International Cotton Advisory Committee

CSITC
Global - Round Trial 2014 - 2
General Evaluation

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

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- -Summary Table
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Optional Parameters
- -Summary Table
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USDA-AMS, Memphis, TN, USA

System Provided by:
Generation 10 Limited

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which benefitted from support from the Common Fund for Commodities
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** Faserinstitut Bremen are a Cooperation Partner with ICA Bremen*

Global - Round Trial 2014 - 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)			4.075	4.218	5.059	4.502	
Reference Values for Evaluation			4.075	4.218	5.059	4.502	
Number Of Instruments			127	127	127	127	**127**
Inter-Instrument Variation	based on 30 tests	SD	0.078	0.078	0.062	0.072	**0.073**
		CV %	1.9	1.8	1.2	1.6	**1.6**
	based on 6 tests	SD	0.079	0.078	0.070	0.073	**0.075**
		CV %	1.9	1.8	1.4	1.6	**1.7**
	based on single tests	SD	0.089	0.087	0.077	0.080	**0.083**
		CV %	2.2	2.1	1.5	1.8	**1.9**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.025	0.022	0.024	0.023	**0.023**
		CV %	0.6	0.5	0.5	0.5	**0.5**
	between single tests on one day	SD	0.039	0.037	0.036	0.037	**0.037**
		CV %	1.0	0.9	0.7	0.8	**0.8**
	between all tests on different days	SD	0.048	0.046	0.047	0.046	**0.047**
		CV %	1.2	1.1	0.9	1.0	**1.1**

Strength							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			25.151	33.628	27.129	28.910	
Reference Values for Evaluation			25.151	33.628	27.129	28.910	
Number Of Instruments			127	127	127	127	**127**
Inter-Instrument Variation	based on 30 tests	SD	0.702	0.632	0.728	0.740	**0.700**
		CV %	2.8	1.9	2.7	2.6	**2.5**
	based on 6 tests	SD	0.751	0.741	0.833	0.831	**0.789**
		CV %	3.0	2.2	3.1	2.9	**2.8**
	based on single tests	SD	0.892	1.005	0.988	1.007	**0.973**
		CV %	3.5	3.0	3.6	3.5	**3.4**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.290	0.348	0.311	0.323	**0.318**
		CV %	1.2	1.0	1.1	1.1	**1.1**
	between single tests on one day	SD	0.499	0.606	0.516	0.515	**0.534**
		CV %	2.0	1.8	1.9	1.8	**1.9**
	between all tests on different days	SD	0.562	0.714	0.619	0.603	**0.624**
		CV %	2.2	2.1	2.3	2.1	**2.2**

Length							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			0.9825	1.2242	1.0156	1.1358	
Reference Values for Evaluation			0.9825	1.2242	1.0156	1.1358	
Number Of Instruments			127	127	127	127	**127**
Inter-Instrument Variation	based on 30 tests	SD	0.0127	0.0120	0.0128	0.0141	**0.0129**
		CV %	1.3	1.0	1.3	1.2	**1.2**
	based on 6 tests	SD	0.0142	0.0130	0.0139	0.0150	**0.0140**
		CV %	1.4	1.1	1.4	1.3	**1.3**
	based on single tests	SD	0.0173	0.0168	0.0164	0.0181	**0.0172**
		CV %	1.8	1.4	1.6	1.6	**1.6**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.0056	0.0052	0.0058	0.0053	**0.0055**
		CV %	0.6	0.4	0.6	0.5	**0.5**
	between single tests on one day	SD	0.0098	0.0100	0.0091	0.0098	**0.0097**
		CV %	1.0	0.8	0.9	0.9	**0.9**
	between all tests on different days	SD	0.0112	0.0110	0.0104	0.0110	**0.0109**
		CV %	1.1	0.9	1.0	1.0	**1.0**

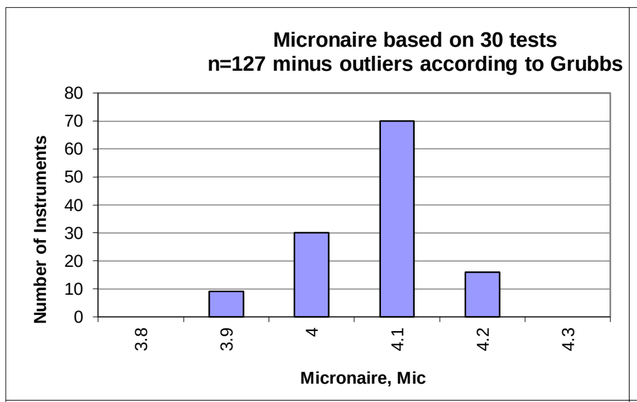
Uniformity							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			78.648	84.923	79.669	81.214	
Reference Values for Evaluation			78.648	84.923	79.669	81.214	
Number Of Instruments			128	128	128	128	**128**
Inter-Instrument Variation	based on 30 tests	SD	0.646	0.669	0.547	0.528	**0.597**
		CV %	0.8	0.8	0.7	0.6	**0.7**
	based on 6 tests	SD	0.724	0.751	0.609	0.597	**0.670**
		CV %	0.9	0.9	0.8	0.7	**0.8**
	based on single tests	SD	0.886	0.880	0.788	0.784	**0.834**
		CV %	1.1	1.0	1.0	1.0	**1.0**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.267	0.234	0.246	0.244	**0.248**
		CV %	0.3	0.3	0.3	0.3	**0.3**
	between single tests on one day	SD	0.508	0.470	0.481	0.517	**0.494**
		CV %	0.6	0.6	0.6	0.6	**0.6**
	between all tests on different days	SD	0.555	0.528	0.552	0.573	**0.552**
		CV %	0.7	0.6	0.7	0.7	**0.7**

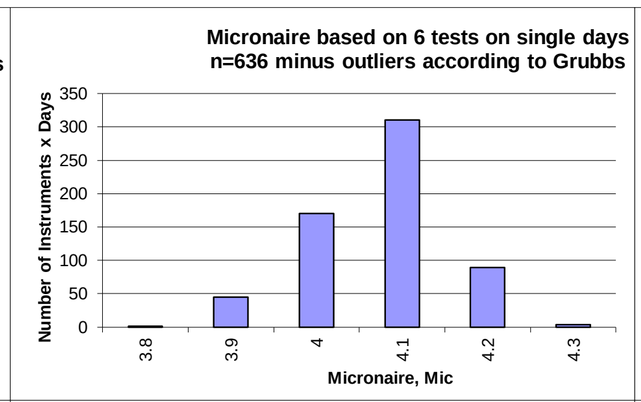
Color Rd							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			70.644	76.655	77.165	67.518	
Reference Values for Evaluation			70.644	76.655	77.165	67.518	
Number Of Instruments			125	125	125	125	**125**
Inter-Instrument Variation	based on 30 tests	SD	0.622	0.809	0.660	0.732	**0.706**
		CV %	0.9	1.1	0.9	1.1	**1.0**
	based on 6 tests	SD	0.676	0.855	0.711	0.776	**0.755**
		CV %	1.0	1.1	0.9	1.1	**1.0**
	based on single tests	SD	0.739	0.881	0.734	0.807	**0.790**
		CV %	1.0	1.1	1.0	1.2	**1.1**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.172	0.173	0.173	0.173	**0.173**
		CV %	0.2	0.2	0.2	0.3	**0.2**
	between single tests on one day	SD	0.193	0.182	0.170	0.189	**0.184**
		CV %	0.3	0.2	0.2	0.3	**0.3**
	between all tests on different days	SD	0.280	0.269	0.237	0.294	**0.270**
		CV %	0.4	0.4	0.3	0.4	**0.4**

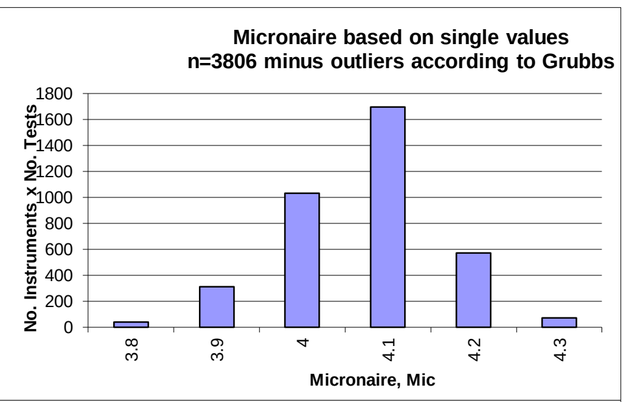
Color +b							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			9.361	12.668	8.598	7.746	
Reference Values for Evaluation			9.361	12.668	8.598	7.746	
Number Of Instruments			125	125	125	125	**125**
Inter-Instrument Variation	based on 30 tests	SD	0.255	0.346	0.217	0.231	**0.262**
		CV %	2.7	2.7	2.5	3.0	**2.7**
	based on 6 tests	SD	0.273	0.355	0.242	0.257	**0.281**
		CV %	2.9	2.8	2.8	3.3	**3.0**
	based on single tests	SD	0.283	0.344	0.269	0.273	**0.292**
		CV %	3.0	2.7	3.1	3.5	**3.1**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.077	0.106	0.080	0.086	**0.087**
		CV %	0.8	0.8	0.9	1.1	**0.9**
	between single tests on one day	SD	0.075	0.104	0.081	0.087	**0.087**
		CV %	0.8	0.8	0.9	1.1	**0.9**
	between all tests on different days	SD	0.111	0.165	0.120	0.120	**0.129**
		CV %	1.2	1.3	1.4	1.6	**1.4**

Test Result Distributions
Micronaire

Cotton 1







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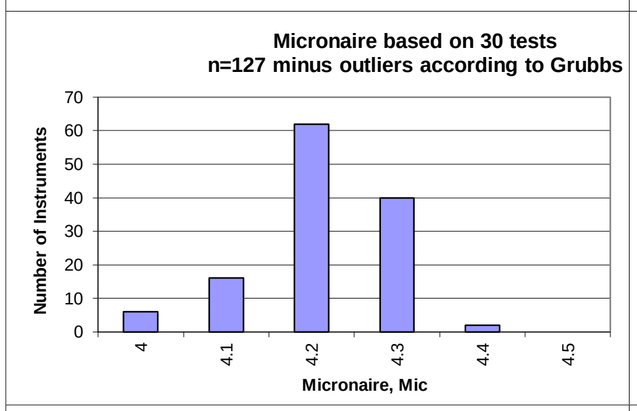

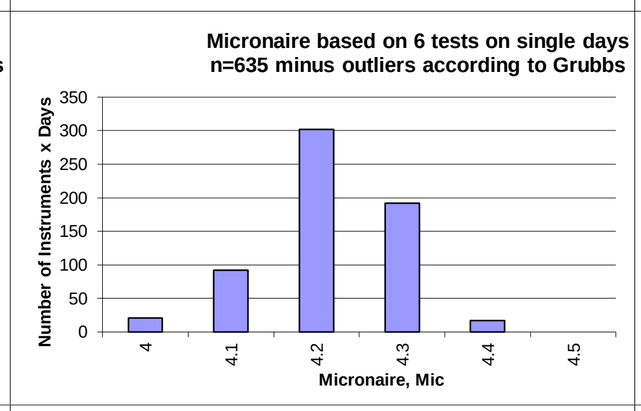

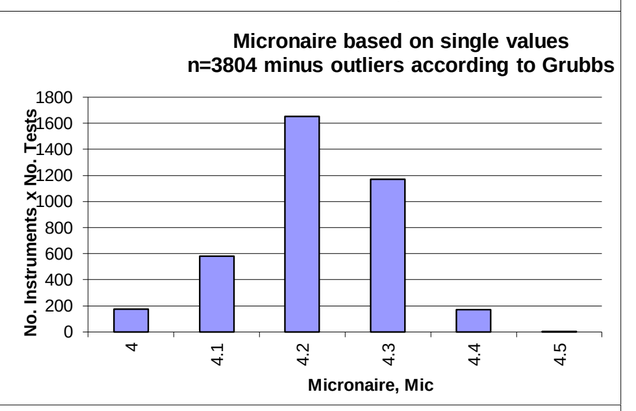

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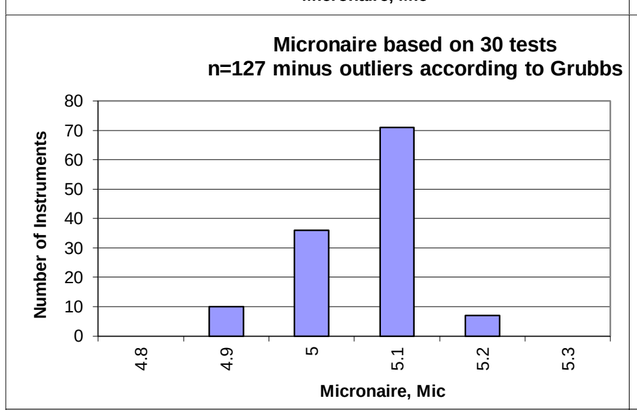
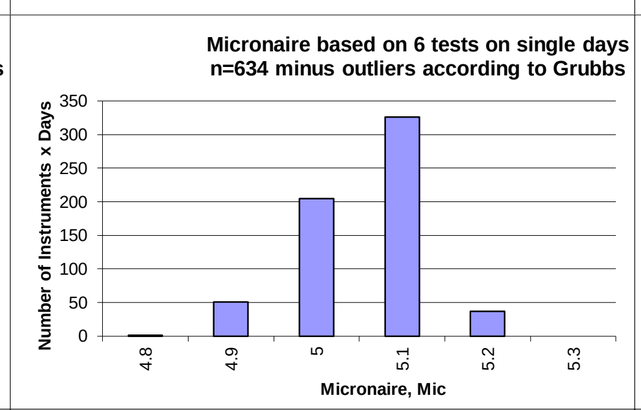
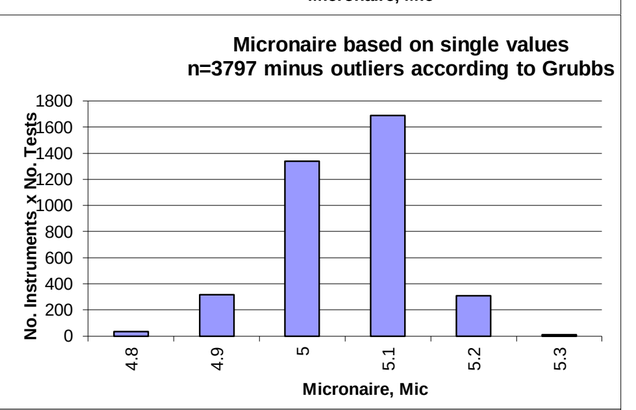
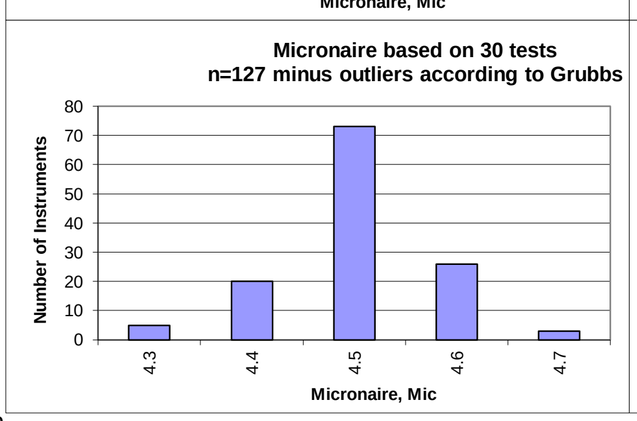
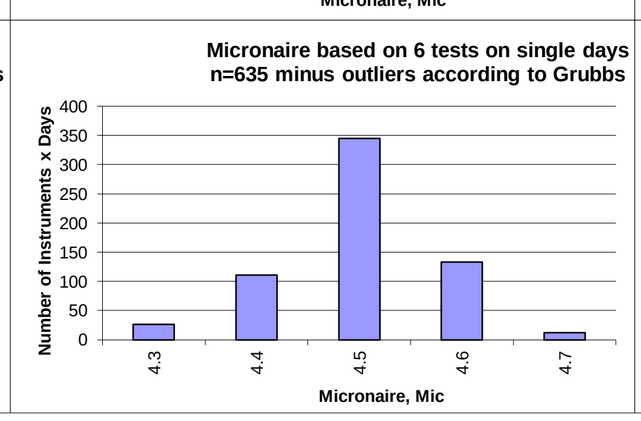


