

**Canon**

**DICOM CONFORMANCE STATEMENT  
FOR  
ULTRASOUND WORKSTATION PROGRAM**

***UltraExtend NX***  
**MODEL CUW-U001S V1.00**

**CANON MEDICAL SYSTEMS CORPORATION**

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Japan: <https://www.medical.canon/Interoperability/DICOM/JP>

## 1. CONFORMANCE STATEMENT OVERVIEW

Table 1-1 provides an overview of the network services supported by *UltraExtend™ NX*.

**Table 1-1  
NETWORK SERVICES**

SOP Classes	User of Service (SCU)	Provider of Service (SCP)
<b>Transfer</b>		
Secondary Capture Image Storage	Yes	Yes
Ultrasound Image Storage	Yes	Yes
Ultrasound Multi-frame Image Storage	Yes	Yes
Enhanced SR Storage	Yes	Yes
Comprehensive SR Storage	Yes	Yes

Table 1-2 provides an overview of the Media Storage Application Profiles supported by *UltraExtend™ NX*.

**Table 1-2  
MEDIA SERVICES**

Media Storage Application Profile	Write Files (FSC or FSU)	Read Files (FSR)
<b>Compact Disk – Recordable</b>		
General Purpose CD-R	No	Yes
<b>DVD Plus Recordable</b>		
General Purpose DVD	No	Yes
<b>USB Media</b>		
General Purpose USB Media	Yes	Yes

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## 3. INTRODUCTION

### 3.1 REVISION HISTORY

**Table 3.1-1  
REVISION HISTORY**

REV.	Date of Issue	Author	Description
*	October 2021	Canon Medical Systems	Initial Version

### 3.2 AUDIENCE

This document is intended for hospital staff, health system integrators, software designers or implementers. It is assumed that the reader has a working understanding of DICOM.

### 3.3 REMARKS

DICOM, by itself, does not guarantee interoperability. However, the Conformance Statement facilitates a first-level validation for interoperability between different applications supporting the same DICOM functionality.

This Conformance Statement is not intended to replace validation with other DICOM equipment to ensure proper exchange of information intended.

The scope of this Conformance Statement is to facilitate communication with Canon Medical Systems and other vendors' Medical equipment. The Conformance Statement should be read and understood in conjunction with the DICOM Standard [DICOM]. However, by itself it is not guaranteed to ensure the desired interoperability and a successful interconnectivity.

The user should be aware of the following important issues:

- The comparison of different conformance statements is the first step towards assessing interconnectivity between Canon Medical Systems and non-Canon Medical Systems equipment.
- Test procedures should be defined to validate the desired level of connectivity.
- The DICOM standard will evolve to meet the users' future requirements. Canon Medical Systems is actively involved in developing the standard further and therefore reserves the right to make changes to its products or to discontinue its delivery.

### 3.4 DEFINITIONS, TERMS AND ABBREVIATIONS

Definitions, terms and abbreviations used in this document are defined within the different parts of the DICOM standard.

Abbreviations and terms are as follows:

<b>AE</b>	Application Entity
<b>ASCE</b>	Association Control Service Element
<b>CD-R</b>	Compact Disk Recordable
<b>CM</b>	Code Meaning (0008,0104)
<b>CSD</b>	Coding Scheme Designator (0008,0102)
<b>CV</b>	Code Value (0008,0100)
<b>DHCP</b>	Dynamic Host Configuration Protocol
<b>DIMSE</b>	DICOM Message Service Element
<b>DNS</b>	Domain Name System
<b>DVD</b>	A trademark of the DVD forum that is not an abbreviation
<b>DVD+R</b>	DVD Plus Recordable
<b>FSC</b>	File-Set Creator
<b>FSR</b>	File-Set Reader
<b>FSU</b>	File-Set Updater
<b>IE</b>	Information Entity
<b>IEEE</b>	Institute of Electrical and Electronics Engineers
<b>IOD</b>	Information Object Definition
<b>ISO</b>	International Standard Organization
<b>MPPS</b>	Modality Performed Procedure Step
<b>MSPS</b>	Modality Scheduled Procedure Step
<b>MWM</b>	Modality Worklist Management
<b>NTP</b>	Network Time Protocol
<b>PDU</b>	Protocol Data Unit
<b>SCU</b>	Service Class User (DICOM client)
<b>SCP</b>	Service Class Provider (DICOM server)
<b>SOP</b>	Service-Object Pair
<b>UID</b>	Unique Identifier
<b>USB</b>	Universal Serial Bus
<b>WPA</b>	Wi-Fi Protected Access

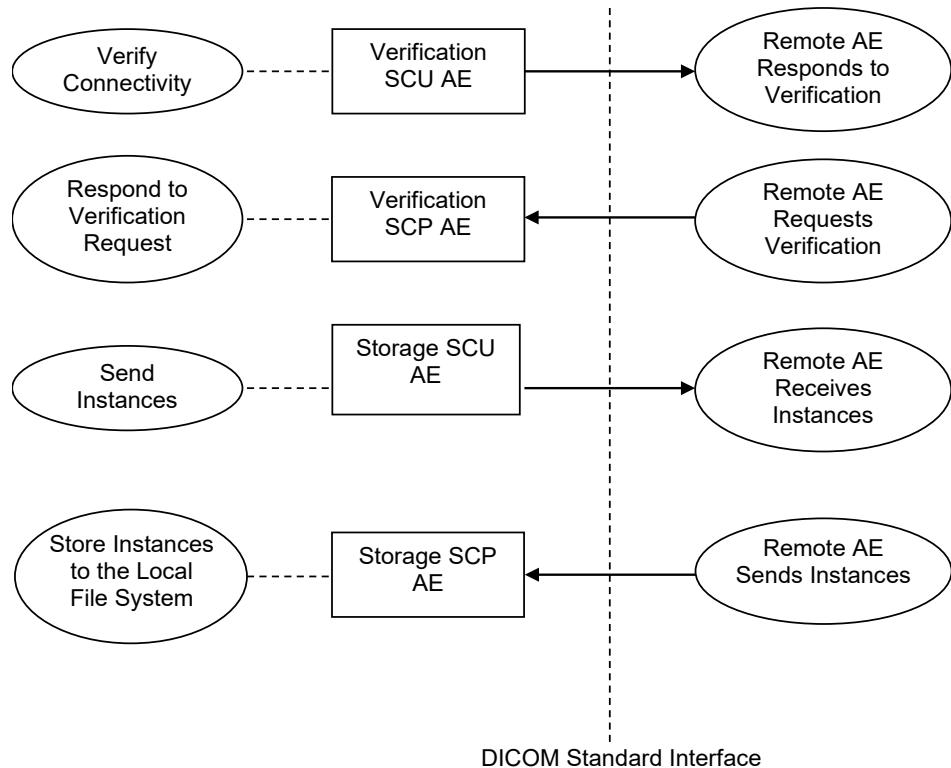
### 3.5 REFERENCES

NEMA PS3 Digital Imaging and Communications in Medicine (DICOM) Standard, available free at <http://medical.nema.org/>

## 4. NETWORKING

### 4.1 IMPLEMENTATION MODEL

#### 4.1.1 Application Data Flow



**Figure 4.1-1  
APPLICATION DATA FLOW DIAGRAM**

- The Verification SCU AE issues a C-ECHO to verify a DICOM connection to a remote AE. It is associated with the local real-world activity "Verify Connectivity". "Verify Connectivity" is performed via the Service Tool.
- The Verification SCP AE responds successfully to C-ECHO requests from known AE Titles. It is associated with the local real-world activity "Respond to Verification Request".
- The Storage SCU AE sends instances to a remote AE. It is associated with the local real-world activity "Send Instances". "Send Instances" is performed upon user request for specific instances selected.
- The Storage SCP AE receives incoming instances. It is associated with the local real-world activity "Store Instances to the Local File System". "Store Instances to the Local File System" stores the received instances to the local file system.

## 4.1.2 Functional Definition of AEs

### 4.1.2.1 Functional Definition of Verification SCU AE

The Verification SCU AE issues a C-ECHO to verify a DICOM connection to a remote AE. It is performed via the Service Tool.

### 4.1.2.2 Functional Definition of Verification SCP AE

The Verification SCP AE responds successfully to C-ECHO requests from known AE Titles.

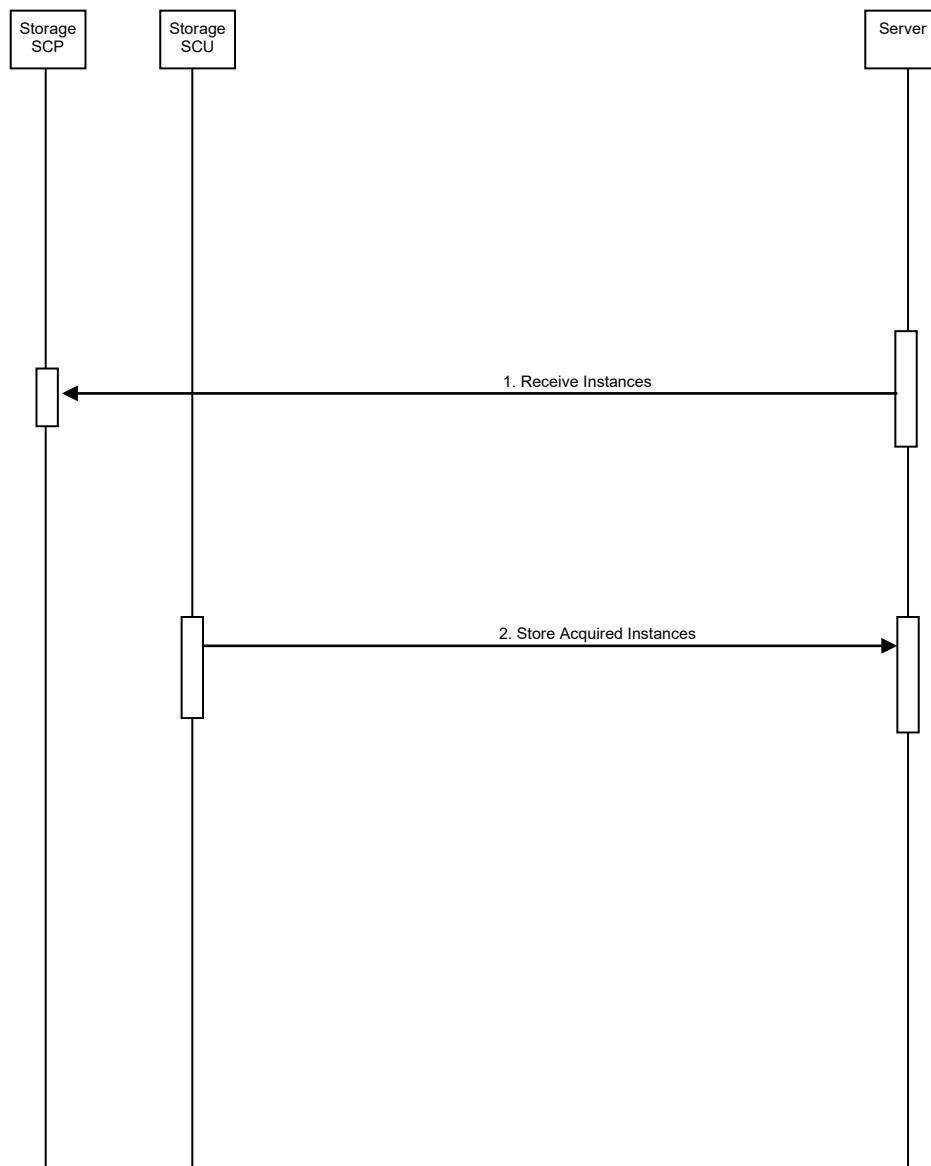
### 4.1.2.3 Functional Definition of Storage SCU AE

The existence of a send-job queue entry with associated network destination will activate the Storage SCU AE. An association request is sent to the destination AE and upon successful negotiation of a Presentation Context the image transfer is started.

### 4.1.2.4 Functional Definition of Storage SCP AE

The Storage SCP AE waits for another application to connect at the presentation address configured for its Application Entity Title. The Storage SCP AE will accept Associations with Presentation Contexts for SOP Classes of the Verification and Storage Service Classes. Any instances received on such Presentation Contexts will be stored to the local file system.

#### 4.1.3 Sequencing of Real-World Activities



**Figure 4.1-2  
SEQUENCING CONSTRAINTS**

Under typical scheduled workflow conditions the sequencing constraints illustrated in Figure 4.1-2 apply:

1. Receive Instances
2. Store Acquired Instances

## 4.2 AE SPECIFICATIONS

### 4.2.1 Verification SCU AE Specification

#### 4.2.1.1 SOP Classes

The Verification SCU AE provides Standard Conformance to the following SOP Classes:

**Table 4.2-1  
SOP CLASSES FOR THE VERIFICATION SCU AE**

SOP Class Name	SOP Class UID	SCU	SCP
Verification	1.2.840.10008.1.1	Yes	No

#### 4.2.1.2 Association Policies

##### 4.2.1.2.1 General

The DICOM standard application context name for DICOM 3.0 is always proposed:

**Table 4.2-2  
DICOM APPLICATION CONTEXT FOR THE VERIFICATION SCU AE**

Application Context Name	1.2.840.10008.3.1.1.1
--------------------------	-----------------------

##### 4.2.1.2.2 Number of Associations

The Verification SCU AE initiates one association at a time.

**Table 4.2-3  
NUMBER OF ASSOCIATIONS INITIATED FOR THE VERIFICATION SCU AE**

Maximum number of simultaneous associations	1
---	---

##### 4.2.1.2.3 Asynchronous Nature

The Verification SCU AE does not support asynchronous communication (multiple outstanding transactions over a single association).

