



1200 G Street, NW
Suite 500
Washington, DC 20005

P: 202-628-6380
F: 202-393-5453
W: www.atis.org

**Bar Code/Standard
Coding (BCSC)**

Robert Fox
BCSC Chair
rfox@telcordia.com

Robert Yanders
BCSC Vice Chair
bob.yanders@qwest.com

Veronica Lancaster
BCSC Manager –
Standards
Development
vlancaster@atis.org

January 3, 2007

Via E-mail

Robert Leibrandt
Deputy Program Manager
Defense Procurement & Acquisition Policy
3060 Defense Pentagon
Room 3E1044
Washington, DC 20301-3060

Re: Request for ATIS-0300085, BCSC Test Specification for Product
Label Scanning

Dear Mr. Leibrandt:

Per your request to Bob Fox at a recent ANSI MH10 Subcommittee 8 meeting, enclosed herewith is a copy of ATIS-0300085, BCSC Test Specification for Product Label Scanning. This document, which was developed by the Alliance for Telecommunications Industry Solutions' (ATIS) Bar Code/Standard Coding Committee (BCSC), is available to any company wishing to perform scanner testing for the telecommunications industry and report its results back to the ATIS BCSC. The purpose of testing is to determine how the classes of laser scanners and imaging scanners compare for a typical Central Office inventory environment.

By way of background, ATIS is a technical planning and standards development organization committed to developing and promoting technical and operational standards for communications and related information technologies worldwide. Industry professionals from more than 350 communications companies actively participate in ATIS' open industry committees, forums, and "Incubators." The ATIS BCSC establishes guidelines for common shipping labels, product marking labels, product changes and software issuance standards. These common guidelines simplify the receiving, shipping, transportation and tracing of telecommunications products through company and industry business processes and the global supply chain.

Included as an attachment to ATIS-0300085, BCSC Test Specification for Product Label Scanning, is a spreadsheet (datacapture.xls) that is used for the collection of data. The BCSC requests that all companies participating in

Standards that Drive the Business of Communications

testing return the completed spreadsheet, along with copies of Appendices A and B for each scanner tested, to the BCSC. The results will be collected by Veronica Lancaster, BCSC Manager – Standards Development, and will be reported to the telecommunication industry. The data reported to the industry will not reveal the testing company, the manufacturer or the model number of the units tested.

If the Department of Defense is interested in participating in testing, please contact Ms. Lancaster at (202) 434-8826 or vlancaster@atis.org to arrange for shipment of the Test Panel, which is used to perform the testing of laser scanners and imaging scanners. It is requested that all test results be provided to the BCSC no later than February 16, 2007.

Should you have questions or comments on the document or the process, please feel free to contact Bob Fox, Chair of the ATIS BCSC.

Sincerely,

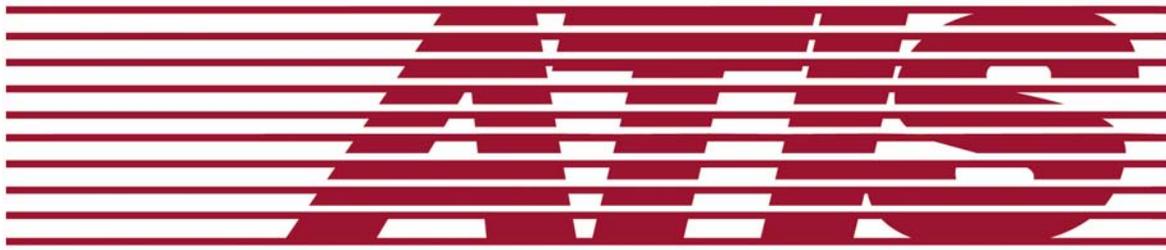
A handwritten signature in black ink, appearing to read 'T Goode', is positioned above the typed name.

Thomas Goode
General Counsel

Enclosure

cc: Bob Fox, BCSC Chairman

BCSC Correspondence #061205-001



**Alliance for Telecommunications
Industry Solutions**

ATIS Standard

ATIS-0300085

BCSC Test Specification for Product Label Scanning



ATIS is a technical planning and standards development organization that is committed to rapidly developing and promoting technical and operations standards for the communications and related information technologies industry worldwide using a pragmatic, flexible and open approach. Over 1,100 participants from more than 350 communications companies are active in ATIS' 21 industry committees, and its Incubator Solutions Program.