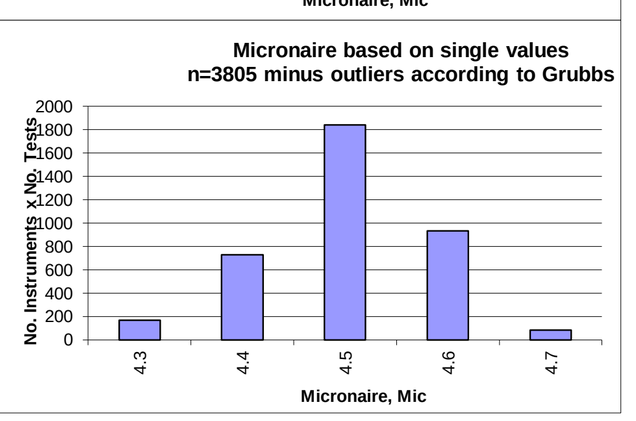




Cotton 4







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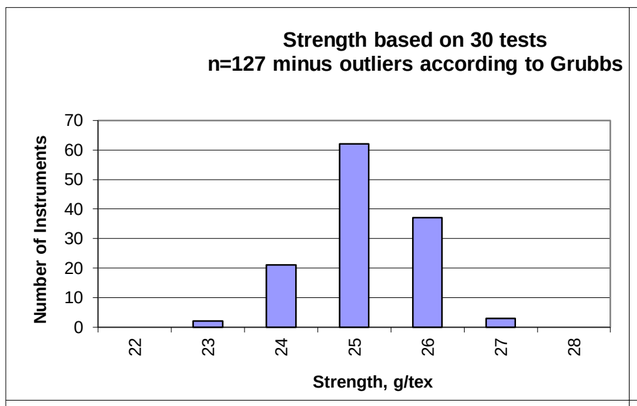
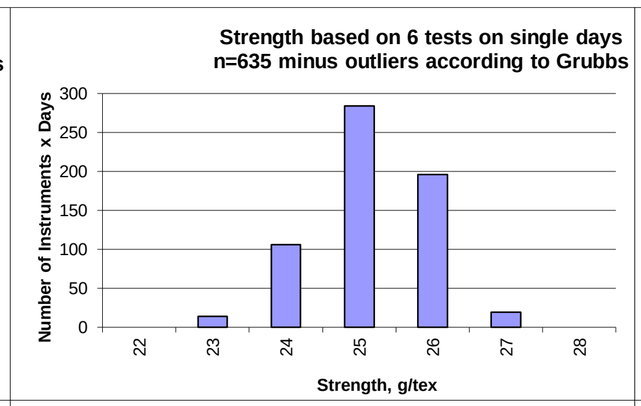
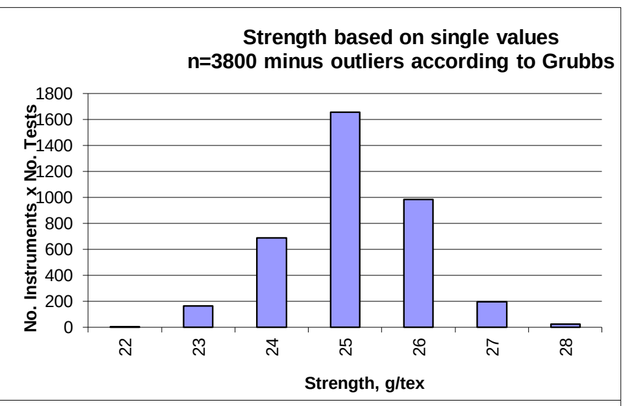
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method.)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Strength

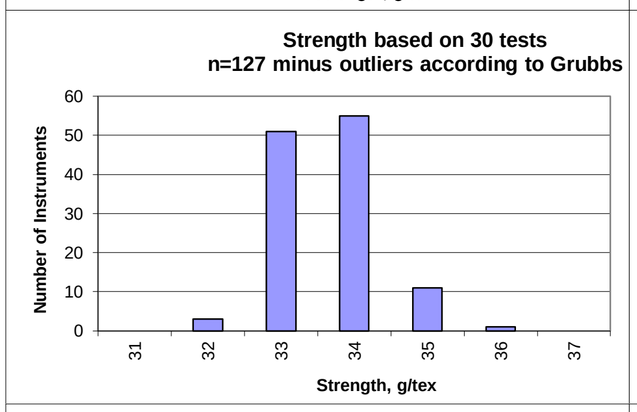
Cotton 1

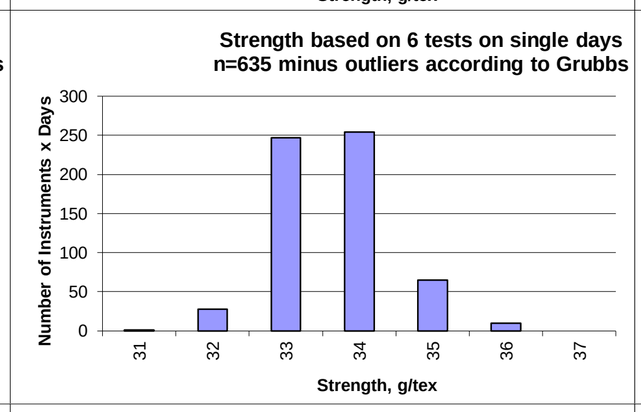


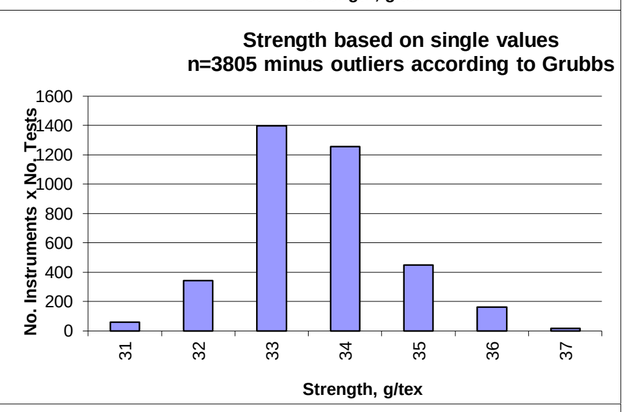




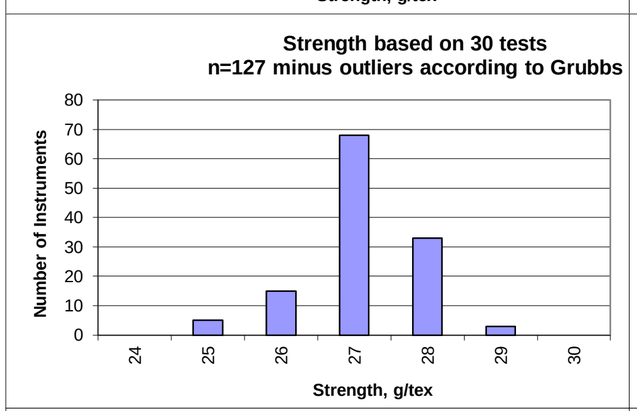
Cotton 2

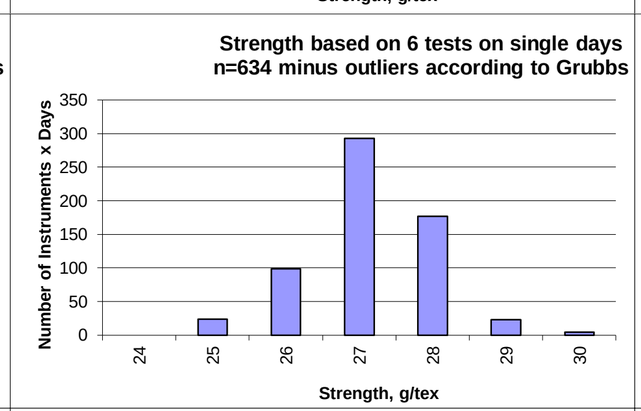


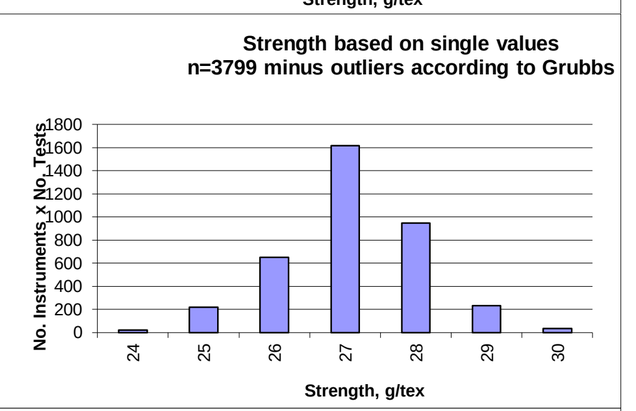




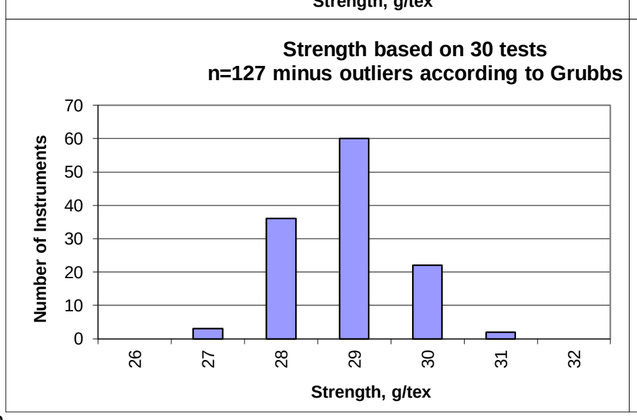
Cotton 3

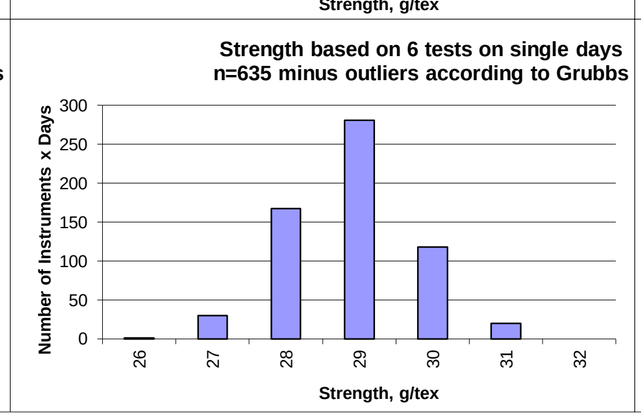


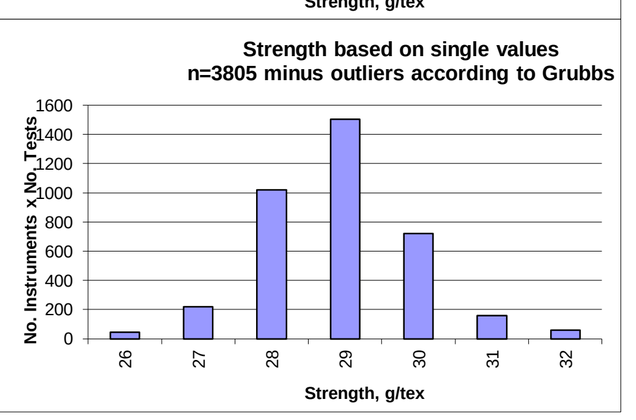




Cotton 4







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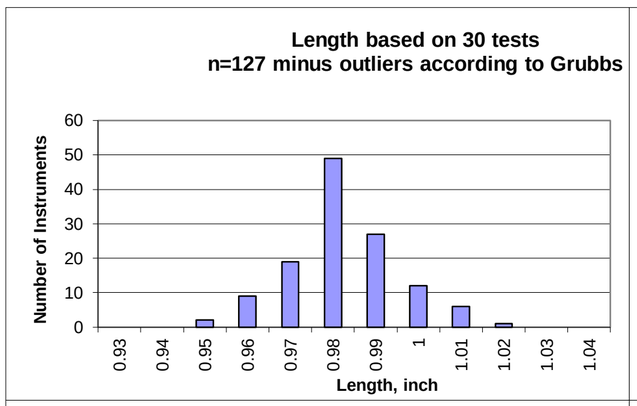
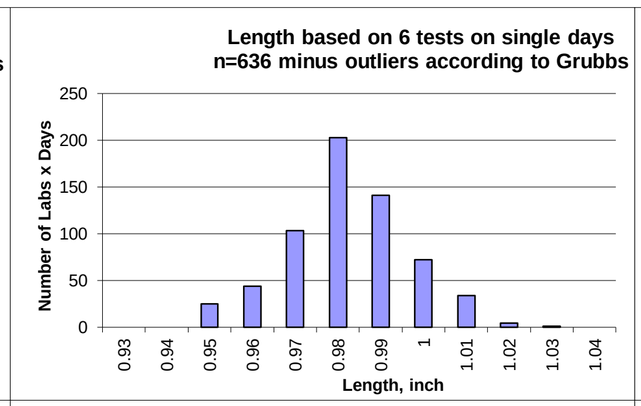
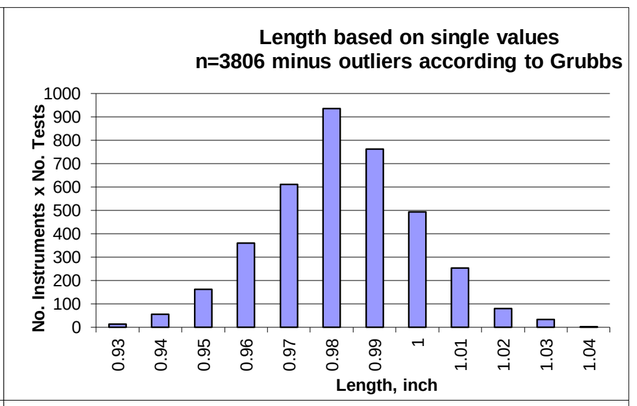
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Length