**Table 4.2-4  
ASYNCHRONOUS NATURE FOR THE VERIFICATION SCU AE**

Maximum number of outstanding asynchronous transactions	1
---	---

##### 4.2.1.2.4 Implementation Identifying Information

The implementation information for the Verification SCU AE is:

**Table 4.2-5  
DICOM Implementation Class and Version FOR THE VERIFICATION SCU AE**

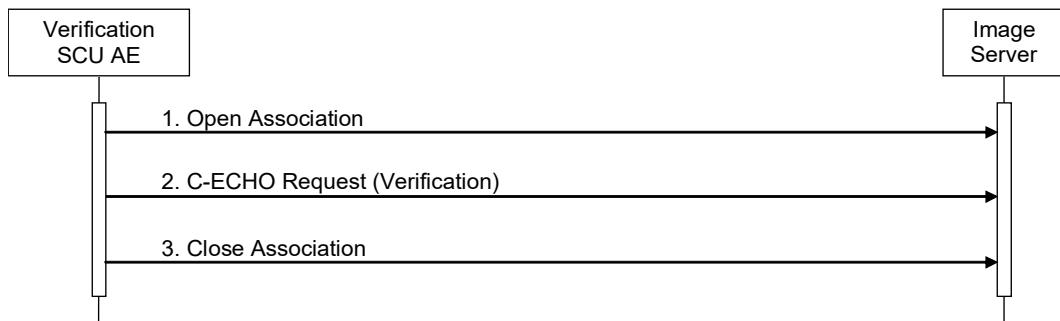
Implementation Class UID	1.2.392.200036.9116.6.36.1000.1
Implementation Version Name	CM_UL_DCM_V1.0 for Original TM_UL_DCM_V1.0 for Option

### 4.2.1.3 Association Initiation Policy

#### 4.2.1.3.1 Activity – Verify Connectivity

##### 4.2.1.3.1.1 Description and Sequencing of Activities

The Verification SCU AE attempts to initiate a new association in order to issue a verification request (C-ECHO).



**Figure 4.2-1  
SEQUENCING OF ACTIVITY – VERIFY CONNECTIVITY**

A possible sequence of interactions between the Verification SCU AE and an Image Server (e.g. a storage or archive device supporting the Verification SOP Classes as an SCP) is illustrated in the figure above:

1. The Verification SCU AE opens an association with the Image Server.
2. The Verification SCU AE issues a verification request (C-ECHO) and the Image Server replies with a C-ECHO response (status success).
3. The Verification SCU AE closes the association with the Image Server.

#### 4.2.1.3.1.2 Proposed Presentation Contexts

The Verification SCU AE will propose the Presentation Contexts shown in the following table:

**Table 4.2-6  
PROPOSED PRESENTATION CONTEXTS FOR ACTIVITY VERIFY CONNECTIVITY**

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
Verification	1.2.840.10008.1.1	Implicit VR LittleEndian	1.2.840.10008.1.2	SCU	None
		Explicit VR LittleEndian	1.2.840.10008.1.2.1		

#### 4.2.1.3.1.3 SOP Specific Conformance for Verification SOP Class

The Verification SCU AE provides standard conformance to the Verification Service Class as an SCU.

The behavior of Verification SCU AE when encountering status codes in a C-ECHO response is summarized in the table below:

**Table 4.2-7  
VERIFICATION RESPONSE STATUS HANDLING BEHAVIOR**

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	The Verification SCU AE judges the remote AE is present and active on the network.

The behavior of Verification SCU AE during communication failure is summarized in the table below:

**Table 4.2-8  
VERIFICATION COMMUNICATION FAILURE BEHAVIOR**

Exception	Behavior
Timeout	The association is aborted and the failure reason is logged and reported to the user.
Association aborted by the SCP or network layers	The failure reason is logged and reported to the user.

## 4.2.2 Verification SCP AE Specification

### 4.2.2.1 SOP Classes

The Verification SCP AE provides Standard Conformance to the following SOP Classes:

**Table 4.2-9  
SOP CLASSES FOR THE VERIFICATION SCP AE**

SOP Class Name	SOP Class UID	SCU	SCP
Verification	1.2.840.10008.1.1	No	Yes

### 4.2.2.2 Association Policies

#### 4.2.2.2.1 General

The DICOM standard application context name for DICOM 3.0 is always proposed:

**Table 4.2-10  
DICOM APPLICATION CONTEXT FOR THE VERIFICATION SCP AE**

Application Context Name	1.2.840.10008.3.1.1.1
--------------------------	-----------------------

#### 4.2.2.2.2 Number of Associations

**Table 4.2-11  
NUMBER OF ASSOCIATIONS ACCEPTED FOR THE VERIFICATION SCP AE**

Maximum number of simultaneous associations	Unlimited
---	-----------

#### 4.2.2.2.3 Asynchronous Nature

The Verification SCP AE does not support asynchronous communication (multiple outstanding transactions over a single association).

**Table 4.2-12  
ASYNCHRONOUS NATURE FOR THE VERIFICATION SCP AE**

Maximum number of outstanding asynchronous transactions	1
---	---

#### 4.2.2.2.4 Implementation Identifying Information

The implementation information for the Verification SCP AE is:

**Table 4.2-13  
DICOM IMPLEMENTATION CLASS AND VERSION FOR THE VERIFICATION SCP AE**

Implementation Class UID	1.2.392.200036.9116.6.36.1000.1
Implementation Version Name	CM_UL_DCM_V1.0 for Original TM_UL_DCM_V1.0 for Option

#### 4.2.2.3 Association Initiation Policy

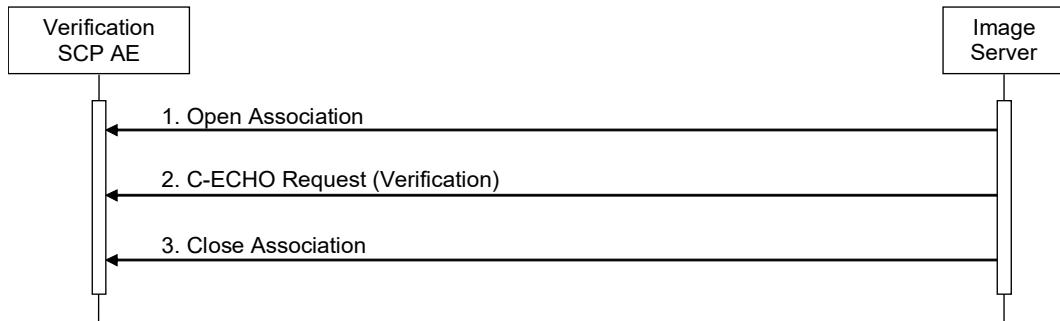
The Verification SCP AE does not initiate associations.

#### 4.2.2.4 Association Acceptance Policy

##### 4.2.2.4.1 Activity – Respond to Verification Request

###### 4.2.2.4.1.1 Description and Sequencing of Activities

When the Verification SCP AE accepts an association, it will respond to a verification request (C-ECHO).



**Figure 4.2-2  
SEQUENCING OF ACTIVITY – RESPOND TO VERIFICATION REQUEST**

A possible sequence of interactions between the Verification SCP AE and an Image Server (e.g. a storage or archive device supporting the Verification SOP Classes as an SCU) is illustrated in the figure above:

1. The Image Server opens an association with the Verification SCP AE.
2. The Image Server issues a verification request (C-ECHO) and the Verification SCP AE replies with a C-ECHO response (status success).
3. The Image Server closes the association with the Verification SCP AE.

The Verification SCP AE may reject association attempts as shown in the table below. The Result, Source and Reason/Diag columns represent the values returned in the appropriate fields of an ASSOCIATE-RJ PDU (see PS 3.8, Section 9.3.4). The contents of the Source column are abbreviated to save space and the meaning of the abbreviations are:

- a. 1 - DICOM UL service-user
- b. 2 - DICOM UL service-provider (ASCE related function)

**Table 4.2-14  
ASSOCIATION REJECTION REASONS**

Result	Source	Reason/Diag	Explanation
1 – rejected-permanent	a	3 – calling-AE-title-not-recognized	The association request contained an unrecognized calling AE Title. An association request with the same parameters will not succeed at a later time unless configuration changes are made. This rejection reason normally occurs when the association acceptor has not been configured to recognize the AE Title of the association initiator.
1 – rejected-permanent	b	1 – no-reason-given	The association request could not be parsed. An association request with the same format will not succeed at a later time.

#### 4.2.2.4.1.2 Accepted Presentation Contexts

The default behavior of the Verification SCP AE supports the Implicit VR LittleEndian and Explicit VR LittleEndian transfer syntaxes. If both transfer syntaxes are proposed per presentation context then the Verification SCP AE will select Explicit VR LittleEndian transfer syntax.

**Table 4.2-15**

**PROPOSED PRESENTATION CONTEXTS FOR ACTIVITY RESPOND TO VERIFICATION REQUEST**

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
Verification	1.2.840.10008.1.1	Implicit VR LittleEndian	1.2.840.10008.1.2	SCP	None
		Explicit VR LittleEndian	1.2.840.10008.1.2.1		

#### 4.2.2.4.1.3 SOP Specific Conformance for Verification SOP Class

The Verification SCP AE provides standard conformance to the Verification Service Class as an SCP.

### 4.2.3 Storage SCU AE Specification

#### 4.2.3.1 SOP Classes

The Storage SCU AE provides Standard Conformance to the following SOP Classes:

**Table 4.2-16  
SOP CLASSES FOR THE STORAGE SCU AE**

SOP Class Name	SOP Class UID	SCU	SCP
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	Yes	No
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1		
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1		
Enhanced SR Storage	1.2.840.10008.5.1.4.1.1.88.22		
Comprehensive SR Storage	1.2.840.10008.5.1.4.1.1.88.33		

#### 4.2.3.2 Association Policies

##### 4.2.3.2.1 General

The DICOM standard application context name for DICOM 3.0 is always proposed:

**Table 4.2-17  
DICOM APPLICATION CONTEXT FOR THE STORAGE SCU AE**

Application Context Name	1.2.840.10008.3.1.1.1
--------------------------	-----------------------

##### 4.2.3.2.2 Number of Associations

The Storage SCU AE can initiate up to ten associations at a time for each destination to which a transfer request is being processed in the active job queue list. Up to ten jobs, that instances will be sent to the different remote hosts, will be active at a time, the other remains pending until the active job is completed or failed.

**Table 4.2-18  
NUMBER OF ASSOCIATIONS INITIATED FOR THE STORAGE SCU AE**

Maximum number of simultaneous associations	1
---	---

##### 4.2.3.2.3 Asynchronous Nature

The Storage SCU AE does not support asynchronous communication (multiple outstanding transactions over a single association).

**Table 4.2-19  
ASYNCHRONOUS NATURE FOR THE STORAGE SCU AE**

Maximum number of outstanding asynchronous transactions	1
---	---

#### 4.2.3.2.4 Implementation Identifying Information

The implementation information for the Storage SCU AE is:

**Table 4.2-20**  
**DICOM IMPLEMENTATION CLASS AND VERSION FOR THE STORAGE SCU AE**

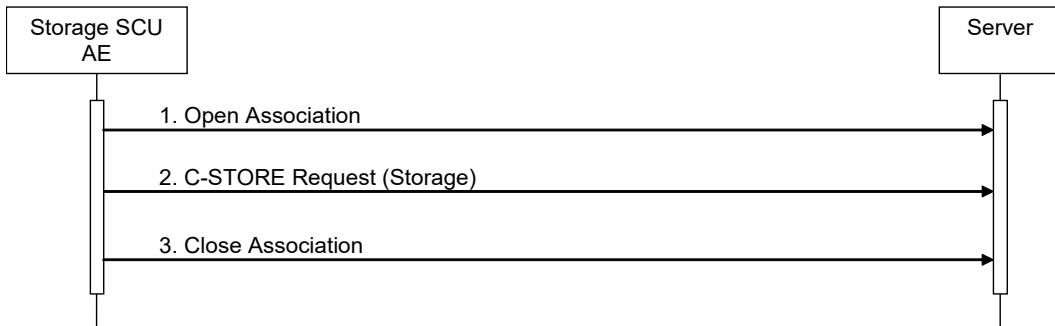
Implementation Class UID	1.2.392.200036.9116.6.36.1000.1
Implementation Version Name	CM_UL_DCM_V1.0 for Original TM_UL_DCM_V1.0 for Option

### 4.2.3.3 Association Initiation Policy

#### 4.2.3.3.1 Activity – Send Instances

##### 4.2.3.3.1.1 Description and Sequencing of Activities

The Storage SCU AE attempts to initiate a new association in order to issue a storage request (C-STORE). If the job contains multiple instances then multiple C-STORE requests will be issued over the same association. If the instance transfer fails, the Storage SCU AE will retry this send-job automatically.



**Figure 4.2-3  
SEQUENCING OF ACTIVITY – SEND INSTANCES**

A possible sequence of interactions between the Storage SCU AE and a Server (e.g. a storage or archive device supporting the Storage SOP Classes as an SCP) is illustrated in the Figure above:

1. The Storage SCU AE opens an association with the Server.
2. Acquired instances are transmitted to the Server using a storage request (C-STORE) and the Server replies with a C-STORE response (status success).
3. The Storage SCU AE closes the association with the Server.

#### 4.2.3.3.1.2 Proposed Presentation Contexts

The Storage SCU AE will propose the Presentation Contexts in the following table that shows one Presentation Context Item per row:

**Table 4.2-21**  
**PROPOSED PRESENTATION CONTEXTS FOR ACTIVITY SEND INSTANCES**

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	Implicit VR LittleEndian	1.2.840.10008.1.2	SCU	None
		Explicit VR LittleEndian	1.2.840.10008.1.2.1		
		JPEG Lossy <sup>*1</sup>	1.2.840.10008.1.2.4.50		
		JPEG Lossless <sup>*2</sup>	1.2.840.10008.1.2.4.70		
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	Implicit VR LittleEndian	1.2.840.10008.1.2	SCU	None
		Explicit VR LittleEndian	1.2.840.10008.1.2.1		
		JPEG Lossy <sup>*1</sup>	1.2.840.10008.1.2.4.50		
		JPEG Lossless <sup>*2</sup>	1.2.840.10008.1.2.4.70		
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	Implicit VR LittleEndian	1.2.840.10008.1.2	SCU	None
		Explicit VR LittleEndian	1.2.840.10008.1.2.1		
		JPEG Lossy <sup>*1</sup>	1.2.840.10008.1.2.4.50		
		JPEG Lossless <sup>*2</sup>	1.2.840.10008.1.2.4.70		
Enhanced SR Storage	1.2.840.10008.5.1.4.1.1.88.22	Implicit VR LittleEndian	1.2.840.10008.1.2	SCU	None
		Explicit VR LittleEndian	1.2.840.10008.1.2.1		
Comprehensive SR Storage	1.2.840.10008.5.1.4.1.1.88.33	Implicit VR LittleEndian	1.2.840.10008.1.2		
		Explicit VR LittleEndian	1.2.840.10008.1.2.1		

\*1 JPEG Baseline (Process 1)

\*2 JPEG Lossless, Non-Hierarchical, First-OrderPrediction (Process 14 [Selection Value 1])

#### 4.2.3.3.1.3 SOP Specific Conformance for Storage SOP Classes

The Storage SCU AE provides standard conformance to the Storage Service Class as an SCU.