< <http://www.atis.org/> >

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Note Regarding Previous Versions

The NIIF Reference Document was formerly known as the Network Operations Forum (NOF) Reference Document. The NOF Reference Document was published and maintained by Bellcore. The last version of the NOF Reference Document is Issue 13.

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ATIS-0300085, BCSC Test Specification for Product Label Scanning

The BCSC Test Specification for Product Label Scanning, ATIS-0300085, is an ATIS standard developed by the BCSC under the **ATIS OAM& P Functional Group**.

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BCSC Tests

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1. INTRODUCTION

These tests were developed to test the performance of imagers and laser scanners on MicroPDF417, Data Matrix, and TLC39 symbols laid out on a test panel, similar to the way plug-in circuit cards might appear in a central office environment.

Companies who wish to perform the tests described in this test specification should contact the BCSC Committee Administrator to obtain the test panels. The BCSC Committee Administrator can be contacted via email at vlancaster@atis.org, via telephone at (202) 628-6380, or via US Mail at:

ATIS
BCSC Committee Administrator
1200 G Street NW, Suite 500
Washington, DC 20005

A. Purpose of Tests

This document provides a recommended minimum set of tests that should be performed to test the ability to accurately read individual symbols in a simulated asset management process. The primary intent of these tests is to quantify the ability of both imagers and laser scanners to isolate one symbol in close proximity to other symbols simulating a central office environment.

These tests will help evaluate the ability of imagers and laser scanners to selectively read 2D symbols located in close proximity. The intention of the test board is to simulate a central office environment where plug-in cadres with 2D symbols would be placed side by side. The test boards would be sent to companies interested in participating (e.g., service providers, telecommunications and Automatic Identification and Data Collection (AIDC) equipment manufacturers, Electronic Manufacturing Service (EMS) partners, Original Equipment Manufacturers (OEM)), providing results to the BCSC, and scanned using their hardware. The scanning results would then be collected and compiled to evaluate the ability of the two technologies to discriminate between labels placed in close proximity. It is anticipated that the test results could also provide insight into performance within technologies as well as across suppliers.

This effort ties into the Department of Defense (DoD) requirement that Data Matrix be used to print the DoD Unique Item Identification (UID) label. The BCSC has requested the DoD allow MicroPDF417 as an alternate symbology to Data Matrix so that the telecommunications industry suppliers would not have to apply a second 2D symbol to product sold to the DoD. It was explained to the DoD that the data they are looking for in the UID label would be encoded in the MicroPDF417 symbol and that their imagers would be capable of reading both Data Matrix and MicroPDF417. The DoD denied the original request.

It is expected that the results will provide the DoD with information showing that Imagers are not as effective as laser scanners in reading 2D symbols in a central office application. And to point out that allowing MicroPDF417 as an alternate solution would benefit the DoD by eliminating the need for two (2) 2D symbols on telecommunications products shipped to the DoD, which may confuse the user.

B. Testing Materials Preparation

Labels will be printed and placed on rigid presentation boards. Labels will be separated by black lines to simulate the gaps between plug-in cards. Test boards will be laid out according to the "2d_Test_Board_Layout.xls" file. The symbologies on the test boards are MicroPDF417, TLC39, Code 39 and Data Matrix. Symbols will be placed at 0 and 90 degrees to simulate placement on plug-in cards.

Companies who wish to perform the tests described in this test specification should contact the BCSC Committee Administrator to obtain the test panels. The BCSC Committee Administrator can be contacted via email at vlancaster@atis.org, via telephone at (202) 628-6380, or via US Mail at:

ATIS
BCSC Committee Administrator
1200 G Street NW, Suite 500
Washington, DC 20005

C. Test Method

Symbology Specifications

This Test Plan shall be based on the use the following symbology specifications:

ISO/IEC 16388, Bar Code Symbology Specification – Code 39 – available from Global Engineering Documents, 15 Inverness Way East, Englewood, CO 80112, Telephone: (800) 854-7179 or (303) 397-7956, Telefax: (303) 397-2740, Web site: <http://global.ihs.com> (Outside the United States, check the above Web site for locations in other countries).