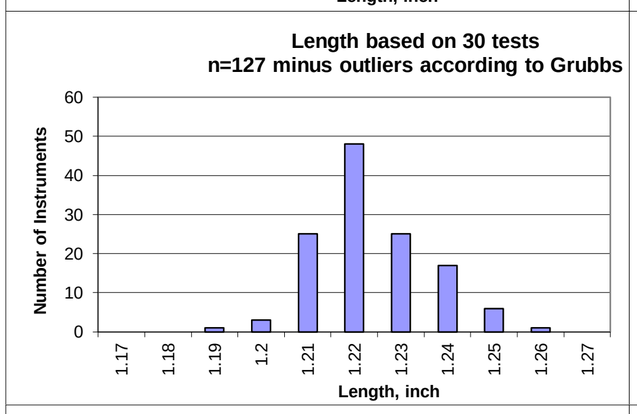
Cotton 1

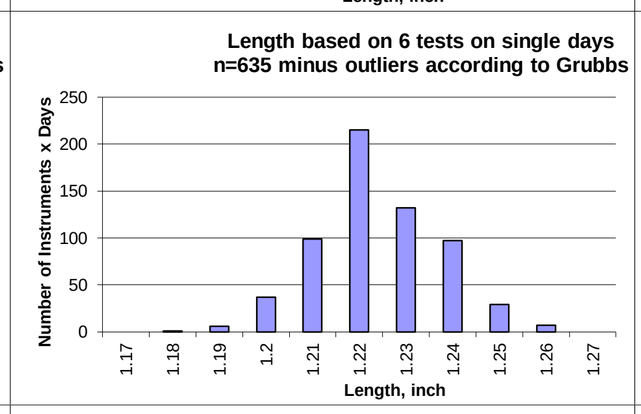


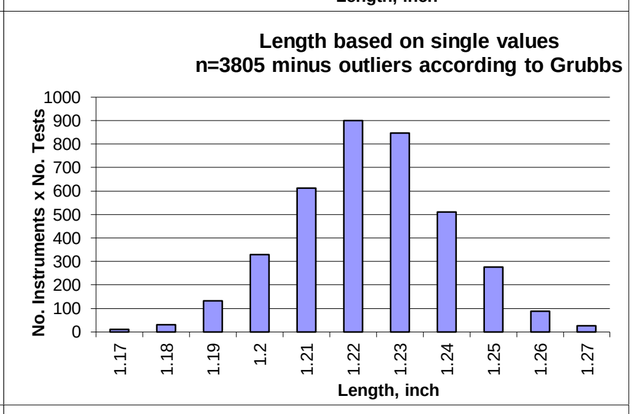




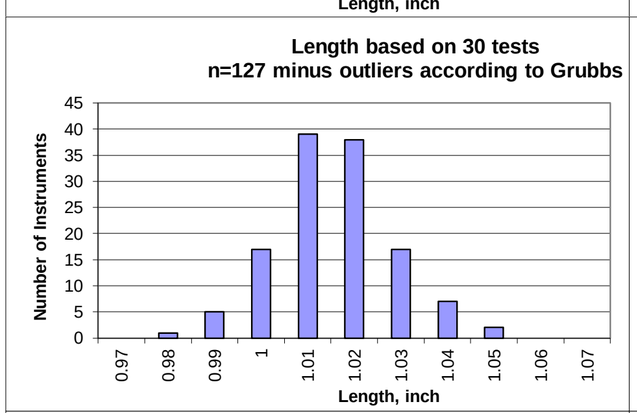
Cotton 2

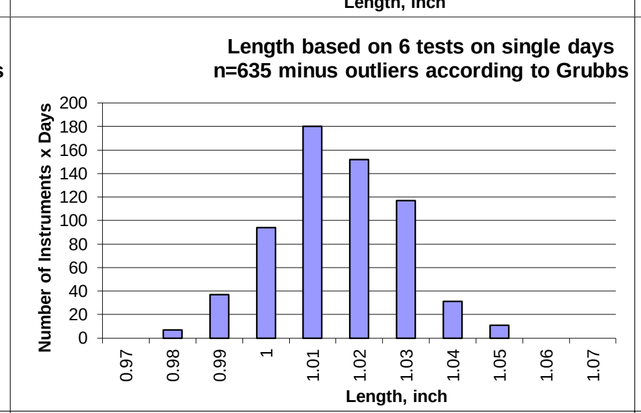


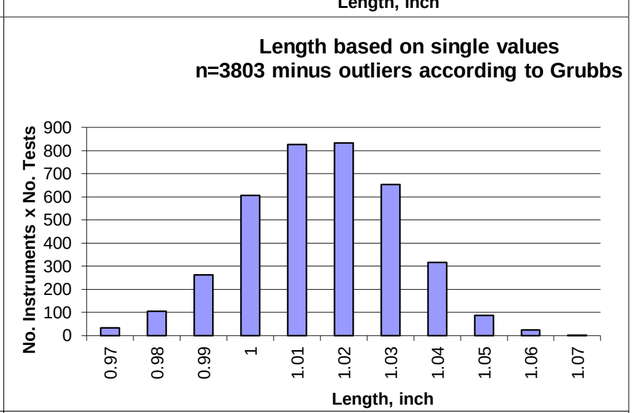




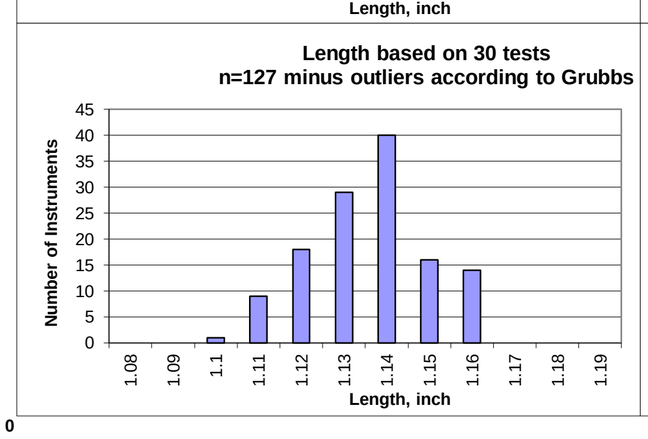
Cotton 3

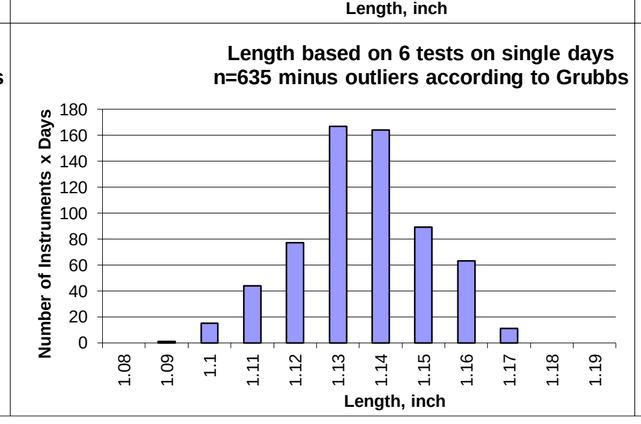


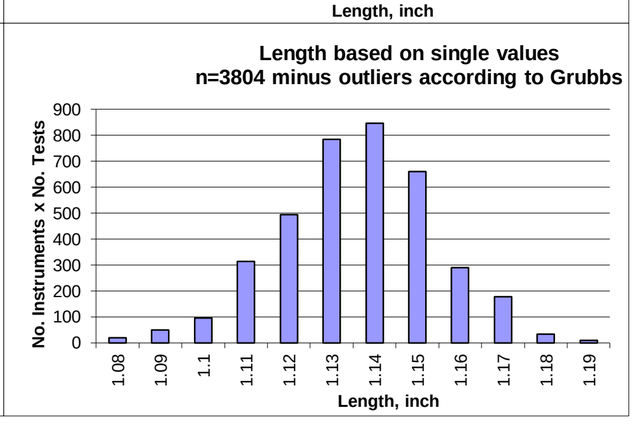




Cotton 4







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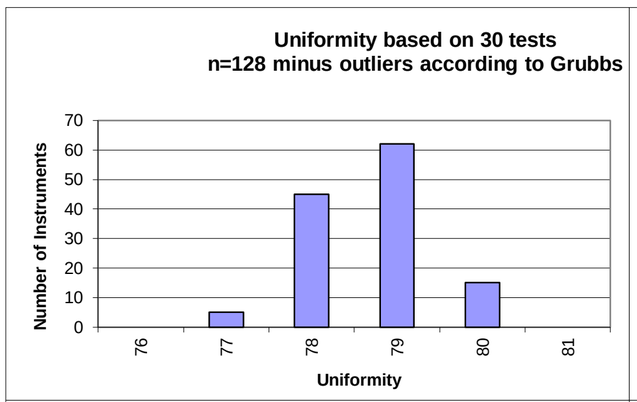
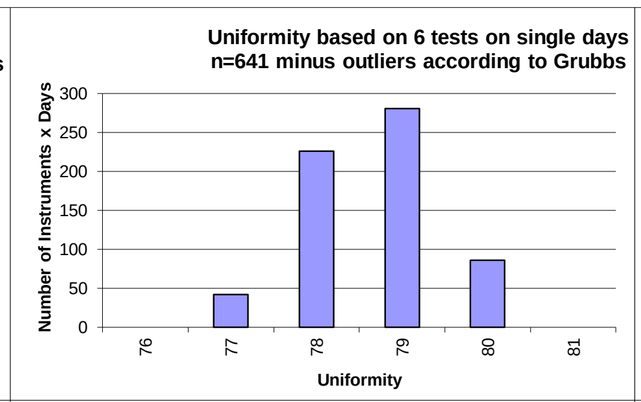
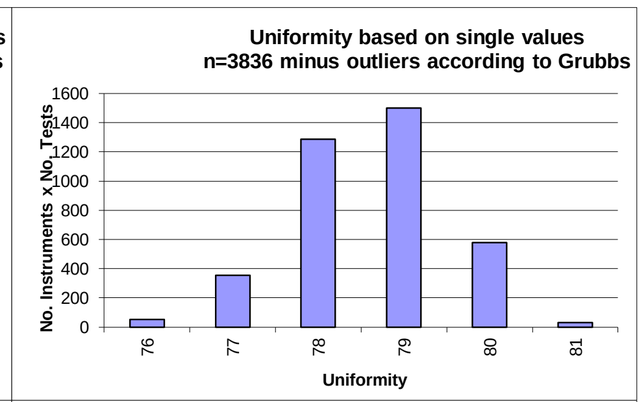
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Uniformity

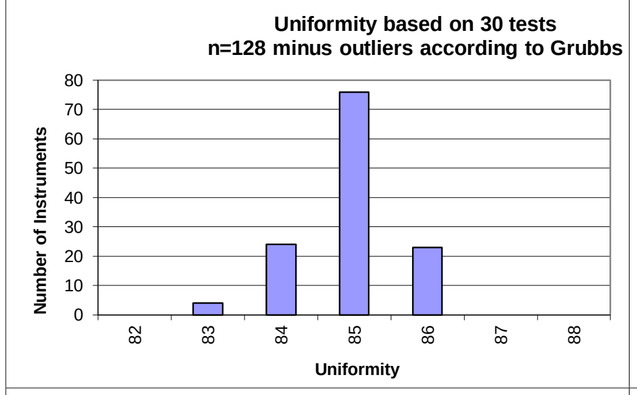
Cotton 1

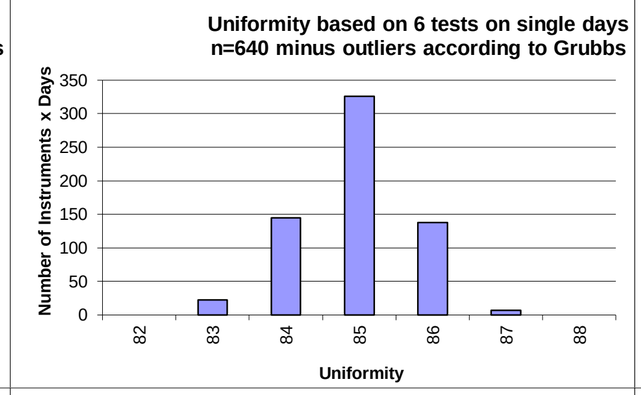


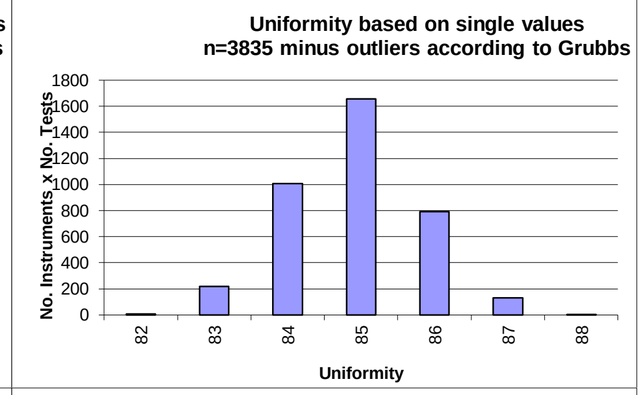




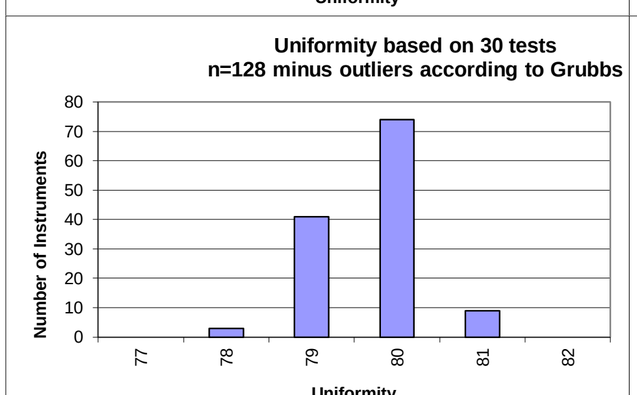
Cotton 2

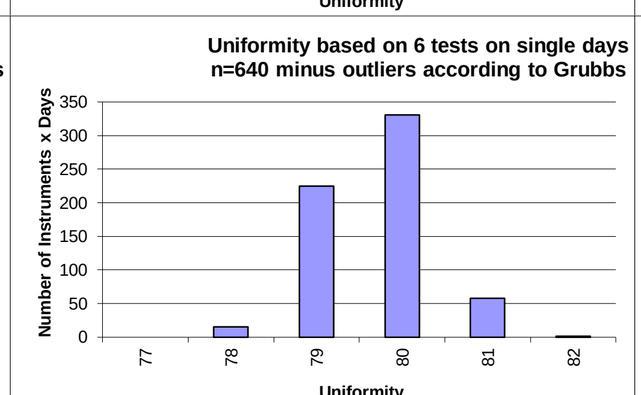


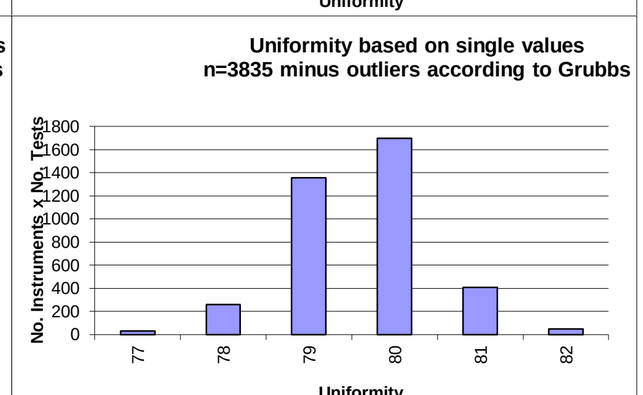




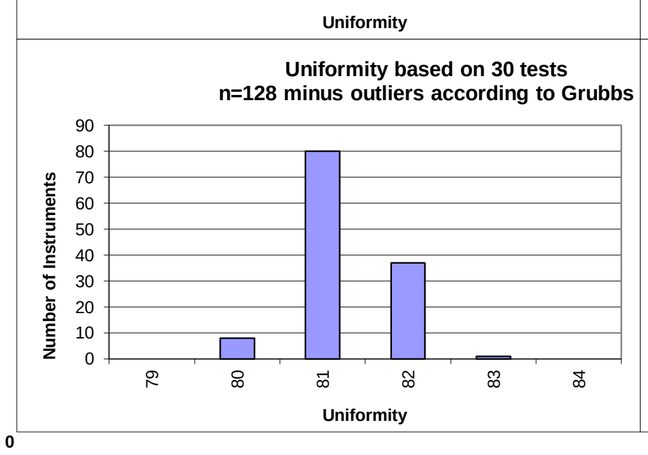
Cotton 3

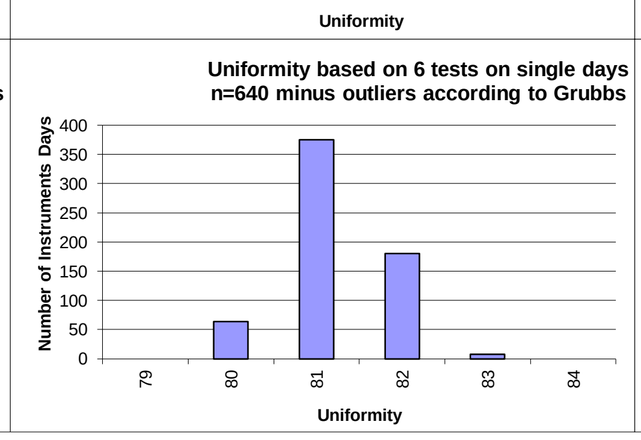


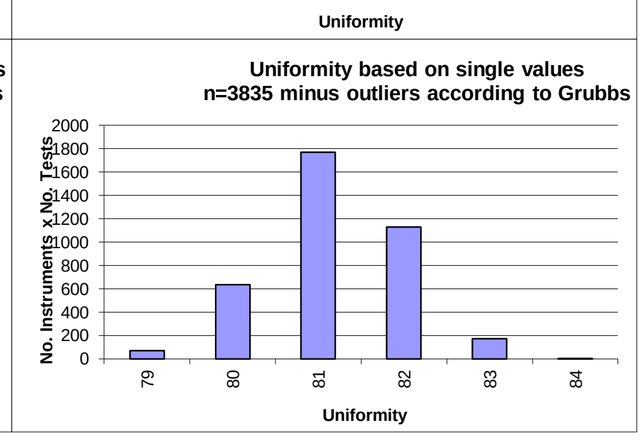




Cotton 4







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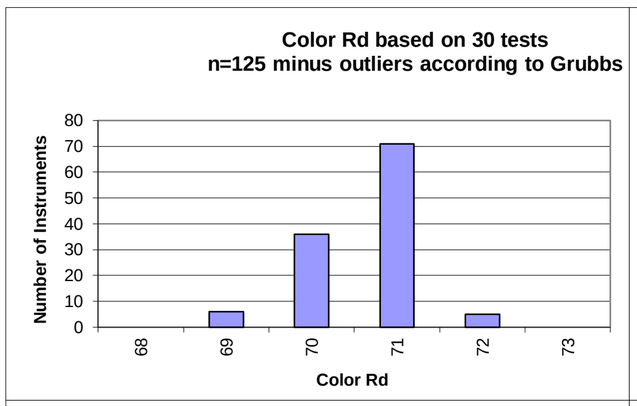
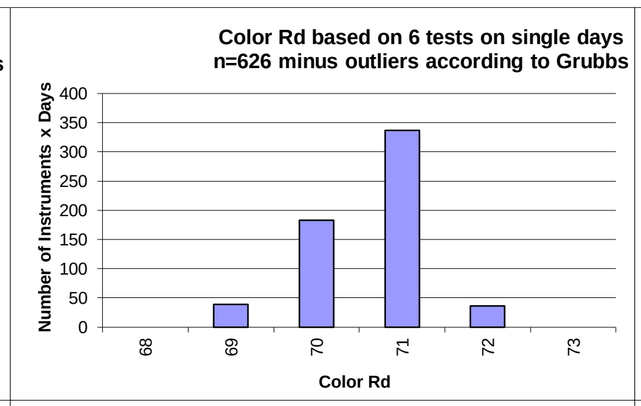
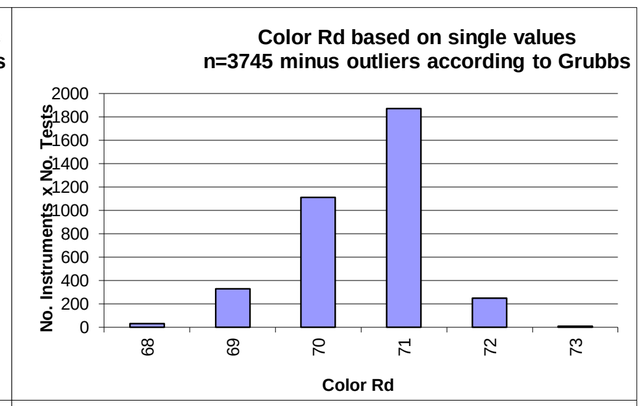
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Color Rd

