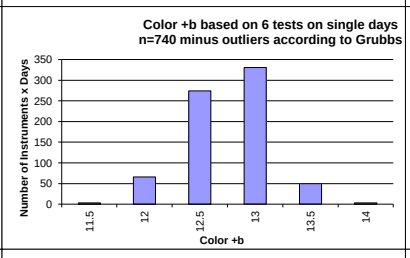


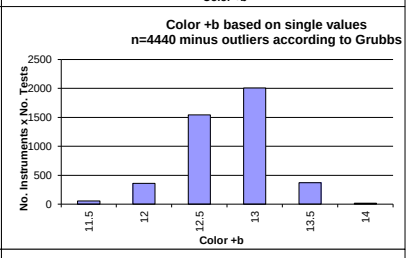




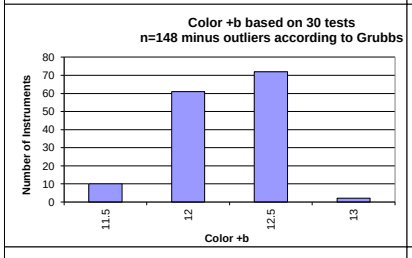
Cotton 2

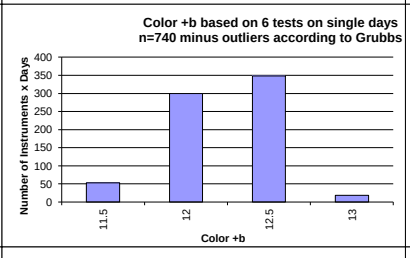


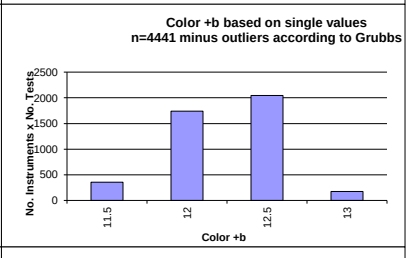




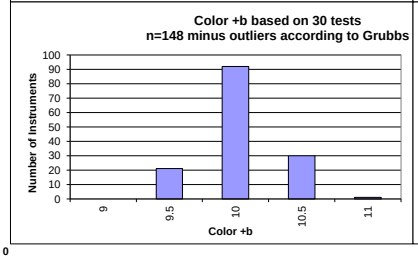
Cotton 3

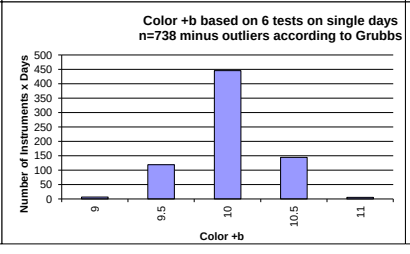


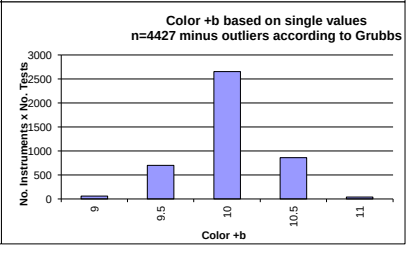




Cotton 4







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

Optional Parameters

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

Trash Count							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			17.33	27.31	22.02	11.32	
Reference Values for Evaluation			17.33	27.31	22.02	11.32	
Number Of Instruments			92	92	92	92	**92**
Inter-Instrument Variation	based on 30 tests	SD	6.19	10.62	8.08	5.28	**7.54**
		CV %	35.7	38.9	36.7	46.6	**39.5**
	based on 6 tests	SD	6.69	11.50	8.51	5.64	**8.09**
		CV %	38.6	42.1	38.6	49.8	**42.3**
	based on single tests	SD	7.08	12.07	9.08	5.88	**8.53**
		CV %	40.8	44.2	41.3	51.9	**44.6**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	1.81	2.27	2.15	1.45	**1.92**
		CV %	10.4	8.3	9.8	12.8	**10.3**
	between single tests on one day	SD	2.22	2.65	2.39	1.59	**2.21**
		CV %	12.8	9.7	10.9	14.1	**11.9**
	between all tests on different days	SD	2.80	3.75	3.42	2.38	**3.09**
		CV %	16.2	13.7	15.5	21.0	**16.6**

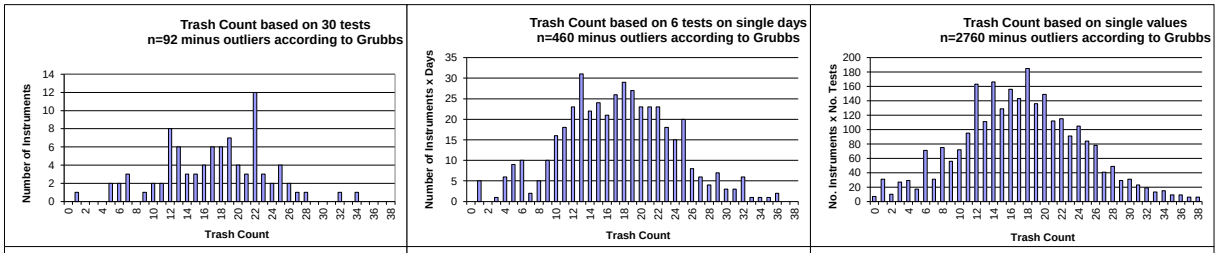
Trash Area							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			0.158	0.214	0.188	0.106	
Reference Values for Evaluation			0.158	0.214	0.188	0.106	
Number Of Instruments			92	92	92	92	**92**
Inter-Instrument Variation	based on 30 tests	SD	0.045	0.071	0.063	0.029	**0.052**
		CV %	28.7	33.3	33.3	27.2	**30.6**
	based on 6 tests	SD	0.049	0.071	0.066	0.033	**0.055**
		CV %	31.2	33.1	35.0	30.6	**32.5**
	based on single tests	SD	0.055	0.075	0.070	0.041	**0.060**
		CV %	35.0	35.1	37.5	38.7	**36.6**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.020	0.026	0.023	0.015	**0.021**
		CV %	12.5	12.4	12.5	14.0	**12.8**
	between single tests on one day	SD	0.027	0.027	0.032	0.018	**0.026**
		CV %	17.2	12.4	17.2	16.5	**15.8**
	between all tests on different days	SD	0.034	0.039	0.042	0.027	**0.036**
		CV %	21.4	18.4	22.6	25.4	**22.0**

