

**Project 25 Compliance Assessment Program**  
**SUPPLIER'S DECLARATION OF COMPLIANCE (SDOC)**  
**SDOC-JKWRD-NX5200-0815**

JVCKENWOOD Corporation  
JVCKENWOODUSA Corporation  
Communications Division  
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Suwanee, Georgia 30024  
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<b>Product Name</b>	NX-5200
<b>Frequency Band</b>	136 – 174 MHz (VHF)
<b>Installed Options</b>	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
<b>Installed Vocoder</b>	Enhanced Full Rate

**Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)**

<b>Manufacturer</b>	<b>Product Name, Definition, and Unique ID</b>	<b>Installed Options</b>
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9

*\*Kenwood Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

JVCKENWOOD Corporation and JVCKENWOOD USA Corporation hereby declares that the Kenwood NX-5200 Portable Radio (VHF) passes the test cases listed in the following Project 25 Compliance Assessment Bulletin sections in their entirety with exclusions as noted:

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Sections 2.1.1.1 and 2.1.1.2 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance, DTR-P25CAP081010-15050402 and Trunked Subscriber Unit Performance, DTR-P25CAP081010-15071401.

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability, DTR-P25CAP081010-14082001-Kenwood NX

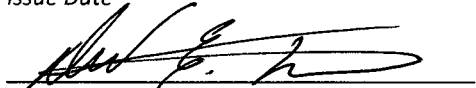
5400, DTR-P25CAP081017-1141104K, and DTR-P25CAP081011. Test case 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris, and Codan infrastructures. Test cases 2.2.3.4.5 and 2.2.3.4.6 are not applicable to EFJohnson and Codan FNE. EFJohnson, Harris, and Codan FNE do not support Inter-System and Inter-WACN roaming therefore these items were not tested.

The summary report of tests performed at Project 25 Compliance Assessment Program Recognized Laboratory(s) P25CAP081010, P25CAP081017, and P25CAP081011 is identified as follows:

**Summary Test Report Identification:** STR-JKWRD-NX5200-0815 issued on 07 August 2015

7 August 2015

*Issue Date*

  
*Supplier Authorized Representative Signature*

Donald E. Wingo

*Supplier Authorized Representative Printed Name*

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**OMB NO:** 1640-0015

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

**Burden Statement**

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DHS FORM 10044 – June 2009

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5200 Portable Radio, VHF

STR-JKWRD-NX5200-0815

Device Under Test Description	
Manufacturer	JVCKENWOOD Corporation JVCKENWOOD USA Corporation
Manufacturer Contact	Donald E. Wingo, 678-474-4719
Product Name	NX-5200, Portable Subscriber Unit – VHF
Frequency Band	VHF (136 – 174 MHz)
Installed Options	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
Installed Vocoder	Enhanced Full Rate

Test Description
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.1 - Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.2 - Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability.

Laboratory Information	
P25 CAP Laboratory Number	P25CAP081010 (EFJohnson Technologies)
Date(s) of Test	10 March 2015 – 01 April 2015 25 March 2015 – 13 July 2015
Date of Issue	14 July 2015
P25 CAP Laboratory Number	P25CAP081010 (EFJohnson Technologies)
Date(s) of Test	7 August 2014
Date of Issue	20 August 2014
P25 CAP Laboratory Number	P25CAP081017 (Harris Corporation)
Date(s) of Test	06 November 2014
Date of Issue	10 November 2014
P25 CAP Laboratory Number	P25CAP081011 (Compliance Testing, LLC)
Date(s) of Test	27 May 2015
Date of Issue	02 June 2015

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5200 Portable Radio, VHF

STR-JKWRD-NX5200-0815

Informative References	
Date	Title
March 2010	P25-CAB-CAI_TEST_REQ

#### ***Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)***

Manufacturer	Product Name, Definition, and Unique ID	Installed Options
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9

*\*JVCKENWOOD Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

#### **Performance Test Cases and Results**

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-15050402	
Performance – Conventional Receiver Tests NX-5200 (VHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 70 dB	P
2.1.10	Intermodulation Rejection	≥ 70 dB	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P
2.1.17	Late Entry Unsquelch 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 P P P
2.1.18	Receiver Throughput Delay	≤ 125 ms	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5200 Portable Radio, VHF

STR-JKWRD-NX5200-0815

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-15050402	
Performance – Conventional Transmitter Tests NX-5200 (VHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time Encoder Attack Time	$\leq 50$ ms	P
		$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	$2544 \leq f_{dev} \leq 3111$ Hz	P
	Low Level Signal Deviation	$848 \leq f_{dev} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 5$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 20$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 5$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-15071401	
Performance – Trunked Receiver Tests NX-5200 (VHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 70 dB	P
2.1.10	Intermodulation Rejection	≥ 70 dB	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5200 Portable Radio, VHF

STR-JKWRD-NX5200-0815

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-15071401	
Performance – Trunked Transmitter Tests NX-5200 (VHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time	$\leq 50$ ms	P
	Encoder Attach Time	$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	$2544 \leq f_{dev} \leq 3111$ Hz	P
	Low Level Signal Deviation	$848 \leq f_{dev} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 5$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 20$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 5$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-15071401	
Performance – Trunked Transmitter Tests NX-5200 (VHF)			
Test Case	Description	Requirement	Results
2.3.1	Trunking Control Channel Slot Time		
	45 ms Slot		
	Encode Attack Time	2.0 ms ≤ t ≤ 11.65 ms	P
	RF Power Attack Time	0.0 ms ≤ t ≤ 11.65 ms	P
	RF Turn Off Time	≤ 1.57 ms	P
2.3.2	Trunking Request Time	≤ 167.5 ms	P
2.3.3	Trunking Voice Access Time	< 500 ms	P5
2.3.5	Transmit Time to Key on Traffic Channel	≤ 150 ms	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5200 Portable Radio, VHF

STR-JKWRD-NX5200-0815

#### Interoperability Test Cases and Results

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability		DTR- P25CAP08101 0-14082001	DTR- P25CAP0810 17-1141104K	DTR- P25CAP0810 11
Kenwood Model Class – NX-5000		EFJ ATLAS	HARRIS VIDA	CODAN
Test Case	Description	Result		
2.2.1	Full Registration			
2.2.1.4.1	Test Case 1 – Valid Registration			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.1.4.2	Test Case 2 – Denied or Refused Registration			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.1.4.3	Test Case 3 – Unverified Registration			
	Home Configuration	P	P	N5
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.2	Group Voice Call			
2.2.2.4.1	Test Case 1 – Group Call Granted			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.2.4.2	Test Case 2 – Group Call Denied			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.2.4.3	Test Case 3 – Group Call Request Queued			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5200 Portable Radio, VHF

STR-JKWRD-NX5200-0815

<b>2.2.3</b>	<b>Unit-to-Unit Voice Call</b>			
<b>2.2.3.4.1</b>	Test Case 1 – Unit-to-Unit Call with Target Availability Check			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.2</b>	Test Case 2 – Unit-to-Unit Call with Target Availability Check Denied by Target			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.3</b>	Test Case 3 – Unit-to-Unit Call Queued with Target Availability Check – Traffic Channel Assignment After Target Availability Check			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.4</b>	Test Case 4 – Unit-to-Unit Call Queued with Target Availability Check – Traffic Channel Assignment Before Target Availability Check			
	Home Configuration	NA1	NA1	NA1
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.5</b>	Test Case 5 – Unit-to-Unit Call without Target Availability Check			
	Home Configuration	N2	P	N2
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.6</b>	Test Case 6 – Unit-to-Unit Call Queued without Target Availability Check			
	Home Configuration	N2	P	N2
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.7</b>	Test Case 7 – Unit-to-Unit Call Denied			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4



## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5200 Portable Radio, VHF

STR-JKWRD-NX5200-0815

<b>2.2.4</b>	<b>Broadcast Voice Call</b>			
<b>2.2.4.4.1</b>	Test Case 1 – Broadcast Voice Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.5</b>	<b>Affiliation</b>			
<b>2.2.5.4.1</b>	Test Case 1 – Radio Permitted to Affiliate with New Group			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.5.4.2</b>	Test Case 2 – Radio Denied Affiliation to New Group			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.6</b>	<b>Announcement Group Call</b>			
<b>2.2.6.4.1</b>	Test Case 1 – Collection of Talk Groups Receive Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.7</b>	<b>Emergency Alarm</b>			
<b>2.2.7.4.1</b>	Test Case 1 – Emergency Alarm			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.8</b>	<b>Emergency Group Call</b>			
<b>2.2.8.4.1</b>	Test Case 1 – Emergency Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.10</b>	<b>Encryption</b>			
<b>2.2.10.4.1</b>	Test Case 1 – Call Privacy for Encrypted Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.11</b>	<b>Intra-Location Registration Area Roaming</b>			
<b>2.2.11.4.1</b>	Test Case 1 – Idle Radio			
	Home Configuration	P	P	N6
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5200 Portable Radio, VHF

STR-JKWRD-NX5200-0815

<b>Model Class: NX-5xxx Subscriber</b>	
<b>Product Name, Definitions and Unique ID</b>	<b>Model Number and Installed Options</b>
NX-5200 VHF Portable	FW K 1.11.01; Trunking, Encryption

<b>Test Case Results Definitions</b>	
No Test Performed	NT
Test Does Not Apply to the Test Object	N/A
Test Object Meets Requirements	P (Pass)
Test Object Does Not Meet Requirements	F (Fail)
Test Object is Not Conclusive	I (Inconclusive)
<b>Comments</b>	
P1: Kenwood subscriber passes Reference Sensitivity specification for C4FM and Simulcast modulations.	
P2: Kenwood subscriber passes Faded Reference Sensitivity specification for C4FM and Simulcast modulations.	
P3: Kenwood subscriber passes Signal Delay Spread Capability specification for C4FM ( $\geq 50$ us) and Simulcast ( $\geq 80$ us) modulations.	
P4: Kenwood subscriber passes Adjacent Channel Rejection specification for C4FM and Simulcast modulations.	
P5: Trunking Voice Access Time will vary dependent on actual system design and implementation.	
N1: EFJohnson infrastructure does not support Inter-System or Inter-WACN roaming.	
N2: Test Cases 2.2.3.4.5 and 2.2.3.4.6 are not supported by EFJohnson and Codan FNE.	
N3: Harris infrastructure does not support Inter-System or Inter-WACN roaming	
N4: Codan infrastructure does not support Inter-System or Inter-WACN roaming	
N5: Codan infrastructure does not support Test Case 3, Section 2.2.1.4.3 Unverified Registration	
N6: Codan infrastructure does not support Intra-Location Registration Area Roaming, Test Case 1, Section 2.2.11.4.1.	
NA1: Test Case 2, Section 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris and Codan infrastructures; see results of test case 2.2.3.4.3	