The behavior of Storage SCU AE when encountering status codes in a C-STORE response is summarized in the table below:

**Table 4.2-22  
STORAGE C-STORE RESPONSE STATUS HANDLING BEHAVIOR**

<b>Service Status</b>	<b>Further Meaning</b>	<b>Status Code</b>	<b>Behavior</b>
Success	Success	0000	The SCP has successfully stored the SOP Instance. If all SOP Instances in a send job have status success then the job is marked as complete.
*	*	Any other status code	The association is aborted and the send job is marked as failed. The status meaning is logged and the job failure is reported to the user via the job control application.

The behavior of Storage SCU AE during communication failure is summarized in the table below:

**Table 4.2-23  
STORAGE COMMUNICATION FAILURE BEHAVIOR**

<b>Exception</b>	<b>Behavior</b>
Timeout	The association is aborted and the send job is marked as failed. The reason is logged and the job failure is reported to the user via the job control application.
Association aborted by the SCP or network layers	The send job is marked as failed. The reason is logged and the job failure is reported to the user via the job control application.

If the instance transfer fails, the Storage SCU AE will retry this send-job automatically (see Section 4.4.2).

The contents of Storage SOP Instances created by the Storage SCU AE conform to the IOD definitions and are described in section 8.1.

## 4.2.4 Storage SCP AE Specification

### 4.2.4.1 SOP Classes

The Storage SCP AE provides Standard Conformance to the following SOP Classes:

**Table 4.2-24  
SOP CLASSES FOR THE STORAGE SCP AE**

SOP Class Name	SOP Class UID	SCU	SCP
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	No	Yes
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1		
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1		
Enhanced SR Storage	1.2.840.10008.5.1.4.1.1.88.22		
Comprehensive SR Storage	1.2.840.10008.5.1.4.1.1.88.33		

### 4.2.4.2 Association Policies

#### 4.2.4.2.1 General

The DICOM standard application context name for DICOM 3.0 is always proposed:

**Table 4.2-25  
DICOM APPLICATION CONTEXT FOR THE STORAGE SCP AE**

Application Context Name	1.2.840.10008.3.1.1.1
--------------------------	-----------------------

#### 4.2.4.2.2 Number of Associations

The Storage SCP AE can support up to ten associations at a time.

**Table 4.2-26  
NUMBER OF ASSOCIATIONS ACCEPTED FOR THE STORAGE SCP AE**

Maximum number of simultaneous associations	10
---	----

#### 4.2.4.2.3 Asynchronous Nature

The Storage SCP AE does not support asynchronous communication (multiple outstanding transactions over a single association).

**Table 4.2-27  
ASYNCHRONOUS NATURE FOR THE STORAGE SCP AE**

Maximum number of outstanding asynchronous transactions	1
---	---

#### 4.2.4.2.4 Implementation Identifying Information

The implementation information for the Storage SCP AE is:

**Table 4.2-28**  
**DICOM IMPLEMENTATION CLASS AND VERSION FOR THE STORAGE SCP AE**

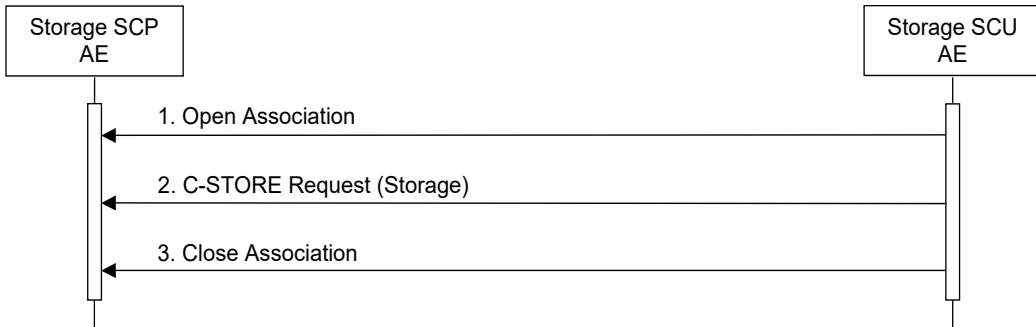
Implementation Class UID	1.2.392.200036.9116.6.36.1000.1
Implementation Version Name	CM_UL_DCM_V1.0 for Original TM_UL_DCM_V1.0 for Option

#### 4.2.4.3 Association Initiation Policy

The Storage SCP AE does not initiate associations.

#### 4.2.4.4 Association Acceptance Policy

The Storage SCP AE accepts associations only if they have valid Presentation Contexts. If none of the requested Presentation Contexts are accepted then the association request itself is rejected. It can be configured to only accept associations with certain hosts (using TCP/IP address) and/or AE Titles.



**Figure 4.2-4  
SEQUENCING OF ACTIVITY – STORE IMAGES TO THE LOCAL FILE SYSTEM**

A possible sequence of interactions between the Storage SCP AE and a Storage SCU AE is illustrated in the Figure above:

1. The Storage SCU AE opens an association with the Storage SCP AE.
2. The Storage SCU AE sends images to the Storage SCP AE using a storage request (C-STORE) and the Storage SCP AE replies with a C-STORE response (status success).
3. The Storage SCU AE closes the association with the Storage SCP AE.

The Storage SCP AE may reject association attempts as shown in the Table 4.2-14.

#### 4.2.4.4.1.1 Accepted Presentation Contexts

If multiple Transfer Syntaxes are proposed per Presentation Context then only the most preferable Transfer Syntax is accepted. The order of Transfer Syntax preference for the STORAGE-SCP AE is configurable. The default preference order if multiple Transfer Syntaxes are proposed in a single Presentation Context is: JPEG Lossless, JPEG Lossy, Little Endian Explicit, Little Endian Implicit (if all these are proposed for a single Presentation Context). This means that if the Implicit VR Little Endian and Explicit VR Little Endian Transfer Syntaxes are proposed in a single Presentation Context then the accepted Transfer Syntax will be Explicit VR Little Endian. This order of preference is configurable.

Any of the presentation contexts shown in the following table are acceptable to the Storage SCP AE.

**Table 4.2-29  
ACCEPTED PRESENTATION CONTEXTS BY THE STORAGE SCP AE**

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1		
		JPEG Lossy <sup>*1</sup>	1.2.840.10008.1.2.4.50		
		JPEG Lossless <sup>*2</sup>	1.2.840.10008.1.2.4.70		
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1		
		JPEG Lossy <sup>*1</sup>	1.2.840.10008.1.2.4.50		
		JPEG Lossless <sup>*2</sup>	1.2.840.10008.1.2.4.70		
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1		
		JPEG Lossy <sup>*1</sup>	1.2.840.10008.1.2.4.50		
		JPEG Lossless <sup>*2</sup>	1.2.840.10008.1.2.4.70		
Enhanced SR Storage	1.2.840.10008.5.1.4.1.1.88.22	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1		
Comprehensive SR Storage	1.2.840.10008.5.1.4.1.1.88.33	Implicit VR Little Endian	1.2.840.10008.1.2		
		Explicit VR Little Endian	1.2.840.10008.1.2.1		

\*1 JPEG Baseline (Process 1)

\*2 JPEG Lossless, Non-Hierarchical, First-OrderPrediction (Process 14 [Selection Value 1])

#### 4.2.4.4.1.2 SOP Specific Conformance for Storage SOP Classes

The associated Activity with the Storage service is the storage of medical data received over the network on a designated hard disk. The Storage SCP AE will return a failure status if it is unable to store the instances on to the hard disk.

The Storage SCP AE is Level 0 conformant as a Storage SCP.

**Table 4.2-30  
THE STORAGE SCP AE C-STORE RESPONSE STATUS RETURN REASONS**

<b>Service Status</b>	<b>Further Meaning</b>	<b>Status Code</b>	<b>Reason</b>
Success	Success	0000	The Composite SOP Instance was successfully received, verified, and stored in the system database.
Refused	Out of Resources	A700	Indicates that there were not enough local resources.
Error	Cannot Understand	C000	Indicates that the Storage SCP AE cannot parse the Data Set into Elements. (e.g. when receiving unsupported character sets)

## 4.3 NETWORK INTERFACES

### 4.3.1 Physical Network Interface

This product supports wired and wireless network interfaces according to the specification of the installed PC.

### 4.3.2 Additional Protocols

DNS can be used for address resolution.

NTP can be used to synchronize the system clock with a time server.

Notes: DHCP can not be used to obtain TCP/IP network configuration information (e.g., own IP address, subnet mask, default gateway, DNS server, etc).

### 4.3.3 IPv4 and IPv6 Support

This product only supports IPv4 connections.

## 4.4 CONFIGURATION

### 4.4.1 AE Title/Presentation Address Mapping

#### 4.4.1.1 Local AE Titles

All local applications use the AE Titles and TCP/IP Ports configured via the service tool.

**Table 4.4-1  
AE TITLE CONFIGURATION TABLE**

Application Entity	Default AE Title	Default TCP/IP Port
Verification SCU		Not Applicable
Storage SCU	UNX_LOCAL_SCU	
Storage SCP		
Verification SCP	UNX_LOCAL_SCP	104

The default character repertoire excluding the highlighted characters can be used for the AE Titles:

**Table 4.4-2  
AE TITLE CHARACTER REPERTOIRE**

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0x00											LF		FF	CR		
0x10												ESC				
0x20	SP	!	"	#	\$	%	&	'	(	)	*	+	,	-	.	/
0x30	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
0x40	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0x50	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
0x60	'	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
0x70	p	q	r	s	t	u	v	w	x	y	z	{		}	~	

#### 4.4.1.2 Remote AE Title/Presentation Address Mapping

The AE Titles, host names and port numbers of remote applications are configured using the service tool. The character repertoire of the AE Titles is listed in Table 4.4-2.

#### 4.4.2 Parameters

A large number of parameters related to acquisition and general operation can be configured using the service tool. The table below only shows those configuration parameters relevant to DICOM communication. See the Product's Service Manual for details on general configuration capabilities.

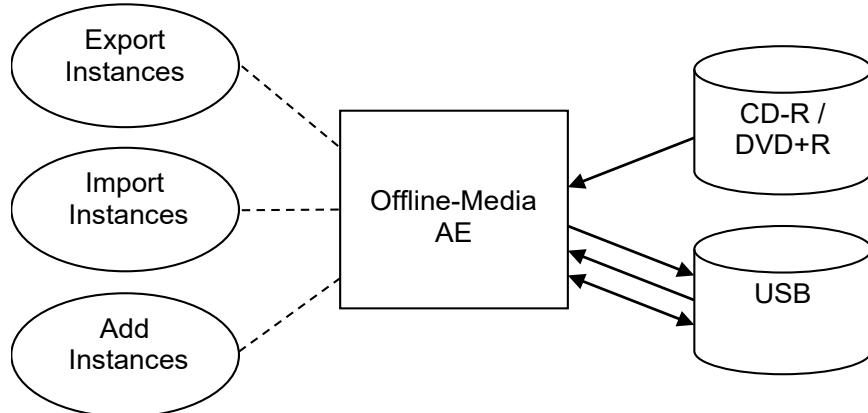
**Table 4.4-3  
CONFIGURATION PARAMETERS TABLE**

Parameter	Configurable (Yes/No) [Range]	Default Value
<b>General Parameters</b>		
Maximum PDU send/receive size	Yes [2048-1048576]	32768 bytes
Time-out waiting for an acceptance or rejection response to an association request (Application Level Timeout)	Yes [1-9999999]	30 sec
Time-out waiting for a response to an association release request (Application Level Timeout)	Yes [1-9999999]	30 sec
Time-out waiting for completion of a TCP/IP connect request (Low-level timeout)	Yes [1-9999999]	30 sec
Time-out awaiting a response to a DIMSE request (Low-Level Timeout)	Yes [1-9999999]	30 sec
Time-out for waiting for data between TCP/IP-packets (Low Level Timeout)	Yes [1-9999999]	30 sec
<b>Storage SCU Parameters</b>		
Maximum number of simultaneously initiated associations by the Storage SCU AE	No	10
Number of times a failed send job may be retried	No	Forever, until the job succeeds or user cancels it.
<b>Storage SCP Parameters</b>		
Maximum number of simultaneously initiated associations by the Storage SCP AE	No	10

## 5. MEDIA INTERCHANGE

### 5.1 IMPLEMENTATION MODEL

#### 5.1.1 Application Data Flow



**Figure 5.1-1**

APPLICATION DATA FLOW DIAGRAM FOR MEDIA STORAGE

- The Offline-Media AE exports instances to a USB Storage medium. It is associated with the local real-world activity "Export Instances" performed upon user request.
- The Offline-Media AE imports instances from a CD-R, DVD+R or USB Storage medium. It is associated with the local real-world activity "Import Instances" performed upon user request.
- The Offline-Media AE updates instances from a USB Storage medium. It is associated with the local real-world activity "Add Instances" performed upon user request.

#### 5.1.2 Functional Definition of AEs

##### 5.1.2.1 Functional Definition of Offline-Media AE

The Offline-Media AE is performed upon user request for selected instances to/from an offline DICOM CD-R, DVD+R or USB medium. It therefore performs the following tasks:

Export:

- Builds DICOM Information Objects.
- Creates a DICOMDIR file that represents the contents of the DICOM Information Objects to be recorded.
- Records DICOM Information Objects and the DICOMDIR file to a USB medium.

Import:

- Reads the DICOMDIR file that represents the contents of the data as recorded.
- Displays the ordered list of instances, identifying information.
- Loads the selected instances from the CD-R, DVD+R or USB medium and displays them on the screen.

Addition:

- Reads a File-set of the USB medium and writes it to the local storage device.
- Adds the instances to the File-set, then writes it to the medium.
- Modifies the DICOMDIR file.

Note: The Offline-Media AE can update files created by the product itself.

### 5.1.3 Sequencing of Real-World Activities

#### 5.1.3.1 Activity – Export Instances

Operator requests to create new File-set(s) onto a new USB medium. The requests are placed in a queue and are executed in the background.

The operations for "Export Instances" are described below:

- Step-1: Select the instances on the local storage device to be created to the medium.
- Step-2: Request to copy to the medium.

#### 5.1.3.2 Activity – Import Instances

Operator requests to retrieve File-set(s) on the CD-R, DVD+R or USB medium. The requests are placed in a queue and are executed in the background.