Maturity							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			85.27	84.32	81.98	83.91	
Reference Values for Evaluation			85.27	84.32	81.98	83.91	
Number Of Instruments			92	92	92	92	**92**
Inter-Instrument Variation	based on 30 tests	SD	1.66	1.14	2.46	1.58	**1.71**
		CV %	2.0	1.4	3.0	1.9	**2.0**
	based on 6 tests	SD	1.69	1.16	2.45	1.50	**1.70**
		CV %	2.0	1.4	3.0	1.8	**2.0**
	based on single tests	SD	1.72	1.18	2.38	1.54	**1.71**
		CV %	2.0	1.4	2.9	1.8	**2.0**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.20	0.18	0.17	0.22	**0.19**
		CV %	0.2	0.2	0.2	0.3	**0.2**
	between single tests on one day	SD	0.27	0.28	0.27	0.33	**0.29**
		CV %	0.3	0.3	0.3	0.4	**0.3**
	between all tests on different days	SD	0.45	0.43	0.41	0.45	**0.44**
		CV %	0.5	0.5	0.5	0.5	**0.5**

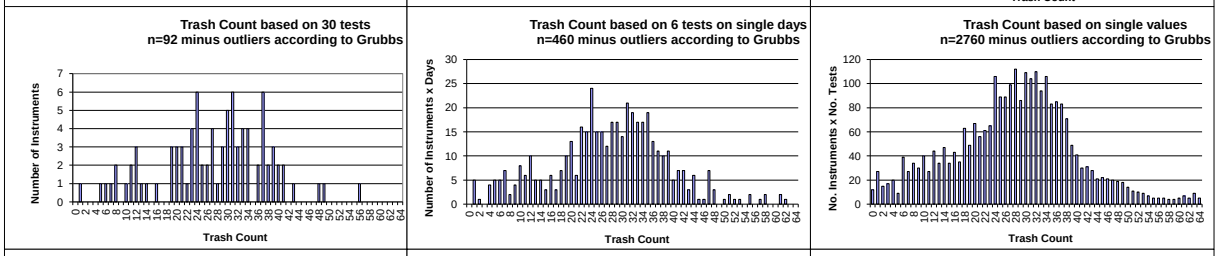
SFI							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			12.65	7.54	11.48	12.71	
Reference Values for Evaluation			12.65	7.54	11.48	12.71	
Number Of Instruments			103	103	103	103	**103**
Inter-Instrument Variation	based on 30 tests	SD	1.17	0.69	1.22	1.29	**1.09**
		CV %	9.2	9.1	10.6	10.1	**9.8**
	based on 6 tests	SD	1.25	0.70	1.27	1.33	**1.14**
		CV %	9.9	9.3	11.0	10.5	**10.2**
	based on single tests	SD	1.38	0.78	1.36	1.46	**1.25**
		CV %	10.9	10.4	11.9	11.5	**11.2**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.30	0.14	0.30	0.34	**0.27**
		CV %	2.4	1.9	2.6	2.7	**2.4**
	between single tests on one day	SD	0.57	0.30	0.53	0.59	**0.50**
		CV %	4.5	3.9	4.6	4.7	**4.4**
	between all tests on different days	SD	0.62	0.33	0.62	0.68	**0.56**
		CV %	4.9	4.4	5.4	5.3	**5.0**