## **Project 25 Compliance Assessment Program**

### **Summary Test Report**

**NX-5200 Portable Radio, VHF**

**STR-JKWRD-NX5200-0815**

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**OMB NO:** 1640-0015

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

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DHS FORM 10044 – June 2009

**Project 25 Compliance Assessment Program**  
**SUPPLIER'S DECLARATION OF COMPLIANCE (SDOC)**  
**SDOC-JKWRD-NX5300-0215B**

JVCKENWOOD Corporation  
JVCKENWOODUSA Corporation  
Communications Division  
3970 Johns Creek Court  
Suwanee, Georgia 30024  
Customer Contact: D.E. Wingo, R&D Manager  
Phone: 678-474-4700  
Fax: 678-474-4731  
<http://www.kenwood.net>  
[dwingo@us.jvckenwood.com](mailto:dwingo@us.jvckenwood.com)

<b>Product Name</b>	NX-5300
<b>Frequency Band</b>	UHF (380 – 470 MHz / 450 – 520 MHz)
<b>Installed Options</b>	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
<b>Installed Vocoder</b>	Enhanced Full Rate

**Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)**

<b>Manufacturer</b>	<b>Product Name, Definition, and Unique ID</b>	<b>Installed Options</b>
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9

*\*Kenwood Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

JVCKENWOOD Corporation and JVCKENWOOD USA Corporation hereby declares that the Kenwood NX-5300 Portable Radio (UHF) passes the test cases listed in the following Project 25 Compliance Assessment Bulletin sections in their entirety with exclusions as noted:

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Sections 2.1.1.1 and 2.1.1.2 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance, DTR-P25CAP081010-14120501 and Trunked Subscriber Unit Performance, DTR-P25CAP081010-14120301.

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability, DTR-P25CAP081010-14082001-Kenwood NX

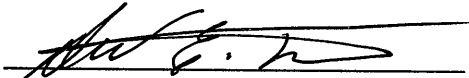
5400, DTR-P25CAP081017-1141104K, and DTR-P25CAP081011. Test case 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris, and Codan infrastructures. Test cases 2.2.3.4.5 and 2.2.3.4.6 are not applicable to EFJohnson and Codan FNE. EFJohnson, Harris, and Codan FNE do not support Inter-System and Inter-WACN roaming therefore these items were not tested.

The summary report of tests performed at Project 25 Compliance Assessment Program Recognized Laboratory(s) P25CAP081010, P25CAP081017, and P25CAP081011 is identified as follows:

**Summary Test Report Identification:** STR-JKWRD-NX5300-0215B issued on 18 June 2015

18 June 2015

*Issue Date*



*Supplier Authorized Representative Signature*

Donald E. Wingo

*Supplier Authorized Representative Printed Name*

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DHS FORM 10044 – June 2009

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215B

Device Under Test Description	
Manufacturer	JVCKENWOOD Corporation JVCKENWOOD USA Corporation
Manufacturer Contact	Donald E. Wingo, 678-474-4719
Product Name	NX-5300, Portable Subscriber Unit - UHF
Frequency Band	UHF (380 – 470 MHz / 450 – 520 MHz)
Installed Options	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
Installed Vocoder	Enhanced Full Rate

Test Description
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.1 - Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.2 - Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability.

Laboratory Information	
P25 CAP Laboratory Number	P25CAP081010 (EFJohnson Technologies)
Date(s) of Test	12 November to 20 November 2014
Date of Issue	05 December 2014
P25 CAP Laboratory Number	P25CAP081010 (EFJohnson Technologies)
Date(s) of Test	7 August 2014
Date of Issue	20 August 2014
P25 CAP Laboratory Number	P25CAP081017 (Harris Corporation)
Date(s) of Test	06 November 2014
Date of Issue	10 November 2014
P25 CAP Laboratory Number	P25CAP081011 (Compliance Testing, LLC)
Date(s) of Test	27 May 2015
Date of Issue	02 June 2015

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215B

Informative References	
Date	Title
March 2010	P25-CAB-CAI_TEST_REQ

#### ***Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)***

Manufacturer	Product Name, Definition, and Unique ID	Installed Options
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9

*\*JVCKENWOOD Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

#### **Performance Test Cases and Results**

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-14120501	
Performance – Conventional Receiver Tests NX-5300 (UHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 70 dB	P
2.1.10	Intermodulation Rejection	≥ 70 dB	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P
2.1.17	Late Entry Unsquelch 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 P P P
2.1.18	Receiver Throughput Delay	≤ 125 ms	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215B

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-14120501	
Performance – Conventional Transmitter Tests NX-5300 (UHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time Encoder Attack Time	$\leq 50$ ms	P
		$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	$2544 \leq f_{\text{dev}} \leq 3111$ Hz	P
	Low Level Signal Deviation	$848 \leq f_{\text{dev}} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 25$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14120301	
Performance – Trunked Receiver Tests NX-5300 (UHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 70 dB	P
2.1.10	Intermodulation Rejection	≥ 70 dB	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P



## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215B

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14120301	
Performance – Trunked Transmitter Tests NX-5300 (UHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time Encoder Attach Time	$\leq 50$ ms	P
		$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	$2544 \leq f_{dev} \leq 3111$ Hz	P
	Low Level Signal Deviation	$848 \leq f_{dev} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 25$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14120301	
Performance – Trunked Transmitter Tests NX-5300 (UHF)			
Test Case	Description	Requirement	Results
2.3.1	Trunking Control Channel Slot Time		
	45 ms Slot		
	Encode Attack Time	2.0 ms ≤ t ≤ 11.65 ms	P
	RF Power Attack Time	0.0 ms ≤ t ≤ 11.65 ms	P
	RF Turn Off Time	≤ 1.57 ms	P
2.3.2	Trunking Request Time	≤ 167.5 ms	P
2.3.3	Trunking Voice Access Time	< 500 ms	P5
2.3.5	Transmit Time to Key on Traffic Channel	≤ 150 ms	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215B

#### Interoperability Test Cases and Results

<b>P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability</b>		<b>DTR-P25CAP08101 0-14082001</b>	<b>DTR-P25CAP0810 17-1141104K</b>	<b>DTR-P25CAP0810 11</b>
<b>Kenwood Model Class – NX-5000</b>		<b>EFJ ATLAS</b>	<b>HARRIS VIDA</b>	<b>CODAN</b>
<b>Test Case</b>	<b>Description</b>	<b>Result</b>		
<b>2.2.1</b>	<b>Full Registration</b>			
<b>2.2.1.4.1</b>	Test Case 1 – Valid Registration			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.1.4.2</b>	Test Case 2 – Denied or Refused Registration			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.1.4.3</b>	Test Case 3 – Unverified Registration			
	Home Configuration	P	P	N5
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.2</b>	<b>Group Voice Call</b>			
<b>2.2.2.4.1</b>	Test Case 1 – Group Call Granted			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.2.4.2</b>	Test Case 2 – Group Call Denied			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.2.4.3</b>	Test Case 3 – Group Call Request Queued			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215B

<b>2.2.3</b>	<b>Unit-to-Unit Voice Call</b>		
<b>2.2.3.4.1</b>	Test Case 1 – Unit-to-Unit Call with Target Availability Check		
	Home Configuration	P	P
	Inter-System Roaming Configuration	N1	N3
	Inter-WACN Roaming Configuration	N1	N4
<b>2.2.3.4.2</b>	Test Case 2 – Unit-to-Unit Call with Target Availability Check Denied by Target		
	Home Configuration	P	P
	Inter-System Roaming Configuration	N1	N3
	Inter-WACN Roaming Configuration	N1	N4
<b>2.2.3.4.3</b>	Test Case 3 – Unit-to-Unit Call Queued with Target Availability Check – Traffic Channel Assignment After Target Availability Check		
	Home Configuration	P	P
	Inter-System Roaming Configuration	N1	N3
	Inter-WACN Roaming Configuration	N1	N4
<b>2.2.3.4.4</b>	Test Case 4 – Unit-to-Unit Call Queued with Target Availability Check – Traffic Channel Assignment Before Target Availability Check		
	Home Configuration	NA1	NA1
	Inter-System Roaming Configuration	N1	N3
	Inter-WACN Roaming Configuration	N1	N4
<b>2.2.3.4.5</b>	Test Case 5 – Unit-to-Unit Call without Target Availability Check		
	Home Configuration	N2	P
	Inter-System Roaming Configuration	N1	N3
	Inter-WACN Roaming Configuration	N1	N4
<b>2.2.3.4.6</b>	Test Case 6 – Unit-to-Unit Call Queued without Target Availability Check		
	Home Configuration	N2	P
	Inter-System Roaming Configuration	N1	N3
	Inter-WACN Roaming Configuration	N1	N4
<b>2.2.3.4.7</b>	Test Case 7 – Unit-to-Unit Call Denied		
	Home Configuration	P	P
	Inter-System Roaming Configuration	N1	N3
	Inter-WACN Roaming Configuration	N1	N4

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215B

<b>2.2.4</b>	<b>Broadcast Voice Call</b>			
<b>2.2.4.4.1</b>	Test Case 1 – Broadcast Voice Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.5</b>	<b>Affiliation</b>			
<b>2.2.5.4.1</b>	Test Case 1 – Radio Permitted to Affiliate with New Group			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.5.4.2</b>	Test Case 2 – Radio Denied Affiliation to New Group			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.6</b>	<b>Announcement Group Call</b>			
<b>2.2.6.4.1</b>	Test Case 1 – Collection of Talk Groups Receive Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.7</b>	<b>Emergency Alarm</b>			
<b>2.2.7.4.1</b>	Test Case 1 – Emergency Alarm			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.8</b>	<b>Emergency Group Call</b>			
<b>2.2.8.4.1</b>	Test Case 1 – Emergency Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.10</b>	<b>Encryption</b>			
<b>2.2.10.4.1</b>	Test Case 1 – Call Privacy for Encrypted Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.11</b>	<b>Intra-Location Registration Area Roaming</b>			
<b>2.2.11.4.1</b>	Test Case 1 – Idle Radio			
	Home Configuration	P	P	N6
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215B

<b>Model Class: NX-5xxx Subscriber</b>	
<b>Product Name, Definitions and Unique ID</b>	<b>Model Number and Installed Options</b>
NX-5300 UHF Portable	FW K 1.11.01; Trunking, Encryption

