

Instrument Marbling Validation Cards – Target and Tolerance Values

Table 1 lists the target values and tolerance limits for the current 4 card marbling set. Use of the low, medium and high marbling verification cards is discussed in item 4 of section “Prior to the Start of Operation” in the document entitled Instrument Verification Standard Operating Procedure (VERSOP-revised 10-12-11.docx). The USDA marbling card is used to collect data for system maintenance purposes only. The current software versions will automatically acquire and average 3 readings in “Marbling Check.” If the system fails to read within the approved ranges or if the standard deviation exceeds 10 on any card the process is to be repeated. If the system fails to validate after two attempts the system shall be re-booted and allowed to warm up for 30 minutes for the Xenon camera series prior to a third and final test. LED camera series will be allowed to warm up for 20 minutes prior to a third and final test.

Table 1. Verification Card Tolerances

Xenon – Camera #<200

Name	Marbling Target	Tolerance	Low Limit	High Limit	Long Term Low Limit	Long Term High Limit
Low Marbling	297	20	277	317	287	307
Med Marbling	543	34	509	577	526	560
High Marbling	694	38	656	733	675	713
USDA	383					

LED – Camera #>200

Name	Marbling Target	Tolerance	Low Limit	High Limit	Long Term Low Limit	Long Term High Limit
Low Marbling	323	23	300	346	312	335
Med Marbling	507	20	487	527	497	517
High Marbling	711	20	691	731	701	721
USDA	385					

Table 2. RMS Verification Card Tolerances

Card	Marbling Target	Tolerance	Low Limit	High Limit	Long Term Low Limit	Long Term High Limit
Low Marbling	271	14	257	285	264	278
Med Marbling	467	20	447	487	457	477
High Marbling	641	41	600	682	621	662



Satisfactory raw image and processed image.