U.S. Cotton Fiber Chart 2018/2019

Ratings of Fiber Properties

Upper Half Mean Length

Below 0.99	Short
0.99-1.10	Medium
1.11-1.26	Long

Fiber Elongation (%)

Below 5.0	Very Low
5.0-5.8	Low
5.9-6.7	Average
6.8-7.6	High
Above 7.6	Very High

Uniformity Index

Below 77	Very Low
77-79	Low
80-82	Average
83-85	High
Above 85	Very High

Length Uniformity Index (LUI) = 100 x Mean Length / Upper Half Mean Length

Fiber Fineness (millitex)

Below 135	Very Fine
135-175	Fine
175-200	Average
200-230	Coarse
Above 230	Very Coarse

Fiber Maturity Ratio

Below 0.7	Uncommon
0.7-0.8	Immature
0.8-1.0	Mature
Above 1.0	Very Mature

Fiber Strength

(1/8-in. gauge strength in grams/tex)

23 and below	Weak
24-25	Intermediate
26-28	Average
29-30	Strong
31 and above	Very Strong

EFS® System

The EFS® cotton management system is a group of related software programs designed to work independently and cooperatively to manage cotton as a raw material and asset. By providing tools to manage most aspects of cotton's life cycle, the cotton management system seeks to improve the efficiency of cotton flow, augment the efficiency and utility of cotton, increase cotton's profitability, and enhance the demand for cotton.

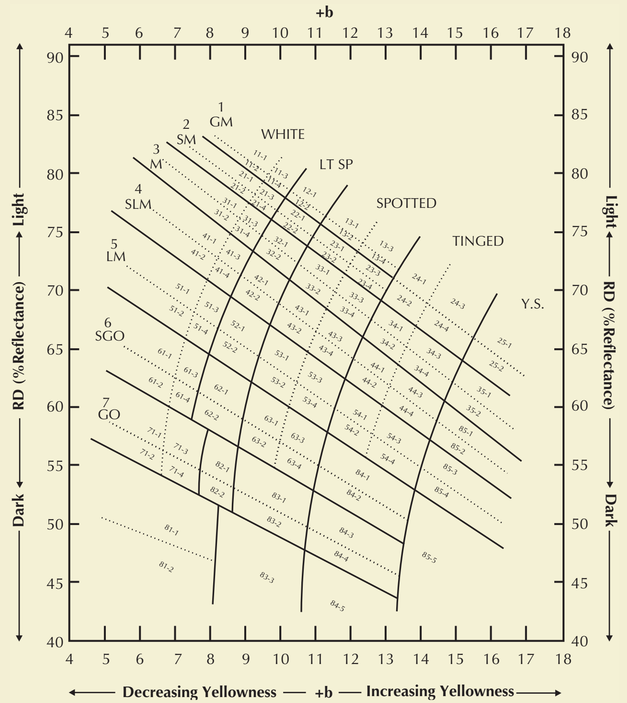
MILLNet™ Software

MILLNet™ software manages a mill's acquisition and use of USDA HVI® classed cotton. Its groups and categories system can aid mills in creating uniform mixes best suited for a specified end product.

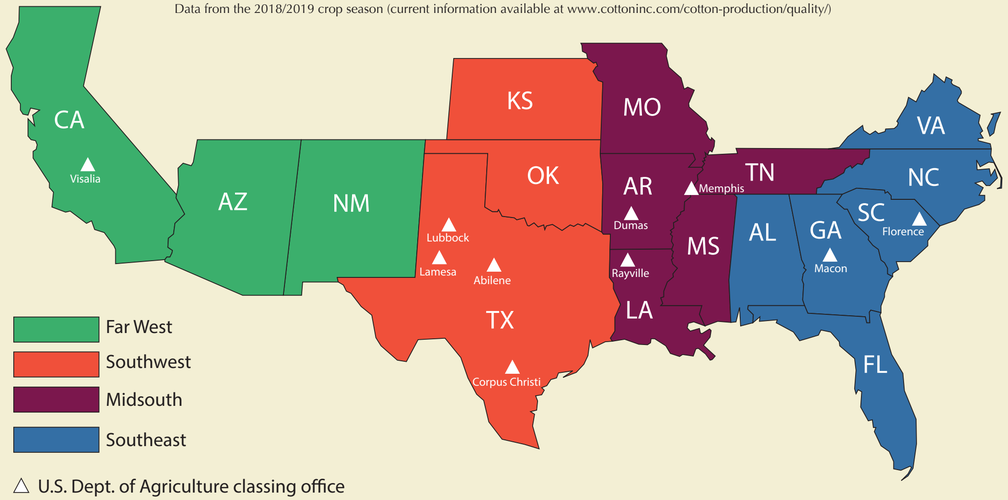
EFS®-USCROP™ Software

EFS®-USCROP™ software enables a user to review and analyze crop data using USDA HVI® classing information. Complicated sets of cotton classing data can be simplified and enhanced with a variety of reports and graphs.

HVI® Color Chart for American Upland Cotton



Data from the 2018/2019 crop season (current information available at www.cottoninc.com/cotton-production/quality/)



Grades of U.S. Cotton Official Standards of the U.S.