<b>Test Case Results Definitions</b>	
No Test Performed	NT
Test Does Not Apply to the Test Object	N/A
Test Object Meets Requirements	P (Pass)
Test Object Does Not Meet Requirements	F (Fail)
Test Object is Not Conclusive	I (Inconclusive)
<b>Comments</b>	
P1: Kenwood subscriber passes Reference Sensitivity specification for C4FM and Simulcast modulations.	
P2: Kenwood subscriber passes Faded Reference Sensitivity specification for C4FM and Simulcast modulations.	
P3: Kenwood subscriber passes Signal Delay Spread Capability specification for C4FM ( $\geq 50$ us) and Simulcast ( $\geq 80$ us) modulations.	
P4: Kenwood subscriber passes Adjacent Channel Rejection specification for C4FM and Simulcast modulations.	
P5: Trunking Voice Access Time will vary dependent on actual system design and implementation.	
N1: EFJohnson infrastructure does not support Inter-System or Inter-WACN roaming.	
N2: Test Cases 2.2.3.4.5 and 2.2.3.4.6 are not supported by EFJohnson and Codan FNE.	
N3: Harris infrastructure does not support Inter-System or Inter-WACN roaming	
N4: Codan infrastructure does not support Inter-System or Inter-WACN roaming	
N5: Codan infrastructure does not support Test Case 3, Section 2.2.1.4.3 Unverified Registration	
N6: Codan infrastructure does not support Intra-Location Registration Area Roaming, Test Case 1, Section 2.2.11.4.1.	
NA1: Test Case 2, Section 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris and Codan infrastructures; see results of test case 2.2.3.4.3	

## **Project 25 Compliance Assessment Program**

### **Summary Test Report**

**NX-5300 Portable Radio, UHF**

**STR-JKWRD-NX5300-0215B**

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**OMB NO:** 1640-0015

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

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DHS FORM 10044 – June 2009

**Project 25 Compliance Assessment Program**  
**SUPPLIER'S DECLARATION OF COMPLIANCE (SDOC)**  
**SDOC-JKWRD-NX5300-0215C**

JVCKENWOOD Corporation  
JVCKENWOODUSA Corporation  
Communications Division  
3970 Johns Creek Court  
Suwanee, Georgia 30024  
Customer Contact: D.E. Wingo, R&D Manager  
Phone: 678-474-4700  
Fax: 678-474-4731  
<http://www.kenwood.net>  
[dwingo@us.jvckenwood.com](mailto:dwingo@us.jvckenwood.com)

<b>Product Name</b>	NX-5300
<b>Frequency Band</b>	UHF (380 – 470 MHz / 450 – 520 MHz)
<b>Installed Options</b>	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
<b>Installed Vocoder</b>	Enhanced Full Rate

**Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)**

<b>Manufacturer</b>	<b>Product Name, Definition, and Unique ID</b>	<b>Installed Options</b>
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9
Motorola Solutions, Inc.	Motorola Solutions ASTRO 25 System	Rel. 7.15

*\*JVCKENWOOD Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

JVCKENWOOD Corporation and JVCKENWOOD USA Corporation hereby declares that the Kenwood NX-5300 Portable Radio (UHF) passes the test cases listed in the following Project 25 Compliance Assessment Bulletin sections in their entirety with exclusions as noted:

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Sections 2.1.1.1 and 2.1.1.2 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance, DTR-P25CAP081010-14120501 and Trunked Subscriber Unit Performance, DTR-P25CAP081010-14120301.

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability, DTR-P25CAP081010-14082001-Kenwood NX

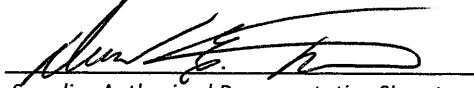
5400, DTR-P25CAP081017-1141104K, DTR-P25CAP081011 (Codan) and DTR-P25CAP081011 (Motorola). Test case 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris, Codan, and Motorola infrastructures. Test cases 2.2.3.4.5 and 2.2.3.4.6 are not applicable to EFJohnson, Codan and Motorola FNE. EFJohnson, Harris, Codan, and Motorola FNE do not support Inter-System and Inter-WACN roaming therefore these items was not tested.

The summary report of tests performed at Project 25 Compliance Assessment Program Recognized Laboratory(s) P25CAP081010, P25CAP081017, P25CAP081011, and P25CAP081012 is identified as follows:

**Summary Test Report Identification:** STR-JKWRD-NX5300-0215C issued on 28 September 2015

28 September 2015

*Issue Date*

  
*Supplier Authorized Representative Signature*

Donald E. Wingo

*Supplier Authorized Representative Printed Name*

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**OMB NO:** 1640-0015

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

**Burden Statement**

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 form 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.

DHS FORM 10044 – June 2009



## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215C

Device Under Test Description	
Manufacturer	JVCKENWOOD Corporation JVCKENWOOD USA Corporation
Manufacturer Contact	Donald E. Wingo, 678-474-4719
Product Name	NX-5300, Portable Subscriber Unit - UHF
Frequency Band	UHF (380 – 470 MHz / 450 – 520 MHz)
Installed Options	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
Installed Vocoder	Enhanced Full Rate

Test Description
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.1 - Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.2 - Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability.

Laboratory Information	
P25 CAP Laboratory Number	P25CAP081010 (EFJohnson Technologies)
Date(s) of Test	12 November to 20 November 2014
Date of Issue	05 December 2014
P25 CAP Laboratory Number	P25CAP081010 (EFJohnson Technologies)
Date(s) of Test	7 August 2014
Date of Issue	20 August 2014
P25 CAP Laboratory Number	P25CAP081017 (Harris Corporation)
Date(s) of Test	06 November 2014
Date of Issue	10 November 2014
P25 CAP Laboratory Number	P25CAP081011 (Compliance Testing, LLC)
Date(s) of Test	27 May 2015
Date of Issue	02 June 2015

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215C

Laboratory Information	
<b>P25 CAP Laboratory Number</b>	P25CAP081012 (Motorola Solutions Inc.)
<b>Date(s) of Test</b>	28 August 2015
<b>Date of Issue</b>	04 September 2015

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

#### **Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)**

Manufacturer	Product Name, Definition, and Unique ID	Installed Options
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9
Motorola Solutions, Inc.	Motorola Solutions ASTRO 25 System	Rel. 7.15

*\*JVCKENWOOD Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

#### **Performance Test Cases and Results**

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-14120501	
Performance – Conventional Receiver Tests NX-5300 (UHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 70 dB	P
2.1.10	Intermodulation Rejection	≥ 70 dB	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 P P P
2.1.18	Receiver Throughput Delay	≤ 125 ms	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215C

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-14120501	
Performance – Conventional Transmitter Tests NX-5300 (UHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time Encoder Attack Time	$\leq 50$ ms	P
		$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	$2544 \leq f_{\text{dev}} \leq 3111$ Hz	P
	Low Level Signal Deviation	$848 \leq f_{\text{dev}} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 25$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14120301	
Performance – Trunked Receiver Tests NX-5300 (UHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 70 dB	P
2.1.10	Intermodulation Rejection	≥ 70 dB	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215C

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14120301	
Performance – Trunked Transmitter Tests NX-5300 (UHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time Encoder Attach Time	$\leq 50$ ms	P
		$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	$2544 \leq f_{dev} \leq 3111$ Hz	P
	Low Level Signal Deviation	$848 \leq f_{dev} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 25$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14120301	
Performance – Trunked Transmitter Tests NX-5300 (UHF)			
Test Case	Description	Requirement	Results
2.3.1	Trunking Control Channel Slot Time		
	45 ms Slot		
	Encode Attack Time	2.0 ms ≤ t ≤ 11.65 ms	P
	RF Power Attack Time	0.0 ms ≤ t ≤ 11.65 ms	P
	RF Turn Off Time	≤ 1.57 ms	P
2.3.2	Trunking Request Time	≤ 167.5 ms	P
2.3.3	Trunking Voice Access Time	< 500 ms	P5
2.3.5	Transmit Time to Key on Traffic Channel	≤ 150 ms	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215C

#### Interoperability Test Cases and Results

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability		DTR- P25CAP08101 0-14082001	DTR- P25CAP0810 17-1141104K	DTR- P25CAP0810 11	DTR- P25CAP0810 11
Kenwood Model Class – NX-5000		EFJ ATLAS	HARRIS VIDA	CODAN	MOTOROLA
Test Case	Description	Result			
2.2.1	Full Registration				
2.2.1.4.1	Test Case 1 – Valid Registration				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
2.2.1.4.2	Test Case 2 – Denied or Refused Registration				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
2.2.1.4.3	Test Case 3 – Unverified Registration				
	Home Configuration	P	P	N5	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
2.2.2	Group Voice Call				
2.2.2.4.1	Test Case 1 – Group Call Granted				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
2.2.2.4.2	Test Case 2 – Group Call Denied				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
2.2.2.4.3	Test Case 3 – Group Call Request Queued				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215C

<b>2.2.3</b>	<b>Unit-to-Unit Voice Call</b>			
<b>2.2.3.4.1</b>	Test Case 1 – Unit-to-Unit Call with Target Availability Check			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.2</b>	Test Case 2 – Unit-to-Unit Call with Target Availability Check Denied by Target			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.3</b>	Test Case 3 – Unit-to-Unit Call Queued with Target Availability Check – Traffic Channel Assignment After Target Availability Check			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.4</b>	Test Case 4 – Unit-to-Unit Call Queued with Target Availability Check – Traffic Channel Assignment Before Target Availability Check			
	Home Configuration	NA1	NA1	NA1
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.5</b>	Test Case 5 – Unit-to-Unit Call without Target Availability Check			
	Home Configuration	N2	P	N2
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.6</b>	Test Case 6 – Unit-to-Unit Call Queued without Target Availability Check			
	Home Configuration	N2	P	N2
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.7</b>	Test Case 7 – Unit-to-Unit Call Denied			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215C

<b>2.2.4</b>	<b>Broadcast Voice Call</b>				
<b>2.2.4.4.1</b>	Test Case 1 – Broadcast Voice Call				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.5</b>	<b>Affiliation</b>				
<b>2.2.5.4.1</b>	Test Case 1 – Radio Permitted to Affiliate with New Group				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.5.4.2</b>	Test Case 2 – Radio Denied Affiliation to New Group				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.6</b>	<b>Announcement Group Call</b>				
<b>2.2.6.4.1</b>	Test Case 1 – Collection of Talk Groups Receive Call				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.7</b>	<b>Emergency Alarm</b>				
<b>2.2.7.4.1</b>	Test Case 1 – Emergency Alarm				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.8</b>	<b>Emergency Group Call</b>				
<b>2.2.8.4.1</b>	Test Case 1 – Emergency Call				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.10</b>	<b>Encryption</b>				
<b>2.2.10.4.1</b>	Test Case 1 – Call Privacy for Encrypted Call				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.11</b>	<b>Intra-Location Registration Area Roaming</b>				
<b>2.2.11.4.1</b>	Test Case 1 – Idle Radio				
	Home Configuration	P	P	N6	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5300 Portable Radio, UHF

