

# Project 25 Compliance Assessment Program

## Summary Test Report

Codan Radio Communications UR-4E768-00-000

STR-Codan-100006

Test Item Description		
<b>Manufacturer</b>	Codan Radio Communications	
<b>Manufacturer Contact</b>	Mike Cyr	
<b>Product Name</b>	MT-4E Receiver UR-4E768-00-000 (768-776 MHz)	
<b>Installed Options</b>	<b>Hardware</b>	50171.3 50164.3 50154.3 50149.3
	<b>Firmware</b>	2.2.2.D S3.3
<b>Installed Vocoder</b>	Enhanced Full Rate	

Test Description
P25-CAB-CAI_TEST_REQ – March 2010, Section 2.2.1.1 – Project 25 Phase 1 Common Air Interface Performance Conventional Mode Operation Base Station/Repeaters

Laboratory Information	
<b>P25 CAP Laboratory Code</b>	P25CAP081016
<b>Date(s) of Test</b>	April 23, 2010
<b>Date(s) of Issue</b>	April 23, 2010

Informative References	
<b>Date</b>	<b>Title</b>
March 2010	P25-CAB-CAI_TEST_REQ

<b>P25-CAB-CAI_TEST_REQ – March 2010, Section 2.2.1.1 – Project 25 Phase 1 Common Air Interface Performance Conventional Mode Operation Base Station/Repeaters</b>		<b>DTR: TIMCO081016 UR-4E768-00-000 3096ZT11P25_PERFORM_RPT_SU_2.1.1.2.doc</b>	
<b>RECEIVER TESTS (768 – 776 MHz)</b>			
<b>Test Case</b>	<b>Description</b>	<b>Requirement</b>	<b>Results</b>
2.1.4	Reference Sensitivity	≤ -113 dBm (Class B)	P
2.1.5	Faded Reference Sensitivity	≤ -105 dBm (Class B)	P
2.1.7	Adjacent Channel Rejection	≥ 60 dB (Class B)	P
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 70 dB (Class B)	P
2.1.10	Intermodulation Rejection	≥ 70 dB (Class B)	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P
2.1.17	Late Entry Unsilence Delay No Talk Group or Encryption Talk Group Only Encryption Only Both (on clear or encrypted channel)	≤ 125 ms ≤ 370 ms ≤ 370 ms ≤ 460 ms	P
2.1.18	Receiver Throughput Delay	≤ 125 ms	P
<b>TX TESTS (N/A)</b>			
<b>Test Case</b>	<b>Description</b>	<b>Requirement</b>	<b>Results</b>
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	≤ 67 dB	N/A1
2.2.14	Transmitter Throughput Delay	≤ 125 ms	N/A1
2.2.15	Frequency Deviation for C4FM High Level signal Deviation Low Level Signal Deviation	2544 Hz < f <sub>dev</sub> ≤ 3111 Hz 848 Hz < f <sub>dev</sub> ≤ 1037 Hz	N/A1
2.2.16	Modulation Fidelity	≤ 10 % (Class B)	N/A1
2.2.18	Transient Frequency Behavior Time Interval t1 = 10.0 ms Time Interval t2 = 25.0 ms Time Interval t3 = 10.0 ms	Δf  ≤ 12.5 kHz  Δf  ≤ 6.25 kHz  Δf  ≤ 12.5 kHz	N/A1

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

<b>Comments</b>
N/A1: UR-4E768 is a modular receiver and therefore P25-CAB-CAI_TEST_REQ – March 2010, Section 2.2.1.1 Transmitter tests are not applicable and not supported by this module.

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**OMB NO:** 1640-0015

**EXPIRATION DATE:** 07/31/2015

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An agency may not conduct or sponsor information collection and a person is not required to respond to this information collection unless it displays a current valid Office of Management and Budget control number and an expiration date. The control number for this collection is 1640-0015 and this form will expire on 07/31/2015. The estimated average time to complete this for is 60 minutes per respondent. If you have any comments regarding the burden estimate you can write to Department of Homeland Security, Science and Technology Directorate, Washington, DC 20528.

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