Test Result Distributions
Trash Count

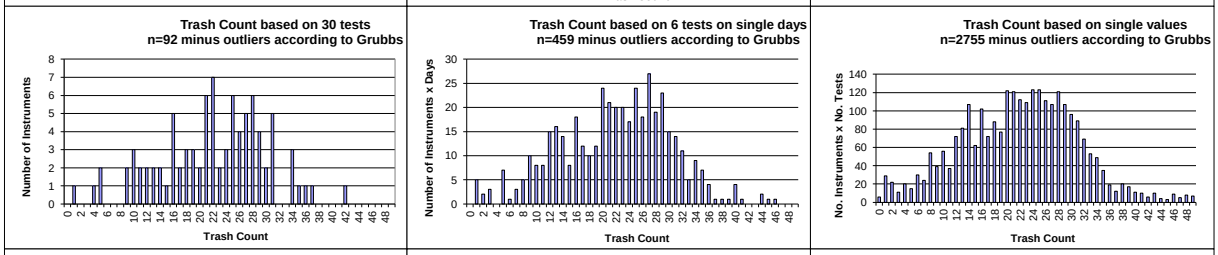
Cotton 1



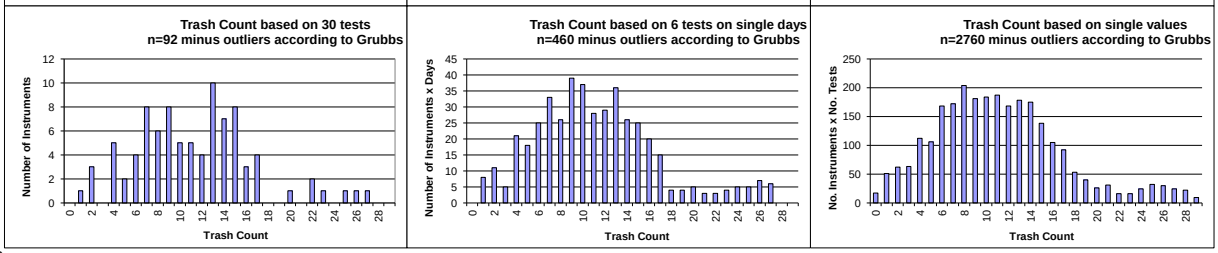
Cotton 2



Cotton 3



Cotton 4



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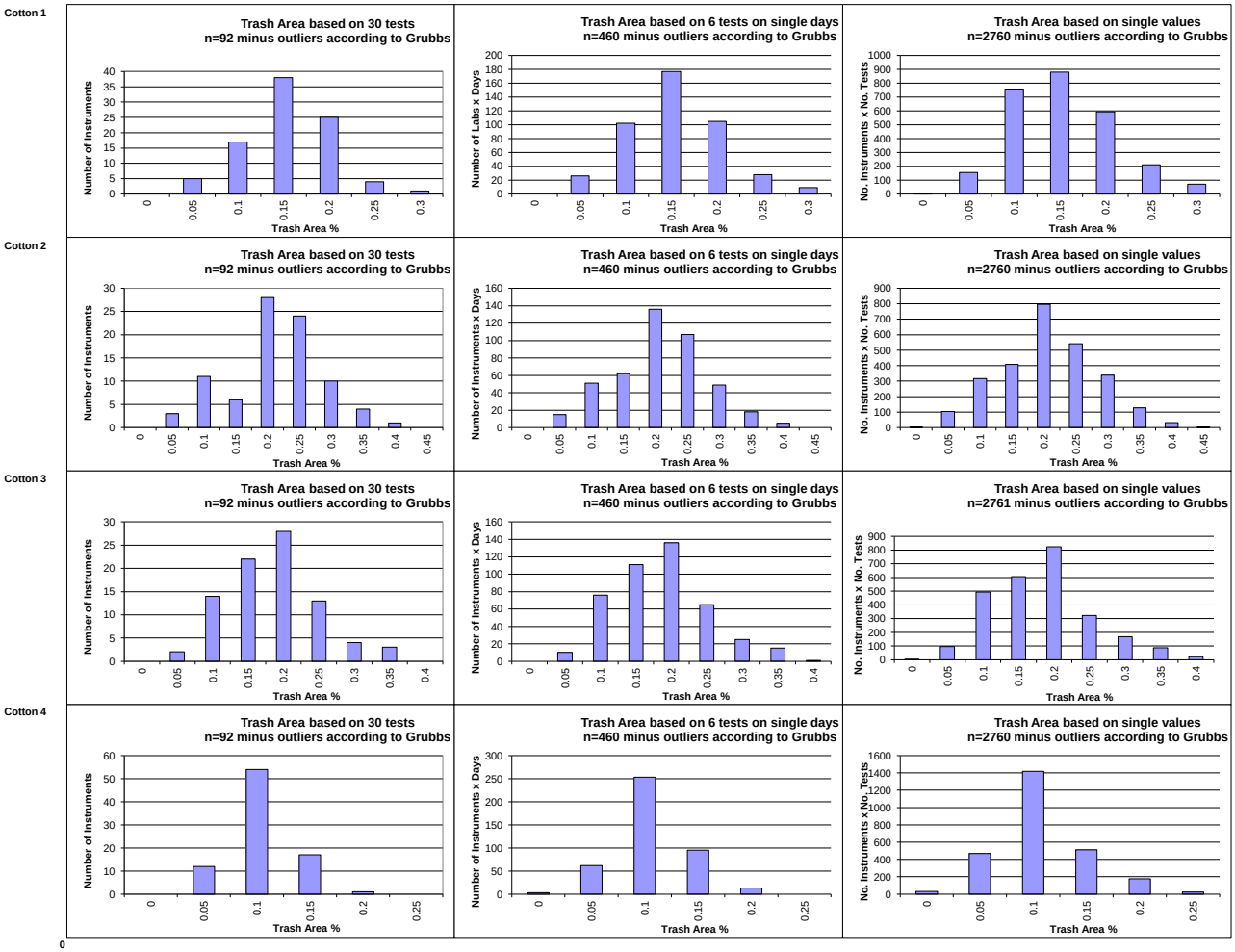
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

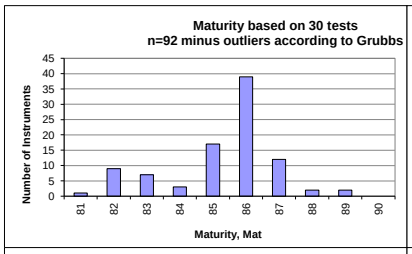
Test Result Distributions
Trash Area

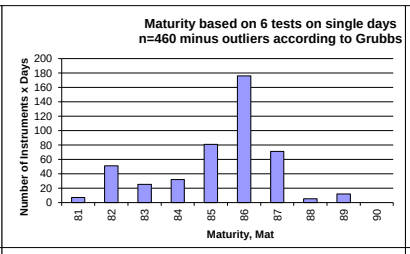


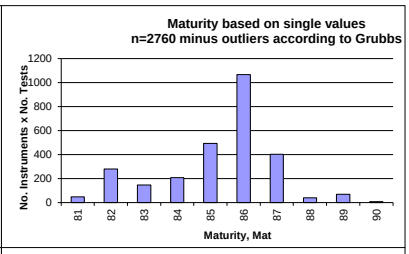
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Maturity