STR-JKWRD-NX5300-0215C

<b>Model Class: NX-5xxx Subscriber</b>	
<b>Product Name, Definitions and Unique ID</b>	<b>Model Number and Installed Options</b>
NX-5300 UHF Portable	FW K 1.11.01 – 1.40.00; Trunking, Encryption

<b>Test Case Results Definitions</b>	
No Test Performed	NT
Test Does Not Apply to the Test Object	N/A
Test Object Meets Requirements	P (Pass)
Test Object Does Not Meet Requirements	F (Fail)
Test Object is Not Conclusive	I (Inconclusive)
<b>Comments</b>	
P1: Kenwood subscriber passes Reference Sensitivity specification for C4FM and Simulcast modulations.	
P2: Kenwood subscriber passes Faded Reference Sensitivity specification for C4FM and Simulcast modulations.	
P3: Kenwood subscriber passes Signal Delay Spread Capability specification for C4FM ( $\geq 50$ us) and Simulcast ( $\geq 80$ us) modulations.	
P4: Kenwood subscriber passes Adjacent Channel Rejection specification for C4FM and Simulcast modulations.	
P5: Trunking Voice Access Time will vary dependent on actual system design and implementation.	
N1: EFJohnson infrastructure does not support Inter-System or Inter-WACN roaming.	
N2: Test Cases 2.2.3.4.5 and 2.2.3.4.6 are not supported by EFJohnson, Codan, and Motorola FNE.	
N3: Harris infrastructure does not support Inter-System or Inter-WACN roaming	
N4: Codan infrastructure does not support Inter-System or Inter-WACN roaming	
N5: Codan infrastructure does not support Test Case 3, Section 2.2.1.4.3 Unverified Registration	
N6: Codan infrastructure does not support Intra-Location Registration Area Roaming, Test Case 1, Section 2.2.11.4.1.	
N7: Motorola infrastructure does not support Inter-System or Inter-WACN roaming	
NA1: Test Case 2, Section 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris, Codan and Motorola infrastructures; see results of test case 2.2.3.4.3	



## **Project 25 Compliance Assessment Program**

### **Summary Test Report**

**NX-5300 Portable Radio, UHF**

**STR-JKWRD-NX5300-0215C**

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**OMB NO:** 1640-0015

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DHS FORM 10044 – June 2009

**Project 25 Compliance Assessment Program**  
**SUPPLIER'S DECLARATION OF COMPLIANCE (SDOC)**  
**SDOC-JKWRD-NX5400-1214C**

JVCKENWOOD Corporation  
JVCKENWOOD USA Corporation  
Communications Division  
3970 Johns Creek Court  
Suwanee, Georgia 30024  
Customer Contact: D.E. Wingo, R&D Manager  
Phone: 678-474-4700  
Fax: 678-474-4731  
<http://www.kenwood.net>  
[dwingo@us.jvckenwood.com](mailto:dwingo@us.jvckenwood.com)

<b>Product Name</b>	NX-5400
<b>Frequency Band</b>	700 / 800 MHz
<b>Installed Options</b>	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
<b>Installed Vocoder</b>	Enhanced Full Rate

**Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)**

<b>Manufacturer</b>	<b>Product Name, Definition, and Unique ID</b>	<b>Installed Options</b>
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9

*\*JVCKENWOOD Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

JVCKENWOOD Corporation and JVCKENWOOD USA Corporation hereby declares that the Kenwood NX-5400 Portable Radio passes the test cases listed in the following Project 25 Compliance Assessment Bulletin sections in their entirety with exclusions as noted:

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Sections 2.1.1.1 and 2.1.1.2 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance, DTR-P25CAP081010-14082501 and Trunked Subscriber Unit Performance, DTR-P25CAP081010-14082502.

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability, DTR-P25CAP081010-14082001-Kenwood NX

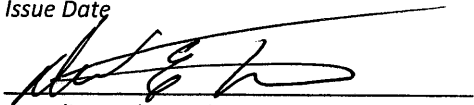
5400, DTR-P25CAP081017-1141104K, and DTR-P25CAP081011. Test case 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris, and Codan infrastructures. Test cases 2.2.3.4.5 and 2.2.3.4.6 are not applicable to EFJohnson and Codan FNE. EFJohnson, Harris, and Codan FNE do not support Inter-System and Inter-WACN roaming therefore these items were not tested.

The summary report of tests performed at Project 25 Compliance Assessment Program Recognized Laboratory(s) P25CAP081010, P25CAP081017, and P25CAP081011 is identified as follows:

**Summary Test Report Identification:** STR-JKWRD-NX5400-1214C issued on 30 June 2015

30 June 2015

*Issue Date*

  
*Supplier Authorized Representative Signature*

Donald E. Wingo

*Supplier Authorized Representative Printed Name*

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**OMB NO:** 1640-0015

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

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DHS FORM 10044 – June 2009

**Project 25 Compliance Assessment Program**  
**Summary Test Report**  
**NX-5400 Portable Radio, 700 / 800 MHz**  
**STR-JKWRD-NX5400-1214C**

<b>Device Under Test Description</b>	
<b>Manufacturer</b>	JVCKENWOOD Corporation JVCKENWOOD USA Corporation
<b>Manufacturer Contact</b>	Donald E. Wingo, 678-474-4719
<b>Product Name</b>	NX-5400
<b>Frequency Band</b>	700 / 800 MHz
<b>Installed Options</b>	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
<b>Installed Vocoder</b>	Enhanced Full Rate

<b>Test Description</b>
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.1 - Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.2 - Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability.

<b>Laboratory Information</b>	
<b>P25 CAP Laboratory Number</b>	P25CAP081010 (EFJohnson Technologies)
<b>Date(s) of Test</b>	28 July to 04 August 2014
<b>Date of Issue</b>	25 August 2014
<b>P25 CAP Laboratory Number</b>	P25CAP081010 (EFJohnson Technologies)
<b>Date(s) of Test</b>	7 August 2014
<b>Date of Issue</b>	20 August 2014
<b>P25 CAP Laboratory Number</b>	P25CAP081017 (Harris Corporation)
<b>Date(s) of Test</b>	06 November 2014
<b>Date of Issue</b>	10 November 2014
<b>P25 CAP Laboratory Number</b>	P25CAP081011 (Compliance Testing, LLC)
<b>Date(s) of Test</b>	27 May 2015
<b>Date of Issue</b>	02 June 2015

**Project 25 Compliance Assessment Program**  
**Summary Test Report**  
**NX-5400 Portable Radio, 700 / 800 MHz**  
**STR-JKWRD-NX5400-1214C**

Informative References	
Date	Title
March 2010	P25-CAB-CAI_TEST_REQ

**Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)**

Manufacturer	Product Name, Definition, and Unique ID	Installed Options
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9

*\*JVCKENWOOD Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

**Performance Test Cases and Results**

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-14082501	
Performance – Conventional Receiver Tests NX-5400 (700/800 MHz)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 70 dB	P
2.1.10	Intermodulation Rejection	≥ 70 dB	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P
2.1.17	Late Entry Unsquelch Delay		
	No Talk Group or Encryption	≤ 125 ms	P
	Talk Group Only	≤ 370 ms	P
	Encryption Only	≤ 370 ms	P
	Both (On Clear or Encrypted Channel)	≤ 460 ms	P
2.1.18	Receiver Throughput Delay	≤ 125 ms	P

**Project 25 Compliance Assessment Program**  
**Summary Test Report**  
**NX-5400 Portable Radio, 700 / 800 MHz**  
**STR-JKWRD-NX5400-1214C**

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-14082501	
Performance – Conventional Transmitter Tests NX-5400 (700 MHz)			
Test Case	Description	Requirement	Results
2.2.8	Adjacent Channel Power Ratio – Offset from Center Freq (kHz) – <u>700 MHz Band</u>	ACPR (dB)	
	9.375	40	P
	15.625, 21.875, 37.5	60	P
	62.5, 87.5, 150, 250, 350	65	P
	>400 kHz to 12 MHz	75	P
	12 MHz to paired RX Band	75	P
	In the Paired RX Band	100	P
2.2.12	Transmitter Power Attack Time	≤ 50 ms	P
	Encoder Attack Time	≤ 100 ms	P
2.2.14	Transmitter Throughput Delay	≤ 125 ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	2544 ≤ f <sub>dev</sub> ≤ 3111 Hz	P
	Low Level Signal Deviation	848 ≤ f <sub>dev</sub> ≤ 1037 Hz	P
2.2.16	Modulation Fidelity	≤ 5%	P
2.2.18	Transient Frequency Behavior		
	Time Interval t <sup>1</sup> = 20 ms	{Δf} ≤ 12.5 kHz	P
	Time Interval t <sup>2</sup> = 50 ms	{Δf} ≤ 6.25 kHz	P
	Time Interval t <sup>3</sup> = 10 ms	{Δf} ≤ 12.5 kHz	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5400 Portable Radio, 700 / 800 MHz

STR-JKWRD-NX5400-1214C

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-14082501	
Performance – Conventional Transmitter Tests NX-5400 (800 MHz)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time Encoder Attack Time	$\leq 50$ ms	P
		$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	$2544 \leq f_{dev} \leq 3111$ Hz	P
	Low Level Signal Deviation	$848 \leq f_{dev} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 20$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 50$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14082502	
Performance – Trunked Receiver Tests NX-5400 (700/800 MHz)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 70 dB	P
2.1.10	Intermodulation Rejection	≥ 70 dB	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P

**Project 25 Compliance Assessment Program**  
**Summary Test Report**  
**NX-5400 Portable Radio, 700 / 800 MHz**  
**STR-JKWRD-NX5400-1214C**

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14082502	
Performance – Trunked Transmitter Tests NX-5400 (700 MHz)			
Test Case	Description	Requirement	Results
2.2.8	Adjacent Channel Power Ratio – Offset from Center Freq (kHz)	ACPR (dB)	
	<u>700 MHz Band</u>		
	9.375	40	P
	15.625, 21.875, 37.5	60	P
	62.5, 87.5, 150, 250, 350	65	P
	>400 kHz to 12 MHz	75	P
	12 MHz to paired RX Band	75	P
	In the Paired RX Band	100	P
2.2.12	Transmitter Power Attack Time	≤ 50 ms	P
	Encoder Attach Time	≤ 100 ms	P
2.2.14	Transmitter Throughput Delay	≤ 125 ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	2544 ≤ f <sub>dev</sub> ≤ 3111 Hz	P
	Low Level Signal Deviation	848 ≤ f <sub>dev</sub> ≤ 1037 Hz	P
2.2.16	Modulation Fidelity	≤ 5%	P
2.2.18	Transient Frequency Behavior		
	Time Interval t <sup>1</sup> = 20 ms	{Δf} ≤ 12.5 kHz	P
	Time Interval t <sup>2</sup> = 50 ms	{Δf} ≤ 6.25 kHz	P
	Time Interval t <sup>3</sup> = 10 ms	{Δf} ≤ 12.5 kHz	P



## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5400 Portable Radio, 700 / 800 MHz

STR-JKWRD-NX5400-1214C

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14082502	
Performance – Trunked Transmitter Tests NX-5400 (800 MHz)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time Encoder Attach Time	$\leq 50$ ms	P
		$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	$2544 \leq f_{dev} \leq 3111$ Hz	P
	Low Level Signal Deviation	$848 \leq f_{dev} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 20$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 50$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14082502	
Performance – Trunked Transmitter Tests NX-5400 (700/800 MHz)			
Test Case	Description	Requirement	Results
2.3.1	Trunking Control Channel Slot Time		
	45 ms Slot		
	Encode Attack Time	2.0 ms ≤ t ≤ 11.65 ms	P
	RF Power Attack Time	0.0 ms ≤ t ≤ 11.65 ms	P
	RF Turn Off Time	≤ 1.57 ms	P
2.3.2	Trunking Request Time (45 ms Slot)	≤ 167 ms	P
2.3.3	Trunking Voice Access Time	<500 ms	P5
2.3.5	Transmit Time to Key on Traffic Channel	≤ 150 ms	P

**Project 25 Compliance Assessment Program**  
**Summary Test Report**  
**NX-5400 Portable Radio, 700 / 800 MHz**  
**STR-JKWRD-NX5400-1214C**

**Interoperability Test Cases and Results**

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability		DTR- P25CAP08101 0-14082001	DTR- P25CAP0810 17-1141104K	DTR- P25CAP0810 11
Kenwood Model Class – NX-5000		EFJ ATLAS	HARRIS VIDA	CODAN
Test Case	Description	Result		
2.2.1	Full Registration			
2.2.1.4.1	Test Case 1 – Valid Registration			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.1.4.2	Test Case 2 – Denied or Refused Registration			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.1.4.3	Test Case 3 – Unverified Registration			
	Home Configuration	P	P	N5
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.2	Group Voice Call			
2.2.2.4.1	Test Case 1 – Group Call Granted			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.2.4.2	Test Case 2 – Group Call Denied			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.2.4.3	Test Case 3 – Group Call Request Queued			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

**Project 25 Compliance Assessment Program**  
**Summary Test Report**  
**NX-5400 Portable Radio, 700 / 800 MHz**  
**STR-JKWRD-NX5400-1214C**

<b>2.2.3</b>	<b>Unit-to-Unit Voice Call</b>			
<b>2.2.3.4.1</b>	Test Case 1 – Unit-to-Unit Call with Target Availability Check			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.2</b>	Test Case 2 – Unit-to-Unit Call with Target Availability Check Denied by Target			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.3</b>	Test Case 3 – Unit-to-Unit Call with Target Availability Check – Traffic Assignment After Target Availability Check			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.4</b>	Test Case 4 – Unit-to-Unit Call with Target Availability Check – Traffic Assignment Before Target Availability Check			
	Home Configuration	NA1	NA1	NA1
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.5</b>	Test Case 5 – Unit-to-Unit Call without Target Availability Check			
	Home Configuration	N2	P	N2
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.6</b>	Test Case 6 – Unit-to-Unit Call Queued without Target Availability Check			
	Home Configuration	N2	P	N2
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.7</b>	Test Case 7 – Unit-to-Unit Call Denied			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

**Project 25 Compliance Assessment Program**  
**Summary Test Report**  
**NX-5400 Portable Radio, 700 / 800 MHz**  
**STR-JKWRD-NX5400-1214C**

<b>2.2.4</b>	<b>Broadcast Voice Call</b>			
<b>2.2.4.4.1</b>	Test Case 1 – Broadcast Voice Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.5</b>	<b>Affiliation</b>			
<b>2.2.5.4.1</b>	Test Case 1 – Radio Permitted to Affiliate with New Group			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.5.4.2</b>	Test Case 2 – Radio Denied Affiliation to New Group			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.6</b>	<b>Announcement Group Call</b>			
<b>2.2.6.4.1</b>	Test Case 1 – Collection of Talk Groups Receive Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.7</b>	<b>Emergency Alarm</b>			
<b>2.2.7.4.1</b>	Test Case 1 – Emergency Alarm			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.8</b>	<b>Emergency Group Call</b>			
<b>2.2.8.4.1</b>	Test Case 1 – Emergency Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.10</b>	<b>Encryption</b>			
<b>2.2.10.4.1</b>	Test Case 1 – Call Privacy for Encrypted Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.11</b>	<b>Intra-Location Registration Area Roaming</b>			
<b>2.2.11.4.1</b>	Test Case 1 – Idle Radio			
	Home Configuration	P	P	N6
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5400 Portable Radio, 700 / 800 MHz

STR-JKWRD-NX5400-1214C

<b>Model Class: NX-5000 Subscriber</b>	
<b>Product Name, Definitions and Unique ID</b>	<b>Model Number and Installed Options</b>
NX-5400 700/800 Portable	FW K1.11.01; Trunking, Encryption

<b>Test Case Results Definitions</b>	
No Test Performed	NT
Test Does Not Apply to the Test Object	N/A
Test Object Meets Requirements	P (Pass)
Test Object Does Not Meet Requirements	F (Fail)
Test Object is Not Conclusive	I (Inconclusive)
<b>Comments</b>	
P1: Kenwood subscriber passes Reference Sensitivity specification for C4FM and Simulcast modulations.	
P2: Kenwood subscriber passes Faded Reference Sensitivity specification for C4FM and Simulcast modulations.	
P3: Kenwood subscriber passes Signal Delay Spread Capability specification for C4FM ( $\geq 50$ us) and Simulcast ( $\geq 80$ us) modulations.	
P4: Kenwood subscriber passes Adjacent Channel Rejection specification for C4FM and Simulcast modulations.	
P5: Trunking Voice Access Time will vary dependent on actual system design and implementation.	
N1: EFJohnson infrastructure does not support Inter-System or Inter-WACN roaming.	
N2: Test Cases 2.2.3.4.5 and 2.2.3.4.6 are not supported by EFJohnson and Codan FNE.	
N3: Harris infrastructure does not support Inter-System or Inter-WACN roaming	
N4: Codan infrastructure does not support Inter-System or Inter-WACN roaming	
N5: Codan infrastructure does not support Test Case 3, Section 2.2.1.4.3 Unverified Registration	
N6: Codan infrastructure does not support Intra-Location Registration Area Roaming, Test Case 1, Section 2.2.11.4.1.	
NA1: Test Case 2, Section 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris and Codan infrastructures; see results of test case 2.2.3.4.3	

**Project 25 Compliance Assessment Program**  
**Summary Test Report**  
**NX-5400 Portable Radio, 700 / 800 MHz**  
**STR-JKWRD-NX5400-1214C**

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**OMB NO:** 1640-0015

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

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DHS FORM 10044 – June 2009

**Project 25 Compliance Assessment Program**  
**SUPPLIER'S DECLARATION OF COMPLIANCE (SDOC)**  
**SDOC-JKWRD-NX5700-0815**

JVCKENWOOD Corporation  
JVCKENWOODUSA Corporation  
Communications Division  
3970 Johns Creek Court  
Suwanee, Georgia 30024  
Customer Contact: D.E. Wingo, R&D Manager  
Phone: 678-474-4700  
Fax: 678-474-4731  
<http://www.kenwood.net>  
[dwingo@us.jvckenwood.com](mailto:dwingo@us.jvckenwood.com)

<b>Product Name</b>	NX-5700
<b>Frequency Band</b>	136 – 174 MHz (VHF)
<b>Installed Options</b>	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
<b>Installed Vocoder</b>	Enhanced Full Rate

**Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)**

<b>Manufacturer</b>	<b>Product Name, Definition, and Unique ID</b>	<b>Installed Options</b>
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9

*\*Kenwood Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

JVCKENWOOD Corporation and JVCKENWOOD USA Corporation hereby declares that the Kenwood NX-5700 Mobile Radio (VHF) passes the test cases listed in the following Project 25 Compliance Assessment Bulletin sections in their entirety with exclusions as noted:

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Sections 2.1.1.1 and 2.1.1.2 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance, DTR-P25CAP081010-15050401 and Trunked Subscriber Unit Performance, DTR-P25CAP081010-15071402.

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability, DTR-P25CAP081010-14082001-Kenwood NX

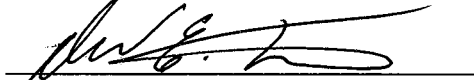
5400, DTR-P25CAP081017-1141104K, and DTR-P25CAP081011. Test case 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris, and Codan infrastructures. Test cases 2.2.3.4.5 and 2.2.3.4.6 are not applicable to EFJohnson and Codan FNE. EFJohnson, Harris, and Codan FNE do not support Inter-System and Inter-WACN roaming therefore these items were not tested.

The summary report of tests performed at Project 25 Compliance Assessment Program Recognized Laboratory(s) P25CAP081010, P25CAP081017, and P25CAP081011 is identified as follows:

**Summary Test Report Identification:** STR-JKWRD-NX5700-0815 issued on 07 August 2015

7 August 2015

*Issue Date*

  
*Supplier Authorized Representative Signature*

Donald E. Wingo

*Supplier Authorized Representative Printed Name*

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**OMB NO:** 1640-0015

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

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DHS FORM 10044 – June 2009



## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5700 Mobile Radio, VHF

STR-JKWRD-NX5700-0815

Device Under Test Description	
Manufacturer	JVCKENWOOD Corporation JVCKENWOOD USA Corporation
Manufacturer Contact	Donald E. Wingo, 678-474-4719
Product Name	NX-5700, Mobile Subscriber Unit – VHF
Frequency Band	VHF (136 – 174 MHz)
Installed Options	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
Installed Vocoder	Enhanced Full Rate

Test Description
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.1 - Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.2 - Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability.