ISO/IEC 24728, Information technology – Bar code symbology specifications MicroPDF417 – available from ANSI, 25 West 43rd Street (between 5th and 6th Avenues), 4th floor, New York, NY 10036, Telephone (212) 642-4900, Fax (212) 398-0023, Web site: <http://webstore.ansi.org/ansidocstore/default.asp>.

ISO/IEC 16022, Information technology – Bar code symbology specifications Data Matrix – available from ANSI, 25 West 43rd Street (between 5th and 6th Avenues), 4th floor, New York, NY 10036, Telephone (212) 642-4900, Fax (212) 398-0023, Web site: <http://webstore.ansi.org/ansidocstore/default.asp>.

For TLC39 specifications, see section 6 in ATIS-0300038, – Product Marking Implementation Guideline – available from the Alliance for Telecommunications Industry Solutions (ATIS), 1200 G Street NW, Suite 500, Washington, DC 20005, Telephone: (202) 434-8844, Fax: (202) 393-5453, Web site: <http://www/atis.org> (Document Center).

Density

The MicroPDF417 symbols will be created with nominal cell sizes (X-dimension) of 5 mils and 7.5 mils. The Data Matrix symbols will be created with nominal cell size of 7.5 mils. TLC39 will be created with nominal cell size of 7.5 mils.

Data Content

Each MicroPDF417 and Data Matrix symbol tested will contain a 10-character CLEI code and a Unique Serial Identification (USI) preceded by the appropriate Data Identifier following the ANSI MH10.8.3 syntax. Data Matrix symbols will be square (not rectangular). Each TLC39 symbol will contain a 6-character Equipment Catalog Item (ECI) number in the linear portion and a USI preceded by the Data Identifier, "S", following the ANSI MH10.8.3 syntax. Each Code 39 symbol will contain a 6-character Equipment Catalog Item (ECI) number. These numbers should be unique so that duplicate scans are easily recognized.

USI's in each symbol will be unique and for the Code 39, either fictitious or unique ECI numbers will be used to differentiate the symbols.

D. Description of Tests

This section provides the details for performing each of the tests.

D.1 Test Process

The following process should be followed by all companies performing the tests outlined in the test plan.

- The test panels should be mounted vertically when scanning to simulate plugs in a frame.
- Two people will be needed to perform testing. One person will scan the symbols on the test board while the other will be recording test information.
- The scanner will need to be connected to a data collection computer. The computer can be integrated into a hand-held terminal or the scanner can be directly connected by cable to a PC.
- Scanner must be configured to enable scanning of the following symbologies:
 - i. Code39
 - ii. Code11
 - iii. TLC39
 - iv. MicroPDF417

- v. Data Matrix (if the scanner is an imager)
- vi. PDF417

NOTE: Enabling all the symbologies required for this application on the scanners will impact performance of the symbologies.

- In general, the person scanning the symbols will scan from left to right beginning with the top row, then left to right with the second row, following this process from top to bottom of the test board (See Figure 1). Specific scanning for individual tests will be outlined in the test procedures below.