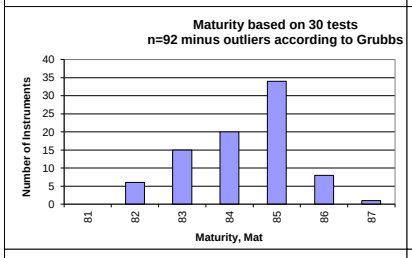
Cotton 1

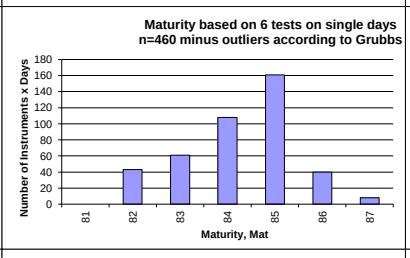


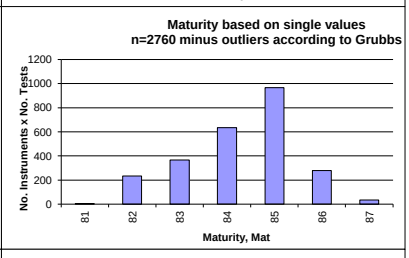




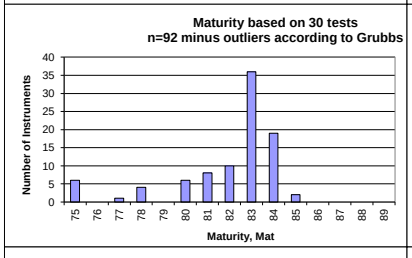
Cotton 2

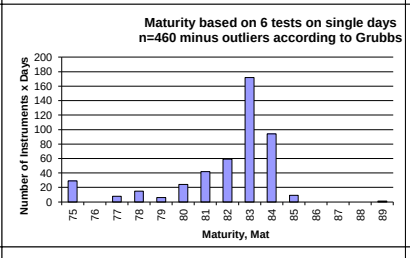


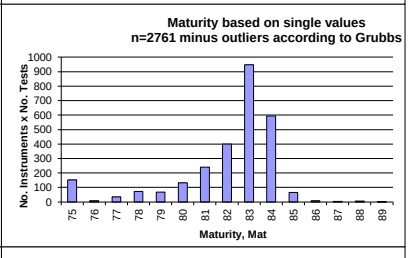




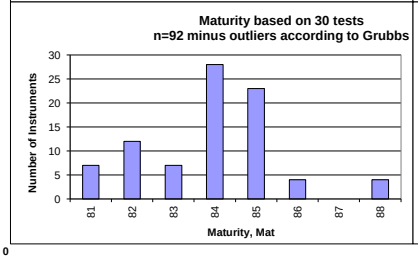
Cotton 3

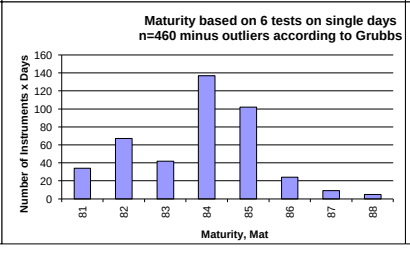


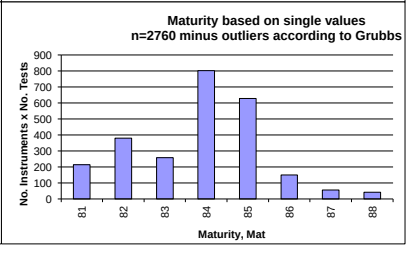




Cotton 4







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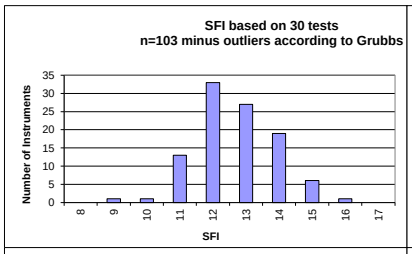
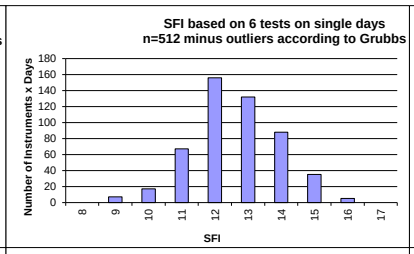
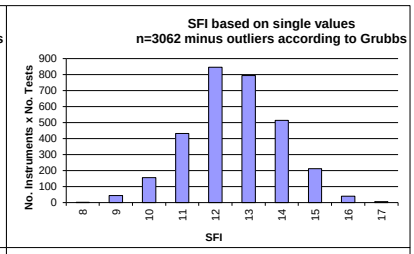
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method.)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
SFI

