



# Office for Interoperability and Compatibility

## Project 25 Compliance Assessment Bulletin

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Project 25

Compliance Assessment Program

Summary Test Report Requirements

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**P25-CAB-STR\_REQ**

February 2009

## Notice of Disclaimer and Limitation of Liability

The Project 25 Compliance Assessment Program (P25 CAP) provides equipment purchasers demonstrated evidence of a product's compliance with a select group of requirements within the suite of P25 standards. The test procedures used to validate these requirements are also part of the P25 suite of standards. While successful tests will demonstrate P25 compliance for the specific requirements tested, the conclusions drawn from these tests do not apply to every environment or need that individual users may have. P25-CAP-mandated tests only demonstrate product compliance with the test procedures listed in the Supplier's Declaration of Compliance and, therefore, only attest to a product's compliance with specific requirements within the P25 standard.

## Revision History

Version	Date	Description
First draft	August 29, 2008	Draft released for review.
Release	October 8, 2008	Final release version approved on October 8, 2008, P25 CAP Governing Board meeting.
Draft	December 16, 2008	Reference update and variable text recognition modification.
Release	February 4, 2009	Final release version approved on February 4, 2009, P25 CAP Governing Board meeting.

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## **1 Introduction**

The Project 25 Compliance Assessment Program (P25 CAP) is a voluntary program that allows P25 equipment suppliers to formally demonstrate their products' compliance with a select group of requirements within the suite of P25 standards. The purpose of the Program is to provide emergency response agencies with evidence that the communications equipment they are purchasing meets P25 standards for performance, conformance, and interoperability.

The Program requires test laboratories to demonstrate their competence through a rigorous and objective assessment process. Such a process promotes the user community's confidence in, and acceptance of, test results from recognized laboratories. All equipment suppliers that participate in the P25 CAP must use DHS-recognized laboratories to conduct performance, conformance, and interoperability tests on their products. P25 equipment suppliers will release summary test reports (STRs) and declarations of compliance based on testing from laboratories recognized by the Department of Homeland Security (DHS). This documentation will serve to increase the public's confidence in the performance, conformance, and interoperability of P25 equipment.

Performance, conformance, and interoperability issues are likely to occur in all communications technologies and especially in ones such as P25 where protocols constantly adapt to changing user requirements. Such problems should be resolved within the P25 CAP and, notably, before product launch and deployment. Further, the declaration of compliance-related documents developed by Program participants will provide useful technical information about the equipment.

P25 CAP will provide the more than 60,000 emergency response agencies nationwide with a consistent and tractable perspective of P25 product compliance. It will also provide a means of verifying that Federal grant dollars are being invested in standardized solutions and equipment that promote interoperability.

### **1.1 Scope**

This Compliance Assessment Bulletin (CAB) will identify uniform format requirements for use in preparation of STR documents. These STRs are submitted to the DHS Office for Interoperability and Compatibility for review and posting.

## 1.2 Conventions

Throughout this CAB and its annex, underlined and italicized text is representative of variable content.

## 1.3 Normative References

None

## 1.4 Informative References

- [1] NIST Handbook 153: *Laboratory Recognition Process for Project 25 Compliance Assessment*, Current Version
- [2] Charter for the Project 25 Compliance Assessment Program, Current Version
- [3] TSB-102.CBAF, Project 25 Compliance Assessment Program – Trunking Interoperability Summary Test Report Guidelines
- [4] TSB-102.CBAC, Project 25 Compliance Assessment Program – Transceiver Performance Summary Test Report Guidelines
- [5] P25 Compliance Assessment Bulletins

## 2 Summary Test Report Information and Format Requirements

This portion of the CAB describes each major element or section of the STR document in a separate subsection.

### 2.1 STR File Format

All STRs submitted to DHS for review and posting will use Adobe Acrobat's Portable Document Format (.pdf). Additionally, STRs submitted must be compliant with all posted RKB<sup>1</sup> requirements, such as Section 508<sup>2</sup> compliance.

