

## X9 REGISTRY FOR CHECK IMAGE TESTS

CONTROLLING SPECIFICATION: ANS X9.100-40 Parts 1 & 2

**Image Test Name:** IBM Dots Per Inch  
**Image Test Number:** 022.00  
**Image Test Version:** 00  
**Image Test Status:** A

*Where:*

*A = Active (approved for use)*

*W = Withdrawn (not for use)*

*S = Superseded (not for use -  
replaced by specified test)*

<b>1</b>	<b>Applicant Information</b>	
<b>1.1</b>	Organization Name:	IBM Corporation
<b>1.2</b>	Organization Address:	8501 IBM Drive MG83/202-3 Charlotte, NC 28262
<b>1.3</b>	Organization Web Site URL:	<a href="http://www.ibm.com">http://www.ibm.com</a>

Approved by: X9 RMG for Check Image Tests March 30, 2007

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<b>2</b>	<b>Image Test Description</b>	
<b>2.1</b>	<b>Image Test Name:</b>	IBM Dots Per Inch
<b>2.2</b>	<b>Image Test XML Name:</b>	dpi
<b>2.3</b>	<b>Image Test Definition:</b>	A metric used to report the resolution (in Dots Per Inch) of the image under test.
<b>2.4</b>	<b>Image Test Applicability:</b> Check all that apply.	<input checked="" type="checkbox"/> <i>Front Image</i> <input checked="" type="checkbox"/> <i>Rear Image</i> <input checked="" type="checkbox"/> <i>B/W Image</i> <input checked="" type="checkbox"/> <i>Grayscale Image</i> <input type="checkbox"/> <i>Color Image</i>
<b>2.5</b>	<b>Intended Use:</b> Intended business use/ application, business context, and business impact when test fails.	This metric will report a failure if the Image Analysis software fails to find a DPI parameter within the image under test.
<b>2.6</b>	<b>Possible Causes for Condition Being Tested:</b>	This test will execute whenever an image is processed. This metric will be generated for every image. Failures can occur if the image contains no indication of its DPI parameter.
<b>2.7</b>	<b>Additional (or Repetitive) Information:</b>	This check is performed on every image. An excerpt of the XML output generated by IQA for this metric is shown below: <code>&lt;dpi&gt;200&lt;/dpi&gt;</code>

**2.8 Test Results Reported**

*A test result is the outcome realized from executing an image test. The outcome will typically be the observed or measured value of some attribute pertaining to the image being tested.*

*Any dependency of a test result on an image side (front or rear), image rendition (B/W, Gray, Color), or other condition shall be fully defined in the Additional Information section.*

*Data types allowed are as defined in ANS X9.100-180-2006, but are typically alphabetic, numeric, alphanumeric, signed numeric (using “+” and “-“ to denote sign), etc.*

**2.8.1 First Image Test Result**

**Test Result Name: Dots Per Inch**

Test Result XML Name:	Data Type:	Data Units:	Data Range:	Margin of Error (in Data Units) (Where Applicable):
dpi	Numeric	Dots per inch		
<b>Description:</b>	This value provides the Dots Per Inch metric of the image under test.			
<b>Formula and/ or Algorithm:</b>	This value is taken from information provided by the image under test.			
<b>Additional Information:</b>				

<p><b>2.9</b></p>	<p><b>Test Parameters Reported</b></p> <p><i>Examples of image test parameters are threshold values used to compute a pass/fail image test flag condition, and constant values used in a formula or algorithm to compute an image test result.</i></p> <p><i>Any dependency of a test parameter on an image side (front or rear), image rendition (B/W, Gray, Color), or other condition shall be fully defined in the Additional Information section.</i></p> <p><i>Any dependency of recommended values on an image side (front or rear), image rendition (B/W, Gray, Color), or other condition shall be fully defined in the Recommended Values section.</i></p> <p><i>Data types allowed are as defined in ANS X9.100-180-2006, but are typically alphabetic, numeric, alphanumeric, signed numeric (using “+” and “-” to denote sign), etc.</i></p>
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No Test Parameters defined for this test.

<p><b>2.10</b></p>	<p><b>Image Test Flag Pass/Fail Criteria:</b></p> <p><i>The Image Test Flag (see ANS X9.100-40-1-2006 for details) will convey one of the following four test conditions:</i></p> <ul style="list-style-type: none"> <li>• <i>Condition not tested</i></li> <li>• <i>Condition tested and result = fail</i></li> <li>• <i>Condition tested and result = pass</i></li> <li>• <i>Condition tested and result=indeterminate</i></li> </ul>	<p>The software will <i>always</i> report this result. There will be two possible results:</p> <ul style="list-style-type: none"> <li>• <i>Condition tested and result = fail</i> This test will <b>fail</b> whenever the image under test does <i>not</i> provide a valid Dots Per Inch metric</li> <li>• <i>Condition tested and result = pass</i> This test will <b>pass</b> whenever the image under test provides a valid Dots Per Inch value. Note that <b>no</b> range checking is performed. Any valid number is accepted.</li> </ul>
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3	Restrictions & Intellectual Property	
3.1	Are there any known restrictions in the use of the submitted check image test and related technology (technical, performance, legal, business, platform, etc.)?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - <i>please provide details:</i>
3.2	Are proprietary Intellectual Property (IP) rights in the form of Patents associated with the description and use of the submitted check image test?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – <i>Please provide patent and/or patent application numbers and indicate who owns the IP. Also provide evidence that the patent holder agrees to comply with the X9 Procedures including the X9 patent policy:</i>
3.3	Are proprietary Intellectual Property (IP) rights in the form of proprietary material and/or other intellectual property (e.g. specific to a vendor tool, device, or product) associated with the description and use of the submitted check image test?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – <i>Please provide evidence that the owner agrees to provide the Proprietary IP Holder Statement contained in Annex B of ANS X9.100-40-2006 Part 2:</i>

**Notice:** By accepting a check image test for registration, ASC X9 is not endorsing, certifying validity, certifying performance, nor providing any warranty for the registered check image test. The organization using the test shall determine which test(s) to use based on their own business needs, perceived benefit, and validation/assessment of any test results provided by the check image test supplier, their own testing, or a third party.