The operations for "Import Instances" are described below:

- Step-1: Select the instances on the medium to be retrieved to the local storage device.
- Step-2: Request to copy to the local storage device.

#### 5.1.3.3 Activity – Add Instances

Operator requests to add new objects to an already existing File-set on the USB medium. The requests are placed in a queue and are executed in the background.

The operations for "Add Instances" are described below:

- Step-1: Select the instances on the local storage device to be added to the medium.
- Step-2: Request to copy to the medium.

### 5.1.4 File Meta Information for Implementation Class and Version

The implementation information written to the File Meta Header in each file is:

**Table 5.1-1  
DICOM IMPLEMENTATION CLASS AND VERSION FOR MEDIA STORAGE**

File Meta Information Version	1
Implementation Class UID	Related original image. Example: 1.2.392.200036.9116.6.36.1000.1 (CUW-U001S) 1.2.392.200036.9116.6.22.1000.1 (TUS-AI900) 1.2.392.200036.9116.6.28.1000.1 (CUS-AA550)
Implementation Version Name	Follow the settings of the original image. TM_UL_DCM_V1.0 For TUS-AI900/800/700 CM_UL_DCM_V1.0 For CUS-AA550/450/000, CUW-U001S

## 5.2 AE SPECIFICATIONS

### 5.2.1 Offline-Media AE Specification

The Offline-Media AE provides standard conformance to the DICOM Interchange Option of the Media Storage Service Class. The Application Profiles and roles are listed below:

**Table 5.2-1  
APPLICATION PROFILES, ACTIVITIES AND ROLES FOR OFFLINE-MEDIA**

Application Profiles Supported	Real World Activity	Role	SC Option
STD-GEN-USB-JPEG	Export Instances	FSC	Interchange
AUG-GEN-CD, STD-GEN-DVD-JPEG, STD-GEN-USB-JPEG	Import Instances	FSR	Interchange
STD-GEN-USB-JPEG	Add Instances	FSU	Interchange

#### 5.2.1.1 File Meta Information for the Application Entity

The Source Application Entity Title is the local AE title of Storage SCP.

#### 5.2.1.2 Real-World Activities

##### 5.2.1.2.1 Activity – Export Instances

The Offline-Media AE acts as an FSC using the interchange option when requested to export SOP Instances from the local database to a USB medium.

##### 5.2.1.2.1.1 Media Storage Application Profiles

The Offline-Media AE supports the AUG-GEN-CD, STD-GEN-DVD-JPEG and STD-GEN-USB-JPEG Application Profiles.

##### 5.2.1.2.1.1.1 Options

The Offline-Media AE supports the SOP Classes and Transfer Syntaxes listed in Table 5.3-1.

##### 5.2.1.2.2 Activity – Import Instances

The Offline-Media AE acts as an FSR using the interchange option when requested to import SOP Instances from a CD-R, DVD+R or USB medium to the local database.

##### 5.2.1.2.2.1 Media Storage Application Profiles

The Offline-Media AE supports the AUG-GEN-CD, STD-GEN-DVD-JPEG and STD-GEN-USB-JPEG Application Profiles.

##### 5.2.1.2.2.1.1 Options

The Offline-Media AE supports the SOP Classes and Transfer Syntaxes listed in Table 5.3-1.

### 5.2.1.2.3 Activity – Add Instances

The Offline-Media AE acts as an FSU using the interchange option when requested to add SOP Instances from the local database to a USB medium.

#### 5.2.1.2.3.1 Media Storage Application Profiles

The Offline-Media AE supports the STD-GEN-USB-JPEG Application Profiles.

##### 5.2.1.2.3.1.1 Options

The Offline-Media AE supports the SOP Classes and Transfer Syntaxes listed in Table 5.3-1.

## 5.3 AUGMENTED AND PRIVATE APPLICATION PROFILES

### 5.3.1 Augmented Application Profiles

#### 5.3.1.1 Augmented Application Profiles – AUG-GEN-CD

##### 5.3.1.1.1 SOP Class Augmentations

The Augmented Application Profiles support the following SOP Classes and Transfer Syntaxes:

**Table 5.3-1**  
**SOP CLASS AUGMENTATIONS FOR AUG-GEN-CD**

Information Object Definition	SOP Class UID	Transfer Syntax	Transfer Syntax UID
DICOM Media Storage Directory	1.2.840.10008.1.3.10	Explicit VR LittleEndian	1.2.840.10008.1.2.1
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	Explicit VR LittleEndian	1.2.840.10008.1.2.1
		JPEG Lossy <sup>*1</sup>	1.2.840.10008.1.2.4.50
		JPEG Lossless <sup>*2</sup>	1.2.840.10008.1.2.4.70
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	Explicit VR LittleEndian	1.2.840.10008.1.2.1
		JPEG Lossy <sup>*1</sup>	1.2.840.10008.1.2.4.50
		JPEG Lossless <sup>*2</sup>	1.2.840.10008.1.2.4.70
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	Explicit VR LittleEndian	1.2.840.10008.1.2.1
		JPEG Lossy <sup>*1</sup>	1.2.840.10008.1.2.4.50
		JPEG Lossless <sup>*2</sup>	1.2.840.10008.1.2.4.70
Enhanced SR Storage	1.2.840.10008.5.1.4.1.1.88. 22	Explicit VR LittleEndian	1.2.840.10008.1.2.1
Comprehensive SR Storage	1.2.840.10008.5.1.4.1.1.88. 33	Explicit VR LittleEndian	1.2.840.10008.1.2.1

\*1 JPEG Baseline (Process 1)

\*2 JPEG Lossless, Non-Hierarchical, First-OrderPrediction (Process 14 [Selection Value 1])

### **5.3.1.1.2      Directory Augmentations**

Not applicable.

### **5.3.1.1.3      Other Augmentations**

Not applicable.

## **5.3.2    Private Application Profiles**

Not applicable.

## **5.4    MEDIA CONFIGURATION**

Not applicable.

## 6. SUPPORT OF CHARACTER SETS

This product supports the following character sets:

- ISO-IR 6 (default) ISO 646
- ISO-IR 100 (Latin alphabet No.1) Supplementary set of ISO 8859
- ISO-IR 87 (Japanese) JIS X 0208 (Kanji)

Notes: If the Storage SCP AE receives instances that contain characters from unsupported character sets, it will respond with "Cannot Understand" to the C-STORE request.

If the MWM SCU AE receives worklist items that contain characters from unsupported character sets, it may abort the association using A-ABORT.

This product doesn't support ISO-IR 13 (Kana).

## 7. SECURITY

This product does not support any specific security measures.

It is assumed that the product is used within a secured environment. It is assumed that a secured environment includes at a minimum:

- a. Firewall or router protections to ensure that only approved external hosts have network access to the product.
- b. Firewall or router protections to ensure that the product only has network access to approved external hosts and services.
- c. Any communication with external hosts and services outside the locally secured environment use appropriate secure network channels (e.g. such as a Virtual Private Network (VPN))

Other network security procedures such as automated intrusion detection may be appropriate in some environments. Additional security features may be established by the local security policy and are beyond the scope of this conformance statement.

## 8. ANNEXES

### 8.1 IOD CONTENTS

#### 8.1.1 Created SOP Instances

Table 8.1-1 specifies the attributes of a Secondary Capture Image transmitted by the Storage SCU AE.

Table 8.1-2 specifies the attributes of an Ultrasound Image transmitted by the Storage SCU AE.

Table 8.1-3 specifies the attributes of an Ultrasound Multi-frame Image transmitted by the Storage SCU AE.

Table 8.1-4 specifies the attributes of an Enhanced SR transmitted by the Storage SCU AE.

Table 8.1-5 specifies the attributes of a Comprehensive SR transmitted by the Storage SCU AE.

The following tables use a number of abbreviations. The abbreviations used in the "Presence of ..." column are:

VNAP	Value Not Always Present (attribute sent zero length if no value is present)
ANAP	Attribute Not Always Present
ALWAYS	Always Present
EMPTY	Attribute is sent without a value
Not Present	All attributes in this module are not present

The abbreviations used in the "Source" column:

USER	the attribute value source is from user input
AUTO	the attribute value is generated automatically
CONFIG	the attribute value source is a configurable parameter

### 8.1.1.1 SC Image IOD

**Table 8.1-1**  
**IOD OF CREATED SC IMAGE SOP INSTANCES**

IE	Module	Reference	Presence of Module
Patient	Patient	Table 8.1-6	ALWAYS
	Clinical Trial Subject	--	Not Present
Study	General Study	Table 8.1-7	ALWAYS
	Patient Study	Table 8.1-8	ALWAYS
	Clinical Trial Study	--	Not Present
Series	General Series	Table 8.1-9	ALWAYS
	Clinical Trial Series	--	Not Present
Equipment	General Equipment	Table 8.1-12	ALWAYS
	SC Equipment	Table 8.1-19	ALWAYS
Image	General Image	Table 8.1-13	ALWAYS
	Image Pixel	Table 8.1-14	ALWAYS
	SC Image	N.A.	All attributes are optional and are not present
	Overlay Plane	--	Not Present
	Modality LUT	--	Not Present
	VOI LUT	Table 8.1-16	Only if Photometric Interpretation (0028,0004) is MONOCHROME2
	SOP Common	Table 8.1-17	ALWAYS
	Private Application	Table 8.1-18	ALWAYS

### 8.1.1.2 US Image IOD

**Table 8.1-2**  
**IOD OF CREATED US IMAGE SOP INSTANCES**

IE	Module	Reference	Presence of Module
Patient	Patient	Table 8.1-6	ALWAYS
	Clinical Trial Subject	--	Not Present
Study	General Study	Table 8.1-7	ALWAYS
	Patient Study	Table 8.1-8	ALWAYS
	Clinical Trial Study	--	Not Present
Series	General Series	Table 8.1-9	ALWAYS
	Clinical Trial Series	--	Not Present
Frame of Reference	Frame of Reference	--	Not Present
	Synchronization	--	Not Present
Equipment	General Equipment	Table 8.1-12	ALWAYS
Image	General Image	Table 8.1-13	ALWAYS
	Image Pixel	Table 8.1-14	ALWAYS
	Contrast/bolus	--	Not Present
	Palette Color Lookup Table	--	Not Present
	US Region Calibration	Table 8.1-15	ALWAYS
	US Image	Table 8.1-20	ALWAYS
	Overlay Plane	--	Not Present
	VOI LUT	Table 8.1-16	Only if Photometric Interpretation (0028,0004) is MONOCHROME2
	SOP Common	Table 8.1-17	ALWAYS
	Private Application	Table 8.1-18	ALWAYS

### 8.1.1.3 US Multi-frame Image IOD

**Table 8.1-3**  
**IOD OF CREATED US MULTI-FRAME IMAGE SOP INSTANCES**

IE	Module	Reference	Presence of Module
Patient	Patient	Table 8.1-6	ALWAYS
	Clinical Trial Subject	--	Not Present
Study	General Study	Table 8.1-7	ALWAYS
	Patient Study	Table 8.1-8	ALWAYS
	Clinical Trial Study	--	Not Present
Series	General Series	Table 8.1-9	ALWAYS
	Clinical Trial Series	--	Not Present
Frame of Reference	Frame of Reference	--	Not Present
	Synchronization	--	Not Present
Equipment	General Equipment	Table 8.1-12	ALWAYS
Image	General Image	Table 8.1-13	ALWAYS
	Image Pixel	Table 8.1-14	ALWAYS
	Contrast/bolus	--	Not Present
	Cine	Table 8.1-21	ALWAYS
	Multi-frame	Table 8.1-22	ALWAYS
	Frame Pointers	--	Not Present
	Palette Color Lookup Table	--	Not Present
	US Region Calibration	Table 8.1-15	ALWAYS
	US Image	Table 8.1-23	ALWAYS
	VOI LUT	Table 8.1-16	Only if Photometric Interpretation (0028,0004) is MONOCHROME2
	SOP Common	Table 8.1-17	ALWAYS
	Private Application	Table 8.1-18	ALWAYS

### 8.1.1.4 Enhanced SR IOD

**Table 8.1-4  
IOD OF CREATED ENHANCED SR SOP INSTANCES**

<b>IE</b>	<b>Module</b>	<b>Reference</b>	<b>Presence of Module</b>
Patient	Patient	Table 8.1-6	ALWAYS
	Specimen Identification	--	Not Present
	Clinical Trial Subject	--	Not Present
Study	General Study	Table 8.1-7	ALWAYS
	Patient Study	Table 8.1-8	ALWAYS
	Clinical Trial Study	--	Not Present
Series	SR Document Series	Table 8.1-24	ALWAYS
	Clinical Trial Series	--	Not Present
Equipment	General Equipment	Table 8.1-12	ALWAYS
Document	SR Document General	Table 8.1-25	ALWAYS
	SR Document Content	Application measurements: Table 8.1-26	ALWAYS
	SOP Common	Table 8.1-17	ALWAYS
	Private Application	Table 8.1-18	ALWAYS

### 8.1.1.5 Comprehensive SR IOD

**Table 8.1-5  
IOD OF CREATED COMPREHENSIVE SR SOP INSTANCES**

<b>IE</b>	<b>Module</b>	<b>Reference</b>	<b>Presence of Module</b>
Patient	Patient	Table 8.1-6	ALWAYS
	Specimen Identification	--	Not Present
	Clinical Trial Subject	--	Not Present
Study	General Study	Table 8.1-7	ALWAYS
	Patient Study	Table 8.1-8	ALWAYS
	Clinical Trial Study	--	Not Present
Series	SR Document Series	Table 8.1-24	ALWAYS
	Clinical Trial Series	--	Not Present
Frame of Reference	Frame of Reference	--	Not Present
	Synchronization	--	Not Present
Equipment	General Equipment	Table 8.1-12	ALWAYS
Document	SR Document General	Table 8.1-25	ALWAYS
	SR Document Content	Application measurements: Table 8.1-26	ALWAYS
	SOP Common	Table 8.1-17	ALWAYS
	Private Application	Table 8.1-18	ALWAYS