Laboratory Information	
P25 CAP Laboratory Number	P25CAP081010 (EFJohnson Technologies)
Date(s) of Test	10 March 2015 – 01 April 2015 25 March 2015 – 13 July 2015
Date of Issue	14 July 2015
P25 CAP Laboratory Number	P25CAP081010 (EFJohnson Technologies)
Date(s) of Test	7 August 2014
Date of Issue	20 August 2014
P25 CAP Laboratory Number	P25CAP081017 (Harris Corporation)
Date(s) of Test	06 November 2014
Date of Issue	10 November 2014
P25 CAP Laboratory Number	P25CAP081011 (Compliance Testing, LLC)
Date(s) of Test	27 May 2015
Date of Issue	02 June 2015

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5700 Mobile Radio, VHF

STR-JKWRD-NX5700-0815

Informative References	
Date	Title
March 2010	P25-CAB-CAI_TEST_REQ

#### ***Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)***

Manufacturer	Product Name, Definition, and Unique ID	Installed Options
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9

*\*JVCKENWOOD Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

#### **Performance Test Cases and Results**

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-15050401	
Performance – Conventional Receiver Tests NX-5700 (VHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 80 dB	P
2.1.10	Intermodulation Rejection	≥ 75 dB	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P
2.1.17	Late Entry Unsquelch 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 P P P
2.1.18	Receiver Throughput Delay	≤ 125 ms	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5700 Mobile Radio, VHF

STR-JKWRD-NX5700-0815

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-15050401	
Performance – Conventional Transmitter Tests NX-5700 (VHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time Encoder Attack Time	$\leq 50$ ms	P
		$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	$2544 \leq f_{dev} \leq 3111$ Hz	P
	Low Level Signal Deviation	$848 \leq f_{dev} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 5$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 20$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 5$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-15071402	
Performance – Trunked Receiver Tests NX-5700 (VHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 80 dB	P
2.1.10	Intermodulation Rejection	≥ 75 dB	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5700 Mobile Radio, VHF

STR-JKWRD-NX5700-0815

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-15071402	
Performance – Trunked Transmitter Tests NX-5700 (VHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time Encoder Attach Time	$\leq 50$ ms	P
		$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM High Level Signal Deviation Low Level Signal Deviation	$2544 \leq f_{dev} \leq 3111$ Hz	P
		$848 \leq f_{dev} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 5$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 20$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 5$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-15071402	
Performance – Trunked Transmitter Tests NX-5700 (VHF)			
Test Case	Description	Requirement	Results
2.3.1	Trunking Control Channel Slot Time		
	45 ms Slot		
	Encode Attack Time	2.0 ms ≤ t ≤ 11.65 ms	P
	RF Power Attack Time	0.0 ms ≤ t ≤ 11.65 ms	P
	RF Turn Off Time	≤ 1.57 ms	P
2.3.2	Trunking Request Time	≤ 167.5 ms	P
2.3.3	Trunking Voice Access Time	< 500 ms	P5
2.3.5	Transmit Time to Key on Traffic Channel	≤ 150 ms	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5700 Mobile Radio, VHF

STR-JKWRD-NX5700-0815

#### Interoperability Test Cases and Results

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability		DTR- P25CAP08101 0-14082001	DTR- P25CAP0810 17-1141104K	DTR- P25CAP0810 11
Kenwood Model Class – NX-5000		EFJ ATLAS	HARRIS VIDA	CODAN
Test Case	Description	Result		
2.2.1	Full Registration			
2.2.1.4.1	Test Case 1 – Valid Registration			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.1.4.2	Test Case 2 – Denied or Refused Registration			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.1.4.3	Test Case 3 – Unverified Registration			
	Home Configuration	P	P	N5
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.2	Group Voice Call			
2.2.2.4.1	Test Case 1 – Group Call Granted			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.2.4.2	Test Case 2 – Group Call Denied			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.2.4.3	Test Case 3 – Group Call Request Queued			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5700 Mobile Radio, VHF

STR-JKWRD-NX5700-0815

<b>2.2.3</b>	<b>Unit-to-Unit Voice Call</b>			
<b>2.2.3.4.1</b>	Test Case 1 – Unit-to-Unit Call with Target Availability Check			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.2</b>	Test Case 2 – Unit-to-Unit Call with Target Availability Check Denied by Target			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.3</b>	Test Case 3 – Unit-to-Unit Call Queued with Target Availability Check – Traffic Channel Assignment After Target Availability Check			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.4</b>	Test Case 4 – Unit-to-Unit Call Queued with Target Availability Check – Traffic Channel Assignment Before Target Availability Check			
	Home Configuration	NA1	NA1	NA1
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.5</b>	Test Case 5 – Unit-to-Unit Call without Target Availability Check			
	Home Configuration	N2	P	N2
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.6</b>	Test Case 6 – Unit-to-Unit Call Queued without Target Availability Check			
	Home Configuration	N2	P	N2
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.7</b>	Test Case 7 – Unit-to-Unit Call Denied			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5700 Mobile Radio, VHF

STR-JKWRD-NX5700-0815

<b>2.2.4</b>	<b>Broadcast Voice Call</b>			
<b>2.2.4.4.1</b>	Test Case 1 – Broadcast Voice Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.5</b>	<b>Affiliation</b>			
<b>2.2.5.4.1</b>	Test Case 1 – Radio Permitted to Affiliate with New Group			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.5.4.2</b>	Test Case 2 – Radio Denied Affiliation to New Group			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.6</b>	<b>Announcement Group Call</b>			
<b>2.2.6.4.1</b>	Test Case 1 – Collection of Talk Groups Receive Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.7</b>	<b>Emergency Alarm</b>			
<b>2.2.7.4.1</b>	Test Case 1 – Emergency Alarm			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.8</b>	<b>Emergency Group Call</b>			
<b>2.2.8.4.1</b>	Test Case 1 – Emergency Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.10</b>	<b>Encryption</b>			
<b>2.2.10.4.1</b>	Test Case 1 – Call Privacy for Encrypted Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.11</b>	<b>Intra-Location Registration Area Roaming</b>			
<b>2.2.11.4.1</b>	Test Case 1 – Idle Radio			
	Home Configuration	P	P	N6
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5700 Mobile Radio, VHF

STR-JKWRD-NX5700-0815

<b>Model Class: NX-5xxx Subscriber</b>	
<b>Product Name, Definitions and Unique ID</b>	<b>Model Number and Installed Options</b>
NX-5700 VHF Mobile	FW K 1.11.01; Trunking, Encryption

<b>Test Case Results Definitions</b>	
No Test Performed	NT
Test Does Not Apply to the Test Object	N/A
Test Object Meets Requirements	P (Pass)
Test Object Does Not Meet Requirements	F (Fail)
Test Object is Not Conclusive	I (Inconclusive)
<b>Comments</b>	
P1: Kenwood subscriber passes Reference Sensitivity specification for C4FM and Simulcast modulations.	
P2: Kenwood subscriber passes Faded Reference Sensitivity specification for C4FM and Simulcast modulations.	
P3: Kenwood subscriber passes Signal Delay Spread Capability specification for C4FM ( $\geq 50$ us) and Simulcast ( $\geq 80$ us) modulations.	
P4: Kenwood subscriber passes Adjacent Channel Rejection specification for C4FM and Simulcast modulations.	
P5: Trunking Voice Access Time will vary dependent on actual system design and implementation.	
N1: EFJohnson infrastructure does not support Inter-System or Inter-WACN roaming.	
N2: Test Cases 2.2.3.4.5 and 2.2.3.4.6 are not supported by EFJohnson and Codan FNE.	
N3: Harris infrastructure does not support Inter-System or Inter-WACN roaming	
N4: Codan infrastructure does not support Inter-System or Inter-WACN roaming	
N5: Codan infrastructure does not support Test Case 3, Section 2.2.1.4.3 Unverified Registration	
N6: Codan infrastructure does not support Intra-Location Registration Area Roaming, Test Case 1, Section 2.2.11.4.1.	
NA1: Test Case 2, Section 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris and Codan infrastructures; see results of test case 2.2.3.4.3	



**Project 25 Compliance Assessment Program**  
**Summary Test Report**  
**NX-5700 Mobile Radio, VHF**  
**STR-JKWRD-NX5700-0815**

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**OMB NO:** 1640-0015

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

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DHS FORM 10044 – June 2009

**Project 25 Compliance Assessment Program**  
**SUPPLIER'S DECLARATION OF COMPLIANCE (SDOC)**  
**SDOC-JKWRD-NX5800-0215B**

JVCKENWOOD Corporation  
JVCKENWOODUSA Corporation  
Communications Division  
3970 Johns Creek Court  
Suwanee, Georgia 30024  
Customer Contact: D.E. Wingo, R&D Manager  
Phone: 678-474-4700  
Fax: 678-474-4731  
<http://www.kenwood.net>  
[dwingo@us.jvckenwood.com](mailto:dwingo@us.jvckenwood.com)

<b>Product Name</b>	NX-5800
<b>Frequency Band</b>	UHF (380 – 470 MHz / 450 – 520 MHz)
<b>Installed Options</b>	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
<b>Installed Vocoder</b>	Enhanced Full Rate

**Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)**

<b>Manufacturer</b>	<b>Product Name, Definition, and Unique ID</b>	<b>Installed Options</b>
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9

*\*Kenwood Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

JVCKENWOOD Corporation and JVCKENWOOD USA Corporation hereby declares that the Kenwood NX-5800 Mobile Radio (UHF) passes the test cases listed in the following Project 25 Compliance Assessment Bulletin sections in their entirety with exclusions as noted:

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Sections 2.1.1.1 and 2.1.1.2 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance, DTR-P25CAP081010-14120901 and Trunked Subscriber Unit Performance, DTR-P25CAP081010-14120902.

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability, DTR-P25CAP081010-14082001-Kenwood NX

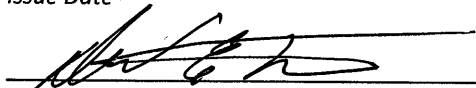
5400, DTR-P25CAP081017-1141104K, and DTR-P25CAP081011. Test case 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris, and Codan infrastructures. Test cases 2.2.3.4.5 and 2.2.3.4.6 are not applicable to EFJohnson and Codan FNE. EFJohnson, Harris, and Codan FNE do not support Inter-System and Inter-WACN roaming therefore these items were not tested.

The summary report of tests performed at Project 25 Compliance Assessment Program Recognized Laboratory(s) P25CAP081010, P25CAP081017, and P25CAP081011 is identified as follows:

**Summary Test Report Identification:** STR-JKWRD-NX5800-0215B issued on 18 June 2015

18 June 2015

*Issue Date*

  
*Supplier Authorized Representative Signature*

Donald E. Wingo

*Supplier Authorized Representative Printed Name*

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**OMB NO:** 1640-0015

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

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DHS FORM 10044 – June 2009

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215B

Device Under Test Description	
Manufacturer	JVCKENWOOD Corporation JVCKENWOOD USA Corporation
Manufacturer Contact	Donald E. Wingo, 678-474-4719
Product Name	NX-5800, Mobile Subscriber Unit - UHF
Frequency Band	UHF (380 – 470 MHz / 450 – 520 MHz)
Installed Options	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
Installed Vocoder	Enhanced Full Rate

Test Description
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.1 - Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.2 - Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability.