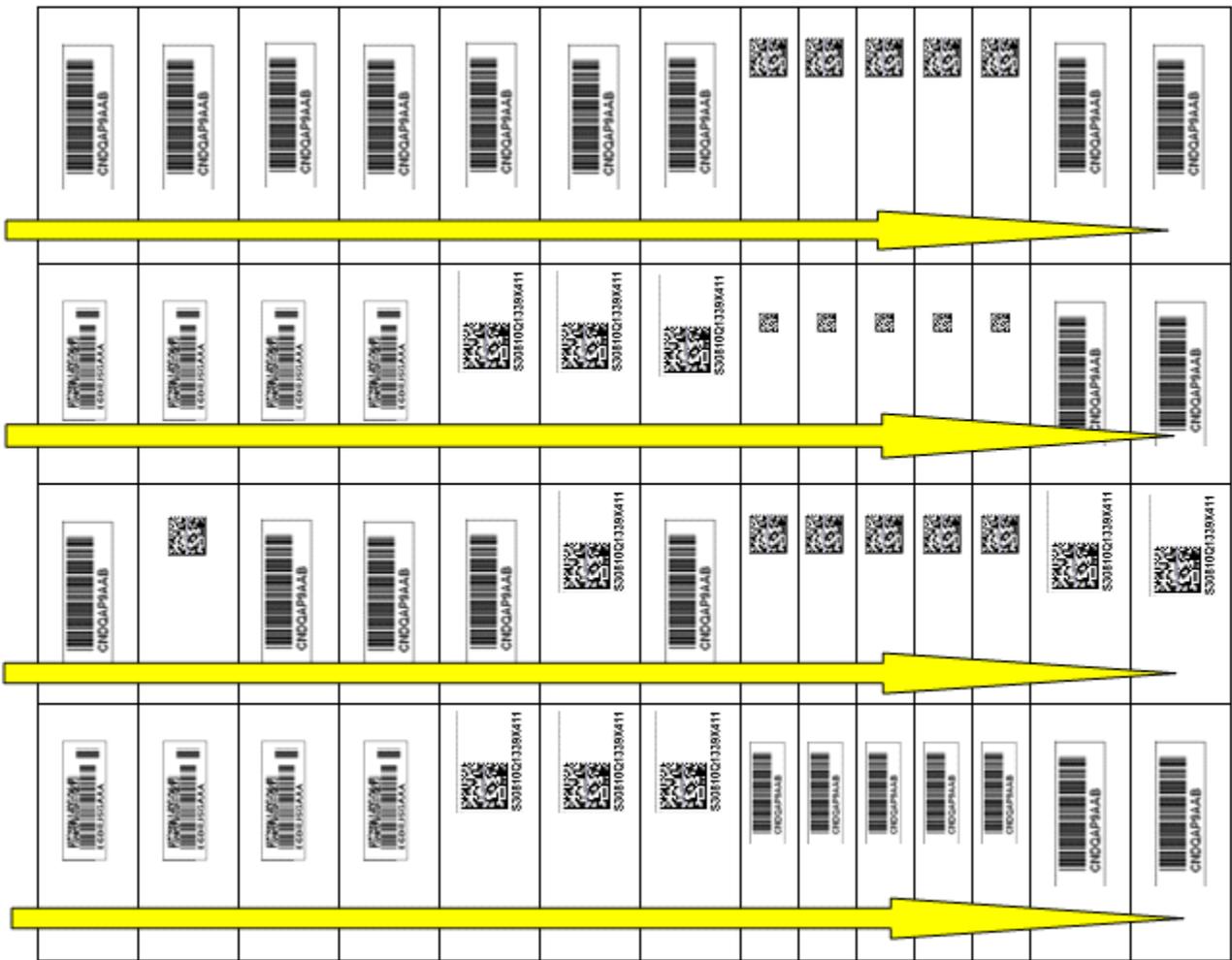


Figure 1: Scanning Process

D.2 Environment Information

Describe the environment in which the test will be performed, for example, office with fluorescent lighting, central office with incandescent lighting, etc. It is recommended that tests be performed in an indoor, office environment.

Another important environmental consideration is noise. Can the scanner be heard? Good read indication?

D.3 Scanner Information

For each scanner tested, the company should record the following information about the scanner on the Scanner Information Sheet, located in Appendix A:

1. Scanner number (assigned by company performing the test)
2. Imager or Laser
3. Cabled, Batch or Wireless
4. Manufacturer specified resolution (e.g., X=5mil to 10mil, X=cell size) – Most scanner manufacturers have multiple scanners (same model) with different optic prescriptions – if a “special focus” is being used it needs to be noted
5. Interface type (e.g., hand held or tethered, USB, serial, or wedge) – if data transmission is to be considered then the Interface type needs to be consistent.
6. Type of aiming pattern (cross hairs, dot, box, or supply a picture)
 - Targeting Zone (describe if the targeting zone is fixed or adjustable. If the targeting zone is adjustable, list the setting for each test.)
7. Dimensions
8. Weight
9. Shock Resistance Specs
7. Scanner Read Indication - Type of indication. Good indication? Bad indication? Adjustable level?
- 9 Manufacturer name
- 10 Model Number

*NOTE: Items 9 and 10 will not be published in test results; however, individual companies may inform the manufacturer of test results. This test specification does not intend to test for battery life, ergonomics, reliability of data.