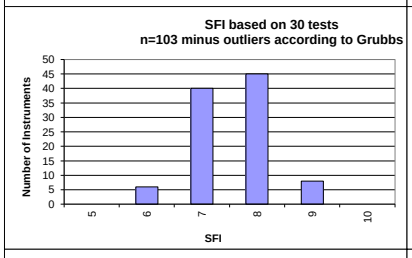
Cotton 1

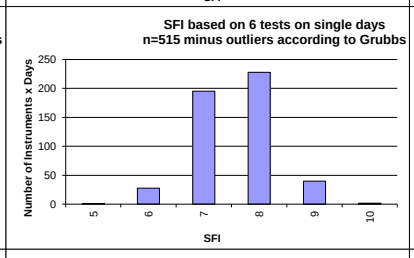


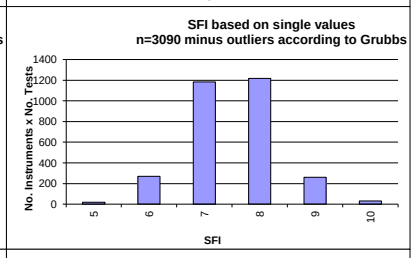




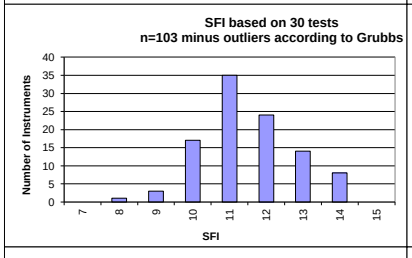
Cotton 2

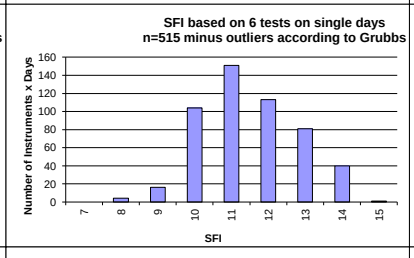


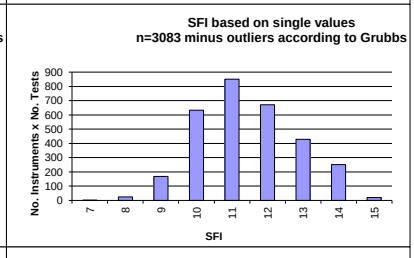




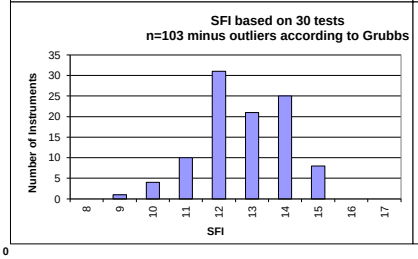
Cotton 3

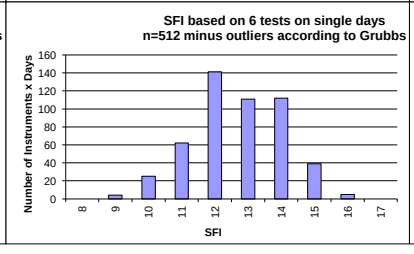


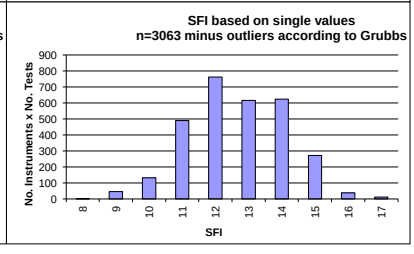




Cotton 4







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 2015 - 4
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*

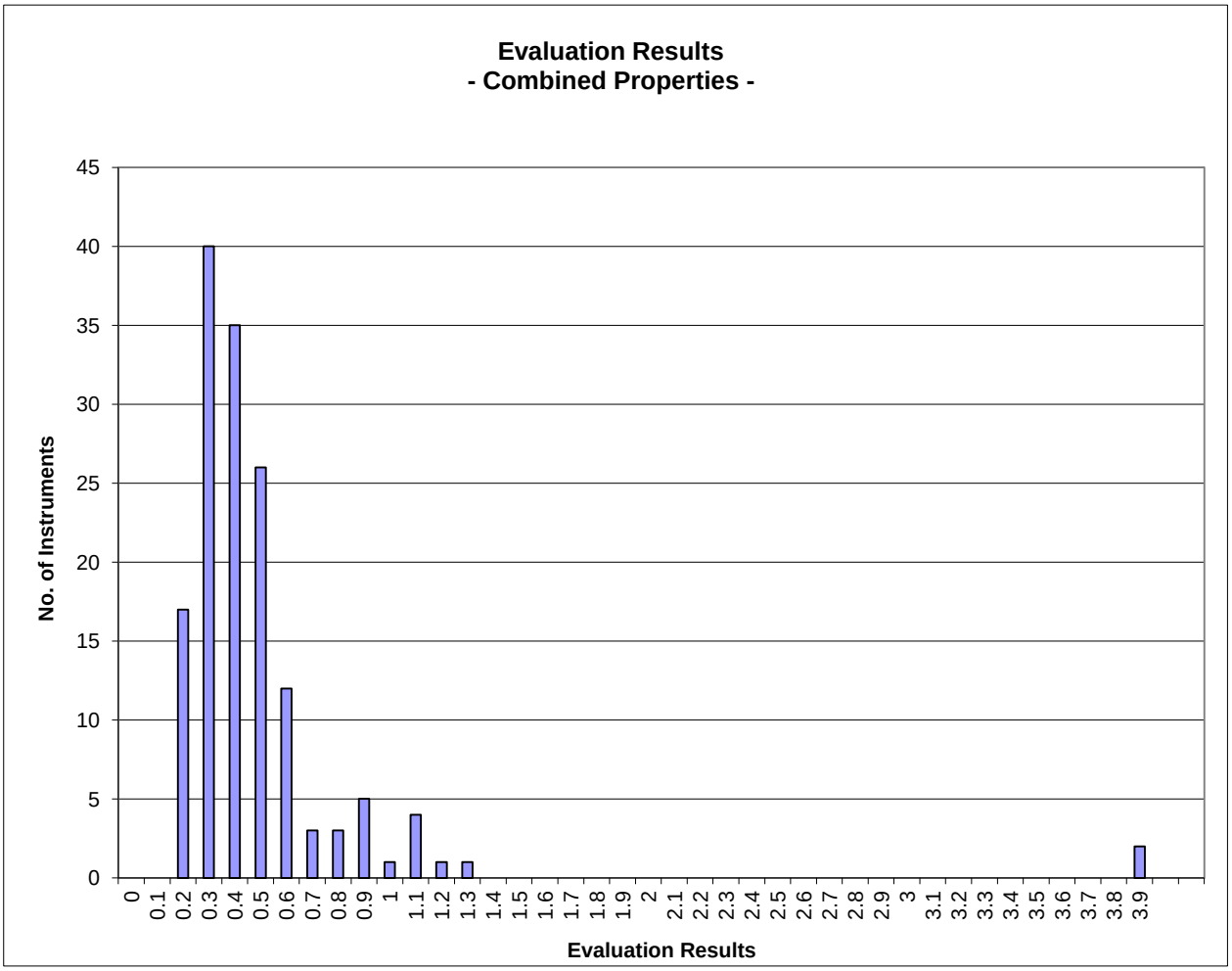
Instrument Evaluation

- Graph of Combined Properties -

According to ICAC CSITC Task Force Recommendations

Global - Round Trial 2015 - 4

		Evaluation Combined Prop.
Statistics	Average	0.49
	Median	0.41
	Best Instrument	0.19
	Worst Instrument	3.91