### 2.2 STR Naming Convention

In order to provide for easy document management and traceability, all STRs will use a common naming convention, detailed as follows:

STR-*<Manufacturer Unique Identifier>-<Manufacturer STR Document #>*

The Manufacturer Unique Identifier is selected by the manufacturer that is issuing the STR; it must be unique so as not to be confused with another manufacturer's STRs. Additionally, the Manufacturer STR Document # is a number that is chosen by the manufacturer issuing the STR. This number is unique to other STRs issued by that same manufacturer. Here is an example:

STR-*LMR-123456*

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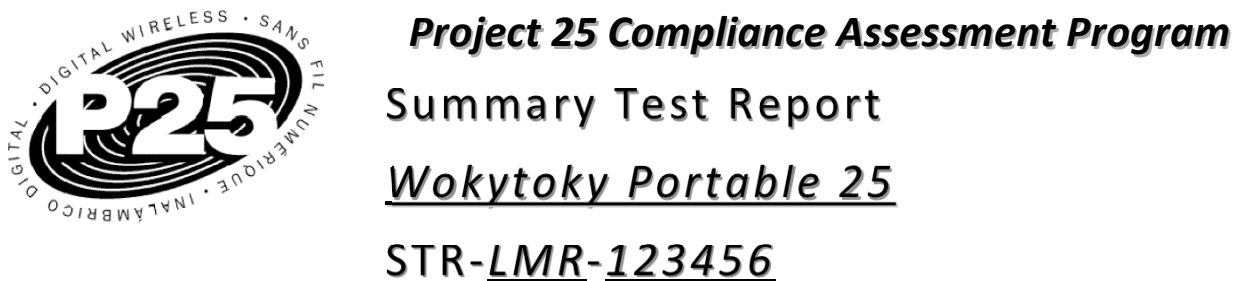
<sup>1</sup> <http://www.rkb.us>

<sup>2</sup> <http://www.section508.gov/>

### 2.3 P25 CAP Letterhead, Title, Device, and Report Number

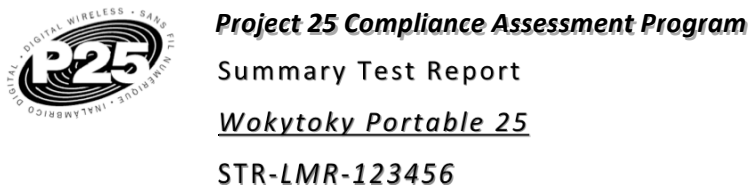
The first page of the STR begins with the P25 logo, about 1.5 inches wide, in the top left corner of the page. To the right of the P25 CAP logo, the STR title, device being tested, and report identification number appear, each in a separate row. The first row to the right of the logo contains the P25 CAP label, under which the title “Summary Test Report” is given; under this line, the device being tested is listed, under which the report identification number is listed. Figure 1 illustrates this:

Figure 1. First Page P25 CAP Letterhead, Title, Device, and Report Identification Number



Each page following the first page in the STR carries the P25 CAP letterhead, title, device being tested, and report identification number as a header. The P25 logo is proportionally smaller as is the font size of the P25 CAP letterhead, title, device being tested, and report identification number. The layout of these elements is the same as on the first page, as exemplified in figure 2.

Figure 2. P25 CAP Letterhead, Title, Device, and Report Identification Number



Each page of the STR includes the current page number and total number of pages (Page # of #) in the bottom right-hand corner.

Figure 3. Page Count

### 2.4 Test Item Description

A description of the test item appears at the top of the document, just below the P25 CAP logo, letterhead, device name, and report identification number. This description includes the name of the



manufacturer, manufacturer contact, product name, and installed options. Figure 4 demonstrates how this information may be arranged.

Figure 4. Test Item Description

Test Item Description <sup>3</sup>	
Manufacturer	<u>LMR Equipment Corporation</u>
Manufacturer Contact	<u>Ima Manufacturer - (303) 555-1212</u>
Product Name	<u>Wokytoky Portable 25</u>
Installed Options	<u>LMR Equipment Corp. Version 4.3</u>

## 2.5 Test Description

Immediately following the description of the device, there will be a table listing the test(s) that were run on the device. The names of the tests listed will follow the guidance in figure 5.

Figure 5. Test Description

Test Description
<u>P25-CAB-CAI TEST-REQ – February 2009, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance</u>

## 2.6 Laboratory Information

Laboratory information for the item tested appears following the test description(s). As exemplified in figure 6, the table includes the P25 CAP laboratory code(s) assigned by DHS based on the recognition process, the date of the test (this may be a single date, two or more dates, or a date range), and the date the test report was issued. If multiple laboratories were involved in testing the specified product, this table will be reproduced with each laboratory’s relevant information.