D.4 Expected Results

The expected results of all tests for imagers or lasers are:

2. resolution of scanner – the ability to read 5 mil and 7 mil symbols
3. determination of difficulty in reading a symbol – first scan yield
4. determination of missed or duplicate scans to help determine the accuracy of the scanner
5. performance on symbols that are close together and symbols that are far apart is similar

D.5 Submission of Test Data

The following shall be returned to the BCSC once testing is complete:

1. Appendix A – Scanner Information Worksheet. A separate form should be completed for each scanner used in testing.
2. Appendix B – Scanner Test Reporting Worksheet. A separate form should be completed for each test performed.
3. Saved Data Capture Spreadsheet. See Appendix C for specific instructions on using the Data Capture Spreadsheet for data capture.
4. Test Panel. If test panel is lost or damaged, company that was in possession of the panel will either recreate or replace the test panel. Contact the BCSC Committee Administrator, Veronica Lancaster, for more information on the recreation or replacement of the panel.

The packaging used to ship the Test Panel to the company participating in testing should be reused to return items to BCSC. The items above should be returned to:

ATIS
Veronica Lancaster
BCSC Committee Administrator
1200 G Street NW, Suite 500
Washington, DC 20005
(202) 434-8826

or via email at vlancaster@atis.org

BCSC TEST: PRELIMINARY SETUP PROCEDURES

TITLE: Preliminary Setup Procedure– Scan Symbols on Panel

PURPOSE: To ensure that the setup and configuration of readers begins at a known point and to verify data transmission is enabled.

PRE-TEST CONDITIONS (Environment): Scanners should not transmit non printable characters.

CONFIGURATION: The scanner should be configured to factory defaults and then optimized for best read performance. The scanner should be configured to block transmissions of characters ASCII DEC less than 032 (block non printable character transmissions) and transmit an Enter key event after each symbol transmission.

To ensure optimal performance of the Data Matrix symbology by all imagers, the rectangular form of Data Matrix shall be turned off for these tests.

TARGETING ZONE SETTING (If applicable): Not needed for preliminary setup testing.

TEST DESCRIPTION:

1. Person performing these preliminary setup procedures should be the person performing testing. The purpose of this preliminary setup procedure is to accustom the tester to using the scanner.
2. Person using the scanner will scan all symbols from left to right beginning with the top row, as noted in D.1, Test Process.
3. Person using the scanner should verify that the scanner is reading and transmitting the data.
 - a. If there is difficulty reading and/or transmitting data with the scanner being used, person scanning should consider if adjustments are needed, if the scanner should be used for testing, or if a different scanner should be selected to perform testing. Person performing testing may also consider contacting the manufacturer for further assistance.
 - b. If the person performing testing is satisfied with scanner performance, proceed with testing.
4. See Appendix C for instructions on the Data Capture Spreadsheet configuration.

EXPECTED RESULT:

1. Determination of scanner to be used for testing.
2. Helping the person performing scanning to accustom themselves to the use of the scanner.

BCSC TEST #1: DEPTH OF FIELD TEST

REFERENCE:

TITLE: Depth of Field test

PURPOSE: Determine ease of use of the scanner to scan plug in cards in a central office environment.

PRE-TEST CONDITIONS: Environment: Describe the lighting conditions in the area that the test is performed on the Scanner Information Worksheet, located in Appendix A.

CONFIGURATION: Ensure that the reader is configured in optimal setup for performance on test symbols. Make note of all non-default settings in Appendix A

TEST DESCRIPTION:

1. Select several test samples of differing size and density on the Test Matrix
2. Maintain orientation of the scanner and determine closest range and farthest range which the scanner is capable of decoding each symbol
3. Determine "sweet spot" where performance is optimal
4. Reorient the same code and calculate near and far as well as optimal distance

EXPECTED RESULT:

1. Depth of Field on properly configured Imagers will be slightly less than that of laser scanners.

BCSC TEST #2: IMAGER TEST #1

TITLE: Imager Test – Scan All Symbols on Panel

PURPOSE: To analyze the ability of imagers to scan plug in cards in a central office environment.

PRE-TEST CONDITIONS (Environment): Describe the lighting conditions in the area that the test is performed on the Scanner Information Worksheet, located in Appendix A.