### 8.1.1.6 Common Modules

**Table 8.1-6  
PATIENT MODULE OF CREATED SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Patient's Name	(0010,0010)	PN		VNAP	AUTO
Patient ID	(0010,0020)	LO		ALWAYS	AUTO
Patient's Birth Date	(0010,0030)	DA		VNAP	AUTO
Patient's Sex	(0010,0040)	CS		VNAP	AUTO
Ethnic Group	(0010,2160)	SH		VNAP	AUTO
Patient Comments	(0010,4000)	LT	Values supplied via Modality Worklist will be entered at [Patient Comment]. [Insurance] and [Patient Comment] will be edited in the following format: <"Insurance="Health Insurance Information<LINEFEED>Comment>.	ALWAYS	AUTO
Patient Identity Removed	(0012,0062)	CS	Yes or NO	ALWAYS	USER
De-identification Method	(0012,0063)	CS	Expert Determination	ANAP	USER

**Table 8.1-7  
GENERAL STUDY MODULE OF CREATED SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Study Instance UID	(0020,000D)	UI		ALWAYS	AUTO
Study Date	(0008,0020)	DA		ALWAYS	AUTO
Study Time	(0008,0030)	TM		ALWAYS	AUTO
Referring Physician's Name	(0008,0090)	PN		VNAP	AUTO
Study ID	(0020,0010)	SH		ALWAYS	AUTO
Accession Number	(0008,0050)	SH		VNAP	AUTO
Study Description	(0008,1030)	LO		VNAP	AUTO
Physician(s) Of Record	(0008,1048)	PN		VNAP	AUTO
Name Of Physician(s) Reading Study	(0008,1060)	PN		VNAP	AUTO
Scheduled Study Start Date	(0032,1000)	DA		ANAP	AUTO
Scheduled Study Start Time	(0032,1001)	TM		ANAP	AUTO
Referenced Study Sequence	(0008,1110)	SQ		ANAP	AUTO
>Referenced SOP Class UID	(0008,1150)	UI		ALWAYS	AUTO
>Referenced SOP Instance UID	(0008,1155)	UI		ALWAYS	AUTO
Procedure Code Sequence	(0008,1032)	SQ		ANAP	AUTO
>Code Value	(0008,0100)	SH		ANAP	AUTO

>Coding Scheme Designator	(0008,0102)	SH		ANAP	AUTO
>Coding Scheme Version	(0008,0103)	SH		ANAP	AUTO
>Code Meaning	(0008,0104)	LO		ANAP	AUTO

**Table 8.1-8  
PATIENT STUDY MODULE OF CREATED SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Patient's Age	(0010,1010)	AS		VNAP	AUTO
Patient's Size	(0010,1020)	DS		VNAP	AUTO
Patient's Weight	(0010,1030)	DS		VNAP	AUTO

**Table 8.1-9  
GENERAL SERIES MODULE OF CREATED SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Modality	(0008,0060)	CS	US	ALWAYS	AUTO
Series Instance UID	(0020,000E)	UI		ALWAYS	AUTO
Series Number	(0020,0011)	IS		ALWAYS	AUTO
Series Date	(0008,0021)	DA		ALWAYS	AUTO
Series Time	(0008,0031)	TM		ALWAYS	AUTO
Performing Physician's Name	(0008,1050)	PN		VNAP	AUTO
Protocol Name	(0018,1030)	LO	Abdomen, Carotid, Thyroid, Breast, OB, GYN, Endo-Vaginal, Fetal Heart, Adult Heart, Pediatric Heart, Coronary, TCD, Neo-Head, Neo-General, Neo-Hip, PV Venous, PV Arterial, Digits, MSK, Prostate, Kidney, Testes, OTHER or M-TEE	ALWAYS	AUTO
Series Description	(0008,103E)	LO	Blood Pressure from user input will be edited in the following format: <"BloodPressure="Blood Pressure Information>.	VNAP	AUTO
Operators' Name	(0008,1070)	PN		VNAP	AUTO
Referenced Performed Procedure Step Sequence	(0008,1111)	SQ		ALWAYS	AUTO
>Referenced SOP Class UID	(0008,1150)	UI		ALWAYS	AUTO
>Referenced SOP Instance UID	(0008,1155)	UI		ALWAYS	AUTO
Body Part Examined	(0018,0015)	CS		EMPTY	AUTO
Request Attributes Sequence	(0040,0275)	SQ		ANAP	AUTO
>Requested Procedure ID	(0040,1001)	SH		ANAP	AUTO

>Requested Procedure Description	(0032,1060)	LO		ANAP	AUTO
>Reason for the Scheduled Procedure	(0040,1002)	LO		EMPTY	AUTO
>Scheduled Procedure Step ID	(0040,0009)	SH		ANAP	AUTO
>Scheduled Procedure Step Description	(0040,0007)	LO		ANAP	AUTO
>Scheduled Protocol Code Sequence	(0040,0008)	SQ		ANAP	AUTO
>>Code Value	(0008,0100)	SH		ANAP	AUTO
>>Code Scheme Designator	(0008,0102)	SH		ANAP	AUTO
>>Code Scheme Version	(0008,0103)	SH		ANAP	AUTO
>>Code Meaning	(0008,0104)	LO		ANAP	AUTO
Performed Procedure Step ID	(0040,0253)	SH		ANAP	AUTO
Performed Procedure Step Start Date	(0040,0244)	DA		ANAP	AUTO
Performed Procedure Step Start Time	(0040,0245)	TM		ANAP	AUTO
Performed Procedure Step Description	(0040,0254)	LO		ANAP	AUTO
Performed Protocol Code Sequence	(0040,0260)	SQ		ANAP	AUTO
>Code Value	(0008,0100)	SH		ANAP	AUTO
>Coding Scheme Designator	(0008,0102)	SH		ANAP	AUTO
>Coding Scheme Version	(0008,0103)	SH		ANAP	AUTO
>Code Meaning	(0008,0104)	LO		ANAP	AUTO

**Table 8.1-10  
FRAME OF REFERENCE OF MODULE OF CREATED SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Volume Frame of Reference UID	(0020,0052)	UI		ALWAYS	AUTO

**Table 8.1-11  
ULTRASOUND FRAME OF REFERENCE MODULE OF CREATED SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Volume Frame of Reference UID	(0020,9312)	UI		ALWAYS	AUTO
Ultrasound Acquisition Geometry	(0020,9307)	CS		ALWAYS	AUTO

Apex Position	(0020,9308)	FD		ALWAYS	AUTO
Volume to Transducer Mapping Matrix	(0020,9309)	FD		ALWAYS	AUTO
Patient Frame of Reference Source	(0020,930C)	CS	ESTIMATED	ALWAYS	AUTO
Volume to Table Mapping Matrix	(0020,930A)	FD		ALWAYS	AUTO

**Table 8.1-12  
GENERAL EQUIPMENT MODULE OF CREATED SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Manufacturer	(0008,0070)	LO	Follow the settings of the original image. CANON_MEC for CUS-AA550/450/000 CUW-U001S TOSHIBA_MEC_US for TUS-AI900/800/700	ALWAYS	AUTO
Institution Name	(0008,0080)	LO	Maximum 30 characters.	ALWAYS	CONFIG
Institution Address	(0008,0081)	ST		ALWAYS	CONFIG
Station Name	(0008,1010)	SH		ALWAYS	CONFIG
Institutional Department Name	(0008,1040)	LO		ALWAYS	CONFIG
Manufacturer's Model Name	(0008,1090)	LO	Related original image. Example: CUW-U001S TUS-AI900 CUS-AA550	ALWAYS	AUTO
Device Serial Number	(0018,1000)	LO		ALWAYS	AUTO
Software Version	(0018,1020)	LO	Related original image. Example: V1.0 SPxxxx* for System Version V1.0 of CUW-U001S V6.0 SPxxxx* for System Version V6.0 of TUS-AI900/800/700 V6.0 SPxxxx* for System Version V4.0 of CUS-AA550/450/000	ALWAYS	AUTO

**Table 8.1-13  
GENERAL IMAGE MODULE OF CREATED SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Instance Number	(0020,0013)	IS		ALWAYS	AUTO
Patient Orientation	(0020,0020)	CS		EMPTY	AUTO

Content Date	(0008,0023)	DA		ALWAYS	AUTO
Content Time	(0008,0033)	TM		ALWAYS	AUTO
Image Type	(0008,0008)	CS	Value 1: Pixel Data Characteristics "ORIGINAL" or "DERIVED" Value 2: Patient Examination Characteristics "PRIMARY" or "SECONDARY" Value 3: System Defined Term Value 4: Image Mode	ANAP	AUTO
Acquisition Date	(0008,0022)	DA		ALWAYS	AUTO
Acquisition Time	(0008,0032)	TM		ALWAYS	AUTO
Derivation Description	(0008,2111)	ST		ANAP	AUTO
Image Comments	(0020,4000)	LT		ANAP	USER
Burned In Annotation	(0028,0301)	CS	YES or NO	ANAP	AUTO
Lossy Image Compression	(0028,2110)	CS	00 or 01	ALWAYS	AUTO
Lossy Image Compression Ratio	(0028,2112)	DS		ANAP	AUTO

**Table 8.1-14**  
**IMAGE PIXEL MODULE OF CREATED SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Samples per Pixel	(0028,0002)	US	1 or 3	ALWAYS	AUTO
Photometric Interpretation	(0028,0004)	CS	RGB, MONOCHROME2 or YBR_FULL_422	ALWAYS	CONFIG
Planar Configuration	(0028,0006)	US	0 or 1	ANAP	AUTO
Rows	(0028,0010)	US	[Rows], [Columns] Related original image. Example: 960, 1280	ALWAYS	AUTO
Columns	(0028,0011)	US			
Bits Allocated	(0028,0100)	US	8	ALWAYS	AUTO
Bits Stored	(0028,0101)	US	8	ALWAYS	AUTO
High Bit	(0028,0102)	US	7	ALWAYS	AUTO
Pixel Representation	(0028,0103)	US	0	ALWAYS	AUTO
Pixel Data	(7FE0,0010)	OB or OW		ALWAYS	AUTO

**Table 8.1-15**  
**US REGION CALIBRATION MODULE OF CREATED SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Sequence of Ultrasound Regions	(0018,6011)	SQ		ANAP	AUTO
>Region Spatial Format	(0018,6012)	US		ALWAYS	AUTO
>Region Data Type	(0018,6014)	US		ALWAYS	AUTO
>Region Flags	(0018,6016)	UL		ALWAYS	AUTO
>Region Location Min x0	(0018,6018)	UL		ALWAYS	AUTO
>Region Location Min y0	(0018,601A)	UL		ALWAYS	AUTO
>Region Location Max x1	(0018,601C)	UL		ALWAYS	AUTO
>Region Location Max y1	(0018,601E)	UL		ALWAYS	AUTO
>Reference Pixel x0	(0018,6020)	SL		ALWAYS	AUTO
>Reference Pixel y0	(0018,6022)	SL		ALWAYS	AUTO
>Physical Units X Direction	(0018,6024)	US		ALWAYS	AUTO
>Physical Units Y Direction	(0018,6026)	US		ALWAYS	AUTO
>Reference Pixel Physical Value X	(0018,6028)	FD		ALWAYS	AUTO
>Reference Pixel Physical Value Y	(0018,602A)	FD		ALWAYS	AUTO
>Physical Delta X	(0018,602C)	FD		ALWAYS	AUTO
>Physical Delta Y	(0018,602E)	FD		ALWAYS	AUTO
>Transducer Frequency	(0018,6030)	UL		ALWAYS	AUTO
>Pulse Repetition Frequency	(0018,6032)	UL		ANAP	AUTO
>Doppler Correction Angle	(0018,6034)	FD		ANAP	AUTO
>Steering Angle	(0018,6036)	FD		ANAP	AUTO
>Doppler Sample Volume X Position	(0018,6039)	SL		ANAP	AUTO
>Doppler Sample Volume Y Position	(0018,603B)	SL		ANAP	AUTO
>TM-Line Position x0	(0018,603D)	SL		ANAP	AUTO
>TM-Line Position y0	(0018,603F)	SL		ANAP	AUTO
>TM-Line Position x1	(0018,6041)	SL		ANAP	AUTO
>TM-Line Position y1	(0018,6043)	SL		ANAP	AUTO

**Table 8.1-16**  
**VOI LUT MODULE OF CREATED SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Window Center	(0028,1050)	DS	128.00	ANAP	AUTO
Window Width	(0028,1051)	DS	256.00	ANAP	AUTO

**Table 8.1-17**  
**SOP COMMON MODULE OF CREATED SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Specific Character Set	(0008,0005)	CS	See Section 6	ALWAYS	AUTO
Instance Creation Date	(0008,0012)	DA		ALWAYS	AUTO
Instance Creation Time	(0008,0013)	TM		ALWAYS	AUTO
Instance Creator UID	(0008,0014)	UI	Related original image. Example: 1.2.392.200036.9116.6.22.xx xxxxxx*(*8 digit number) (TUS-AI900) 1.2.392.200036.9116.6.28.xx xxxxxx* (*8 digit number) (CUS-AA550)	ALWAYS	AUTO
SOP Class UID	(0008,0016)	UI	1.2.840.10008.5.1.4.1.1.7 for SC Image 1.2.840.10008.5.1.4.1.1.6.1 for US Image 1.2.840.10008.5.1.4.1.1.3.1 for US Multi-frame Image 1.2.840.10008.5.1.4.1.1.88.2 2 for Enhanced SR 1.2.840.10008.5.1.4.1.1.88.3 3 for Comprehensive SR	ALWAYS	AUTO
SOP Instance UID	(0008,0018)	UI		ALWAYS	AUTO
Timezone Offset From UTC	(0008,0201)	SH		ALWAYS	AUTO

**Table 8.1-18**  
**PRIVATE APPLICATION MODULE OF CREATED SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Private Creator	(0029,00xx)	LO	PMTF INFORMATION DATA	ANAP	AUTO
Application Header Type	(0029,xx08)	CS	Ex.) TUS_IMAGE	ANAP	AUTO
Application Header Version	(0029,xx09)	LO	Ex.) 1	ANAP	AUTO
Application Header Data	(0029,xx10)	OB		ANAP	AUTO
Application Header Data	(0029,xx20)	OB		ANAP	AUTO
Private Creator	(7015,00xx)	LO	PMTF INFORMATION DATA  CANON_SR	ALWAYS	AUTO
Application Header Data	(7015,xx60)	OB	TUS_MEASUREMENT_XML	ANAP	AUTO
Application Header Sequence	(7015,xx73)	SQ	TUS_DATA	ANAP	AUTO
>Private Creator	(0029,00xx)	LO	PMTF INFORMATION DATA	ALWAYS	AUTO
>Application Header Type	(0029,xx89)	LO	USImage, etc	ALWAYS	AUTO
>Application Header Data	(0029,xx90)	OB		ALWAYS	AUTO
Private Creator	(7015,00xx)	LO	PMTF INFORMATION DATA	ANAP	AUTO