Figure 6. Laboratory Information

Laboratory Information	
P25 CAP Laboratory Code	<u>P25CAP001</u>
Date(s) of Test	<u>May 1, 2009 to May 15, 2009</u>
Date of Issue	<u>May 22, 2009</u>

## 2.7 References

The laboratory information section will be followed by a list of references that note appropriate P25 CAP CABs. Each CAB identifies the P25 CAP tests that encompass conformance test procedures, measurement methods, performance recommendations, and interoperability test procedures. Figure 7 is an example of an appropriate informative reference.

Figure 7. Informative References

Informative References	
Date	Title

<sup>3</sup> Note that the product name and installed options listed in this table must be identical with the identifiers used in the accompanying Supplier’s Declaration of Compliance.

<u>Feb 2009</u>	<u>P25-CAB-CAI TEST REQ</u>
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## 2.8 Other Devices Tested

After providing references, a list of other devices that were also tested will be presented (when applicable). This section is especially appropriate when performing interoperability tests as either subscriber units (SUs) or pieces of infrastructure will be included in the testing. For each device listed, the manufacturer, point of contact, product name and installed options, and definition<sup>4</sup> will be given.

Figure 8. Other Devices Tested

Devices Tested		
Manufacturer and Point of Contact	Product Name and Definition	Installed Options
<u>LMR Equipment Corporation</u> <u>Ima Manufacturer - (303) 555-1212</u>	<u>Wokytoky 25 Portable</u>	<b>Hardware:</b> <u>wt25pH0002011b</u> <b>Software:</b> <u>wt25pS0003045a</u>
<u>AirTalky</u> <u>Joe Vendor - (847) 555-1212</u>	<u>Talkover Portable</u>	<u>1.5 ACMv1, ERCv3</u>
<u>Speak Systems</u> <u>Bob Industry - (202) 555-1212</u>	<u>SS5100 Portable</u>	<u>N/A</u>
<u>ClearWaiver</u> <u>Connie Company - (208) 555-1212</u>	<u>CW-5400 Portable</u>	<b>Hardware:</b> <u>5400ph35</u> <b>Software:</b> <u>5400ps398g</u>
<u>AirVine</u> <u>Moe Business - (508) 555-1212</u>	<u>AV100 Portable</u>	<b>Hardware:</b> <u>100AVPH007a5y</u> <b>Software:</b> <u>100AVPS028ca1g</u>

## 3 Test Cases and Results Requirements

Following these sections, the test cases and results will be presented. If multiple types of tests were run on the device, the tests will be listed in the order that they are presented in this section.

Each test type will report the applicable test cases and results, their descriptions, the Detailed Test Report identification number<sup>5</sup>, and the results of each test case for the item under testing. Annexes A and B provide several comprehensive examples of test cases and results.

To identify those standards that included the necessary test cases:

1. Refer to the CABs that are applicable to the type of equipment being tested.
2. Use the standards listed in the CABs to identify the necessary test cases for the tests.

<sup>4</sup> In this context, the definition of a product will indicate whether or not it is portable, mobile, base station, repeater, etc.

<sup>5</sup> The Detailed Test Report identification number format is DTR-<P25 CAP laboratory code>-<P25 CAP laboratory document identification #>.

### 3.1 Subscriber Units

#### 3.1.1 Performance

##### 3.1.1.1 Conventional Mode Operation

Figure 9 provides an abbreviated example for presenting test cases and results for SU conventional performance tests.

Figure 9. SU Conventional Performance Test Cases and Results Example

<u>P25-CAB-CAI TEST REQ – February 2009, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance</u>		<u>DTR-P25CAP001-55123</u>	
<b>RECEIVER TESTS</b>			
Test Case	Description	Requirement	Results
<u>2.1.4</u>	<u>Reference Sensitivity</u>	<u>≤ -116 dBm (Class A)</u>	<u>P</u>
<u>2.1.5</u>	<u>Faded Reference Sensitivity</u>	<u>≤ -108 dBm (Class A)</u>	<u>P</u>
<u>P25-CAB-CAI TEST REQ – February 2009, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance</u>		<u>DTR-P25CAP002-34333</u>	
<b>TRANSMITTER TESTS</b>			
Test Case	Description	Requirement	Results
<u>2.2.12</u>	<u>Transmitter Power and Encoder Attack Time</u>		
	<u>Transmitter Attack Time</u>	<u>≤ 50 ms (Class A)</u>	<u>P</u>
	<u>Encoder Attack Time</u>	<u>≤ 100 ms (Class A)</u>	<u>P</u>
<u>2.2.14</u>	<u>Transmitter Throughput Delay</u>	<u>≤ 125 ms (Class A)</u>	<u>P</u>

##### 3.1.1.2 Trunked Mode Operation

Presentations of SU trunked mode performance tests are identical to SU conventional mode performance tests. In the case where both conventional and trunked modes of operations are tested on the device, conventional mode test cases and results will precede trunked mode test cases and results.