CONFIGURATION: Describe the interface type on the Scanner Information Worksheet, located in Appendix A. User should perform the Preliminary Setup Procedures to ensure that data is being transmitted correctly to the Data Capture Spreadsheet.

Ensure that the reader is configured in optimal setup for performance on test symbols. Make note of all non-default settings on the Scanner Information Worksheet in Appendix A.

NOTE: Data Matrix and MicroPDF417 shall be ENABLED. Performance is impacted by these symbologies.

TARGETING ZONE SETTING (If applicable): If your scanner has a targeting zone setting, please provide the setting on the Scanner Information Worksheet, located in Appendix A.

TEST DESCRIPTION:

1. Person not performing scanning should record the start and stop time of Imager Test #1, approximate distance from the face of the scanner to the symbol, as well as note any difficulties that the person scanning symbols is having capturing content. The start time and stop time should be entered into the Data Capture Spreadsheet.
2. Person scanning the symbols will scan from left to right beginning with the top row, then left to right with the second row, following this process from top to bottom of the test board (See Figure 1)
3. Download or record the data captured into the Data Capture Spreadsheet provided with the test panel.
4. Note any data discrepancies, such as unmatched or duplicated data or your scanner capturing adjacent labels, on the Data Capture Spreadsheet in the column to the right of the data captured.
5. Note any general comments about Imager Test #1 under the data captured in the Data Capture Spreadsheet. These comments should include difficulty in aiming the scanner at the specific symbol to be scanned, difficulty in getting a good read of a particular symbol and/or several symbols, position of how the scanner was held (vertically or horizontally) to get a good read,

EXPECTED RESULT:

1. The data collected will match the encoded data in the Data Capture Spreadsheet. If there are discrepancies, such as unmatched data, duplicated data, or your scanner capturing adjacent labels, these should be reported as mentioned above.

2. It is expected that comments provided to the BCSC will assist in gathering information on issues associated with the imager used to perform Imager Test #1, which will be reported upon completion of the testing period.
3. The start and stop time of the test will be impacted by the Targeting Zone setting (if available). A more restricted the Target Zone will result in slower scan rates and visa versa.
4. The Testers should determine the best scan performance vs. scanning error and record those values

BCSC TEST #3: IMAGER TEST #2

TITLE: Imager Test – Scan All Symbols Except Data Matrix

PURPOSE: To analyze the ability of imagers to scan plug in cards with laser scannable symbols in a central office environment to compare to the Laser Scanner Test #1.

PRE-TEST CONDITIONS (Environment): Describe the lighting conditions in the area that the test is performed on the Scanner Information Worksheet, located in Appendix A.

CONFIGURATION: Describe the interface type on the Scanner Information Worksheet, located in Appendix A. User should perform the Preliminary Setup Procedures to ensure that data is being transmitted correctly to the Data Capture Spreadsheet.

Ensure that the reader is configured in optimal setup for performance on test symbols. Make note of all non-default settings in Appendix A.

NOTE: Data Matrix and MicroPDF417 shall be ENABLED. Performance is impacted by these symbologies.

TARGETING ZONE SETTING (If applicable): If your scanner has a targeting zone setting, please provide the setting on the Scanner Information Worksheet, located in Appendix A.

TEST DESCRIPTION:

1. Person not performing scanning should record the start and stop time of Imager Test #2, approximate distance from the face of the scanner to the symbol, as well as note any difficulties that the person scanning symbols is having capturing content.
2. Person using the imager will scan symbols, skipping Data Matrix symbols from left to right beginning with the top row, then left to right with the second row, following this process from top to bottom of the test board (See Figure 1).
3. Download or record the data captured into the Data Capture Spreadsheet provided with the test panel.
4. Note any data discrepancies, such as unmatched or duplicated data or your scanner capturing adjacent labels, on the Data Capture Spreadsheet in the column to the right of the data captured.
5. Note any general comments about Imager Test #2 under the data captured in the Data Capture Spreadsheet. These comments should include difficulty in aiming the scanner at the specific symbol to be scanned, difficulty in getting a good read of a particular symbol and/or several symbols, position of how the scanner was held (vertically or horizontally) to get a good read,

EXPECTED RESULT:

1. The data collected will match the encoded data in the Data Capture Spreadsheet. If there are discrepancies, such as unmatched data, duplicated data, or your scanner capturing adjacent labels, these should be reported as mentioned above.