Laboratory Information	
P25 CAP Laboratory Number	P25CAP081010 (EFJohnson Technologies)
Date(s) of Test	07 November to 21 November 2014
Date of Issue	09 December 2014
P25 CAP Laboratory Number	P25CAP081010 (EFJohnson Technologies)
Date(s) of Test	7 August 2014
Date of Issue	20 August 2014
P25 CAP Laboratory Number	P25CAP081017 (Harris Corporation)
Date(s) of Test	06 November 2014
Date of Issue	10 November 2014
P25 CAP Laboratory Number	P25CAP081011 (Compliance Testing, LLC)
Date(s) of Test	27 May 2015
Date of Issue	02 June 2015

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215B

Informative References	
Date	Title
March 2010	P25-CAB-CAI_TEST_REQ

#### *Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)*

Manufacturer	Product Name, Definition, and Unique ID	Installed Options
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9

*\*JVCKENWOOD Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

#### Performance Test Cases and Results

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-14120901	
Performance – Conventional Receiver Tests NX-5800 (UHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 80 dB	P
2.1.10	Intermodulation Rejection	≥ 75 dB	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P
2.1.17	Late Entry Unsquelch 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 P P P
2.1.18	Receiver Throughput Delay	≤ 125 ms	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215B

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-14120901	
Performance – Conventional Transmitter Tests NX-5800 (UHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time	$\leq 50$ ms	P
	Encoder Attack Time	$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	$2544 \leq f_{dev} \leq 3111$ Hz	P
	Low Level Signal Deviation	$848 \leq f_{dev} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 25$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14120902	
Performance – Trunked Receiver Tests NX-5800 (UHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 80 dB	P
2.1.10	Intermodulation Rejection	≥ 75 dB	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215B

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14120902	
Performance – Trunked Transmitter Tests NX-5800 (UHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time Encoder Attach Time	$\leq 50$ ms	P
		$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM High Level Signal Deviation Low Level Signal Deviation	$2544 \leq f_{dev} \leq 3111$ Hz	P
		$848 \leq f_{dev} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 25$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14120902	
Performance – Trunked Transmitter Tests NX-5800 (UHF)			
Test Case	Description	Requirement	Results
2.3.1	Trunking Control Channel Slot Time		
	45 ms Slot		
	Encode Attack Time	$2.0\text{ ms} \leq t \leq 11.65\text{ ms}$	P
	RF Power Attack Time	$0.0\text{ ms} \leq t \leq 11.65\text{ ms}$	P
	RF Turn Off Time	$\leq 1.57\text{ ms}$	P
2.3.2	Trunking Request Time	$\leq 167.5\text{ ms}$	P
2.3.3	Trunking Voice Access Time	$< 500\text{ ms}$	P5
2.3.5	Transmit Time to Key on Traffic Channel	$\leq 150\text{ ms}$	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215B

#### Interoperability Test Cases and Results

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability		DTR- P25CAP08101 0-14082001	DTR- P25CAP0810 17-1141104K	DTR- P25CAP0810 11
Kenwood Model Class – NX-5000		EFJ ATLAS	HARRIS VIDA	CODAN
Test Case	Description	Result		
2.2.1	Full Registration			
2.2.1.4.1	Test Case 1 – Valid Registration			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.1.4.2	Test Case 2 – Denied or Refused Registration			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.1.4.3	Test Case 3 – Unverified Registration			
	Home Configuration	P	P	N5
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.2	Group Voice Call			
2.2.2.4.1	Test Case 1 – Group Call Granted			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.2.4.2	Test Case 2 – Group Call Denied			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
2.2.2.4.3	Test Case 3 – Group Call Request Queued			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4



## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215B

<b>2.2.3</b>	<b>Unit-to-Unit Voice Call</b>			
<b>2.2.3.4.1</b>	Test Case 1 – Unit-to-Unit with Target Availability Check			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.2</b>	Test Case 2 – Unit-to-Unit Call with Target Availability Check Denied by Target			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.3</b>	Test Case 3 – Unit-to-Unit Call Queued with Target Availability Check – Traffic Channel Assignment After Target Availability Check			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.4</b>	Test Case 4 – Unit-to-Unit Call Queued with Target Availability Check – Traffic Channel Assignment Before Target Availability Check			
	Home Configuration	NA1	NA1	NA1
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.5</b>	Test Case 5 – Unit-to-Unit Call without Target Availability Check			
	Home Configuration	N2	P	N2
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.6</b>	Test Case 6 – Unit-to-Unit Call Queued without Target Availability Check			
	Home Configuration	N2	P	N2
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.7</b>	Test Case 7 – Unit-to-Unit Call Denied			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215B

<b>2.2.4</b>	<b>Broadcast Voice Call</b>			
<b>2.2.4.4.1</b>	Test Case 1 – Broadcast Voice Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.5</b>	<b>Affiliation</b>			
<b>2.2.5.4.1</b>	Test Case 1 – Radio Permitted to Affiliate with New Group			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.5.4.2</b>	Test Case 2 – Radio Denied Affiliation to New Group			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.6</b>	<b>Announcement Group Call</b>			
<b>2.2.6.4.1</b>	Test Case 1 – Collection of Talk Groups Receive Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.7</b>	<b>Emergency Alarm</b>			
<b>2.2.7.4.1</b>	Test Case 1 – Emergency Alarm			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.8</b>	<b>Emergency Group Call</b>			
<b>2.2.8.4.1</b>	Test Case 1 – Emergency Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.10</b>	<b>Encryption</b>			
<b>2.2.10.4.1</b>	Test Case 1 – Call Privacy for Encrypted Call			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.11</b>	<b>Intra-Location Registration Area Roaming</b>			
<b>2.2.11.4.1</b>	Test Case 1 – Idle Radio			
	Home Configuration	P	P	N6
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215B

<b>Model Class: NX-5000 Subscriber</b>	
<b>Product Name, Definitions and Unique ID</b>	<b>Model Number and Installed Options</b>
NX-5800 UHF Mobile	FW K 1.11.01; Trunking, Encryption

<b>Test Case Results Definitions</b>	
No Test Performed	NT
Test Does Not Apply to the Test Object	N/A
Test Object Meets Requirements	P (Pass)
Test Object Does Not Meet Requirements	F (Fail)
Test Object is Not Conclusive	I (Inconclusive)
<b>Comments</b>	
P1: Kenwood subscriber passes Reference Sensitivity specification for C4FM and Simulcast modulations.	
P2: Kenwood subscriber passes Faded Reference Sensitivity specification for C4FM and Simulcast modulations.	
P3: Kenwood subscriber passes Signal Delay Spread Capability specification for C4FM ( $\geq 50$ us) and Simulcast ( $\geq 80$ us) modulations.	
P4: Kenwood subscriber passes Adjacent Channel Rejection specification for C4FM and Simulcast modulations.	
P5: Trunking Voice Access Time will vary dependent on actual system design and implementation.	
N1: EFJohnson infrastructure does not support Inter-System or Inter-WACN roaming.	
N2: Test Cases 2.2.3.4.5 and 2.2.3.4.6 are not supported by EFJohnson and Codan FNE.	
N3: Harris infrastructure does not support Inter-System or Inter-WACN roaming	
N4: Codan infrastructure does not support Inter-System or Inter-WACN roaming	
N5: Codan infrastructure does not support Test Case 3, Section 2.2.1.4.3 Unverified Registration	
N6: Codan infrastructure does not support Intra-Location Registration Area Roaming, Test Case 1, Section 2.2.11.4.1.	
NA1: Test Case 2, Section 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris and Codan infrastructures; see results of test case 2.2.3.4.3	

**Project 25 Compliance Assessment Program**  
**Summary Test Report**  
**NX-5800 Mobile Radio, UHF**  
**STR-JKWRD-NX5800-0215B**

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**OMB NO:** 1640-0015

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

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DHS FORM 10044 – June 2009

**Project 25 Compliance Assessment Program**  
**SUPPLIER'S DECLARATION OF COMPLIANCE (SDOC)**  
**SDOC-JKWRD-NX5800-0215C**

JVCKENWOOD Corporation  
JVCKENWOODUSA Corporation  
Communications Division  
3970 Johns Creek Court  
Suwanee, Georgia 30024  
Customer Contact: D.E. Wingo, R&D Manager  
Phone: 678-474-4700  
Fax: 678-474-4731  
<http://www.kenwood.net>  
[dwingo@us.jvckenwood.com](mailto:dwingo@us.jvckenwood.com)

<b>Product Name</b>	NX-5800
<b>Frequency Band</b>	UHF (380 – 470 MHz / 450 – 520 MHz)
<b>Installed Options</b>	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
<b>Installed Vocoder</b>	Enhanced Full Rate

**Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)**

<b>Manufacturer</b>	<b>Product Name, Definition, and Unique ID</b>	<b>Installed Options</b>
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9
Motorola Solutions, Inc.	Motorola Solutions ASTRO 25 System	Rel. 7.15

*\*JVCKENWOOD Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

JVCKENWOOD Corporation and JVCKENWOOD USA Corporation hereby declares that the Kenwood NX-5800 Mobile Radio (UHF) passes the test cases listed in the following Project 25 Compliance Assessment Bulletin sections in their entirety with exclusions as noted:

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Sections 2.1.1.1 and 2.1.1.2 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance, DTR-P25CAP081010-14120901 and Trunked Subscriber Unit Performance, DTR-P25CAP081010-14120902.

P25\_CAB\_CAI\_TEST\_REQ; March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability, DTR-P25CAP081010-14082001-Kenwood NX

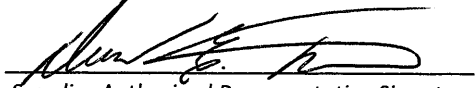
5400, DTR-P25CAP081017-1141104K, DTR-P25CAP081011 (Codan) and DTR-P25CAP081011 (Motorola). Test case 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris, Codan, and Motorola infrastructures. Test cases 2.2.3.4.5 and 2.2.3.4.6 are not applicable to EFJohnson, Codan and Motorola FNE. EFJohnson, Harris, Codan, and Motorola FNE do not support Inter-System and Inter-WACN roaming therefore these items was not tested.