#### 3.1.2 Conformance

##### 3.1.2.1 Basic Conventional Mode Operation

No tests are defined or required at this time.

##### 3.1.2.2 Advanced Conventional Mode Operation

No tests are defined or required at this time.

##### 3.1.2.3 Basic Trunked Mode Operation

No tests are defined or required at this time.

**3.1.2.4 Advanced Trunked Mode Operation**

No tests are defined or required at this time.

**3.1.3 Interoperability**

**3.1.3.1 Conventional Mode Operation**

No tests are defined or required at this time.

**3.1.3.2 Trunked Mode Operation**

Figure 10.10 provides an abbreviated example for presenting test cases and results for SU trunked interoperability tests.

Figure 10.10 SU Trunked Interoperability Test Cases and Results Example

<u>P25-CAB-CAI TEST REQ – February 2009</u> <u>Section 2.1.3.2 – Project 25 Phase 1 Common</u> <u>Air Interface Trunked Subscriber Unit</u> <u>Interoperability</u>		<u>DTR-</u> <u>P25CAP001-</u> <u>55123</u>	<u>DTR-</u> <u>P25CAP002-</u> <u>34333</u>	<u>DTR-</u> <u>P25CAP002-</u> <u>34333</u>	<u>DTR-</u> <u>P25CAP001-</u> <u>5513</u>	<u>DTR-</u> <u>P25CAP001-</u> <u>55123</u>			
<u>Wokytoky 25 Portable</u>		<u>Wokytoky</u> <u>Skynet</u>	<u>AT100</u>	<u>SS5100</u>	<u>CW-5400</u>	<u>AV100</u>			
<b>Test Case</b>	<b>Description</b>	<b>Result</b>							
<u>2.2.1</u>	<u>Full Registration</u>								
<u>2.2.1.4.1</u>	<u>Test Case 1 – Valid Registration</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>			
<u>2.2.1.4.2</u>	<u>Test Case 2 – Denied or Refused Registration</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>			

**3.2 Base Stations/Repeaters**

**3.2.1 Performance**

Presentations of base station/repeater performance tests are identical to SU performance tests. In the case where both conventional and trunked modes of operations are tested on the device, conventional mode test cases and results will precede trunked mode test cases and results.

**3.2.2 Conformance**

**3.2.2.1 Basic Conventional Mode Operation**

No tests are defined or required at this time.

**3.2.2.2 Advanced Conventional Mode Operation**

No tests are defined or required at this time.

**3.2.2.3 Basic Trunked Mode Operation**

No tests are defined or required at this time.

### 3.2.2.4 Advanced Trunked Mode Operation

No tests are defined or required at this time.

## 3.2.3 Interoperability

### 3.2.3.1 Conventional Mode Operation

No tests are defined or required at this time.

### 3.2.3.2 Trunked Mode Operation

Presentations of base station/repeater trunked mode interoperability tests are identical to SU trunked mode interoperability tests.

## 3.3 Results Definitions and Comments

Following the presentation of the test cases with results, list the result definitions used in the report.

Figure 11 serves as an example:

Figure 11. Test Case Result Definitions

Test Case Result Definitions	
No Test Performed	---
Test Does Not Apply to the Test Object	<u>N/A</u>
Test Object Meets Requirements	<u>P (Pass)</u>
Test Object Does Not Meet Requirements	<u>F (Fail)</u>
Test Object is Inconclusive	<u>I (Inconclusive)</u>

Finally, provide notated comments to elaborate on test case results when necessary. The following are convention examples based on the examples listed in Figure .