Color Grade	Symbols	Color Grade	Classer Leaf Code
White			
Good Middling	GM	11	1
Strict Middling	SM	21	2
Middling	Mid	31	3
Strict Low Middling	SLM	41	4
Low Middling	LM	51	5
Strict Good Ordinary	SGO	61	6
Good Ordinary	GO	71	7
Light Spotted			
Good Middling	GM Lt Sp	12	
Strict Middling	SM Lt Sp	22	
Middling	Mid Lt Sp	32	
Strict Low Middling	SLM Lt Sp	42	
Low Middling	LM Lt Sp	52	
Strict Good Ordinary	SGO Lt Sp	62	

Color Grade	Symbols	Color Grade
Spotted		
Good Middling	GM Sp	13
Strict Middling	SM Sp	23
Middling	Mid Sp	33
Strict Low Middling	SLM Sp	43
Low Middling	LM Sp	53
Strict Good Ordinary	SGO Sp	63
Tinged		
Strict Middling	SM Tg	24
Middling	Mid Tg	34
Strict Low Middling	SLM Tg	44
Low Middling	LM Tg	54
Yellow Stained		
Strict Low Middling	SM YS	25
Middling	Mid YS	35

Bale Size

Average net bale weight is 495 lbs.
(for statistical purposes average bale weight is 480 lbs.)

	Universal Densities	
	Gin	SI
Length, in.	55	1.40 m
Width, in.	21	0.53 m
Thickness at bale ties, in.	33	0.84 m

COTTON USA™

cotton®

Visalia

(CA, AZ, NM)
615,314 Bales

Micronaire	4.5
Length (32's)	37.6
(100's)	1.17
LUI	81.8%
Strength (g/tex)	32.3
Grade (31)	34.5%
Grade (41)	27.3%
FM 1830 GLT	13.6%
DP 1612 B2XF	7.5%

Abilene

(N. Cent. TX, OK, KS)
1,450,186 Bales

Micronaire	4.2
Length (32's)	36.0
(100's)	1.12
LUI	80.3%
Strength (g/tex)	29.7
Grade (31)	37.6%
Grade (41)	31.9%
DP 1646 B2XF	22.9%
NG 3406 B2XF	11.1%

Corpus Christi

(S. TX)
1,813,010 Bales

Micronaire	4.7
Length (32's)	35.9
(100's)	1.12
LUI	80.9%
Strength (g/tex)	29.4
Grade (11&21)	27.4%
Grade (31)	20.2%
DP 1646 B2XF	32.7%
PHY 312 WRF	12.9%

Lamesa

(NW. TX)
886,083 Bales

Micronaire	4.0
Length (32's)	35.9
(100's)	1.12
LUI	80.5%
Strength (g/tex)	30.1
Grade (31)	48.4%
Grade (41)	22.4%
DP 1646 B2XF	11.4%
DP 1845 B3XF	9.0%

Lubbock

(NW. TX, NM)
3,404,070 Bales

Micronaire	4.1
Length (32's)	36.1
(100's)	1.13
LUI	80.9%
Strength (g/tex)	30.8
Grade (31)	49.8%
Grade (41)	27.8%
NG 4689 B2XF	15.0%
NG 3406 B2XF	14.7%

Dumas

(AR, MS)
1,393,049 Bales

Micronaire	4.7
Length (32's)	37.4
(100's)	1.17
LUI	81.2%
Strength (g/tex)	30.1
Grade (41)	62.9%
Grade (31)	21.9%
DP 1646 B2XF	64.1%
DP 1518 B2XF	18.7%

Memphis

(TN, AR, MO)
3,015,870 Bales

Micronaire	4.6
Length (32's)	37.1
(100's)	1.16
LUI	81.8%
Strength (g/tex)	29.7
Grade (41)	54.0%
Grade (42)	18.6%
DP 1518 B2XF	28.2%
DP 1646 B2XF	10.6%

Rayville

(LA, AR)
548,644 Bales

Micronaire	4.7
Length (32's)	36.8
(100's)	1.15
LUI	80.8%
Strength (g/tex)	30.0
Grade (41)	41.2%
Grade (31)	22.5%
DP 1646 B2XF	53.0%
PHY 330 W3FE	5.1%

Florence

(SC, NC, VA)
1,248,284 Bales

Micronaire	4.5
Length (32's)	36.4
(100's)	1.14
LUI	80.6%
Strength (g/tex)	29.5
Grade (41)	54.6%
Grade (31)	23.2%
DP 1646 B2XF	36.1%
PHY 330 W3FE	7.1%

Macon

(GA, FL)
2,546,113 Bales

Micronaire	4.3
Length (32's)	36.6
(100's)	1.14
LUI	81.0%
Strength (g/tex)	28.8
Grade (41)	42.5%
Grade (31)	29.0%
DP 1646 B2XF	48.3%
NG 5007 B2XF	12.8%

Far West Total

(CA, AZ, NM)
615,314 Bales

Micronaire	4.5
Length (32's)	37.6
(100's)	1.17
LUI	81.8%
Strength (g/tex)	32.3
Grade (31)	34.5%
Grade (41)	27.3%
FM 1830 GLT	12.7%
DP 1612 B2XF	6.3%

Southwest Total

(TX, OK, KS)
7,553,349 Bales

Micronaire	4.2
Length (32's)	36.0
(100's)	1.13
LUI	80.7%
Strength (g/tex)	30.2
Grade (31)	40.2%
Grade (41)	23.8%
DP 1646 B2XF	12.1%
NG 3406 B2XF	9.7%

Midsouth Total

(AR, MO, TN, MS, LA)
4,957,563 Bales

Micronaire	4.7
Length (32's)	37.2
(100's)	1.16
LUI	81.5%
Strength (g/tex)	29.8
Grade (41)	55.1%
Grade (31)	14.6%
DP 1646 B2XF	31.3%
DP 1518 B2XF	21.7%

Southeast Total

(AL, GA, FL, SC, NC, VA)
3,794,397 Bales

Micronaire	4.4
Length (32's)	36.5
(100's)	1.14
LUI	80.9%
Strength (g/tex)	29.0
Grade (41)	46.5%
Grade (31)	27.1%
DP 1646 B2XF	42.7%
NG 5007 B2XF	9.8%