Application Header Sequence	(7015,xx73)	SQ	TUS_DATA	ANAP	AUTO
>Private Creator	(0029,00xx)	LO	PMTF INFORMATION DATA	ALWAYS	AUTO
>Application Header Type	(0029,xx89)	LO		ANAP	AUTO
>Application Header Data	(0029,xx90)	OB		ALWAYS	AUTO
Private Creator	(7FE1,00xx)	LO	CANON MDW NON-IMAGE	ANAP	AUTO
US Private Data	(7FE1,xx10)	OB		ANAP	AUTO

### 8.1.1.7 SC Image Modules

**Table 8.1-19  
SC EQUIPMENT MODULE OF CREATED SC IMAGE SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Conversion Type	(0008,0064)	CS	WSD	ALWAYS	AUTO

### 8.1.1.8 US Image Modules

**Table 8.1-20  
US IMAGE MODULE OF CREATED US IMAGE SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Heart Rate	(0018,1088)	IS	Positive integer value	ANAP	AUTO
Transducer Data	(0018,5010)	LO		ANAP	AUTO
Focus Depth	(0018,5012)	DS		ANAP	AUTO
Mechanical Index	(0018,5022)	DS		ANAP	AUTO
Bone Thermal Index	(0018,5024)	DS		ANAP	AUTO
Soft Tissue Thermal Index	(0018,5027)	DS		ANAP	AUTO
Depth of Scan Field	(0018,5050)	IS		ANAP	AUTO
Transducer Type	(0018,6031)	CS		ANAP	AUTO
Samples Per Pixel	(0028,0002)	US	1 or 3	ALWAYS	AUTO
Photometric Interpretation	(0028,0004)	CS	RGB, MONOCHROME2 or YBR_FULL_422	ALWAYS	CONFIG
Planar Configuration	(0028,0006)	US	0 or 1	ANAP	AUTO
Rows	(0028,0010)	US	[Rows], [Columns] Related original image.  Example: 960, 1280	ALWAYS	AUTO
Columns	(0028,0011)	US			
Ultrasound Color Data Present	(0028,0014)	US	0 or 1	ALWAYS	AUTO
Bits Allocated	(0028,0100)	US	8	ALWAYS	AUTO
Bits Stored	(0028,0101)	US	8	ALWAYS	AUTO
High Bit	(0028,0102)	US	7	ALWAYS	AUTO
Pixel Representation	(0028,0103)	US	0	ALWAYS	AUTO
Pixel Data	(7FE0,0010)	OB or OW		ALWAYS	AUTO

### 8.1.1.9 US Multi-frame Image Modules

**Table 8.1-21  
CINE MODULE OF CREATED US MULTI-FRAME IMAGE SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Start Trim	(0008,2142)	IS		ALWAYS	AUTO
Stop Trim	(0008,2143)	IS		ALWAYS	AUTO

Recommended Display Frame Rate	(0008,2144)	IS		ALWAYS	AUTO
Cine Rate	(0018,0040)	IS		ALWAYS	AUTO
Effective Duration	(0018,0072)	DS		ALWAYS	AUTO
Frame Time	(0018,1063)	DS		ALWAYS	AUTO
Frame Delay	(0018,1066)	DS		ALWAYS	AUTO
Actual Frame Duration	(0018,1242)	IS		ALWAYS	AUTO

**Table 8.1-22  
MULTI-FRAME MODULE OF CREATED US MULTI-FRAME IMAGE SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Number of Frames	(0028,0008)	IS		ALWAYS	AUTO
Frame Increment Pointer	(0028,0009)	AT	<0018,1063>	ALWAYS	AUTO

**Table 8.1-23  
US IMAGE MODULE OF CREATED US MULTI-FRAME IMAGE SOP INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Stage Name	(0008,2120)	SH		ANAP	AUTO
Stage Number	(0008,2122)	IS		ANAP	AUTO
Number of Stages	(0008,2124)	IS		ANAP	AUTO
View Name	(0008,2127)	SH		ANAP	AUTO
View Number	(0008,2128)	IS		ANAP	AUTO
Number of Views in Stage	(0008,212A)	IS		ANAP	AUTO
Number of Event Timers	(0008,2129)	IS		ANAP	AUTO
Event Elapsed Time(s)	(0008,2130)	DS		ANAP	AUTO
Event Timer Name(s)	(0008,2132)	LO		ANAP	AUTO
Trigger Time	(0018,1060)	DS		ANAP	AUTO
Nominal Interval	(0018,1062)	IS		ANAP	AUTO
Beat Rejection Flag	(0018,1080)	CS		ANAP	AUTO
Low R-R Value	(0018,1081)	IS		ANAP	AUTO
High R-R Value	(0018,1082)	IS		ANAP	AUTO
Heart Rate	(0018,1088)	IS	Positive integer value	VNAP	AUTO
Transducer Data	(0018,5010)	LO		ALWAYS	AUTO
Focus Depth	(0018,5012)	DS		ANAP	AUTO
Mechanical Index	(0018,5022)	DS		ALWAYS	AUTO
Bone Thermal Index	(0018,5024)	DS		ANAP	AUTO
Soft Tissue Thermal Index	(0018,5027)	DS		ANAP	AUTO
Depth of Scan Field	(0018,5050)	IS		ANAP	AUTO
Transducer Type	(0018,6031)	CS		ALWAYS	AUTO
Samples per Pixel	(0028,0002)	US	1 or 3	ALWAYS	AUTO
Photometric Interpretation	(0028,0004)	CS	RGB, MONOCHROME2 or YBR_FULL_422	ALWAYS	AUTO

Planar Configuration	(0028,0006)	US	0 or 1	ANAP	AUTO
Rows	(0028,0010)	US	[Rows], [Columns] Related original image.  Example: 960, 1280	ALWAYS	AUTO
Columns	(0028,0011)	US		ALWAYS	AUTO
Ultrasound Color Data Present	(0028,0014)	US	0 or 1	ANAP	AUTO
Bits Allocated	(0028,0100)	US	8	ALWAYS	AUTO
Bits Stored	(0028,0101)	US	8	ALWAYS	AUTO
High Bit	(0028,0102)	US	7	ALWAYS	AUTO
Pixel Representation	(0028,0103)	US	0	ALWAYS	AUTO
Stage Code Sequence	(0040,000A)	SQ		ANAP	AUTO
>Code Value	(0008,0100)	SH		ANAP	AUTO
>Coding Scheme Designator	(0008,0102)	SH		ANAP	AUTO
>Coding Scheme Version	(0008,0103)	SH		ANAP	AUTO
>Code Meaning	(0008,0104)	LO		ANAP	AUTO
View Code Sequence	(0054,0220)	SQ		ANAP	AUTO
>Code Value	(0008,0100)	SH		ANAP	AUTO
>Coding Scheme Designator	(0008,0102)	SH		ANAP	AUTO
>Coding Scheme Version	(0008,0103)	SH		ANAP	AUTO
>Code Meaning	(0008,0104)	LO		ANAP	AUTO
Pixel Data	(7FE0,0010)	OB		ALWAYS	AUTO

### 8.1.1.10 Enhanced/Comprehensive SR Modules

Table 8.1-24

#### SR DOCUMENT SERIES MODULE OF CREATED ENHANCED/COMPREHENSIVE SR SOP INSTANCES

Attribute Name	Tag	VR	Value	Presence of Value	Source
Modality	(0008,0060)	CS	SR	ALWAYS	AUTO
Referenced Study Component Sequence	(0008,1111)	SQ		VNAP	AUTO
Series Instance UID	(0020,000E)	UI		ALWAYS	AUTO
Series Number	(0020,0011)	IS		ALWAYS	AUTO

**Table 8.1-25**  
**SR DOCUMENT GENERAL MODULE OF CREATED ENHANCED/COMPREHENSIVE SR SOP**  
**INSTANCES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Content Date	(0008,0023)	DA		ALWAYS	AUTO
Content Time	(0008,0033)	TM		ALWAYS	AUTO
Instance Number	(0020,0013)	IS		ALWAYS	AUTO
Referenced Request Sequence	(0040,A370)	SQ		VNAP	AUTO
>Accession Number	(0008,0050)	SH		ALWAYS	AUTO
>Referenced Study Sequence	(0008,1110)	SQ		ALWAYS	AUTO
>Study Instance UID	(0020,000D)	UI		ALWAYS	AUTO
>Requested Procedure Description	(0032,1060)	LO		VNAP	AUTO
>Requested Procedure Code Sequence	(0032,1064)	SQ		VNAP	AUTO
>Requested Procedure ID	(0040,1001)	SH		VNAP	AUTO
>Placer Order Number/Imaging Service Request	(0040,2016)	LO		VNAP	AUTO
>Filler Order Number/Imaging Service Request	(0040,2017)	LO		VNAP	AUTO
Performed Procedure Code Sequence	(0040,A372)	SQ		VNAP	AUTO
Current Requested Procedure Evidence Sequence	(0040,A375)	SQ		VNAP	AUTO
>Referenced Series Sequence	(0008,1115)	SQ		ALWAYS	AUTO
>>Referenced SOP Sequence	(0008,1199)	SQ		ALWAYS	AUTO
>>>Referenced SOP Class UID	(0008,1150)	UI		ALWAYS	AUTO
>>>Referenced SOP Instance UID	(0008,1155)	UI		ALWAYS	AUTO
>>Series Instance UID	(0020,000E)	UI		ALWAYS	AUTO
>Study Instance UID	(0020,000D)	UI		ALWAYS	AUTO
Completion Flag	(0040,A491)	CS	COMPLETE	ALWAYS	AUTO
Verification Flag	(0040,A493)	CS	UNVERIFIED	ALWAYS	AUTO

**Table 8.1-26**  
**SR DOCUMENT CONTENT MODULE OF CREATED ENHANCED/COMPREHENSIVE SR SOP**  
**INSTANCES FOR ECHOCARDIOGRAPHY PROCEDURE REPORT TEMPLATE**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Value Type	(0040,A040)	CS	CONTAINER	ALWAYS	AUTO
Concept Name Code Sequence	(0040,A043)	SQ		ALWAYS	AUTO
>Code Value	(0008,0100)	SH	125200	ALWAYS	AUTO
>Coding Scheme Designator	(0008,0102)	SH	DCM	ALWAYS	AUTO
>Code Meaning	(0008,0104)	LO	Adult Echocardiography Procedure Report	ALWAYS	AUTO
Continuity of Content	(0040,A050)	CS	SEPARATE	ALWAYS	AUTO
Content Template Sequence	(0040,A504)	SQ		ALWAYS	AUTO
>Template Identifier	(0040,DB00)	CS	5200	ALWAYS	AUTO
>Mapping Resource	(0008,0105)	CS	DCMR	ALWAYS	AUTO
Content Sequence	(0040,A730)	SQ		ALWAYS	AUTO
>Relationship Type	(0040,A010)	CS	HAS CONCEPT MOD	ALWAYS	AUTO
>Value Type	(0040,A040)	CS	CODE	ALWAYS	AUTO
>Concept Name Code Sequence	(0040,A043)	SQ		ALWAYS	AUTO
>>Code Value	(0008,0100)	SH	121049	ALWAYS	AUTO
>>Coding Scheme Designator	(0008,0102)	SH	DCM	ALWAYS	AUTO
>>Code Meaning	(0008,0104)	LO	Language of Content Item and descendants	ALWAYS	AUTO
>Concept Code Sequence	(0040,A168)	SQ		ALWAYS	AUTO
>>Code Value	(0008,0100)	SH	eng	ALWAYS	AUTO
>>Coding Scheme Designator	(0008,0102)	SH	ISO0639-2	ALWAYS	AUTO
>>Code Meaning	(0008,0104)	LO	English	ALWAYS	AUTO
>Relationship Type	(0040,A010)	CS	HAS OBS CONTEXT	ALWAYS	AUTO
>Value Type	(0040,A040)	CS	CODE	ALWAYS	AUTO
>Concept Name Code Sequence	(0040,A043)	SQ		ALWAYS	AUTO
>>Code Value	(0008,0100)	SH	121005	ALWAYS	AUTO
>>Coding Scheme Designator	(0008,0102)	SH	DCM	ALWAYS	AUTO
>>Code Meaning	(0008,0104)	LO	Observer Type	ALWAYS	AUTO
>Concept Code Sequence	(0040,A168)	SQ		ALWAYS	AUTO
>>Code Value	(0008,0100)	SH	121007	ALWAYS	AUTO
>>Coding Scheme Designator	(0008,0102)	SH	DCM	ALWAYS	AUTO
>>Code Meaning	(0008,0104)	LO	Device	ALWAYS	AUTO
>Relationship Type	(0040,A010)	CS	CONTAINS	ALWAYS	AUTO
>Value Type	(0040,A040)	CS	CONTAINER	ALWAYS	AUTO
>Concept Name Code Sequence	(0040,A043)	SQ		ALWAYS	AUTO
>>Code Value	(0008,0100)	SH	121118	ALWAYS	AUTO
>>Coding Scheme Designator	(0008,0102)	SH	DCM	ALWAYS	AUTO
>>Code Meaning	(0008,0104)	LO	Patient Characteristics	ALWAYS	AUTO
>Continuity of Content	(0040,A050)	CS	SEPARATE	ALWAYS	AUTO
>Content Sequence	(0040,A730)	SQ		ANAP	AUTO
>>Relationship Type	(0040,A010)	CS	CONTAINS	ALWAYS	AUTO
>>Value Type	(0040,A040)	CS	NUM	ALWAYS	AUTO
>>Concept Name Code Sequence	(0040,A043)	SQ		ANAP	AUTO
>>>Code Value	(0008,0100)	SH	121033	ANAP	AUTO
>>>Coding Scheme Designator	(0008,0102)	SH	DCM	ANAP	AUTO
>>>Code Meaning	(0008,0104)	LO	Subject Age	ANAP	AUTO
>>Measured Value Sequence	(0040,A300)	SQ		ALWAYS	AUTO
>>Measured Units Code Sequence	(0040,08EA)	SQ		ALWAYS	AUTO
>>>>Code Value	(0008,0100)	SH		ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)	SH		ANAP	AUTO
>>>>Code Meaning	(0008,0104)	LO		ANAP	AUTO