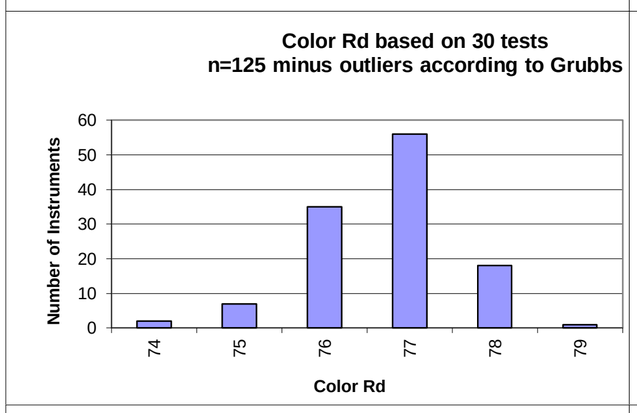
Cotton 1

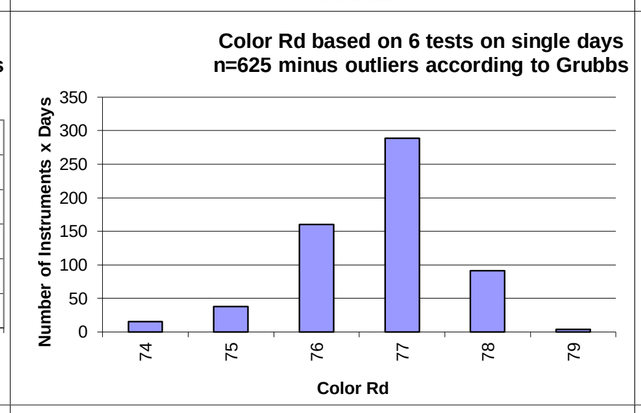


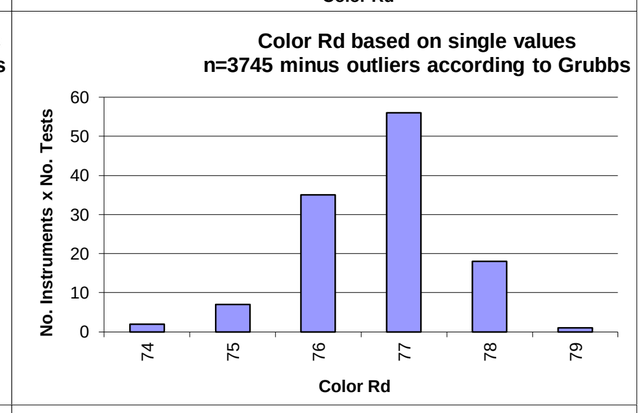




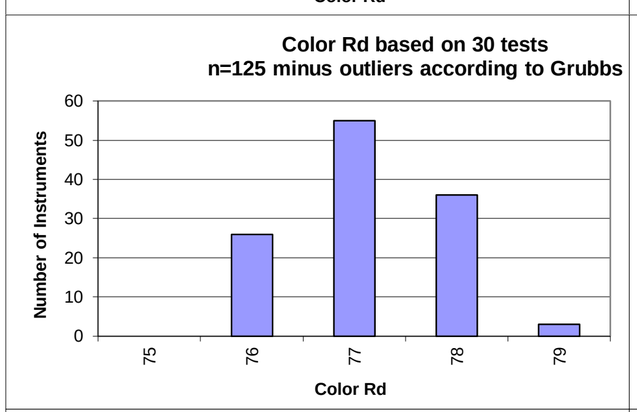
Cotton 2

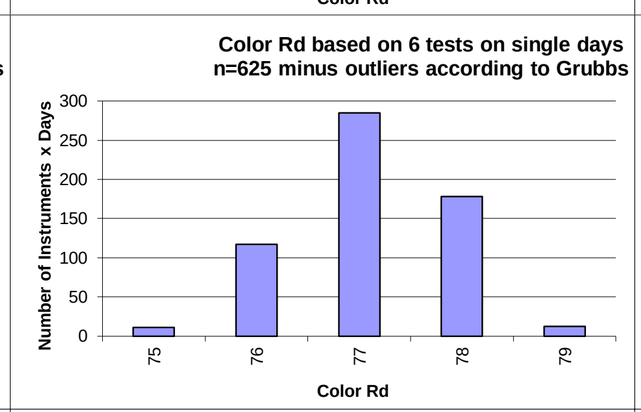


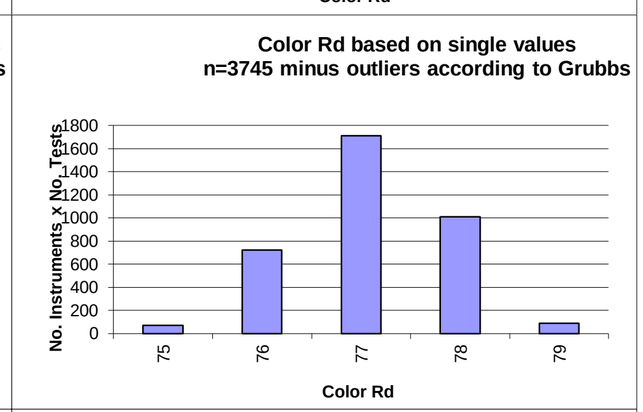




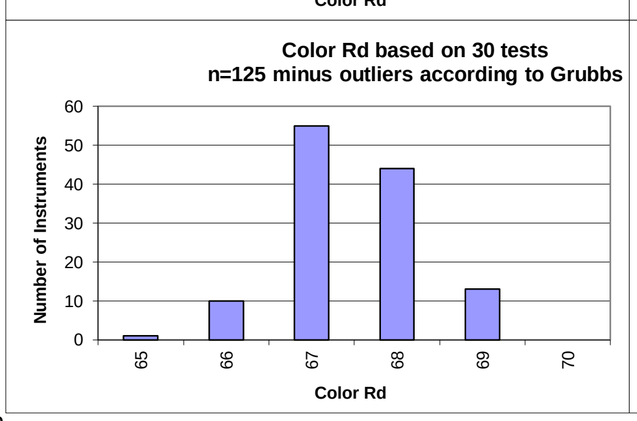
Cotton 3

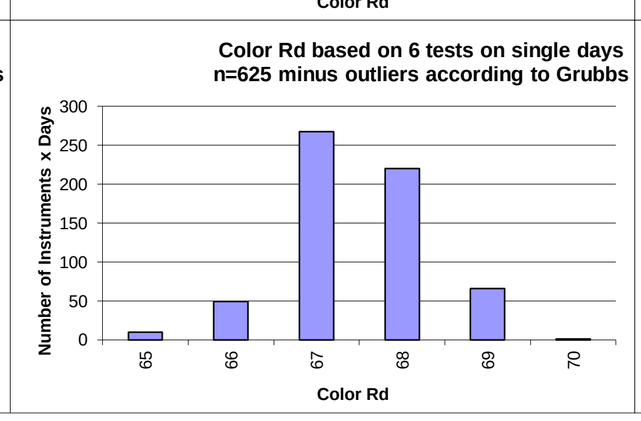


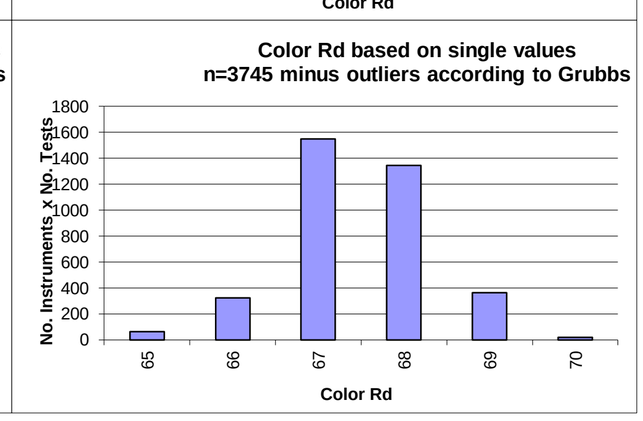




Cotton 4







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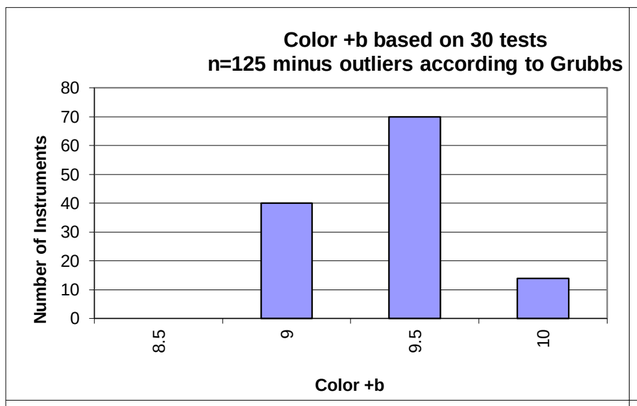
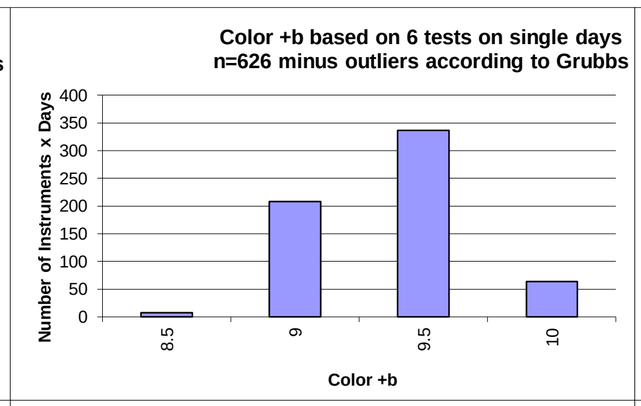
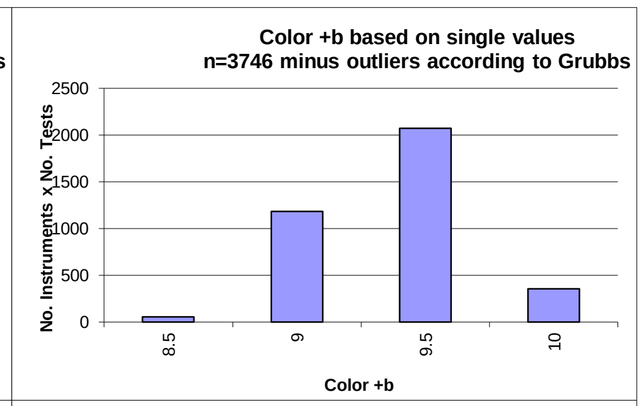
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Color +b

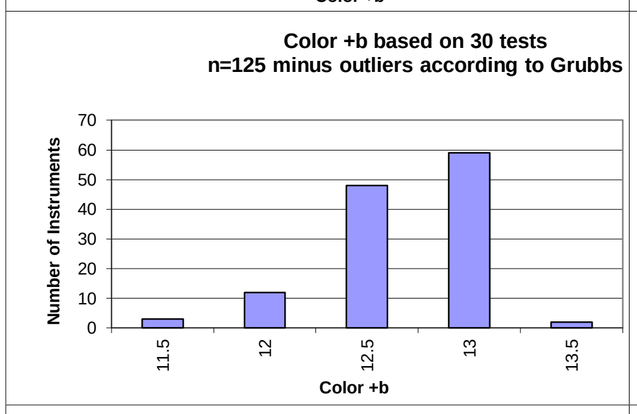
Cotton 1

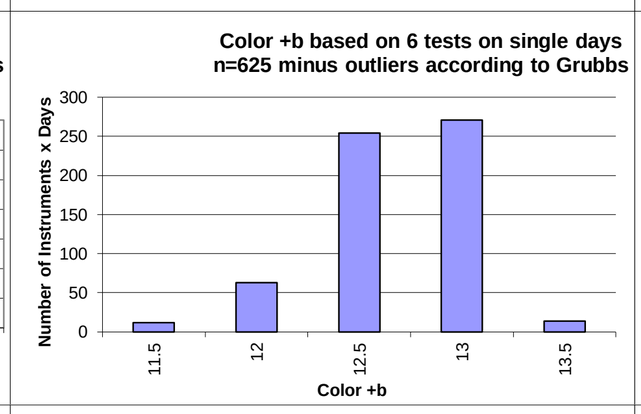


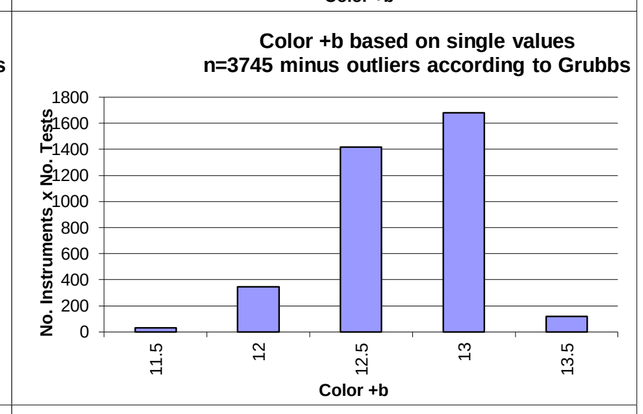




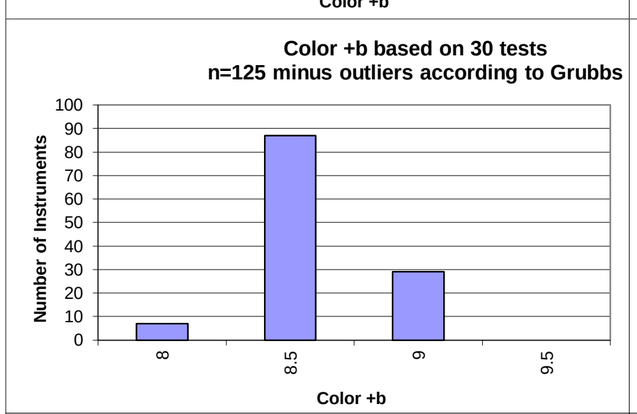
Cotton 2

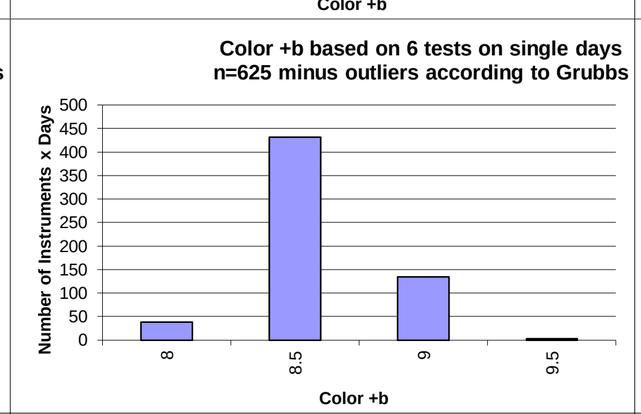


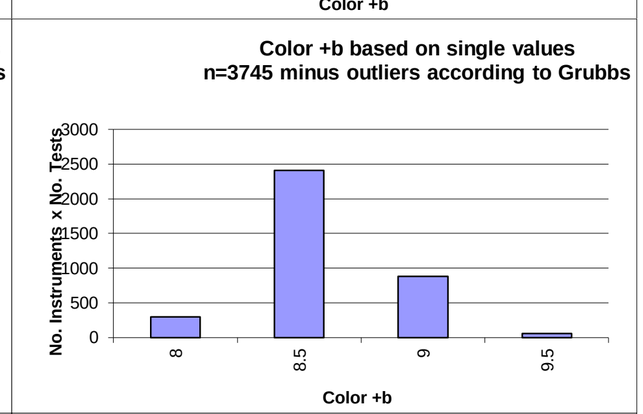




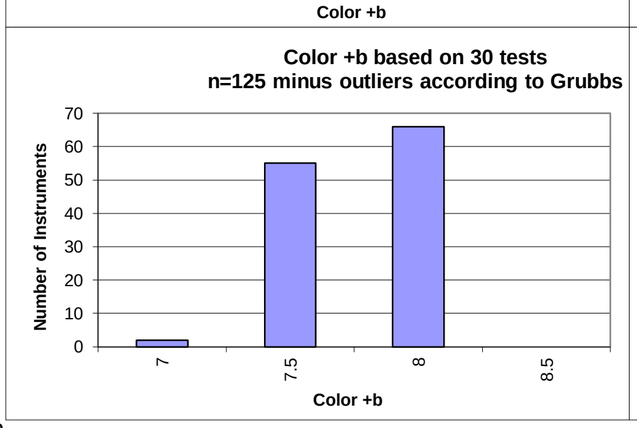
Cotton 3

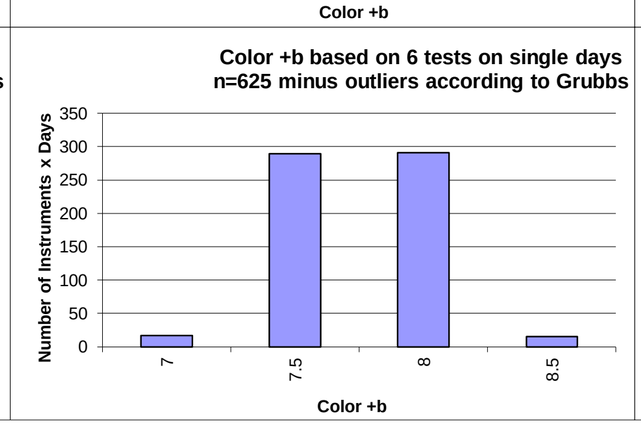


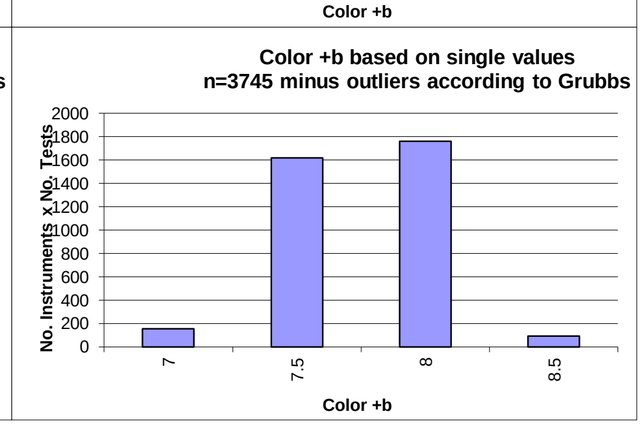




Cotton 4







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(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)			33.37	21.34	17.43	32.92	
Reference Values for Evaluation			33.37	21.34	17.43	32.92	
Number Of Instruments			101	101	101	101	**101**
Inter-Instrument Variation	based on 30 tests	SD	9.69	6.08	6.26	9.92	**7.99**
		CV %	29.0	28.5	35.9	30.1	**30.9**
	based on 6 tests	SD	10.13	6.51	6.56	10.79	**8.50**
		CV %	30.4	30.5	37.6	32.8	**32.8**
	based on single tests	SD	11.23	7.40	7.06	11.27	**9.24**
		CV %	33.7	34.7	40.5	34.2	**35.8**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	2.73	2.20	1.90	2.86	**2.42**
		CV %	8.2	10.3	10.9	8.7	**9.5**
	between single tests on one day	SD	2.79	2.29	2.04	3.00	**2.53**
		CV %	8.4	10.7	11.7	9.1	**10.0**
	between all tests on different days	SD	4.43	3.62	3.29	4.59	**3.98**
		CV %	13.3	16.9	18.9	13.9	**15.8**