Figure 12. Test Case Result Comments

Comments
N1: Add information for a "Note" here.
N2: Add information for a second "Note" here.
N/A1: Add note here for a "Not Applicable" test.
N/A2: Add note here for a second "Not Applicable" test.
P1: Add note here for a "Pass" verdict that requires elaboration.
P2: Add note here for a second "Pass" verdict that requires elaboration.
I1: Add note here for an "Inconclusive" verdict that requires elaboration.
F1: Add note here for a "Fail" verdict that requires elaboration.

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**Annex A – Performance Summary Test Report Example**



**Project 25 Compliance Assessment Program**

**Summary Test Report**

**Wokytoky 25 Portable**

**STR-LMR-123456**

Test Item Description	
Manufacturer	<u>LMR Equipment Corporation</u>
Manufacturer Contact	<u>Ima Manufacturer - (303) 555-1212</u>
Product Name	<u>Wokytoky 25 Portable</u>
Installed Options	<u>LMR Equipment Corp. Version 4.3</u>

Test Description
<u>P25-CAB-CAI TEST-REQ – February 2009, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Un Performance</u>

Test Information	
P25 CAP Laboratory Code	<u>P25CAP001</u>
Date(s) of Test	<u>May 1, 2009 to May 15, 2009</u>
Date of Issue	<u>May 22, 2009</u>

Informative References	
Date	Title
<u>Feb 2009</u>	<u>P25-CAB-CAI TEST REQ</u>



**Project 25 Compliance Assessment Program**

Summary Test Report

Wokytoky Portable 25

STR-LMR-123456

<b><u>P25-CAB-CAI TEST REQ – February 2009, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance</u></b>		<b>DTR-P25CAP001-55123</b>	
<b>RECEIVER TESTS</b>			
<b>Test Case</b>	<b>Description</b>	<b>Requirement</b>	<b>Results</b>
<b><u>2.1.4</u></b>	<b><u>Reference Sensitivity</u></b>	<b><u>≤ -116 dBm (Class A)</u></b>	<b><u>P</u></b>
<b><u>2.1.5</u></b>	<b><u>Faded Reference Sensitivity</u></b>	<b><u>≤ -108 dBm (Class A)</u></b>	<b><u>P</u></b>
<b><u>2.1.6</u></b>	<b><u>Signal Delay Spread Capability</u></b>	<b><u>≥ 50 μs (Class A)</u></b>	<b><u>P</u></b>
<b><u>2.1.7</u></b>	<b><u>Adjacent Channel Rejection</u></b>	<b><u>≥ 60 dB (Class A)</u></b>	<b><u>P1</u></b>
<b><u>2.1.8</u></b>	<b><u>Co-Channel Rejection</u></b>	<b><u>≤ 9 dB (Class A)</u></b>	<b><u>P</u></b>
<b><u>2.1.9</u></b>	<b><u>Spurious Response Rejection</u></b>	<b><u>≥ 70 dB (Class A)</u></b>	<b><u>P</u></b>
<b><u>2.1.10</u></b>	<b><u>Intermodulation Rejection</u></b>	<b><u>≥ 70 dB (Class A)</u></b>	<b><u>P</u></b>
<b><u>2.1.11</u></b>	<b><u>Signal Displacement Bandwidth</u></b>	<b><u>≥ 1000 Hz (Class A)</u></b>	<b><u>P</u></b>
<b><u>2.1.17</u></b>	<b><u>Late Entry Unsquelch Delay</u></b>		
	<b><u>No Talk Group or Encryption</u></b>	<b><u>≤ 125 ms (Class A)</u></b>	<b><u>P</u></b>
	<b><u>Talk Group Only</u></b>	<b><u>≤ 370 ms (Class A)</u></b>	<b><u>P</u></b>
	<b><u>Encryption Only</u></b>	<b><u>≤ 370 ms (Class A)</u></b>	<b><u>P</u></b>
	<b><u>Both (on clear of encrypted channel)</u></b>	<b><u>≤ 460 ms (Class A)</u></b>	<b><u>P</u></b>
<b><u>2.1.18</u></b>	<b><u>Receiver Throughput Delay</u></b>	<b><u>≤ 125 ms (Class A)</u></b>	<b><u>P</u></b>