Attribute Name	Tag	VR	Value	Presence of Value	Source
>>>Numeric Value	(0040,A30A)	DS		ALWAYS	AUTO
>>Relationship Type	(0040,A010)	CS	CONTAINS	ALWAYS	AUTO
>>Value Type	(0040,A040)	CS	CODE	ALWAYS	AUTO
>>Concept Name Code Sequence	(0040,A043)	SQ		ALWAYS	AUTO
>>>Code Value	(0008,0100)	SH	121032	ALWAYS	AUTO
>>>Coding Scheme Designator	(0008,0102)	SH	DCM	ALWAYS	AUTO
>>>Code Meaning	(0008,0104)	LO	Subject Sex	ALWAYS	AUTO
>>Concept Code Sequence	(0040,A168)	SQ		ALWAYS	AUTO
>>>Code Value	(0008,0100)	SH		ALWAYS	AUTO
>>>Coding Scheme Designator	(0008,0102)	SH		ALWAYS	AUTO
>>>Code Meaning	(0008,0104)	LO		ALWAYS	AUTO
>>Relationship Type	(0040,A010)	CS	CONTAINS	ALWAYS	AUTO
>>Value Type	(0040,A040)	CS	NUM	ALWAYS	AUTO
>>Concept Name Code Sequence	(0040,A043)	SQ		ANAP	AUTO
>>>Code Value	(0008,0100)	SH	8867-4	ANAP	AUTO
>>>Coding Scheme Designator	(0008,0102)	SH	LN	ANAP	AUTO
>>>Code Meaning	(0008,0104)	LO	Heart Rate. SR Document content Module may have multiple measurement results, at that case, the heart rate value is set for the last measurement.	ANAP	AUTO
>>Measured Value Sequence	(0040,A300)	SQ		ALWAYS	AUTO
>>>Measured Units Code Sequence	(0040,08EA)	SQ		ALWAYS	AUTO
>>>>Code Value	(0008,0100)	SH	{H.B.}/min	ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)	SH	UCUM	ANAP	AUTO
>>>>Code Meaning	(0008,0104)	LO	Heart beat per minute	ANAP	AUTO
>>>Numeric Value	(0040,A30A)	DS		ALWAYS	AUTO
>>Relationship Type	(0040,A010)	CS	CONTAINS	ALWAYS	AUTO
>>Value Type	(0040,A040)	CS	NUM	ALWAYS	AUTO
>>Concept Name Code Sequence	(0040,A043)	SQ		ANAP	AUTO
>>>Code Value	(0008,0100)	SH	F-008EC	ANAP	AUTO
>>>Coding Scheme Designator	(0008,0102)	SH	SRT	ANAP	AUTO
>>>Code Meaning	(0008,0104)	LO	Systolic Blood Pressure	ANAP	AUTO
>>Measured Value Sequence	(0040,A300)	SQ		ALWAYS	AUTO
>>>Measured Units Code Sequence	(0040,08EA)	SQ		ALWAYS	AUTO
>>>>Code Value	(0008,0100)	SH	mm[Hg]	ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)	SH	UCUM	ANAP	AUTO
>>>>Code Meaning	(0008,0104)	LO	Millimeter of mercury	ANAP	AUTO
>>>Numeric Value	(0040,A30A)	DS		ALWAYS	AUTO
>>Relationship Type	(0040,A010)	CS	CONTAINS	ALWAYS	AUTO
>>Value Type	(0040,A040)	CS	NUM	ALWAYS	AUTO
>>Concept Name Code Sequence	(0040,A043)	SQ		ANAP	AUTO
>>>Code Value	(0008,0100)	SH	F-008ED	ANAP	AUTO
>>>Coding Scheme Designator	(0008,0102)	SH	SRT	ANAP	AUTO
>>>Code Meaning	(0008,0104)	LO	Diastolic Blood Pressure	ANAP	AUTO
>>Measured Value Sequence	(0040,A300)	SQ		ALWAYS	AUTO
>>>Measured Units Code Sequence	(0040,08EA)	SQ		ALWAYS	AUTO
>>>>Code Value	(0008,0100)	SH	mm[Hg]	ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)	SH	UCUM	ANAP	AUTO
>>>>Code Meaning	(0008,0104)	LO	Millimeter of mercury	ANAP	AUTO
>>>Numeric Value	(0040,A30A)	DS		ALWAYS	AUTO
>>Relationship Type	(0040,A010)	CS	CONTAINS	ALWAYS	AUTO
>>Value Type	(0040,A040)	CS	NUM	ALWAYS	AUTO
>>Concept Name Code Sequence	(0040,A043)	SQ		ANAP	AUTO

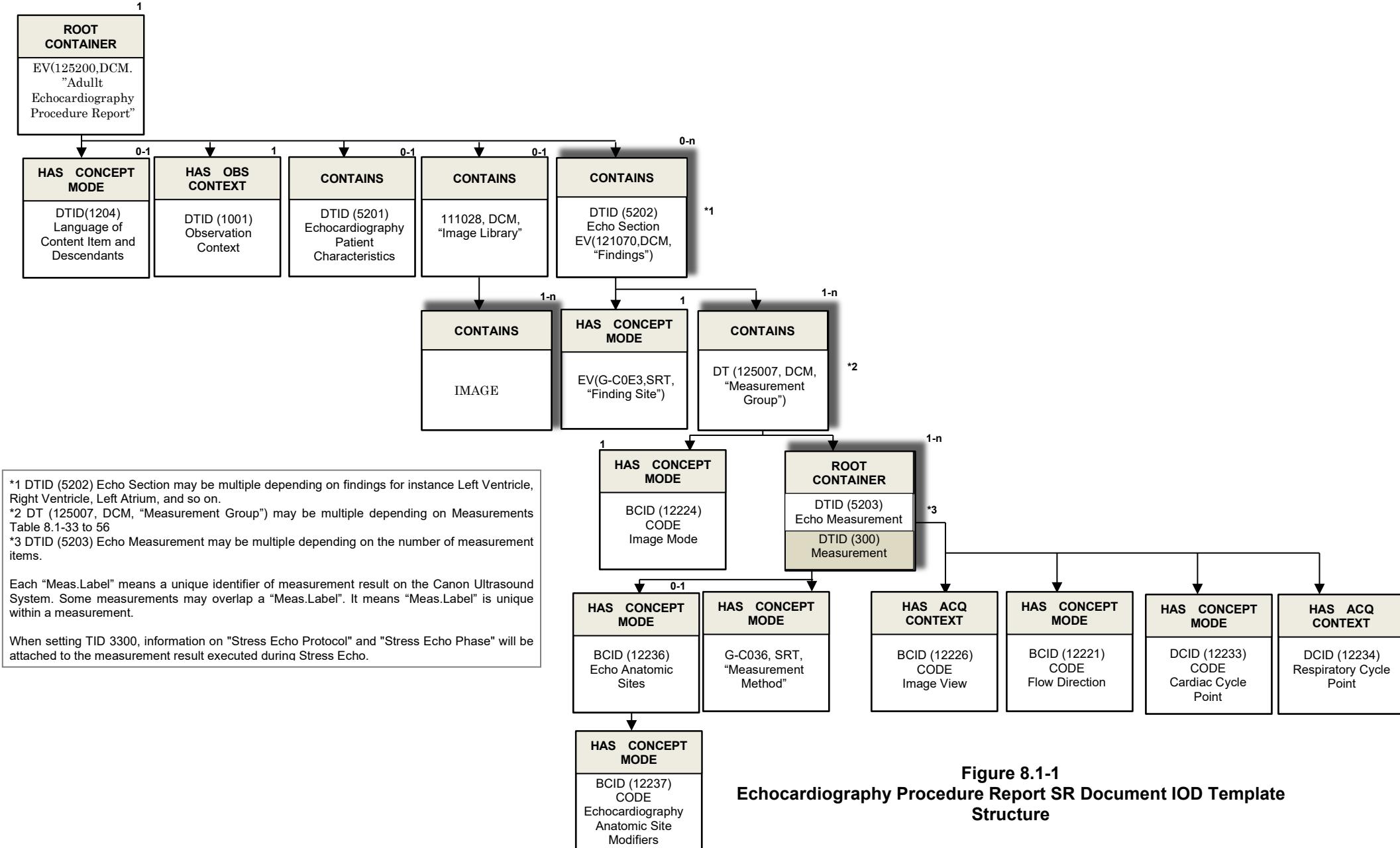
Attribute Name	Tag	VR	Value	Presence of Value	Source																								
>>>Code Value	(0008,0100)	SH	8277-6	ANAP	AUTO																								
>>>Coding Scheme Designator	(0008,0102)	SH	LN	ANAP	AUTO																								
>>>>Code Meaning	(0008,0104)	LO	Body Surface Area	ANAP	AUTO																								
>>Measured Value Sequence	(0040,A300)	SQ		ALWAYS	AUTO																								
>>Measured Units Code Sequence	(0040,08EA)	SQ		ALWAYS	AUTO																								
>>>>Code Value	(0008,0100)	SH	m2	ANAP	AUTO																								
>>>>Coding Scheme Designator	(0008,0102)	SH	UCUM	ANAP	AUTO																								
>>>>Code Meaning	(0008,0104)	LO	M^2	ANAP	AUTO																								
>>Numeric Value	(0040,A30A)	DS		ALWAYS	AUTO																								
>Relationship Type	(0040,A010)	CS	CONTAINS	ALWAYS	AUTO																								
>Value Type	(0040,A040)	CS	CONTAINER	ALWAYS	AUTO																								
>Concept Name Code Sequence	(0040,A043)	SQ		ANAP	AUTO																								
>>Code Value	(0008,0100)	SH	111028	ANAP	AUTO																								
>>Coding Scheme Designator	(0008,0102)	SH	DCM	ANAP	AUTO																								
>>Code Meaning	(0008,0104)	LO	Image Library	ANAP	AUTO																								
>>Continuity of Content	(0040,A050)	CS	SEPARATE	ALWAYS	AUTO																								
>>Content Sequence	(0040,A730)	SQ		ANAP	AUTO																								
>>Referenced SOP Sequence	(0008,1199)	SQ		ALWAYS	AUTO																								
>>Referenced SOP Class UID	(0008,1150)	UI		ALWAYS	AUTO																								
>>Referenced SOP Instance UID	(0008,1155)	UI		ALWAYS	AUTO																								
>>Relationship Type	(0040,A010)	CS	CONTAINS	ALWAYS	AUTO																								
>>Value Type	(0040,A040)	CS	IMAGE	ALWAYS	AUTO																								
>Relationship Type	(0040,A010)	CS	CONTAINS	ALWAYS	AUTO																								
>Value Type	(0040,A040)	CS	CONATINER	ALWAYS	AUTO																								
>Concept Name Code Sequence	(0040,A043)	SQ		ALWAYS	AUTO																								
>>Code Value	(0008,0100)	SH	121070	ALWAYS	AUTO																								
>>Coding Scheme Designator	(0008,0102)	SH	DCM	ALWAYS	AUTO																								
>>Code Meaning	(0008,0104)	LO	Findings	ALWAYS	AUTO																								
>>Continuity of Content	(0040,A050)	CS	SEPARATE	ALWAYS	AUTO																								
>>Content Sequence	(0040,A730)	SQ		ALWAYS	AUTO																								
>>Relationship Type	(0040,A010)	CS	HAS CONCEPT MOD	ALWAYS	AUTO																								
>>Value Type	(0040,A040)	CS	CODE	ALWAYS	AUTO																								
>>Concept Name Code Sequence	(0040,A043)	SQ		ALWAYS	AUTO																								
>>>Code Value	(0008,0100)	SH	G-C0E3	ALWAYS	AUTO																								
>>>Coding Scheme Designator	(0008,0102)	SH	SRT	ALWAYS	AUTO																								
>>>Code Meaning	(0008,0104)	LO	Finding Site	ALWAYS	AUTO																								
>>Concept Code Sequence	(0040,A168)	SQ		ALWAYS	AUTO																								
>>>Code Value	(0008,0100)	SH	<table border="1"> <thead> <tr> <th>CV</th> <th>CSD</th> <th>CM</th> </tr> </thead> <tbody> <tr> <td>T-32600</td> <td>SRT</td> <td>Left Ventricle</td> </tr> <tr> <td>T-32300</td> <td>SRT</td> <td>Left Atrium</td> </tr> <tr> <td>T-32500</td> <td>SRT</td> <td>Right Ventricle</td> </tr> <tr> <td>T-35400</td> <td>SRT</td> <td>Aortic Valve</td> </tr> <tr> <td>T-35300</td> <td>SRT</td> <td>Mitral Valve</td> </tr> <tr> <td></td> <td></td> <td>Pulmonary Venous Structure</td> </tr> <tr> <td>T-48581</td> <td>SRT</td> <td></td> </tr> </tbody> </table>	CV	CSD	CM	T-32600	SRT	Left Ventricle	T-32300	SRT	Left Atrium	T-32500	SRT	Right Ventricle	T-35400	SRT	Aortic Valve	T-35300	SRT	Mitral Valve			Pulmonary Venous Structure	T-48581	SRT		ALWAYS	AUTO
CV	CSD	CM																											
T-32600	SRT	Left Ventricle																											
T-32300	SRT	Left Atrium																											
T-32500	SRT	Right Ventricle																											
T-35400	SRT	Aortic Valve																											
T-35300	SRT	Mitral Valve																											
		Pulmonary Venous Structure																											
T-48581	SRT																												
>>>Coding Scheme Designator	(0008,0102)	SH	<table border="1"> <tbody> <tr> <td>T-35100</td> <td>SRT</td> <td>Tricuspid Valve</td> </tr> <tr> <td>T-35200</td> <td>SRT</td> <td>Pulmonic Valve</td> </tr> <tr> <td>3270000</td> <td>TSBus</td> <td>Right Coronary Artery</td> </tr> <tr> <td>3270001</td> <td>TSBus</td> <td>Left Anterior Descending Coronary Artery</td> </tr> </tbody> </table>	T-35100	SRT	Tricuspid Valve	T-35200	SRT	Pulmonic Valve	3270000	TSBus	Right Coronary Artery	3270001	TSBus	Left Anterior Descending Coronary Artery	ALWAYS	AUTO												
T-35100	SRT	Tricuspid Valve																											
T-35200	SRT	Pulmonic Valve																											
3270000	TSBus	Right Coronary Artery																											
3270001	TSBus	Left Anterior Descending Coronary Artery																											