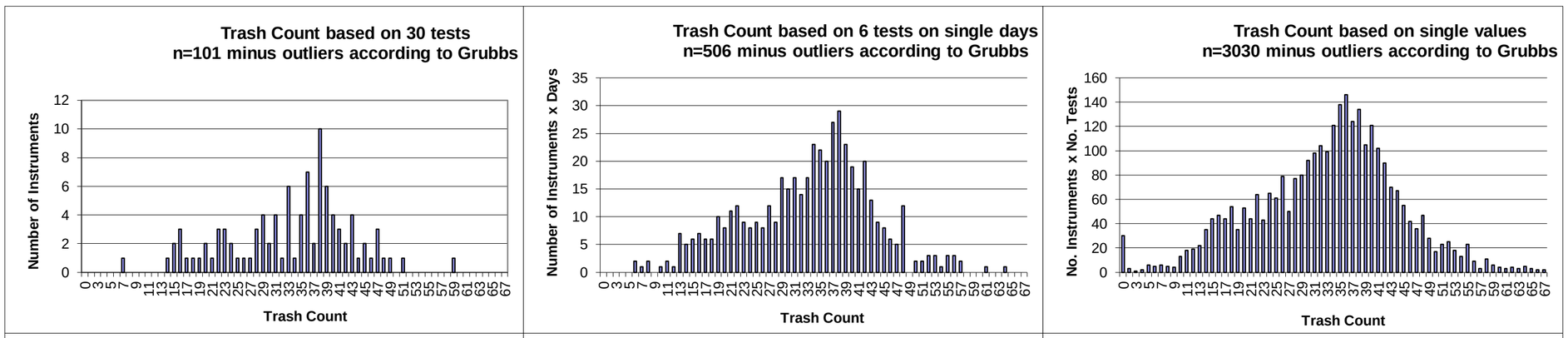
Trash Area							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			0.335	0.253	0.174	0.322	
Reference Values for Evaluation			0.335	0.253	0.174	0.322	
Number Of Instruments			101	101	101	101	**101**
Inter-Instrument Variation	based on 30 tests	SD	0.096	0.090	0.054	0.098	**0.084**
		CV %	28.6	35.6	31.1	30.3	**31.4**
	based on 6 tests	SD	0.115	0.098	0.062	0.105	**0.095**
		CV %	34.3	38.9	35.8	32.7	**35.4**
	based on single tests	SD	0.124	0.107	0.065	0.118	**0.103**
		CV %	37.0	42.2	37.4	36.5	**38.3**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.044	0.040	0.024	0.040	**0.037**
		CV %	13.0	15.9	13.6	12.3	**13.7**
	between single tests on one day	SD	0.052	0.039	0.026	0.042	**0.040**
		CV %	15.4	15.4	15.0	13.2	**14.7**
	between all tests on different days	SD	0.072	0.067	0.040	0.061	**0.060**
		CV %	21.6	26.7	23.1	19.0	**22.6**

Maturity							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			83.59	85.58	88.11	86.18	
Reference Values for Evaluation			83.59	85.58	88.11	86.18	
Number Of Instruments			105	105	105	105	**105**
Inter-Instrument Variation	based on 30 tests	SD	1.71	2.46	1.40	1.73	**1.82**
		CV %	2.0	2.9	1.6	2.0	**2.1**
	based on 6 tests	SD	1.64	2.36	1.43	1.74	**1.79**
		CV %	2.0	2.8	1.6	2.0	**2.1**
	based on single tests	SD	1.60	2.28	1.47	1.73	**1.77**
		CV %	1.9	2.7	1.7	2.0	**2.1**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.22	0.20	0.15	0.22	**0.20**
		CV %	0.3	0.2	0.2	0.3	**0.2**
	between single tests on one day	SD	0.37	0.32	0.35	0.32	**0.34**
		CV %	0.4	0.4	0.4	0.4	**0.4**
	between all tests on different days	SD	0.45	0.45	0.45	0.45	**0.45**
		CV %	0.5	0.5	0.5	0.5	**0.5**

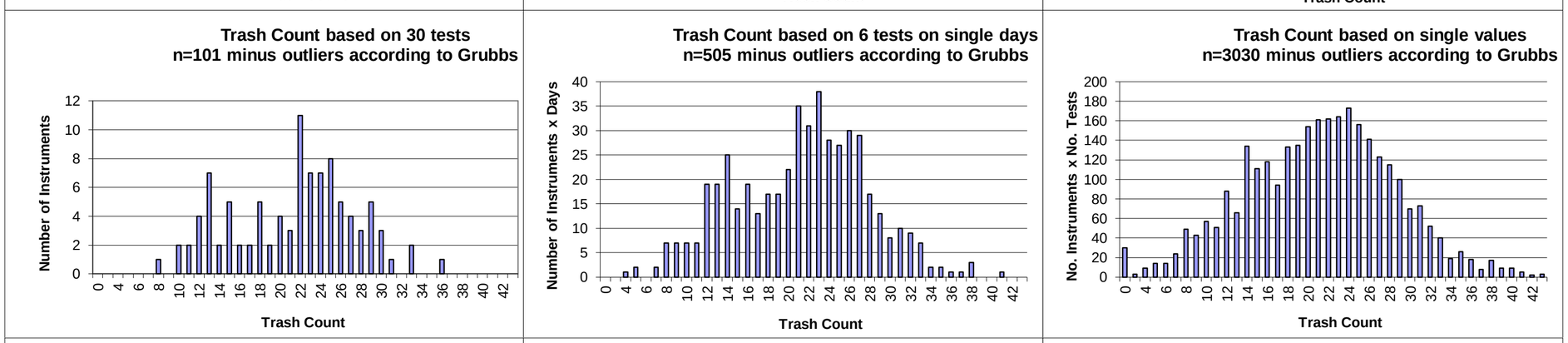
SFI							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			13.47	6.52	11.96	9.68	
Reference Values for Evaluation			13.47	6.52	11.96	9.68	
Number Of Instruments			115	115	115	115	**115**
Inter-Instrument Variation	based on 30 tests	SD	1.38	0.66	0.96	0.91	**0.98**
		CV %	10.2	10.1	8.0	9.5	**9.5**
	based on 6 tests	SD	1.39	0.68	1.00	0.94	**1.00**
		CV %	10.3	10.4	8.4	9.7	**9.7**
	based on single tests	SD	1.54	0.73	1.18	1.06	**1.13**
		CV %	11.4	11.2	9.9	11.0	**10.9**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.35	0.15	0.32	0.26	**0.27**
		CV %	2.6	2.2	2.6	2.7	**2.5**
	between single tests on one day	SD	0.65	0.26	0.58	0.47	**0.49**
		CV %	4.8	4.0	4.8	4.9	**4.6**
	between all tests on different days	SD	0.74	0.28	0.67	0.53	**0.56**
		CV %	5.5	4.4	5.6	5.5	**5.2**

Test Result Distributions
Trash Count

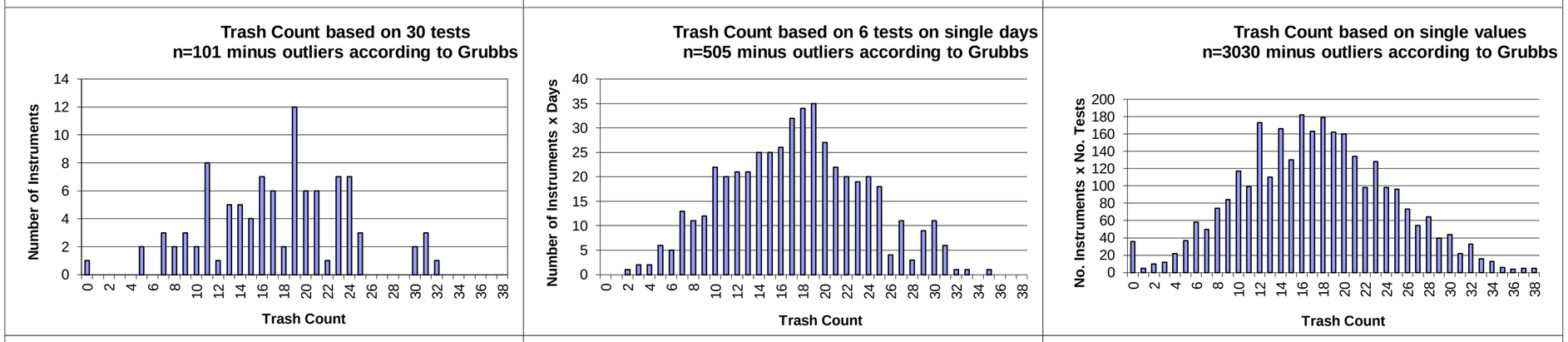
Cotton 1



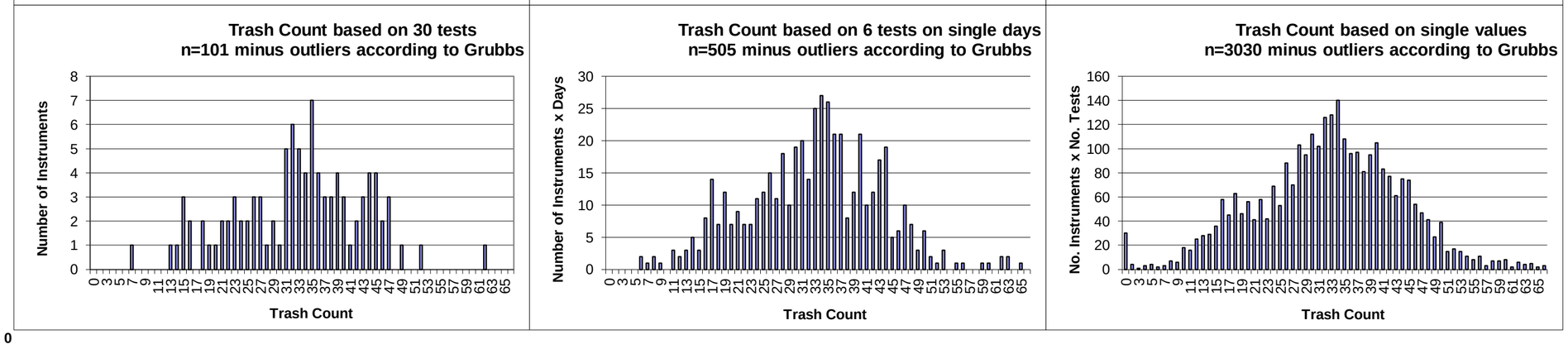
Cotton 2



Cotton 3



Cotton 4



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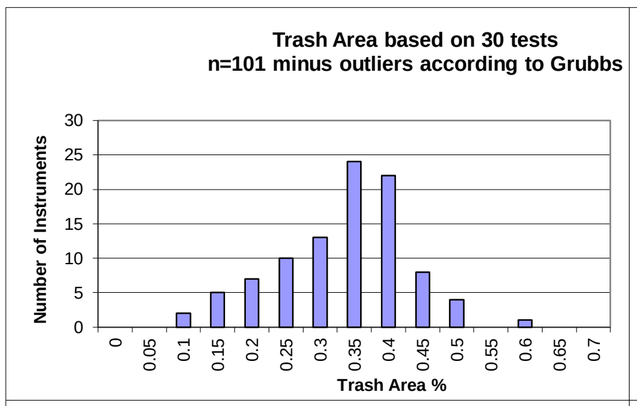
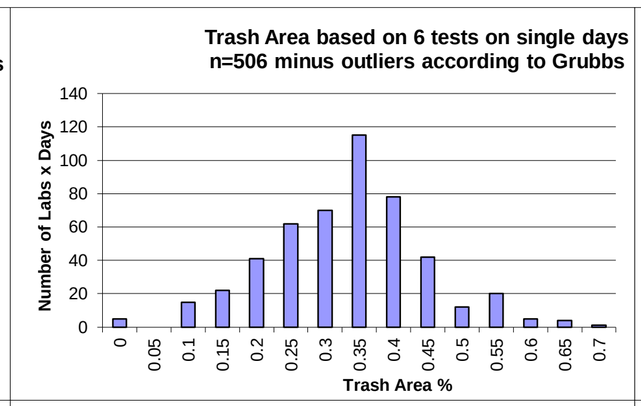
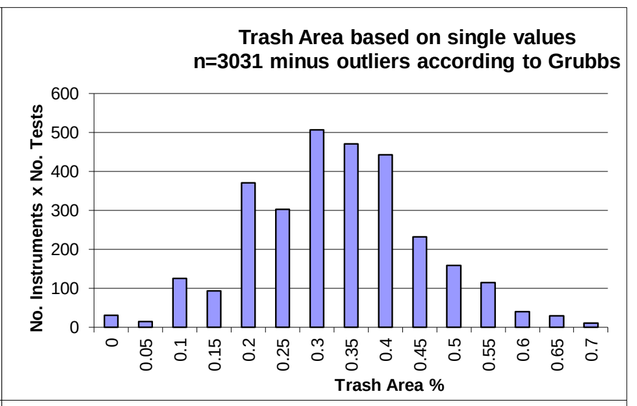
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Trash Area