**Project 25 Compliance Assessment Program**

Summary Test Report

Wokytoky Portable 25

STR-LMR-123456

<b><u>P25-CAB-CAI TEST REQ – February 2009, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance</u></b>		<b><u>DTR-P25CAP001-55123</u></b>	
<b>TRANSMITTER TESTS</b>			
<b>Test Case</b>	<b>Description</b>	<b>Requirement</b>	<b>Results</b>
<b><u>2.2.12</u></b>	<b><u>Transmitter Power and Encoder Attack Time</u></b>		
	<u>Transmitter Attack Time</u>	<b><u><math>\leq 50 \text{ ms (Class A)}</math></u></b>	<u>P</u>
	<u>Encoder Attack Time</u>	<b><u><math>\leq 100 \text{ ms (Class A)}</math></u></b>	<u>P</u>
<b><u>2.2.14</u></b>	<b><u>Transmitter Throughput Delay</u></b>	<b><u><math>\leq 125 \text{ ms (Class A)}</math></u></b>	<u>P</u>
<b><u>2.2.15</u></b>	<b><u>Frequency Deviation for C4FM</u></b>	<b><u><math>\leq 125 \text{ ms (Class A)}</math></u></b>	<u>P</u>
	<u>High-Level Signal Deviation</u>	<b><u><math>2544 \leq f_{dev} \leq 3111 \text{ Hz (Class A)}</math></u></b>	<u>P</u>
	<u>Low-Level Signal Deviation</u>	<b><u><math>848 \leq f_{dev} \leq 1037 \text{ Hz (Class A)}</math></u></b>	<u>P</u>
<b><u>2.2.16</u></b>	<b><u>Modulation Fidelity</u></b>	<b><u><math>\leq 5\% \text{ (Class A)}</math></u></b>	<u>P</u>
<b><u>2.2.18</u></b>	<b><u>Transient Frequency Behavior</u></b>		
	<u>Time Interval <math>t_1 = 5 \text{ ms}</math></u>	<b><u><math> \Delta f  \leq 12.5 \text{ kHz}</math></u></b>	<u>P</u>
	<u>Time Interval <math>t_2 = 20 \text{ ms}</math></u>	<b><u><math> \Delta f  \leq 6.25 \text{ kHz}</math></u></b>	<u>P</u>
	<u>Time Interval <math>t_3 = 5 \text{ ms}</math></u>	<b><u><math> \Delta f  \leq 12.5 \text{ kHz}</math></u></b>	<u>P</u>



**Project 25 Compliance Assessment Program**

Summary Test Report

Wokytoky Portable 25

STR-LMR-123456

Test Case Result Definitions	
No Test Performed	---
Test Does Not Apply to the Test Object	<u>N/A</u>
Test Object Meets Requirements	<u>P (Pass)</u>
Test Object Does Not Meet Requirements	<u>F (Fail)</u>
Test Object is Inconclusive	<u>I (Inconclusive)</u>

Comments
N1: Add information for a "Note" here.
N2: Add information for a second "Note" note here
N/A1: Add note here for a "Not Applicable" test.
N/A2: Add note here for a second "Not Applicable" test.
<u>P1: This is a Class B subscriber unit, not Class A. Its 2.1.7 Adjacent Channel Rejection measurement of 50 dB exceeds the Class B requirement.</u>
P2: Add note here for a second "Pass" verdict that requires elaboration.
I1: Add note here for an "Inconclusive" verdict that requires elaboration.
F1: Add note here for a "Fail" verdict that requires elaboration.

**Annex B – Interoperability Summary Test Report Example**



**Project 25 Compliance Assessment Program**

**Summary Test Report**

**Skynet Trunked Radio System**

**STR-LMR-123456**

Test Item Description	
Manufacturer	<u>LMR Equipment Corporation</u>
Manufacturer Contact	<u>Ima Manufacturer - (303) 555-1212</u>
Product Name	<u>Skynet Trunked Radio System</u>
Installed Options	<u>LMR Equipment Corp. Version 4.3</u>

Test Description
<u>P25-CAB-CAI TEST-REQ – February 2009, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Interoperability</u>

Test Information	
P25 CAP Laboratory Code	<u>P25CAP001</u>
Date(s) of Test	<u>May 1, 2009 to May 15, 2009</u>
Date of Issue	<u>May 22, 2009</u>

Test Information	
P25 CAP Laboratory Code	<u>P25CAP002</u>
Date(s) of Test	<u>May 5, 2009 to May 10, 2009</u>
Date of Issue	<u>May 22, 2009</u>