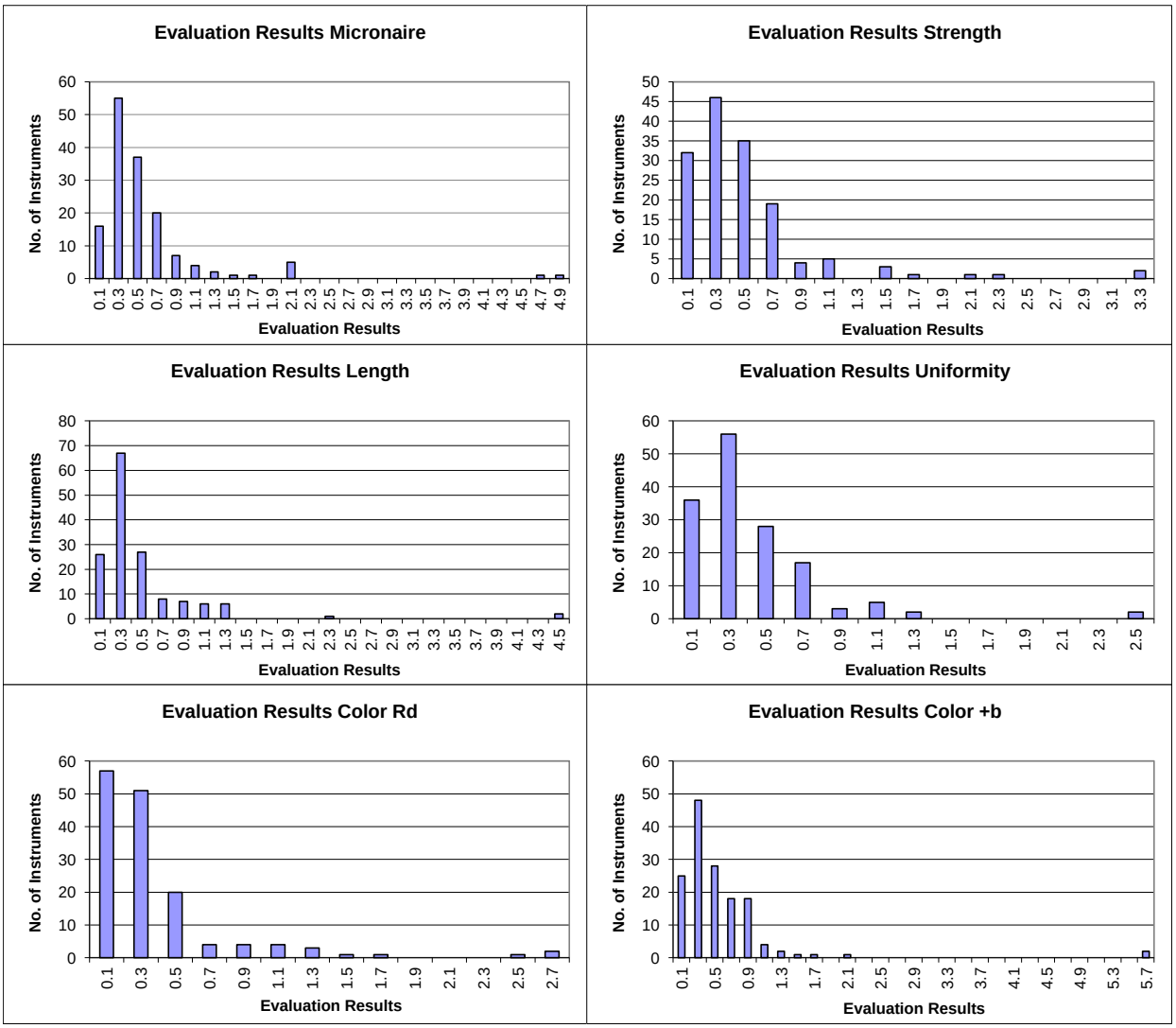
x-Axis shows midpoints of classes

The evaluation results are entered based on the unrounded values

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

Instrument Evaluation
- Graph of Single Properties -
According to ICAC CSITC Task Force Recommendations
Global - Round Trial 2015 - 4

		Evaluation Micronaire	Evaluation Strength	Evaluation Length	Evaluation Uniformity	Evaluation Color Rd	Evaluation Color +b
Statistics	Average	0.58	0.50	0.50	0.41	0.39	0.57
	Median	0.41	0.36	0.35	0.30	0.25	0.42
	Best Instr.	0.06	0.06	0.06	0.04	0.03	0.08
	Worst Instr.	4.86	3.28	4.56	2.51	2.78	5.65



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

International Cotton Advisory Committee

CSITC
Global - Round Trial 2015 - 4
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	96.3	94.1	95.7	99.5	92.1	88.2
Completely within limits	94.0	88.6	86.7	98.0	88.5	75.7
% of Instruments ≥75% within limits	95.3	94.0	98.0	100.0	91.2	87.2
% of Instruments ≥50% within limits	96.0	95.3	98.0	100.0	93.2	93.2