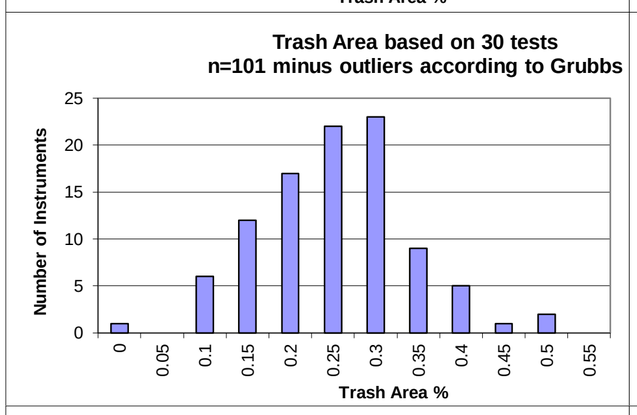
Cotton 1

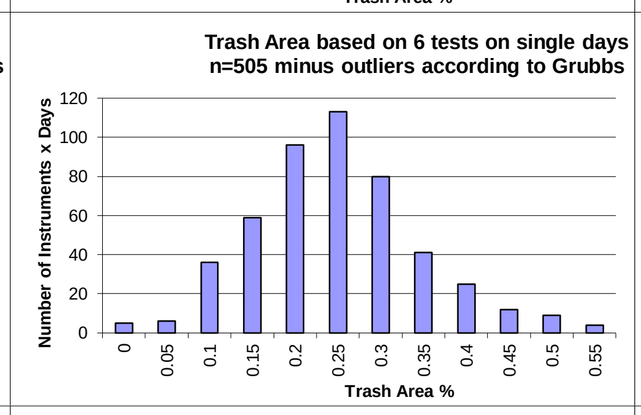


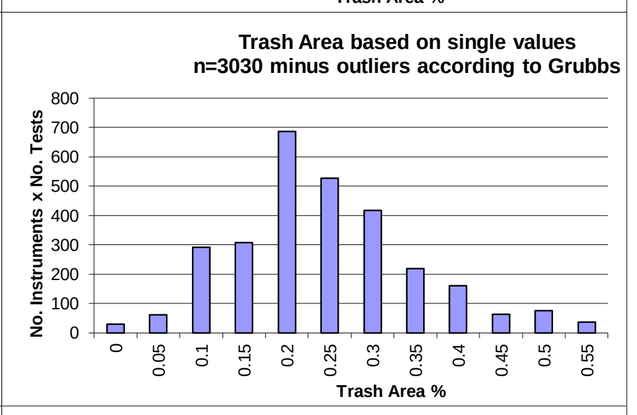




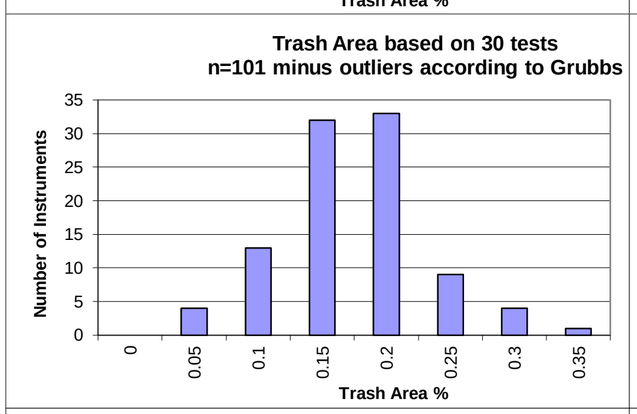
Cotton 2

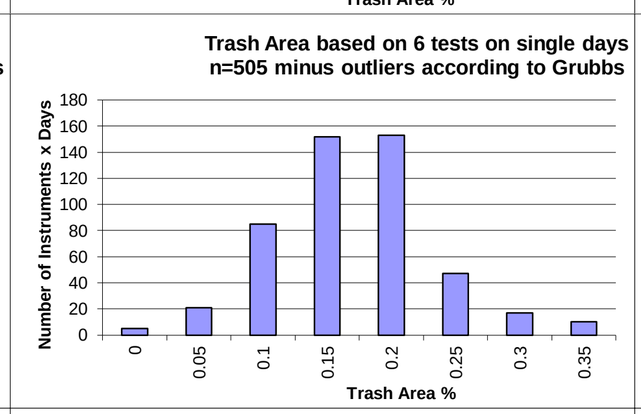


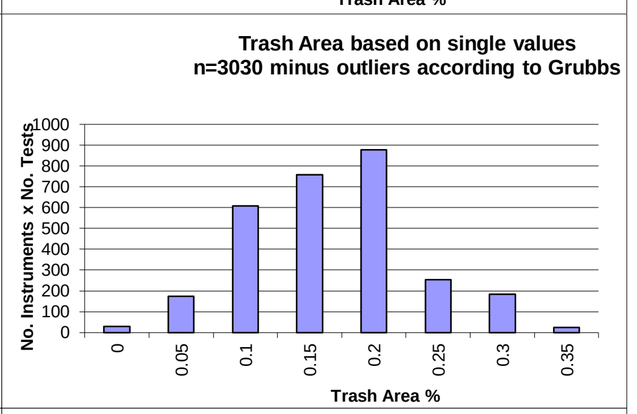




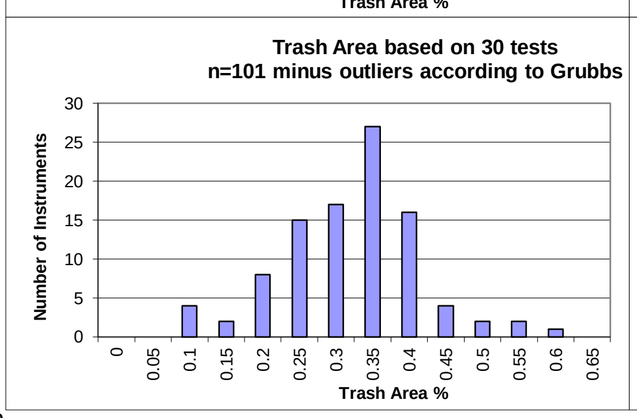
Cotton 3

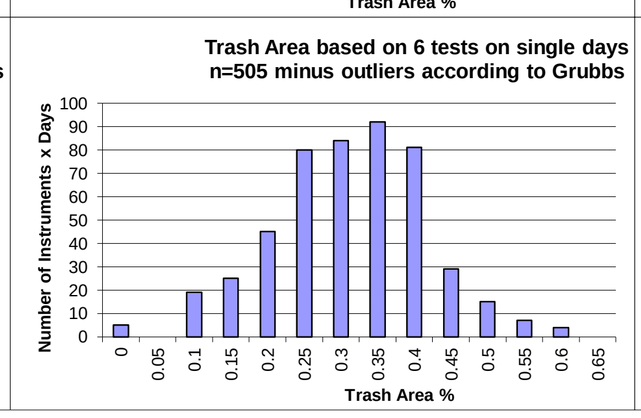


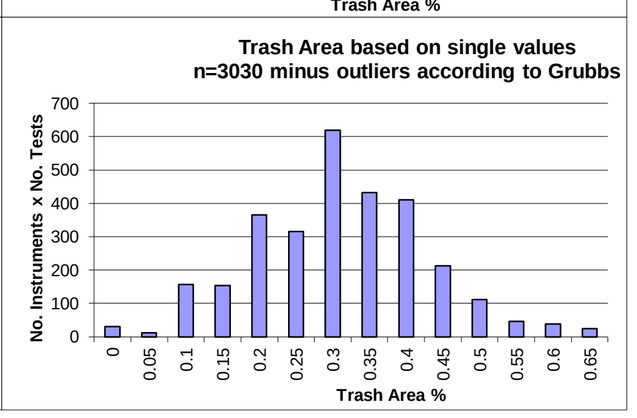




Cotton 4







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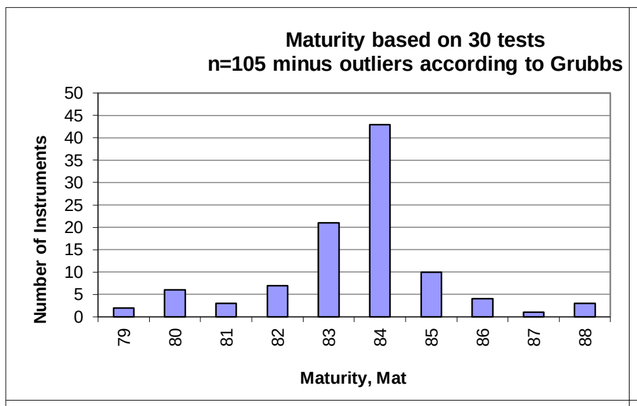
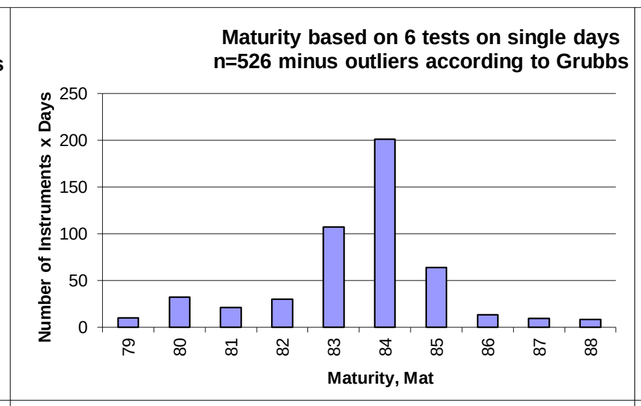
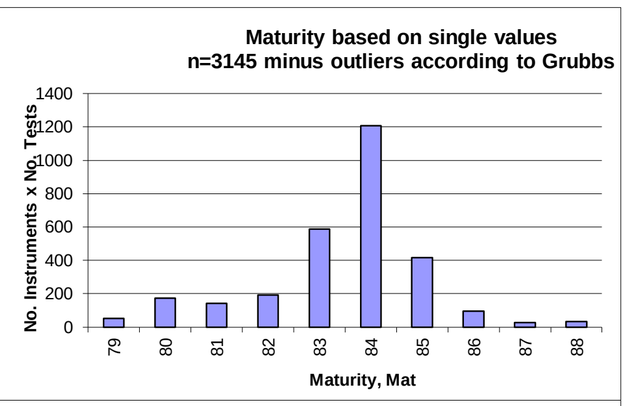
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Maturity

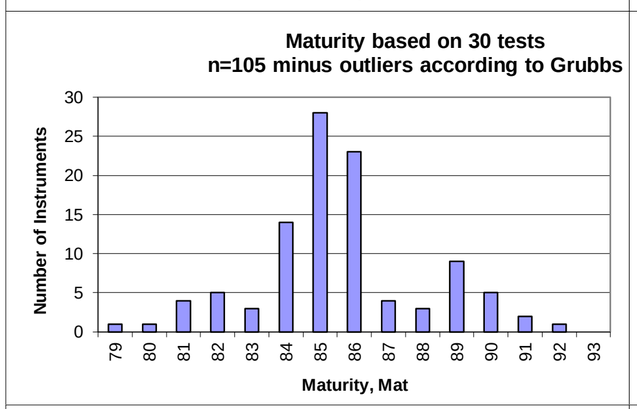
Cotton 1

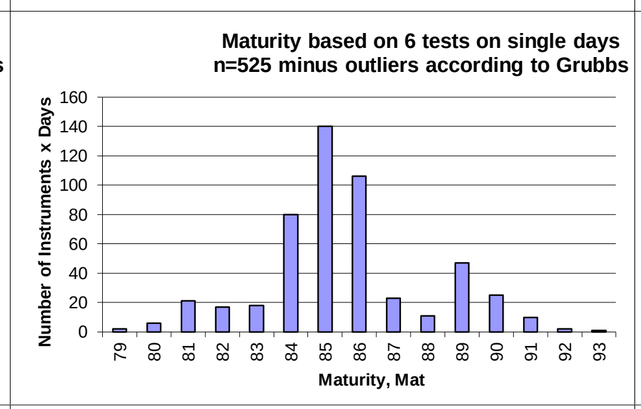


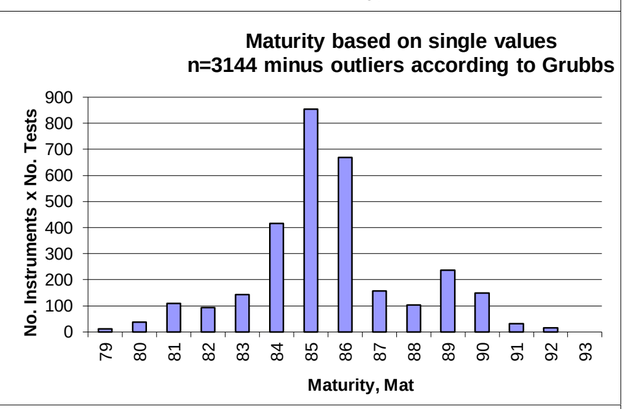




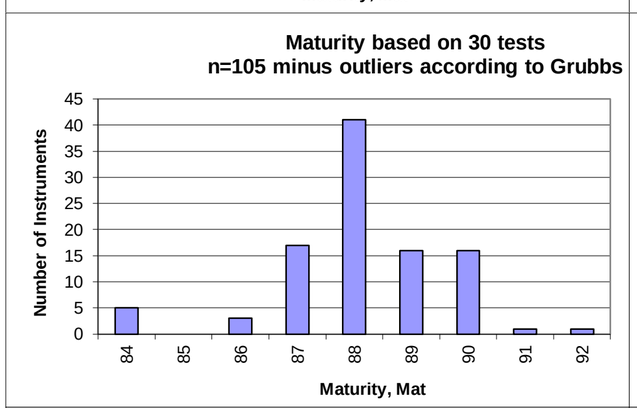
Cotton 2

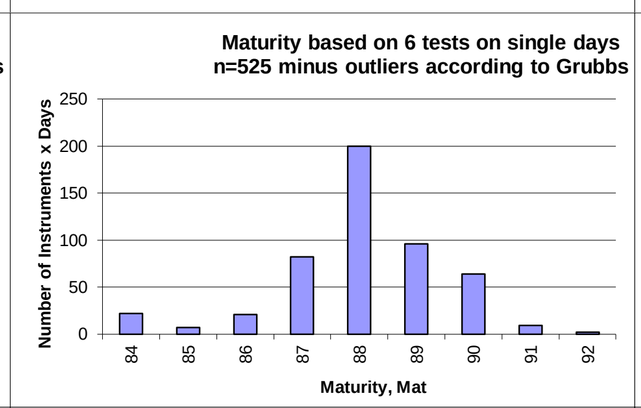


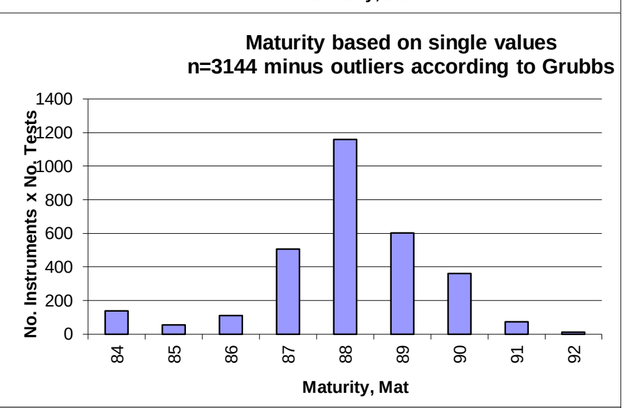




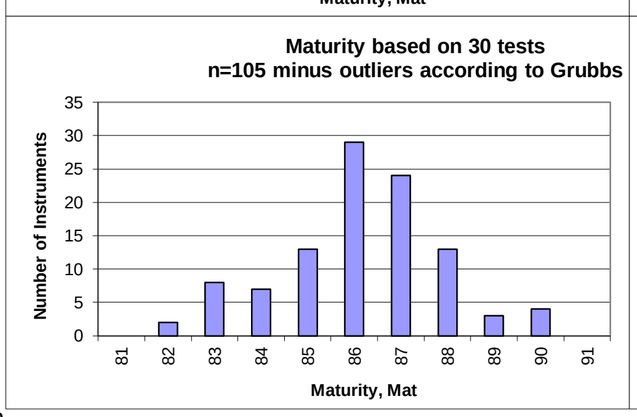
Cotton 3

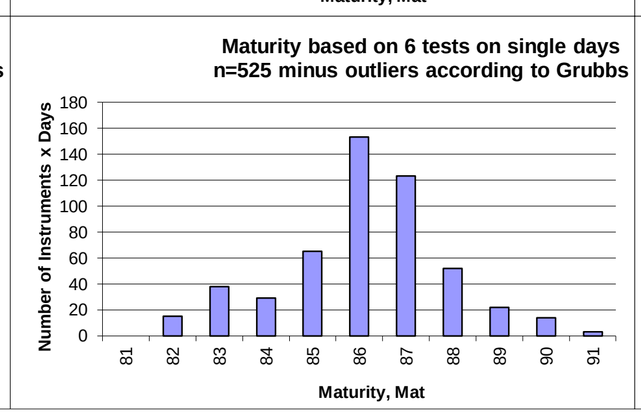


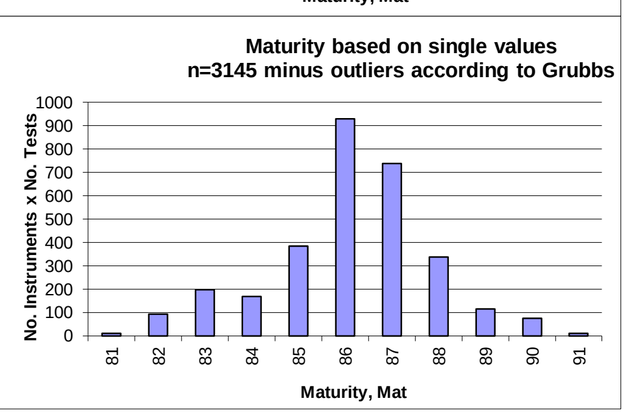




Cotton 4







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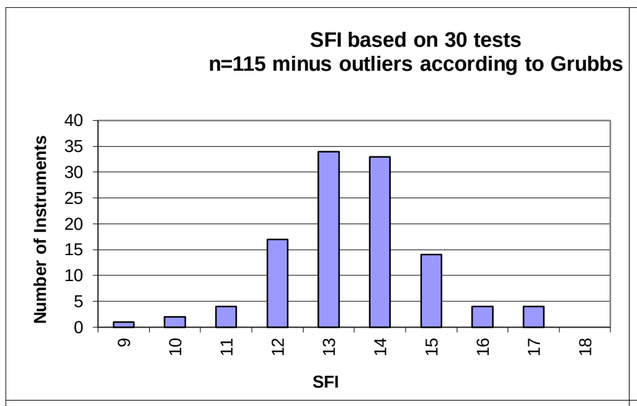
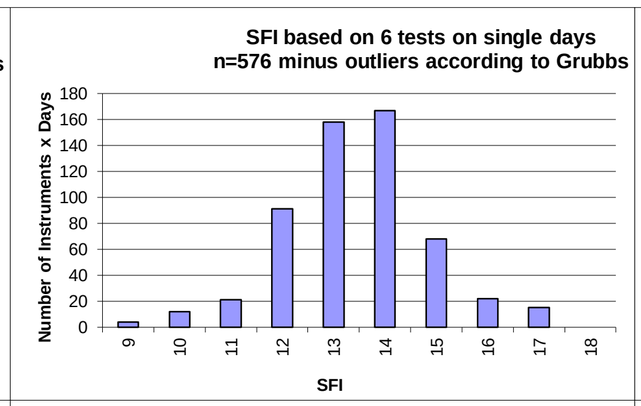
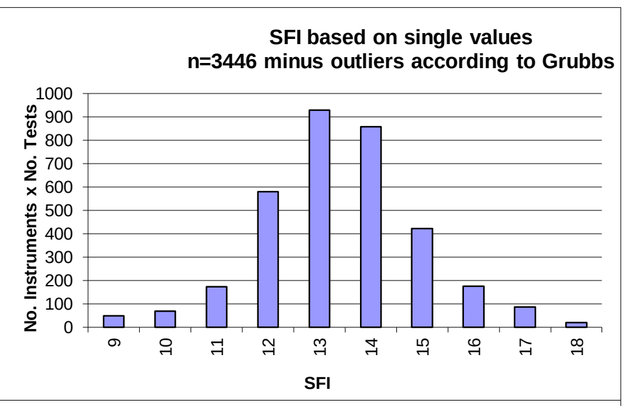
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
SFI