Informative References	
Date	Title
<u>Feb 2009</u>	<u>P25-CAB-CAI TEST REQ</u>



**Project 25 Compliance Assessment Program**

Summary Test Report

Skynet Trunked Radio System

STR-LMR-123456

Subscriber Units Tested		
Manufacturer and POC	Product Name and Definition	Installed Options
<u>LMR Equipment Corporation</u> <u>Ima Manufacturer - (303) 555-1212</u>	<u>Wokytoky 25 Portable</u>	<b>Hardware:</b> <u>wt25pH0002011b</u> <b>Software:</b> <u>wt25pS0003045a</u>
<u>AirTalky</u> <u>Joe Vendor - (847) 555-1212</u>	<u>AT100 Portable</u>	<b>Hardware:</b> <u>ATh100300346</u> <b>Software:</b> <u>ATs100900088</u>
<u>Speak Systems</u> <u>Bob Industry - (202) 555-1212</u>	<u>SS5100 Portable</u>	<b>Hardware:</b> <u>pss5100h00437</u> <b>Software:</b> <u>pss5100s00897</u>
<u>ClearWaiver</u> <u>Connie Company - (208) 555-1212</u>	<u>CW-5400 Portable</u>	<b>Hardware:</b> <u>5400ph35</u> <b>Software:</b> <u>5400ps398q</u>
<u>AirVine</u> <u>Moe Business - (508) 555-1212</u>	<u>AV100 Portable</u>	<b>Hardware:</b> <u>100AVPH007a5y</u> <b>Software:</b> <u>100AVPS028ca1q</u>



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<b><u>Section 2.1.3.2 – Project 25 Phase 1 Common</u></b>		<i>P25CAP001-</i>								
<b><u>Air Interface Trunked Subscriber Unit</u></b>		<i>55123</i>								
<b><u>Interoperability</u></b>		<i>DTR-</i>								
		<i>P25CAP002-</i>								
		<i>34333</i>								
		<i>DTR-</i>								
		<i>P25CAP001-</i>								
		<i>55123</i>								
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**STR-LMR-123456**

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<b><u>Section 2.1.3.2 – Project 25 Phase 1 Common Air</u></b>		<b><u>P25CAP001-</u></b>								
<b><u>Interface Trunked Subscriber Unit</u></b>		<b><u>55123</u></b>								
<b><u>Interoperability</u></b>		<b><u>DTR-</u></b>	<b><u>P25CAP002-</u></b>	<b><u>34333</u></b>	<b><u>DTR-</u></b>	<b><u>P25CAP001-</u></b>	<b><u>55123</u></b>	<b><u>DTR-</u></b>	<b><u>P25CAP001-</u></b>	<b><u>55123</u></b>
<b><u>LMR Equipment Corp. Version 4.3</u></b>		<b><u>Wokytoky</u></b>	<b><u>AT100</u></b>	<b><u>SS5100</u></b>	<b><u>CW-5400</u></b>	<b><u>AV100</u></b>				
<b><u>25</u></b>										
<b>Test Case</b>	<b>Description</b>	<b>Result</b>								
<b><u>2.2.3</u></b>	<b><u>Unit-to-Unit Voice Call</u></b>									
<b><u>2.2.3.4.1</u></b>	<b><u>Test Case 1 – Unit-to-Unit Call</u></b> <b><u>with Target Availability Check</u></b>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				
<b><u>2.2.3.4.2</u></b>	<b><u>Test Case 2 – Unit-to-Unit Call</u></b> <b><u>Target Availability Check Denied</u></b> <b><u>by Target</u></b>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				
<b><u>2.2.3.4.3</u></b>	<b><u>Test Case 3 – Unit-to-Unit Call</u></b> <b><u>Queued with Target Availability</u></b> <b><u>Check</u></b>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				
<b><u>2.2.3.4.4</u></b>	<b><u>Test Case 4 – Unit-to-Unit Call</u></b> <b><u>without Target Availability Check</u></b>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				
<b><u>2.2.3.4.5</u></b>	<b><u>Test Case 5 – Unit-to-Unit Call</u></b> <b><u>Queued without Target</u></b> <b><u>Availability Check</u></b>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				
<b><u>2.2.3.4.6</u></b>	<b><u>Test Case 6 – Unit-to-Unit Call</u></b> <b><u>Denied</u></b>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				
<b><u>2.2.4</u></b>	<b><u>Broadcast Voice Call</u></b>									
<b><u>2.2.4.4.1</u></b>	<b><u>Test Case 1 – Broadcast Voice Call</u></b>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				