Percentage of Results Within Limits						
Instrument	**Micronaire**	**Strength**	**Length**	**Uniformity**	**Color Rd**	**Color +b**
GL154-001-01	100	100	100	100	100	100
GL154-001-02	100	100	100	100	100	100
GL154-001-06	100	100	100	100	100	100
GL154-002-25	100	100	100	100	100	25
GL154-003-01	100	100	100	100	100	50
GL154-004-01	100	100	100	100	100	100
GL154-005-01	100	100	100	100	100	100
GL154-005-02	100	100	100	100	100	100
GL154-006-02	100	100	100	100	100	75
GL154-007-01	100	100	100	100	100	100
GL154-008-02	100	100	100	100	100	75
GL154-008-03	100	100	100	100	100	25
GL154-008-05	100	100	100	100	100	100
GL154-008-06	100	100	100	100	75	100
GL154-009-01	100	100	100	100	100	75
GL154-010-20	100	100	100	100	100	100
GL154-010-22	100	100	100	100	100	100
GL154-011-01	100	100	100	100	100	100
GL154-012-03	100	100	100	100	100	100
GL154-012-04	100	100	100	100	100	100
GL154-012-06	100	100	100	100	100	100
GL154-013-01	100	100	100	100	100	100
GL154-014-01	25	0	25	75	25	0
GL154-014-02	25	25	25	75	0	0
GL154-016-01	100	100	100	100	25	100
GL154-017-01	100	100	100	100	100	100
GL154-017-02	100	100	100	100	100	100
GL154-017-03	100	100	100	100	100	100
GL154-017-04	100	100	100	100	100	100
GL154-018-02	100	100	100	100	100	50
GL154-019-01	100	100	100	100	100	100
GL154-020-01	100	100	100	100	100	100
GL154-020-02	100	100	100	100	100	100
GL154-021-01	100	75	100	100	0	100

GL154-022-01	100	100	100	100	100	100
GL154-023-01	100	100	100	100	100	100
GL154-023-02	100	100	100	100	100	100
GL154-024-01	100	100	100	100	100	100
GL154-024-04	100	100	100	100	100	100
GL154-024-05	100	100	100	100	100	100
GL154-025-12	100	100	100	100	100	100
GL154-025-16	100	100	100	100	100	100
GL154-026-01	100	75	100	100	50	100
GL154-027-01	100	100	75	100	100	100
GL154-027-02	100	100	75	100	100	100
GL154-027-05	100	100	100	100	100	100
GL154-027-07	100	100	100	100	100	100
GL154-028-01	100	75	100	100	100	0
GL154-028-02	100	100	100	100	100	75
GL154-028-03	100	100	100	100	100	75
GL154-029-26	100	100	100	100	100	100
GL154-029-32	100	100	100	100	100	100
GL154-032-06	100	100	100	100	100	50
GL154-033-01	25	100	75	100	100	75
GL154-033-09	25	100	75	100	100	75
GL154-033-11	25	100	75	100	100	75
GL154-033-12	25	100	75	100	100	75
GL154-034-04	100	100	100	100	100	100
GL154-035-01	100	75	100	100	100	75
GL154-036-02	100	100	100	100	100	100
GL154-036-03	100	25	75	100	100	25
GL154-036-04	100	100	75	100	0	75
GL154-036-06	100	25	100	100	0	100
GL154-036-07	100	25	100	100	100	100
GL154-036-08	100	100	100	100	100	100
GL154-037-01	100	100	100	100	50	100
GL154-038-01	100	100	100	100	75	100
GL154-039-01	100	50	100	100	100	100
GL154-040-02	100	100	100	100	100	75
GL154-041-01	100	100	100	100	100	75
GL154-041-02	100	100	75	100	100	50
GL154-041-03	100	100	100	100	100	100
GL154-041-04	100	100	100	100	100	100
GL154-043-03	100	100	100	100	100	100
GL154-044-01	100	100	100	100	100	100
GL154-045-01	100	100	100	100	100	100
GL154-045-02	100	100	100	100	100	100
GL154-046-01	100	100	100	100	100	100
GL154-047-02	100	100	100	100	100	100
GL154-049-01	100	100	100	100	100	100
GL154-049-02	100	100	100	100	100	100
GL154-050-02	100	100	100	100	75	100
GL154-050-03	100	100	100	100	100	100
GL154-051-24	100	100	100	100	100	100
GL154-051-30	100	100	100	100	100	100
GL154-052-01	100	100	100	100	100	50
GL154-053-02	100	100	100	100	100	100
GL154-053-03	100	100	100	100	100	100
GL154-053-04	100	100	100	100	100	100

GL154-054-01	75	100	100	100	100	100
GL154-055-01	100	100	100	100	100	100
GL154-055-02	100	100	100	100	100	100
GL154-056-01	100	100	100	100	100	50
GL154-057-01	100	100	100	100	100	100
GL154-058-01	100	100	100	100	100	100
GL154-059-05	100		75			
GL154-060-01	100	75	100	100	0	100
GL154-064-01	100	100	100	100	100	100
GL154-065-01	100	50	100	100	0	75
GL154-066-01	100	100	100	100	100	100
GL154-067-05	100	100	100	100	100	100
GL154-067-09	100	100	100	100	100	100
GL154-068-01	100	100	100	100	100	100
GL154-069-01	100	75	25	100		
GL154-070-01	100	100	100	100	100	100
GL154-071-01	100	100	100	100	100	100
GL154-071-02	100	100	100	100	100	100
GL154-071-04	100	100	100	100	100	100
GL154-072-01	100	100	100	100	100	100
GL154-073-03	100	100	100	100	100	100
GL154-074-01	100	100	100	100	100	100
GL154-074-03	100	100	100	100	100	100
GL154-075-04	100	100	100	100	100	75
GL154-075-05	100	100	100	100	100	100
GL154-076-01	100	100	100	100	100	100
GL154-077-01	100	100	100	100	100	100
GL154-078-01	100	100	75	100	100	50
GL154-078-02	100	100	100	100	0	25
GL154-079-03	100	100	100	100	100	100
GL154-079-05	100	100	100	100	100	100
GL154-080-01	100	100	100	100	100	50
GL154-080-02	100	100	100	100	100	50
GL154-081-62	100	100	100	100	100	100
GL154-081-63	100	100	100	100	100	100
GL154-082-01	100	100	100	100	100	100
GL154-083-03	75	75	100	75	75	100
GL154-083-05	100	0	75	100	100	100
GL154-084-01	100	100	100	100	100	100
GL154-085-01	100	75	100	100	25	100
GL154-087-01	100	100	100	100	100	100
GL154-089-02	100	100	100	100	100	75
GL154-092-03	100	100	100	100	100	100
GL154-092-14	100	100	100	100	100	100
GL154-095-04	100	100	75	100	100	100
GL154-096-01	100	100	100	100	100	100
GL154-097-01	100	100	75	100	100	100
GL154-097-02	100	100	75	100	100	100
GL154-097-05	100	100	75	100	100	100
GL154-097-06	100	100	75	100	100	100
GL154-098-01	100	100	100	100	100	100
GL154-099-01	100	100	100	100	100	100
GL154-100-01	100	100	100	100	100	0
GL154-100-02	50	100	100	100	100	100
GL154-100-03	100	100	100	100	100	75