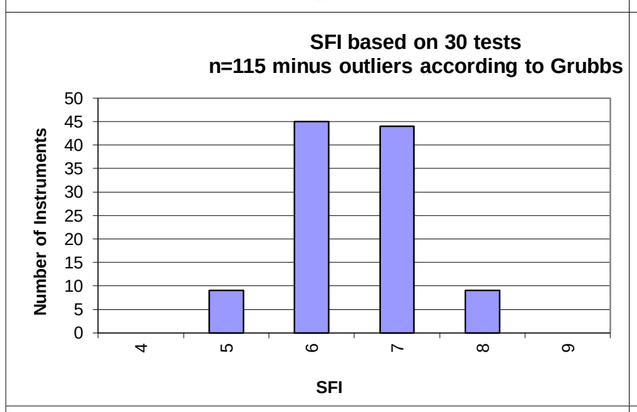
Cotton 1

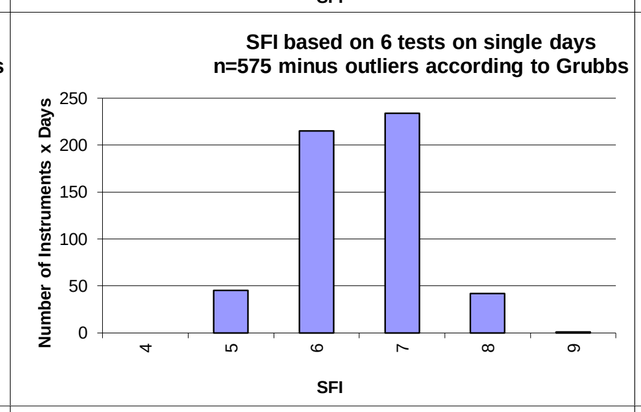


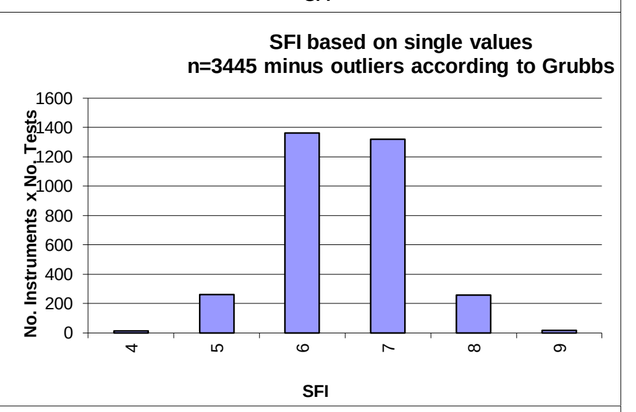




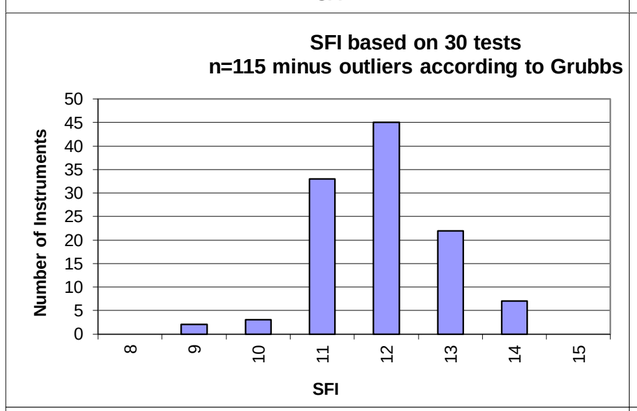
Cotton 2

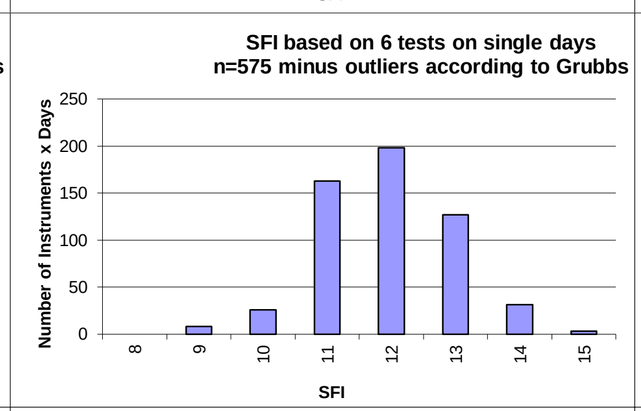


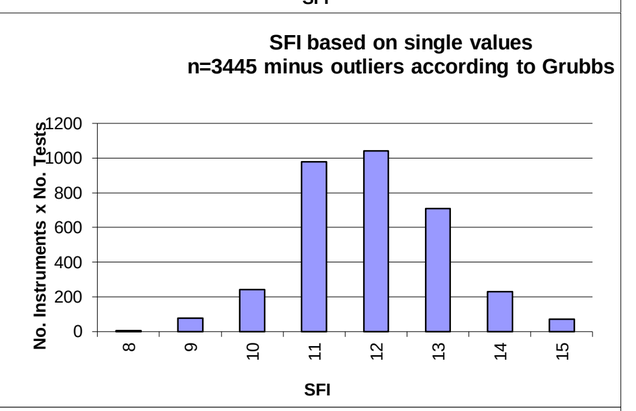




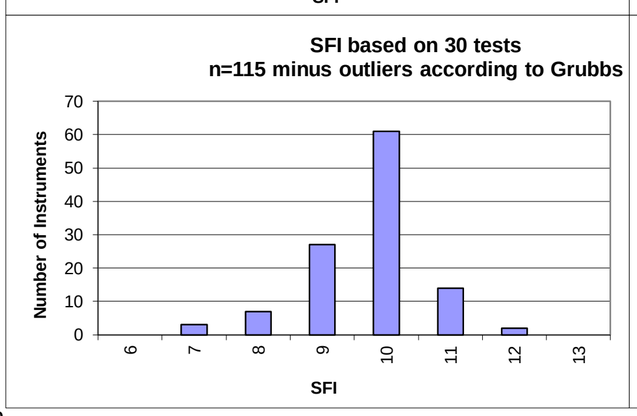
Cotton 3

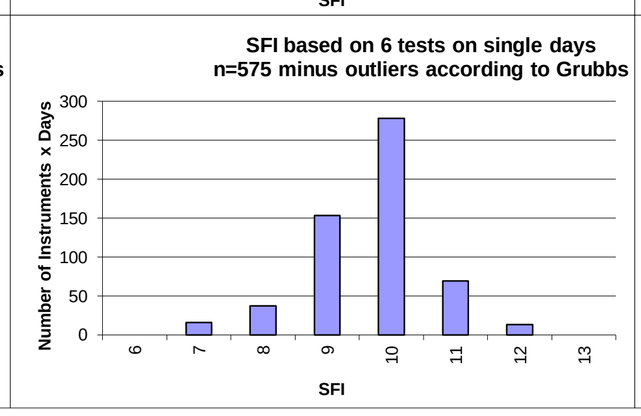


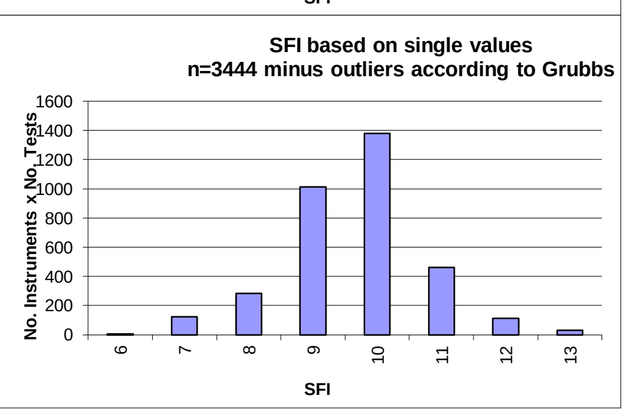




Cotton 4







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

International Cotton Advisory Committee

CSITC
Global - Round Trial 2014 - 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*

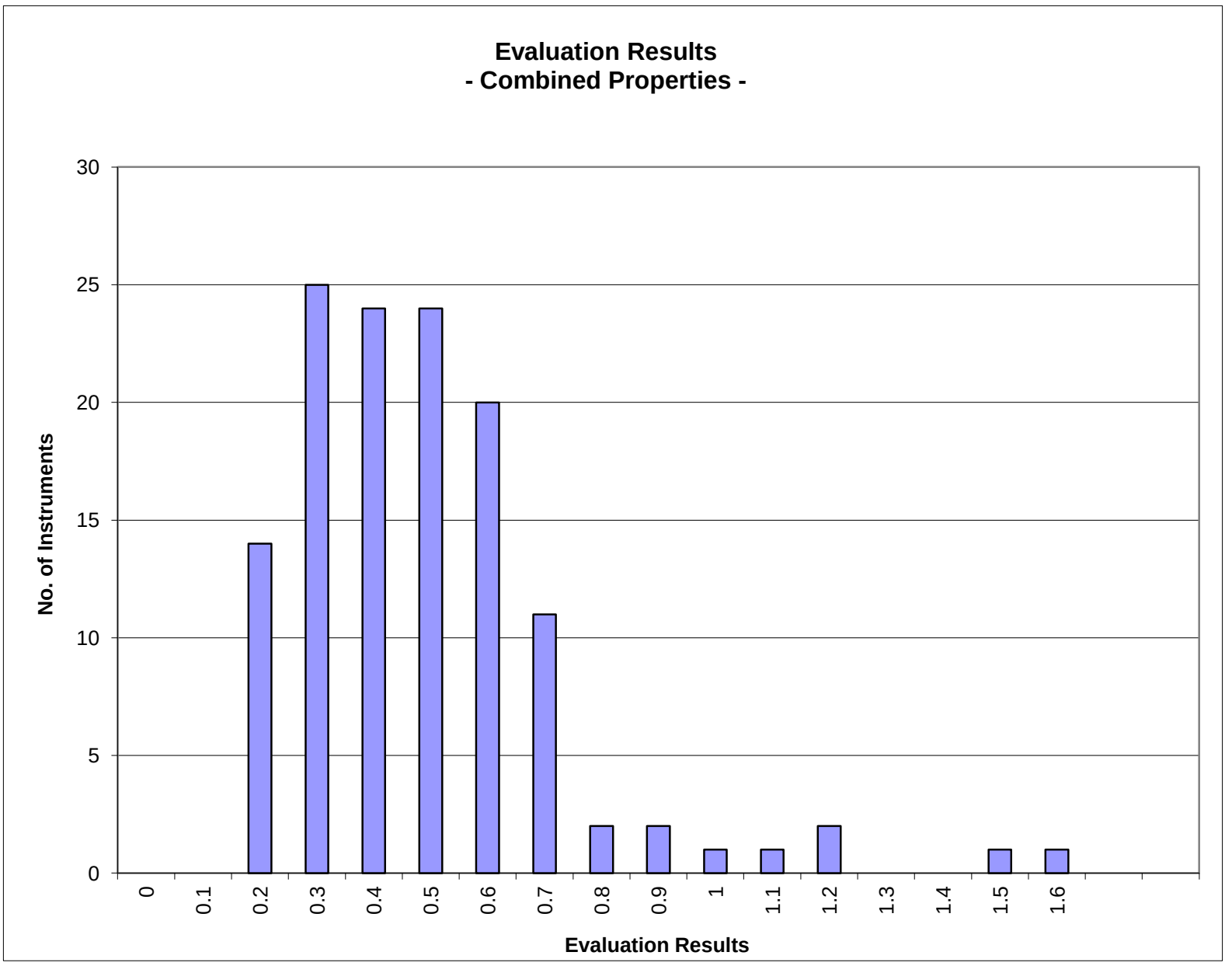
Instrument Evaluation

- Graph of Combined Properties -

According to ICAC CSITC Task Force Recommendations

Global - Round Trial 2014 - 2

		Evaluation Combined Prop.
Statistics	Average	0.49
	Median	0.45
	Best Instrument	0.18
	Worst Instrument	1.61



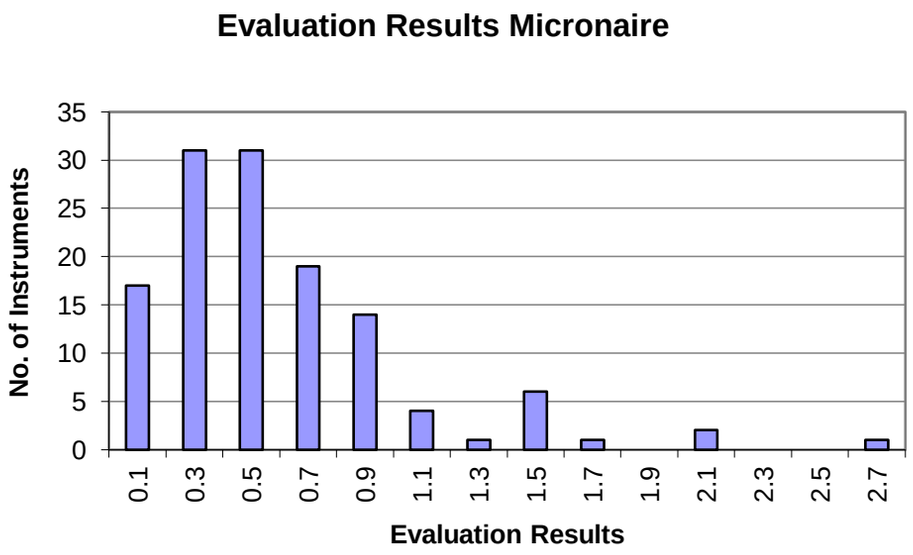
x-Axis shows midpoints of classes

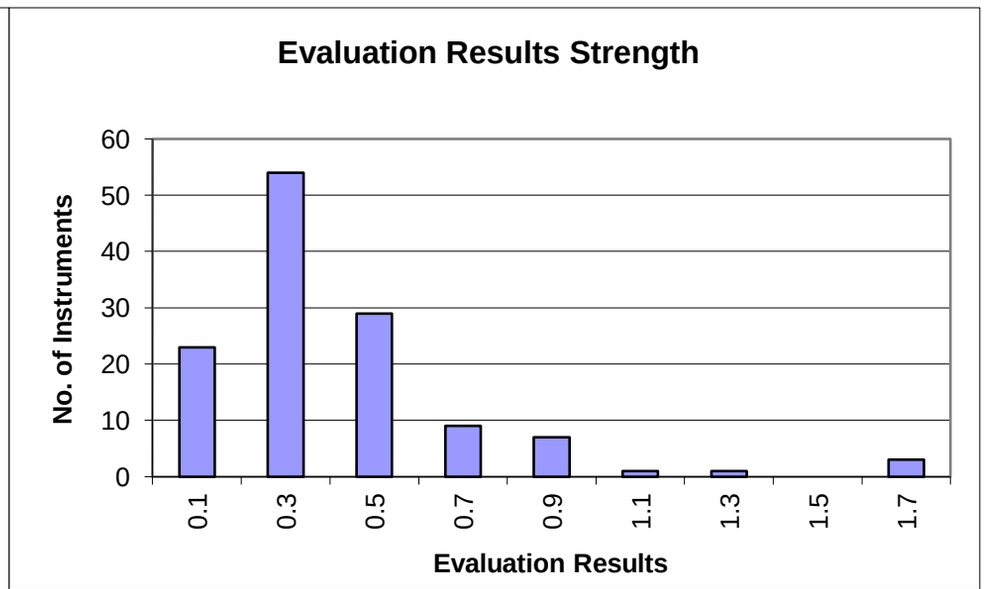
The evaluation results are entered based on the unrounded values

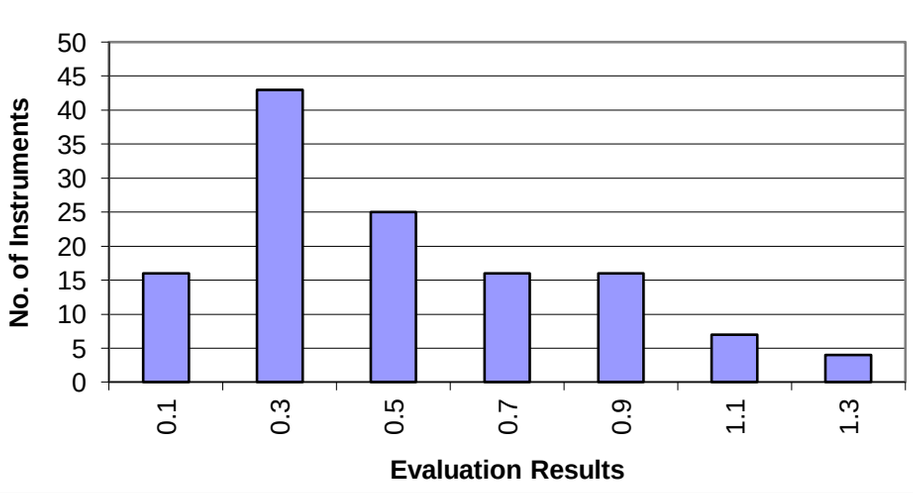
(classes are defined as > lower limit and <= upper limit)

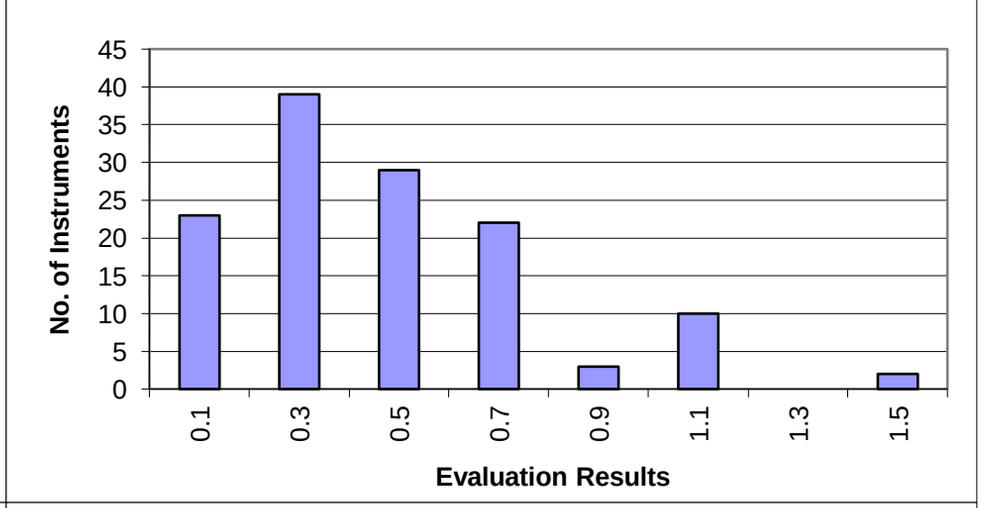
Instrument Evaluation
- Graph of Single Properties -
According to ICAC CSITC Task Force Recommendations
Global - Round Trial 2014 - 2

