



Federal Reserve Banks

Image Quality Assurance (IQA) Settings

Defect Detection Failure Point Changes

Effective September 27, 2007

This document defines the Image Quality Assurance (IQA) settings. The information below lists the IQA metrics performed on each check processed by the Federal Reserve Banks. It also defines the defect detection failure points (i.e., thresholds) for each metric. These thresholds have been modified several times since the advent of the Check Clearing for the 21st Century Act, Check 21. The anticipated result of the most recent changes to our thresholds is a significant decrease in the number of IQA rejects of Non-Conforming Images (NCIs) without a compromise to the quality of the work we pass.

It is important to note that there is a diverse set of IQA applications in the industry. Each one uses differing technologies to derive information about images and ultimately assess quality. Synchronizing thresholds in different IQA applications (or different versions/levels of the same application) may create varying results. Consequently, changing your IQA setting to that of the Federal Reserve Banks does not guarantee a reduction/elimination of IQA rejects/suspects when exchanging images with the Federal Reserve Banks.

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Image Quality Assurance (IQA) Settings
Defect Detection Failure Points
Updated September 27, 2007**

Length			
Minimum	< 4.10 Inches	Maximum	> 10.5 Inches
Height			
Minimum	< 1.752 Inches	Maximum	> 5.7 Inches
Corners			
Front Lower Right and Back Lower Left Corners¹			> .8 Inches
All Other Corners¹	> 1.0 Inches		
Document Skew			
Front Skew	> 287.2 Degrees		
Darkness (Black and White)			
Front Minimum Darkness	< 0.009	Back Minimum Darkness	< 0.0038
	Ratio of black pixels to total pixels		Ratio of black pixels to total pixels
Maximum Darkness	> 0.9	Maximum Darkness	> 0.98
	Ratio of black pixels to total pixels		Ratio of black pixels to total pixels
Noise			
Front Noise Relative Density (Black & White)	> 5,852	Back Noise Relative Density (Black and White)	> 5,852
	Spots considered as noise ² per square inch, on average		Spots considered as noise ² per square inch, On average
IQA Record Size			
Black & White Compressed Data Size			
Front Minimum	250 Bytes	Back Minimum	250 Bytes
Maximum	200,000 Bytes	Maximum	200,000 Bytes

¹ A missing corner is defined as the length or height of one side of a square, with one corner of that square at the point where the projected corner of a check image should be to the point where the opposing corner of that square actually intersects the