The summary report of tests performed at Project 25 Compliance Assessment Program Recognized Laboratory(s) P25CAP081010, P25CAP081017, P25CAP081011, and P25CAP081012 is identified as follows:

**Summary Test Report Identification:** STR-JKWRD-NX5300-0215C issued on 28 September 2015

28 September 2015

*Issue Date*

  
*Supplier Authorized Representative Signature*

Donald E. Wingo

*Supplier Authorized Representative Printed Name*

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DHS FORM 10044 – June 2009

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215C

Device Under Test Description	
Manufacturer	JVCKENWOOD Corporation JVCKENWOOD USA Corporation
Manufacturer Contact	Donald E. Wingo, 678-474-4719
Product Name	NX-5800, Mobile Subscriber Unit - UHF
Frequency Band	UHF (380 – 470 MHz / 450 – 520 MHz)
Installed Options	P25 Conventional P25 Trunking P25 DES (multi-keys) encryption P25 AES (multi-keys) encryption
Installed Vocoder	Enhanced Full Rate

Test Description
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.1 - Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ - March 2010, Section 2.1.1.2 - Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability.

Laboratory Information	
P25 CAP Laboratory Number	P25CAP081010 (EFJohnson Technologies)
Date(s) of Test	07 November to 21 November 2014
Date of Issue	09 December 2014
P25 CAP Laboratory Number	P25CAP081010 (EFJohnson Technologies)
Date(s) of Test	7 August 2014
Date of Issue	20 August 2014
P25 CAP Laboratory Number	P25CAP081017 (Harris Corporation)
Date(s) of Test	06 November 2014
Date of Issue	10 November 2014
P25 CAP Laboratory Number	P25CAP081011 (Compliance Testing, LLC)
Date(s) of Test	27 May 2015
Date of Issue	02 June 2015

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215C

Laboratory Information	
<b>P25 CAP Laboratory Number</b>	P25CAP081012 (Motorola Solutions Inc.)
<b>Date(s) of Test</b>	28 August 2015
<b>Date of Issue</b>	04 September 2015

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

#### **Other Devices Tested with: JVCKENWOOD NX-5xxx (Model Class\*)**

Manufacturer	Product Name, Definition, and Unique ID	Installed Options
EFJohnson	ATLAS, P25 Trunking System	Rel 1..1.0-10, TSNI 1.2.0-14
Harris Corp.	VIDA Premier SR10A MASTR V	Firmware R7G13
Codan Radio	Codan MT-4E – Daniels Trunked Radio	V1.1.0.9
Motorola Solutions, Inc.	Motorola Solutions ASTRO 25 System	Rel. 7.15

*\*JVCKENWOOD Model Class is defined as all subscriber units, mobile and portable, that use common software / firmware and hardware design as related to interoperability testing.*

#### **Performance Test Cases and Results**

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-14120901	
Performance – Conventional Receiver Tests NX-5800 (UHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 80 dB	P
2.1.10	Intermodulation Rejection	≥ 75 dB	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 P P P
2.1.18	Receiver Throughput Delay	≤ 125 ms	P



## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215C

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-14120901	
Performance – Conventional Transmitter Tests NX-5800 (UHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time Encoder Attack Time	$\leq 50$ ms	P
		$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	$2544 \leq f_{\text{dev}} \leq 3111$ Hz	P
	Low Level Signal Deviation	$848 \leq f_{\text{dev}} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 25$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14120902	
Performance – Trunked Receiver Tests NX-5800 (UHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm	P2
2.1.6	Signal Delay Spread Capability	≥ 50 us	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 80 dB	P
2.1.10	Intermodulation Rejection	≥ 75 dB	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215C

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14120902	
Performance – Trunked Transmitter Tests NX-5800 (UHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	$\geq 67$ dB	P
2.2.12	Transmitter Power Attack Time Encoder Attach Time	$\leq 50$ ms	P
		$\leq 100$ ms	P
2.2.14	Transmitter Throughput Delay	$\leq 125$ ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	$2544 \leq f_{dev} \leq 3111$ Hz	P
	Low Level Signal Deviation	$848 \leq f_{dev} \leq 1037$ Hz	P
2.2.16	Modulation Fidelity	$\leq 5\%$	P
2.2.18	Transient Frequency Behavior		
	Time Interval $t^1 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P
	Time Interval $t^2 = 25$ ms	$\{\Delta f\} \leq 6.25$ kHz	P
	Time Interval $t^3 = 10$ ms	$\{\Delta f\} \leq 12.5$ kHz	P

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-14120902	
Performance – Trunked Transmitter Tests NX-5800 (UHF)			
Test Case	Description	Requirement	Results
2.3.1	Trunking Control Channel Slot Time		
	45 ms Slot		
	Encode Attack Time	$2.0\text{ ms} \leq t \leq 11.65\text{ ms}$	P
	RF Power Attack Time	$0.0\text{ ms} \leq t \leq 11.65\text{ ms}$	P
	RF Turn Off Time	$\leq 1.57\text{ ms}$	P
2.3.2	Trunking Request Time	$\leq 167.5\text{ ms}$	P
2.3.3	Trunking Voice Access Time	$< 500\text{ ms}$	P5
2.3.5	Transmit Time to Key on Traffic Channel	$< 150\text{ ms}$	P

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215C

#### Interoperability Test Cases and Results

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability		DTR- P25CAP08101 0-14082001	DTR- P25CAP0810 17-1141104K	DTR- P25CAP0810 11	DTR- P25CAP0810 11
Kenwood Model Class – NX-5000		EFJ ATLAS	HARRIS VIDA	CODAN	MOTOROLA
Test Case	Description	Result			
2.2.1	Full Registration				
2.2.1.4.1	Test Case 1 – Valid Registration				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
2.2.1.4.2	Test Case 2 – Denied or Refused Registration				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
2.2.1.4.3	Test Case 3 – Unverified Registration				
	Home Configuration	P	P	N5	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
2.2.2	Group Voice Call				
2.2.2.4.1	Test Case 1 – Group Call Granted				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
2.2.2.4.2	Test Case 2 – Group Call Denied				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
2.2.2.4.3	Test Case 3 – Group Call Request Queued				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215C

<b>2.2.3</b>	<b>Unit-to-Unit Voice Call</b>			
<b>2.2.3.4.1</b>	Test Case 1 – Unit-to-Unit with Target Availability Check			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.2</b>	Test Case 2 – Unit-to-Unit Call with Target Availability Check Denied by Target			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.3</b>	Test Case 3 – Unit-to-Unit Call Queued with Target Availability Check – Traffic Channel Assignment After Target Availability Check			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.4</b>	Test Case 4 – Unit-to-Unit Call Queued with Target Availability Check – Traffic Channel Assignment Before Target Availability Check			
	Home Configuration	NA1	NA1	NA1
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.5</b>	Test Case 5 – Unit-to-Unit Call without Target Availability Check			
	Home Configuration	N2	P	N2
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.6</b>	Test Case 6 – Unit-to-Unit Call Queued without Target Availability Check			
	Home Configuration	N2	P	N2
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4
<b>2.2.3.4.7</b>	Test Case 7 – Unit-to-Unit Call Denied			
	Home Configuration	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4
	Inter-WACN Roaming Configuration	N1	N3	N4

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215C

<b>2.2.4</b>	<b>Broadcast Voice Call</b>				
<b>2.2.4.4.1</b>	Test Case 1 – Broadcast Voice Call				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.5</b>	<b>Affiliation</b>				
<b>2.2.5.4.1</b>	Test Case 1 – Radio Permitted to Affiliate with New Group				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.5.4.2</b>	Test Case 2 – Radio Denied Affiliation to New Group				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.6</b>	<b>Announcement Group Call</b>				
<b>2.2.6.4.1</b>	Test Case 1 – Collection of Talk Groups Receive Call				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.7</b>	<b>Emergency Alarm</b>				
<b>2.2.7.4.1</b>	Test Case 1 – Emergency Alarm				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.8</b>	<b>Emergency Group Call</b>				
<b>2.2.8.4.1</b>	Test Case 1 – Emergency Call				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.10</b>	<b>Encryption</b>				
<b>2.2.10.4.1</b>	Test Case 1 – Call Privacy for Encrypted Call				
	Home Configuration	P	P	P	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7
<b>2.2.11</b>	<b>Intra-Location Registration Area Roaming</b>				
<b>2.2.11.4.1</b>	Test Case 1 – Idle Radio				
	Home Configuration	P	P	N6	P
	Inter-System Roaming Configuration	N1	N3	N4	N7
	Inter-WACN Roaming Configuration	N1	N3	N4	N7

## Project 25 Compliance Assessment Program

### Summary Test Report

NX-5800 Mobile Radio, UHF

STR-JKWRD-NX5800-0215C

<b>Model Class: NX-5000 Subscriber</b>	
<b>Product Name, Definitions and Unique ID</b>	<b>Model Number and Installed Options</b>
NX-5800 UHF Mobile	FW K 1.11.01 – 1.40.00; Trunking, Encryption

<b>Test Case Results Definitions</b>	
No Test Performed	NT
Test Does Not Apply to the Test Object	N/A
Test Object Meets Requirements	P (Pass)
Test Object Does Not Meet Requirements	F (Fail)
Test Object is Not Conclusive	I (Inconclusive)
<b>Comments</b>	
P1: Kenwood subscriber passes Reference Sensitivity specification for C4FM and Simulcast modulations.	
P2: Kenwood subscriber passes Faded Reference Sensitivity specification for C4FM and Simulcast modulations.	
P3: Kenwood subscriber passes Signal Delay Spread Capability specification for C4FM ( $\geq 50$ us) and Simulcast ( $\geq 80$ us) modulations.	
P4: Kenwood subscriber passes Adjacent Channel Rejection specification for C4FM and Simulcast modulations.	
P5: Trunking Voice Access Time will vary dependent on actual system design and implementation.	
N1: EFJohnson infrastructure does not support Inter-System or Inter-WACN roaming.	
N2: Test Cases 2.2.3.4.5 and 2.2.3.4.6 are not supported by EFJohnson, Codan, and Motorola FNE.	
N3: Harris infrastructure does not support Inter-System or Inter-WACN roaming	
N4: Codan infrastructure does not support Inter-System or Inter-WACN roaming	
N5: Codan infrastructure does not support Test Case 3, Section 2.2.1.4.3 Unverified Registration	
N6: Codan infrastructure does not support Intra-Location Registration Area Roaming, Test Case 1, Section 2.2.11.4.1.	
N7: Motorola infrastructure does not support Inter-System or Inter-WACN roaming	
NA1: Test Case 2, Section 2.2.3.4.4 is not applicable to JVCKENWOOD subscribers on EFJ, Harris, Codan and Motorola infrastructures; see results of test case 2.2.3.4.3	

**Project 25 Compliance Assessment Program**  
**Summary Test Report**  
**NX-5800 Mobile Radio, UHF**  
**STR-JKWRD-NX5800-0215C**

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