2. It is expected that comments provided to the BCSC will assist in gathering information on issues associated with the imager used to perform Imager Test #2, which will be reported upon completion of the testing period.
3. The start and stop time of the test will be impacted by the Targeting Zone setting (if available). A more restricted the Target Zone will result in slower scan rates and visa versa.

The Testers should determine the best scan performance vs. scanning error and record those values

BCSC TEST #4: LASER SCANNER TEST #1

TITLE: Laser Scanner Test – Scan All Symbols Except Data Matrix

PURPOSE: To analyze the ability of laser scanners to scan plug in cards with laser scannable symbols in a central office environment.

PRE-TEST CONDITIONS (Environment): Describe the lighting conditions in the area that the test is performed on the Scanner Information Worksheet, located in Appendix A.

CONFIGURATION: Describe the interface type on the Scanner Information Worksheet, located in Appendix A. User should perform the Preliminary Setup Procedures to ensure that data is being transmitted correctly to the Data Capture Spreadsheet.

Ensure that the reader is configured in optimal setup for performance on test symbols. Make note of all non-default settings in Appendix A.

NOTE: Data Matrix and MicroPDF417 shall be ENABLED. Performance is impacted by these symbologies.

TARGETING ZONE SETTING (If applicable): If your scanner has a targeting zone setting, please provide the setting on the Scanner Information Worksheet, located in Appendix A.

TEST DESCRIPTION:

1. Person not performing scanning should record the start and stop time of Laser Scanner Test #1, approximate distance from the face of the scanner to the symbol, as well as note any difficulties that the person scanning symbols is having capturing content.
2. Person using the scanner will scan symbols, skipping Data Matrix symbols from left to right beginning with the top row, then left to right with the second row, following this process from top to bottom of the test board (See Figure 1).
3. Download or record the data captured into the Data Capture Spreadsheet provided with the test panel.
4. Note any data discrepancies, such as unmatched or duplicated data or your scanner capturing adjacent labels, on the Data Capture Spreadsheet in the column to the right of the data captured.
5. Note any general comments about Laser Scanner Test #1 under the data captured in the Data Capture Spreadsheet. These comments should include difficulty in aiming the scanner at the specific symbol to be scanned, difficulty in getting a good read of a particular symbol and/or several symbols, position of how the scanner was held (vertically or horizontally) to get a good read,

EXPECTED RESULT:

1. The data collected will match the encoded data in the Data Capture Spreadsheet. If there are discrepancies, such as unmatched data, duplicated data, or your scanner capturing adjacent labels, these should be reported as mentioned above.

2. It is expected that comments provided to the BCSC will assist in gathering information on issues associated with the imager used to perform Laser Scanner Test #1, which will be reported upon completion of the testing period.
3. The start and stop time of the test will be impacted by the Targeting Zone setting (if available). A more restricted the Target Zone will result in slower scan rates and visa versa.

The Testers should determine the best scan performance vs. scanning error and record those values

APPENDIX A

SCANNER INFORMATION WORKSHEET (DUPLICATE THIS PAGE FOR EACH SCANNER TESTED)

The information on this worksheet provided to ATIS BCSC will only be used to determine the diversity of equipment, as well as type of equipment, used in testing. Any specific information, such as manufacturer name and model number, will not be published in final test results documentation.

Scanner number (assigned by company performing the test): _____

Imager or Laser: _____

Manufacturer specified resolution (e.g., X=5mil to 10mil, X=cell size): _____

Interface type (e.g., hand held or tethered, USB, serial, or wedge): _____

Type of aiming pattern (cross hairs, box, or supply a picture): _____

Targeting Zone (describe if the targeting zone is fixed or adjustable): _____

Non Standard Settings _____

***Manufacturer name:** _____

***Model Number:** _____

Environment: _____

***NOTE:** Starred items will not be published in test results; however, individual companies may inform the manufacturer of test results if they desire.

APPENDIX B

SCANNER TEST REPORTING WORKSHEET

(DUPLICATE THIS PAGE FOR EACH TEST PERFORMED ON EACH SCANNER)

The information on this worksheet provided to ATIS BCSC will only be used in conjunction with test results received in the Data Capture Spreadsheet.