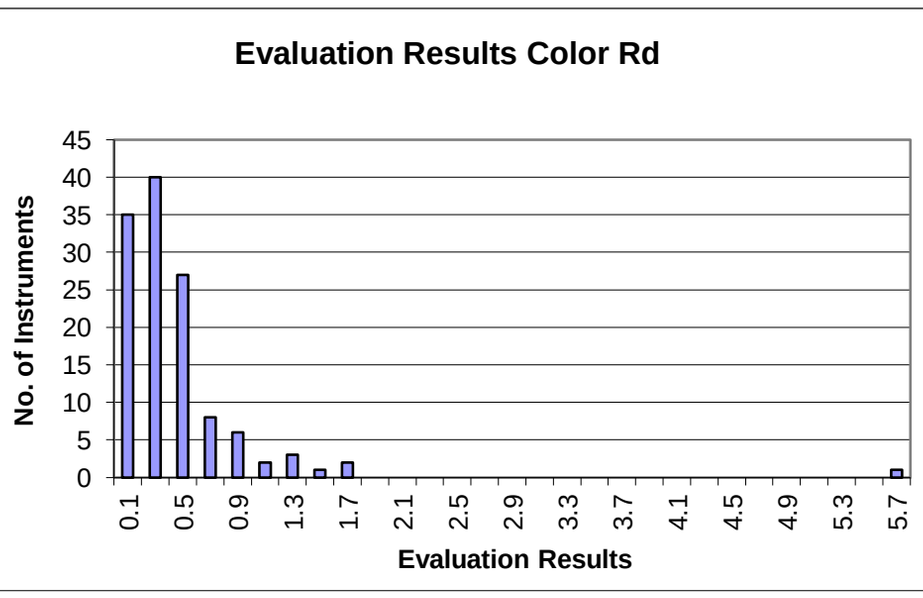
		Evaluation Micronaire	Evaluation Strength	Evaluation Length	Evaluation Uniformity	Evaluation Color Rd	Evaluation Color +b
Statistics	Average	0.60	0.41	0.51	0.48	0.46	0.44
	Median	0.52	0.35	0.43	0.42	0.35	0.33
	Best Instr.	0.10	0.11	0.07	0.09	0.04	0.07
	Worst Instr.	2.67	1.69	1.38	1.52	5.80	2.64

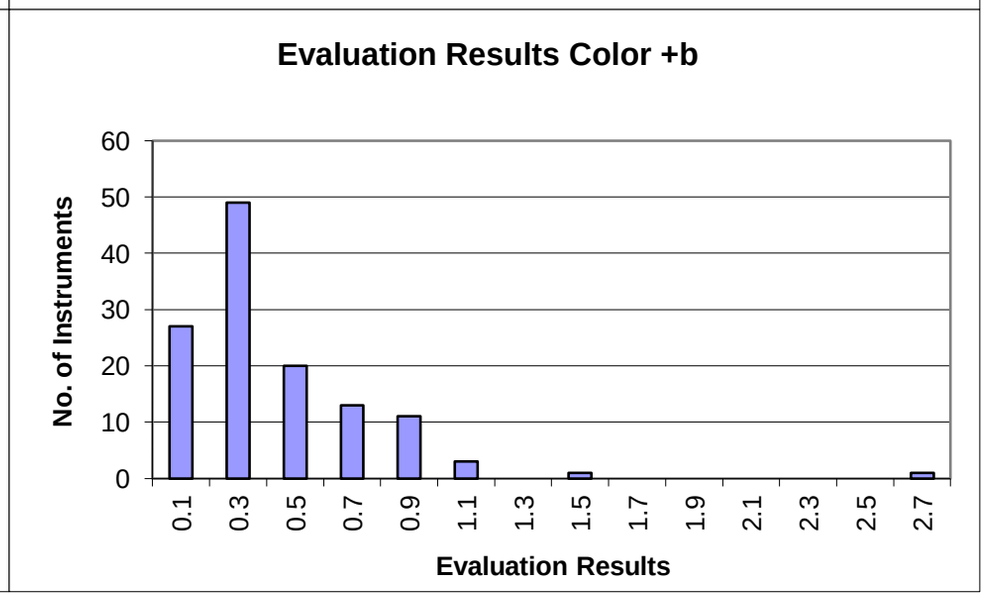












x-Axis shows midpoints of classes
The evaluation results are entered based on the unrounded values

International Cotton Advisory Committee

CSITC
Global - Round Trial 2014 - 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	1.0
	units	g/tex	inch	%	units	units
Average % Results within Limits	97.8	95.7	97.2	99.2	92.0	98.8
Completely within limits	95.3	89.0	89.8	96.9	85.6	96.8
% of Instruments ≥75% within limits	97.6	95.3	99.2	100.0	92.0	98.4
% of Instruments ≥50% within limits	99.2	98.4	100.0	100.0	93.6	100.0

Percentage of Results Within Limits						
Instrument	**Micronaire**	**Strength**	**Length**	**Uniformity**	**Color Rd**	**Color +b**
GL142-002-02	100	100	100	100	100	100
GL142-003-01	100	100	100	100	100	100
GL142-004-02	100	100	100	100	100	100
GL142-005-01	100	100	100	100	100	100
GL142-006-01	100	75	100	100	25	100
GL142-007-04	100	100	75	100	100	100
GL142-009-01	100	100	100	100	100	100
GL142-010-01	100	100	100	100	100	100
GL142-011-01	75	100	75	75	75	100
GL142-012-01	100	100	100	100	25	100
GL142-012-02	100	100	100	100	100	100
GL142-012-04	100	100	100	100	100	100
GL142-013-19	100	75	100	100	100	75
GL142-014-01	100	100	100	100	100	100
GL142-015-01	0	25	100	100	0	100
GL142-016-01	100	100	100	100	75	100
GL142-016-02	100	100	100	100	75	100
GL142-017-01	100	100	100	100	100	100
GL142-018-01	100	75	100	100	100	100
GL142-019-01	100	100	100	100	100	100
GL142-020-01	100	100	100	100	100	100
GL142-022-01	100	100	100	100	100	100
GL142-022-04	100	100	100	100	100	100
GL142-023-01	100	100	100	100	100	75
GL142-024-01	100	100	100	100	100	100
GL142-025-01	75	100	100	100		
GL142-025-02	100	100	100	100	100	100
GL142-026-52	100	100	100	100	100	100
GL142-026-55	100	100	100	100	100	100
GL142-027-01	100	100	100	100	100	100
GL142-027-02	100	100	100	100	100	100
GL142-028-02	100	100	100	100	100	100
GL142-029-03	100	100	100	100	100	100
GL142-030-01	100	50	75	100	50	100
GL142-031-01	100	100	100	100	100	100
GL142-032-02	100	100	100	100	100	100
GL142-032-06	100	100	100	100	100	100
GL142-033-01	100	100	100	100	100	100
GL142-033-02	100	100	100	100	100	100

GL142-034-01	100	100	75	75	0	100
GL142-035-02	100	100	100	100	0	100
GL142-035-07	100	100	100	100	0	100
GL142-035-08	100	75	100	100	100	100
GL142-036-03	100	100	100	100	100	100
GL142-036-07	100	100	100	100	100	100
GL142-036-08	100	100	100	100	100	100
GL142-036-09	100	100	100	100	100	100
GL142-037-01	100	100	75	100	100	100
GL142-038-01	100	100	100	100	100	100
GL142-038-03	100	100	100	100	100	100
GL142-039-01	100	100	50	100	100	100
GL142-041-01	100	100	100	100	100	100
GL142-042-01	50	50	100	75	100	100
GL142-043-01	100	100	100	100	100	100
GL142-044-03	100	100	100	100	100	100
GL142-044-10	100	100	100	100	100	100
GL142-044-12	100	100	100	100	100	100
GL142-045-01	100	100	100	100	25	100
GL142-046-01	100	50	75	100		
GL142-047-01	100	100	100	100	100	100
GL142-049-04	100	100	100	100	100	100
GL142-050-01	100	100	100	100	100	100
GL142-050-03	100	100	100	100	100	100
GL142-051-08		25	100	100		
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GL142-054-01	100	100	100	100	100	100
GL142-054-02	100	100	100	100	100	100
GL142-054-03	100	100	100	100	100	100
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GL142-062-01	100	100	100	100	100	100
GL142-062-03	100	100	75	100	100	100
GL142-062-04	100	100	100	100	100	100
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GL142-065-01	100	100	100	100	100	100
GL142-065-02	100	100	100	100	100	100
GL142-066-01	100	100	100	100	100	100
GL142-066-02	100	100	100	100	100	100
GL142-067-01	100	50	100	100	100	100
GL142-068-01	75	100		100	100	100
GL142-069-02	100	100	100	100	100	100
GL142-070-01	100	75	100	100	100	100
GL142-072-01	100	100	100	100	100	100
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GL142-075-01	100	100	100	100	100	100
GL142-076-01	100	100	100	100	100	100
GL142-080-03	100	100	100	100	100	100
GL142-081-01	100	100	100	100	100	100
GL142-082-01	100	75	100	100	100	100
GL142-083-01	100	100	100	100	100	100
GL142-083-02	100	100	100	100	75	100
GL142-083-05	100	100	100	100	100	100
GL142-084-01	100	75	75	75	75	100
GL142-085-01	100	100	75	100	100	100

GL142-085-02	100	100	100	100	100	100
GL142-086-04	50		100	100	75	50
GL142-087-01	100	100	100	100	100	100
GL142-087-02	100	100	100	100	100	100
GL142-087-03	100	100	100	100	75	100
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GL142-090-18	100	100	100	100	100	100
GL142-090-27	100	100	100	100	100	100
GL142-091-01	100	100	100	100	100	100
GL142-092-01	100	100	100	100	100	100
GL142-092-02	100	100	100	100	100	100
GL142-093-01	100	100	100	100	100	100
GL142-093-03	100	100	100	100	100	100
GL142-094-01	100	100	100	100	25	100
GL142-097-20	100	100	100	100	100	100
GL142-097-24	100	100	100	100	100	100
GL142-099-01	100	100	75	100	50	100
GL142-100-01	100	100	75	100	75	100
GL142-101-01	100	100	100	100	100	100
GL142-101-02	100	100	100	100	100	100
GL142-102-01	100	100	100	100	100	100
GL142-102-02	100	100	100	100	100	100
GL142-102-03	100	100	100	100	100	100
GL142-102-04	100	100	100	100	100	100
GL142-103-01	100	100	100	100	100	100
GL142-104-01	100	100	100	100	100	100
GL142-104-02	100	100	100	100	100	100
GL142-104-03	100	100	75	100	100	100
GL142-104-04	100	100	100	100	100	100

Within Limits Evaluation

Based on Single Test Results

	Micronaire	Strength	Length	Uniformity	Color Rd	Color +b
Limits	0.20	2.0	0.030	2.0	1.5	1.0
	units	g/tex	inch	%	units	units
Average % Results within Limits	96.2	92.5	94.1	97.0	90.1	97.7
% of Instruments 100% within limits	57.5	33.9	35.4	42.2	52.0	77.6
% of Instruments ≥95% within limits	82.7	68.5	61.4	82.0	71.2	88.0
% of Instruments ≥75% within limits	96.9	91.3	96.9	97.7	87.2	98.4
% of Instruments ≥65% within limits	97.6	94.5	99.2	99.2	89.6	98.4
% of Instruments ≥50% within limits	98.4	96.9	100.0	100.0	93.6	100.0

Percentage of Results Within Limits						
Instrument	**Micronaire**	**Strength**	**Length**	**Uniformity**	**Color Rd**	**Color +b**
GL142-002-02	100	100	99	99	93	100
GL142-003-01	100	100	100	100	100	100
GL142-004-02	100	97	98	99	87	100
GL142-005-01	99	100	94	100	99	91
GL142-006-01	94	79	92	98	20	98
GL142-007-04	100	94	73	86	93	100
GL142-009-01	100	100	100	99	93	100
GL142-010-01	98	83	89	93	78	100
GL142-011-01	75	98	73	63	57	89
GL142-012-01	100	95	100	100	19	96
GL142-012-02	97	95	98	100	100	100
GL142-012-04	100	100	100	100	100	100
GL142-013-19	100	73	80	98	93	83
GL142-014-01	99	100	100	94	97	92
GL142-015-01	41	48	82	88	18	98
GL142-016-01	100	100	100	100	83	100
GL142-016-02	100	99	99	98	63	100
GL142-017-01	93	82	61	94	90	85
GL142-018-01	100	81	100	100	99	100
GL142-019-01	88	99	93	93	99	100
GL142-020-01	99	96	100	100	96	100
GL142-022-01	100	100	100	100	100	100
GL142-022-04	100	100	100	100	100	100
GL142-023-01	100	100	93	100	100	80
GL142-024-01	100	100	88	99	98	95
GL142-025-01	76	88	96	98		
GL142-025-02	84	96	89	80	100	100
GL142-026-52	100	100	100	100	100	100
GL142-026-55	100	98	100	100	100	100
GL142-027-01	100	100	100	100	100	100
GL142-027-02	100	100	100	100	100	100
GL142-028-02	100	100	99	100	100	100
GL142-029-03	100	98	100	100	100	100
GL142-030-01	100	68	72	83	59	96
GL142-031-01	100	99	79	99	95	87
GL142-032-02	99	100	88	97	91	87

GL142-032-06	99	100	89	95	85	93
GL142-033-01	100	100	100	100	100	100
GL142-033-02	100	100	100	100	100	100
GL142-034-01	97	86	77	73	13	87
GL142-035-02	86	100	93	98	21	100
GL142-035-07	99	99	94	94	17	99
GL142-035-08	99	77	93	95	96	100
GL142-036-03	100	93	100	98	100	100
GL142-036-07	95	84	100	99	100	100
GL142-036-08	100	100	99	99	100	100
GL142-036-09	99	100	100	100	100	100
GL142-037-01	100	100	95	100	100	100
GL142-038-01	100	96	92	100	100	95
GL142-038-03	98	97	94	99	100	100
GL142-039-01	98	95	78	93	100	100
GL142-041-01	100	98	81	98	87	100
GL142-042-01	53	39	90	88	100	97
GL142-043-01	100	94	91	89	100	100
GL142-044-03	100	100	100	100	100	100
GL142-044-10	100	100	100	100	100	100
GL142-044-12	100	100	100	100	100	100
GL142-045-01	98	88	93	98	42	99
GL142-046-01	90	62	89	99		
GL142-047-01	100	96	96	98	100	100
GL142-049-04	98	96	91	94	95	100
GL142-050-01	99	99	89	92	100	100
GL142-050-03	93	93	88	97	100	100
GL142-051-08		39	93	95		
GL142-052-01	100	96	100	100	100	100
GL142-052-02	98	98	100	98	99	100
GL142-054-01	100	86	98	99	97	100
GL142-054-02	100	76	100	100	95	100
GL142-054-03	100	100	100	100	100	100
GL142-055-06	100	97	98	99	99	100
GL142-055-07	99	91	96	98	100	100
GL142-058-01	98	96	100	100	100	100
GL142-059-01	99	100	88	98	94	87
GL142-060-01	100	99	99	100	100	100
GL142-061-01	98	83	100	98	100	100
GL142-062-01	100	99	99	99	100	100
GL142-062-03	100	98	83	98	96	100
GL142-062-04	99	99	98	100	100	100
GL142-064-01	82	80	87	90	94	100
GL142-065-01	100	100	100	100	100	100
GL142-065-02	100	100	99	100	98	100
GL142-066-01	97	100	100	100	100	100
GL142-066-02	100	100	100	100	100	100
GL142-067-01	100	47	85	93	100	100
GL142-068-01	73	93		98	70	88
GL142-069-02	83	99	100	93	91	100
GL142-070-01	95	73	100	100	82	100
GL142-072-01	100	94	100	100	100	100
GL142-074-01	100	99	100	100	100	100
GL142-075-01	98	97	98	100	93	100
GL142-076-01	100	86	100	100	96	100
GL142-080-03	100	92	88	99	100	100
GL142-081-01	100	94	98	100	100	100
GL142-082-01	98	78	88	98	100	100
GL142-083-01	99	100	92	100	100	100
GL142-083-02	98	100	81	100	79	100

GL142-083-05	98	100	87	100	100	100
GL142-084-01	100	58	76	69	77	100
GL142-085-01	100	95	98	99	100	100
GL142-085-02	100	98	100	98	99	100
GL142-086-04	43		93	93	29	56
GL142-087-01	75	92	100	98	99	100
GL142-087-02	93	98	98	97	100	100
GL142-087-03	100	98	95	98	67	100
GL142-088-01	100	97	94	88	98	53
GL142-090-18	100	98	98	100	98	100
GL142-090-27	100	95	99	100	95	100
GL142-091-01	99	100	97	98	95	98
GL142-092-01	100	90	99	99	100	100
GL142-092-02	100	93	98	99	100	99
GL142-093-01	100	86	97	98	100	100
GL142-093-03	86	71	88	95	89	100
GL142-094-01	93	98	97	98	68	99
GL142-097-20	100	100	100	100	100	100
GL142-097-24	100	99	100	100	100	100
GL142-099-01	94	60	84	97	55	92
GL142-100-01	86	89	75	94	60	100
GL142-101-01	100	100	100	100	100	100
GL142-101-02	100	100	100	100	100	100
GL142-102-01	98	95	100	100	100	100
GL142-102-02	100	100	99	99	100	100
GL142-102-03	100	100	98	100	100	100
GL142-102-04	100	96	97	98	100	100
GL142-103-01	100	98	98	98	88	95
GL142-104-01	100	100	96	100	100	100
GL142-104-02	100	100	100	100	100	100
GL142-104-03	89	99	88	96	96	100
GL142-104-04	100	98	89	98	98	100