GL154-100-04	100	100	100	100	100	25
GL154-100-05	100	100	100	100	100	0
GL154-101-01	100	100	100	100	100	100
GL154-102-01	100	100	100	100	100	100
GL154-102-02	100	100	100	100	100	100
GL154-104-01	100	25	100	100	50	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	95.7	90.7	93.1	98.3	91.9	83.9
% of Instruments 100% within limits	66.0	38.9	34.7	59.7	58.8	31.1
% of Instruments ≥95% within limits	89.3	63.8	66.0	90.6	83.1	46.6
% of Instruments ≥75% within limits	94.7	89.3	94.7	98.7	88.5	75.0
% of Instruments ≥65% within limits	94.7	91.3	96.7	100.0	91.2	80.4
% of Instruments ≥50% within limits	95.3	96.0	98.0	100.0	93.9	92.6

Percentage of Results Within Limits						
Instrument	**Micronaire**	**Strength**	**Length**	**Uniformity**	**Color Rd**	**Color +b**
GL154-001-01	100	100	100	100	100	100
GL154-001-02	100	100	100	100	100	88
GL154-001-06	100	100	100	100	100	100
GL154-002-25	100	88	85	99	97	50
GL154-003-01	98	93	94	100	100	64
GL154-004-01	100	100	100	100	100	97
GL154-005-01	98	100	100	99	99	57
GL154-005-02	98	100	100	99	99	57
GL154-006-02	98	100	100	100	100	65
GL154-007-01	93	100	95	93	98	68
GL154-008-02	100	100	100	100	88	74
GL154-008-03	100	99	100	100	100	40
GL154-008-05	100	98	99	100	80	93
GL154-008-06	100	100	96	100	68	98
GL154-009-01	100	100	97	98	98	71
GL154-010-20	99	98	100	100	100	89
GL154-010-22	100	100	100	100	100	100
GL154-011-01	98	94	97	94	100	82
GL154-012-03	100	100	99	100	100	100
GL154-012-04	100	100	100	100	100	100
GL154-012-06	100	100	100	100	100	100
GL154-013-01	100	100	100	100	99	94
GL154-014-01	25	8	25	75	13	0
GL154-014-02	25	17	25	74	11	0
GL154-016-01	100	88	94	100	57	95
GL154-017-01	98	99	99	100	100	99
GL154-017-02	100	99	100	98	100	96
GL154-017-03	100	100	99	100	100	100
GL154-017-04	100	100	99	100	100	93
GL154-018-02	99	100	100	99	99	44

GL154-019-01	100	97	98	100	100	97
GL154-020-01	100	100	99	100	100	100
GL154-020-02	100	98	95	100	100	100
GL154-021-01	100	88	100	99	12	93
GL154-022-01	100	100	99	98	97	97
GL154-023-01	100	95	96	100	100	92
GL154-023-02	99	78	94	98	100	93
GL154-024-01	100	100	100	100	100	100
GL154-024-04	100	100	100	100	100	98
GL154-024-05	100	100	100	100	100	100
GL154-025-12	100	99	100	100	100	100
GL154-025-16	100	98	100	100	100	100
GL154-026-01	100	73	98	98	53	99
GL154-027-01	100	100	87	100	100	90
GL154-027-02	100	100	89	100	100	100
GL154-027-05	100	100	93	100	100	98
GL154-027-07	99	100	97	100	100	100
GL154-028-01	96	75	93	98	100	27
GL154-028-02	99	78	92	100	100	64
GL154-028-03	100	62	91	96	100	76
GL154-029-26	100	93	98	100	100	100
GL154-029-32	100	98	99	100	99	100
GL154-032-06	99	100	100	99	96	50
GL154-033-01	37	98	82	100	100	65
GL154-033-09	31	96	81	100	100	61
GL154-033-11	33	98	77	100	100	63
GL154-033-12	38	98	85	100	100	64
GL154-034-04	99	98	96	99	100	100
GL154-035-01	100	73	79	98	98	78
GL154-036-02	98	93	94	99	97	98
GL154-036-03	96	36	63	88	85	55
GL154-036-04	98	86	80	95	32	93
GL154-036-06	95	56	83	99	29	96
GL154-036-07	100	39	98	100	98	94
GL154-036-08	95	76	88	98	99	98
GL154-037-01	98	93	97	98	53	99
GL154-038-01	100	58	90	100	68	87
GL154-039-01	100	60	100	98	95	69
GL154-040-02	100	80	79	73	95	68
GL154-041-01	100	100	93	93	99	87
GL154-041-02	88	100	87	95	93	63
GL154-041-03	99	100	100	100	99	80
GL154-041-04	93	100	87	100	100	93
GL154-043-03	100	96	99	99	100	97
GL154-044-01	99	92	99	98	100	100
GL154-045-01	100	100	98	100	97	89
GL154-045-02	100	100	99	100	100	90
GL154-046-01	100	95	100	100	100	94
GL154-047-02	100	100	98	100	88	84
GL154-049-01	100	98	100	100	100	98
GL154-049-02	100	100	100	100	100	94
GL154-050-02	100	90	98	98	68	87
GL154-050-03	100	98	100	100	100	100
GL154-051-24	100	92	98	100	100	89
GL154-051-30	99	92	98	98	95	100