BCSC Test Number: _____

Scanner Number: _____

Start Time: _____

Stop Time: _____

Any difficulties that the person scanning symbols is having capturing content?:

Notes on data discrepancies:

General comments:

APPENDIX C

DATA CAPTURE SPREADSHEET INSTRUCTIONS

BCSC Tests #2 through #4 will be performed using the Data Capture Spreadsheet (datacapture.xls), which accompanies the BCSC Test Specification for Product Label Scanning. This spreadsheet contains several worksheets. The two used for testing are called “Output-All” and “Output-Excl Data Matrix”. The “Output-All” spreadsheet shall be used for BCSC Test #2. The “Output-Excl Data Matrix” spreadsheet shall be used for BCSC Test #3 and BCSC Test #4.

Step 1 – Configure the Spreadsheet

Open the Data Capture Spreadsheet (datacapture.xls) and select either “Output-All” or “Output-Excl Data Matrix” worksheet that will be used. Ensure that the “Options” of the worksheet are configured so that when pressing the “enter” key, the selection cursor moves down. This can be done by selecting “Tools”, Options, and ensure that the “Move selection after Enter’ is checked. Also, ensure that the direction selected is “Down”. See Figure C-1

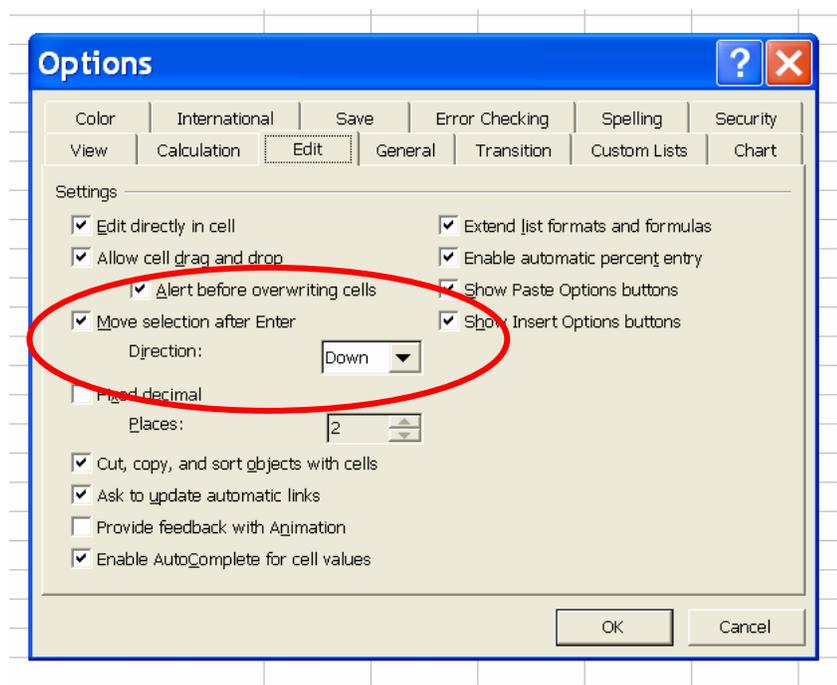


Figure C-1 – Setting the Cursor direction in the Data Capture Spreadsheet

Step 2 – Set the Start Position for Data Capture

Enter the Scanner number assigned by company performing the test for the scanner being used in cell B1. Then, select cell B2 on the “Output-All” or “Output-Excl Data Matrix” worksheet that will be used. If you are testing more than one scanner, the scanner number assigned by company performing the test for the second scanner being used should be entered in cell C1. Then, select cell C2 on the “Output-All” or “Output-Excl Data Matrix” worksheet that will be used. Continue using columns D, E, F, etc., as needed for additional scanners being used for testing.

Step 3 – Saving the Data Capture Spreadsheet for Return to BCSC

It is highly recommended that the Data Capture Spreadsheet be saved at the end of each test performed to ensure that data is not lost. Once testing is complete and data has been captured into the “Output-All” or “Output-Excl Data Matrix” worksheet, the Data Capture Spreadsheet should be saved under the file name “datacapture INSERT COMPANY.xls” For example, if Sprint were performing the tests, Sprint would save the file as “datacapture Sprint.xls”

Data

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