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<b><u>P25-CAB-CAI TEST REQ – February 2009,</u></b> <b><u>Section 2.1.3.2 – Project 25 Phase 1 Common Air</u></b> <b><u>Interface Trunked Subscriber Unit</u></b> <b><u>Interoperability</u></b>		<u>DTR-</u> <u>P25CAP001-</u> <u>55123</u>	<u>DTR-</u> <u>P25CAP002-</u> <u>34333</u>	<u>DTR-</u> <u>P25CAP002-</u> <u>34333</u>	<u>DTR-</u> <u>P25CAP001-</u> <u>55123</u>	<u>DTR-</u> <u>P25CAP001-</u> <u>55123</u>				
<u>LMR Equipment Corp. Version 4.3</u>		<u>Wokytoky</u> <u>25</u>	<u>AT100</u>	<u>SS5100</u>	<u>CW-5400</u>	<u>AV100</u>				
<b>Test Case</b>	<b>Description</b>	<b>Result</b>								
<b><u>2.2.5</u></b>	<b><u>Affiliation</u></b>									
<b><u>2.2.5.4.1</u></b>	<b><u>Test Case 1 – Radio Permitted To</u></b> <b><u>Affiliate With New Group</u></b>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				
<b><u>2.2.5.4.2</u></b>	<b><u>Test Case 2 – Radio Denied</u></b> <b><u>Affiliation To New Group</u></b>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				
<b><u>2.2.6</u></b>	<b><u>Announcement Group Call</u></b>									
<b><u>2.2.6.4.1</u></b>	<b><u>Test Case 1 – Collection Of Talk</u></b> <b><u>Groups Receive Call</u></b>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				
<b><u>2.2.7</u></b>	<b><u>Emergency Alarm</u></b>									
<b><u>2.2.7.4.1</u></b>	<b><u>Test Case 1 – Emergency Alarm</u></b>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				



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<b><u>P25-CAB-CAI TEST REQ – February 2009,</u></b> <b><u>Section 2.1.3.2 – Project 25 Phase 1 Common Air</u></b> <b><u>Interface Trunked Subscriber Unit</u></b> <b><u>Interoperability</u></b>		<u>DTR-</u> <u>P25CAP001-</u> <u>55123</u>	<u>DTR-</u> <u>P25CAP002-</u> <u>34333</u>	<u>DTR-</u> <u>P25CAP002-</u> <u>34333</u>	<u>DTR-</u> <u>P25CAP001-</u> <u>55123</u>	<u>DTR-</u> <u>P25CAP001-</u> <u>55123</u>				
<u>LMR Equipment Corp. Version 4.3</u>		<u>Wokytoky</u> <u>25</u>	<u>AT100</u>	<u>SS5100</u>	<u>CW-5400</u>	<u>AV100</u>				
<b><u>2.2.8</u></b>	<u>Emergency Group Call</u>									
<b><u>2.2.8.4.1</u></b>	<u>Emergency Call</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				
<b><u>2.2.10</u></b>	<u>Encryption</u>									
<b><u>2.2.10.4.1</u></b>	<u>Test Case 1 – Call Privacy for</u> <u>Encrypted Call</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				
<b><u>2.2.11</u></b>	<u>Intra-Location Registration Area Roaming</u>									
<b><u>2.2.11.4.1</u></b>	<u>Test Case 1 – Idle Radio</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>				





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Test Case Result Definitions	
No Test Performed	---
Test Does Not Apply to the Test Object	<u>N/A</u>
Test Object Meets Requirements	<u>P (Pass)</u>
Test Object Does Not Meet Requirements	<u>F (Fail)</u>
Test Object is Inconclusive	<u>I (Inconclusive)</u>

Comments
N1: Add information for a "Note" here.
N2: Add information for a second "Note" here.
<u>N/A1: Infrastructure does not support this mode of operation.</u>
<u>N/A2: Infrastructure does not support this mode of operation.</u>
P1: Add note here for a "Pass" verdict that requires elaboration.
P2: Add note here for a second "Pass" verdict that requires elaboration.
I1: Add note here for an "Inconclusive" verdict that requires elaboration.
F1: Add note here for a "Fail" verdict that requires elaboration.

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