Attribute Name	Tag	VR	Value			Presence of Value	Source
>>>Code Meaning	(0008,0104)	LO	P5-30031	SRT	Cardiac Shunt Study	ALWAYS	AUTO
			T-32200	SRT	Right Atrium		
			T-42000	SRT	Aorta		
			T-44000	SRT	Pulmonary artery		
			T-48600	SRT	Vena Cava		
			D4-30000	SRT	Congenital Anomaly of Cardiovascular System		
>>Relationship Type	(0040,A010)	CS	CONTAINS			ALWAYS	AUTO
>>Value Type	(0040,A040)	CS	CONTAINER			ALWAYS	AUTO
>>Concept Name Code Sequence	(0040,A043)	SQ				ALWAYS	AUTO
>>>Code Value	(0008,0100)	SH	125007			ALWAYS	AUTO
>>>Coding Scheme Designator	(0008,0102)	SH	DCM			ALWAYS	AUTO
>>>Code Meaning	(0008,0104)	LO	Measurement Group			ALWAYS	AUTO
>>Continuity of Content	(0040,A050)	CS	SEPARATE			ALWAYS	AUTO
>>Content Sequence	(0040,A730)	SQ				ALWAYS	AUTO
>>>Relationship Type	(0040,A010)	CS	HAS CONCEPT MOD			ALWAYS	AUTO
>>>Value Type	(0040,A040)	CS	CODE			ALWAYS	AUTO
>>>Concept Name Code Sequence	(0040,A043)	SQ				ANAP	AUTO
>>>>Code Value	(0008,0100)	SH	G-0373			ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)	SH	SRT			ANAP	AUTO
>>>>Code Meaning	(0008,0104)	LO	Image Mode			ANAP	AUTO
>>>>Concept Code Sequence	(0040,A168)	SQ				ALWAYS	AUTO
>>>>Code Value	(0008,0100)	SH	CV	CSD	CM	ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)	SH	G-03A2	SRT	2D mode	ANAP	AUTO
>>>>Code Meaning	(0008,0104)	LO	G-0394	SRT	M mode	ANAP	AUTO
>>>>Measured Value Sequence	(0040,A300)	SQ	03210001	TSBus	Doppler Mode	ANAP	AUTO
>>>>Relationship Type	(0040,A010)	CS	CONTAINS			ALWAYS	AUTO
>>>>Value Type	(0040,A040)	CS	NUM			ALWAYS	AUTO
>>>>Concept Name Code Sequence	(0040,A043)	SQ				ALWAYS	AUTO
>>>>Code Value	(0008,0100)	SH				ALWAYS	AUTO
>>>>Coding Scheme Designator	(0008,0102)	SH				ALWAYS	AUTO
>>>>Code Meaning	(0008,0104)	LO	Measurement name or description			ALWAYS	AUTO
>>>>Measured Units Code Sequence	(0040,08EA)	SQ				ALWAYS	AUTO
>>>>>Code Value	(0008,0100)	SH				ALWAYS	AUTO
>>>>>Coding Scheme Designator	(0008,0102)	SH				ALWAYS	AUTO
>>>>>Code Meaning	(0008,0104)	LO				ALWAYS	AUTO
>>>>>Numeric Value	(0040,A30A)	DS				ALWAYS	AUTO
>>>>Content Sequence	(0040,A730)	SQ				ANAP	AUTO
>>>>Relationship Type	(0040,A010)	CS	HAS CONCEPT MOD			ALWAYS	AUTO
>>>>Value Type	(0040,A040)	CS	CODE			ALWAYS	AUTO
>>>>Concept Name Code Sequence	(0040,A043)	SQ				ANAP	AUTO
>>>>Code Value	(0008,0100)	SH	G-C0E3			ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)	SH	SRT			ANAP	AUTO
>>>>Code Meaning	(0008,0104)	LO	Finding Site			ANAP	AUTO
>>>>Concept Name Code Sequence	(0040,A043)	SQ				ANAP	AUTO

Attribute Name	Tag	VR	Value			Presence of Value	Source
>>>>Code Value	(0008,0100)	SH	CV	CSD	CM	ANAP	AUTO
			G-0391	SRT	Medial Mitral Annulus		
			G-0392	SRT	Lateral Mitral Annulus		
			T-35313	SRT	Mitral Annulus		
			T-32600	SRT	Left Ventricle		
>>>>Coding Scheme Designator	(0008,0102)	SH	T-32650	SRT	Left Ventricle Outflow Tract	ANAP	AUTO
			T-32550	SRT	Right Ventricle Outflow Tract		
			T-35300	SRT	Mitral Valve		
			T-42000	SRT	Aorta		
			T-35111	SRT	Tricuspid Annulus		
>>>>Code Meaning	(0008,0104)	LO	T-35410	SRT	Aortic Valve Ring	ANAP	AUTO
			D4-31150	SRT	Ventricular Septal Defect		
			D4-31220	SRT	Atrial Septal Defect		
>>>>Relationship Type	(0040,A010)	CS	HAS CONCEPT MOD			ALWAYS	AUTO
>>>>Value Type	(0040,A040)	CS	CODE			ALWAYS	AUTO
>>>>Concept Name Code Sequence	(0040,A043)	SQ				ANAP	AUTO
>>>>>Code Value	(0008,0100)	SH	G-A1F8			ANAP	AUTO
>>>>>Coding Scheme Designator	(0008,0102)	SH	SRT			ANAP	AUTO
>>>>>Code Meaning	(0008,0104)	LO	Topographical modifier			ANAP	AUTO
>>>>Concept Name Code Sequence	(0040,A043)	SQ				ANAP	AUTO
>>>>>Code Value	(0008,0100)	SH	CV	CSD	CM	ANAP	AUTO
			R-404A0	SRT	Right Upper Segment		
>>>>>Coding Scheme Designator	(0008,0102)	SH	R-4049E	SRT	Right Lower Segment	ANAP	AUTO
			R-40491	SRT	Left Upper Segment		
>>>>>Code Meaning	(0008,0104)	LO	R-4214B	SRT	Left Lower Segment	ANAP	AUTO
>>>Relationship Type	(0040,A010)	CS	HAS CONCEPT MOD			ALWAYS	AUTO
>>>Value Type	(0040,A040)	CS	CODE			ALWAYS	AUTO
>>>Concept Name Code Sequence	(0040,A043)	SQ				ANAP	AUTO
>>>>Code Value	(0008,0100)	SH	R-40899			ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)	SH	SRT			ANAP	AUTO
>>>>Code Meaning	(0008,0104)	LO	Respiratory Cycle Point			ANAP	AUTO
>>>Concept Code Sequence	(0040,A168)	SQ				ALWAYS	AUTO
>>>>Code Value	(0008,0100)	SH	CV	CSD	CM	ANAP	AUTO
			F-20010	SRT	During Inspiration		
>>>>Coding Scheme Designator	(0008,0102)	SH	F-20020	SRT	During Expiration	ANAP	AUTO
>>>>Code Meaning	(0008,0104)	LO				ANAP	AUTO
>>>Relationship Type	(0040,A010)	CS	HAS CONCEPT MOD			ALWAYS	AUTO
>>>Value Type	(0040,A040)	CS	CODE			ALWAYS	AUTO
>>>Concept Name Code Sequence	(0040,A043)	SQ				ANAP	AUTO
>>>>Code Value	(0008,0100)	SH	R-4089A			ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)	SH	SRT			ANAP	AUTO

Attribute Name	Tag	VR	Value			Presence of Value	Source
>>>>Code Meaning	(0008,0104)	LO	Cardiac Cycle Point			ANAP	AUTO
>>>>Concept Code Sequence	(0040,A168)	SQ				ALWAYS	AUTO
>>>>Code Value	(0008,0100)	SH	CV	CSD	CM	ANAP	AUTO
			F-32010	SRT	Diastole		
			F-32011	SRT	End Diastole	ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)	SH	F-32020	SRT	Systole	ANAP	AUTO
			109070	DCM	End Systole		
						ANAP	AUTO
>>>>Code Meaning	(0008,0104)	LO				ALWAYS	AUTO
>>>>Relationship Type	(0040,A010)	CS	HAS CONCEPT MOD			ALWAYS	AUTO
>>>>Value Type	(0040,A040)	CS	CODE			ALWAYS	AUTO
>>>>Concept Name Code Sequence	(0040,A043)	SQ				ANAP	AUTO
>>>>Code Value	(0008,0100)	SH	CV	CSD	CM	ANAP	AUTO
			125204	DCM	Area-Length Biplane		
			125205	DCM	Area-Length Single Plane		
			125206	DCM	Cube Method		
			125207	DCM	Method of Disks, Biplane		
			125208	DCM	Method of Disks, Single Plane		
>>>>Coding Scheme Designator	(0008,0102)	SH	125209	DCM	Teichholz	ANAP	AUTO
			125210	DCM	Area by Pressure Half-Time		
			125215	DCM	Continuity Equation by Velocity Time Integral		
			125216	DCM	Proximal Isovelocity Surface Area		
>>>>Code Meaning	(0008,0104)	LO	125218	DCM	Simplified Bernoulli	ANAP	AUTO
			125221	DCM	Left Ventricle Mass by M-mode		
			125222	DCM	Left Ventricle Mass by Truncated Ellipse		
			03500000	TSBus	Bullet Method		
			0317000A	TSBus	Gibson Method		
>>>Relationship Type	(0040,A010)	CS	ACQ CONTEXT			ALWAYS	AUTO
>>>Value Type	(0040,A040)	CS	CODE			ALWAYS	AUTO
>>>Concept Name Code Sequence	(0040,A043)	SQ				ANAP	AUTO
>>>>Code Value	(0008,0100)	SH	111031			ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)	SH	DCM			ANAP	AUTO
>>>>Code Meaning	(0008,0104)	LO	Image View			ANAP	AUTO

Attribute Name	Tag	VR	Value			Presence of Value	Source
>>>>Concept Code Sequence	(0040,A168)	SQ				ALWAYS	AUTO
>>>>Code Value	(0008,0100)	SH	CV	CSD	CM	ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)		G-A19B	SRT	Apical two chamber		
>>>>Code Meaning	(0008,0104)	LO	G-A19C	SRT	Apical four chamber	ANAP	AUTO
>>>>Relationship Type	(0040,A010)		CS	HAS CONCEPT MOD			ALWAYS
>>>>Value Type	(0040,A040)	CS	CODE			ALWAYS	AUTO
>>>>Concept Name Code Sequence	(0040,A043)	SQ				ANAP	AUTO
>>>>Code Value	(0008,0100)	SH	G-C048			ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)	SH	SRT			ANAP	AUTO
>>>>Code Meaning	(0008,0104)	LO	Flow Direction			ANAP	AUTO
>>>>Concept Code Sequence	(0040,A168)	SQ				ALWAYS	AUTO
>>>>Code Value	(0008,0100)	SH	CV	CSD	CM	ANAP	AUTO
>>>>Coding Scheme Designator	(0008,0102)		R-42047	SRT	Antegrade Flow		
>>>>Code Meaning	(0008,0104)	LO	R-42E61	SRT	Regurgitant Flow	ANAP	AUTO



**Table 8.1-27 to Table 8.1-50** shows the relationship between unique identifiers "Meas.Label" and DICOM tags structures.  
 Note: Meas.No, LV Parallel and Meas.Label are just for internal use, and those values are not output.

**Table 8.1-27**  
**Cardiac 2D-Mode LV measurement (MOD Simpson method)**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0001		LVAd2	SRT	G-0375	Left Ventricular Diastolic Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32011	End Diastole	DCM	125208	Method of Disks, Single Plane
0002		LVLd2	LN	18077-8	Left Ventricle diastolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32011	End Diastole	DCM	125208	Method of Disks, Single Plane
0003		EDV2	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber				DCM	125208	Method of Disks, Single Plane
1163		LVCLd2	TSBus	03010011	Left Ventricular Contour Length	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32011	End Diastole			
0007		LVAs2	SRT	G-0374	Left Ventricular systolic Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane
0008		LVLs2	LN	18076-0	Left Ventricle systolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane
0009		ESV2	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber				DCM	125208	Method of Disks, Single Plane
1164		LVCLs2	TSBus	03010011	Left Ventricular Contour Length	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	DCM	109070	End Systole			
1255		LVAd3	SRT	G-0375	Left Ventricular Diastolic Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32011	End Diastole	DCM	125208	Method of Disks, Single Plane
1256		LVLd3	LN	18077-8	Left Ventricle diastolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32011	End Diastole	DCM	125208	Method of Disks, Single Plane
1257		EDV3	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis				DCM	125208	Method of Disks, Single Plane
1258		LVCLd3	TSBus	03010011	Left Ventricular Contour Length	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32011	End Diastole			

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
1259		LVAs3	SRT	G-0374	Left Ventricular systolic Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane
1260		LVLs3	LN	18076-0	Left Ventricle systolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane
1261		ESV3	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis				DCM	125208	Method of Disks, Single Plane
1262		LVCLs3	TSBus	03010011	Left Ventricular Contour Length	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	DCM	109070	End Systole			
0013		LVAd4	SRT	G-0375	Left Ventricular Diastolic Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32011	End Diastole	DCM	125208	Method of Disks, Single Plane
0014		LVLd4	LN	18077-8	Left Ventricle diastolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32011	End Diastole	DCM	125208	Method of Disks, Single Plane
0015		EDV4	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber				DCM	125208	Method of Disks, Single Plane
1165		LVCLd4	TSBus	03010011	Left Ventricular Contour Length	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32011	End Diastole			
0019		LVAs4	SRT	G-0374	Left Ventricular systolic Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane
0020		LVLs4	LN	18076-0	Left Ventricle systolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane
0021		ESV4	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber				DCM	125208	Method of Disks, Single Plane
1166		LVCLs4	TSBus	03010011	Left Ventricular Contour Length	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	DCM	109070	End Systole			
0025		LAa4	TSBus	03010002	Left Atrium Area	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0026		LAd4	TSBus	03010003	Left Atrium major axis	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane
0027		LAV4	TSBus	03010004	Left Atrium Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane
1173		LACL4	TSBus	03010013	Left Atrium Contour Length	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber						
0031		LAa2	TSBus	03010002	Left Atrium Area	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane
0032		LAd2	TSBus	03010003	Left Atrium major axis	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane
0033		LAV2	TSBus	03010004	Left Atrium Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane
1174		LACL2	TSBus	03010013	Left Atrium Contour Length	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber						
0037		LA W	TSBus	03010005	Left Atrium Width	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				DCM	109070	End Systole			
0039		LA H	TSBus	03010006	Left Atrium Height	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				DCM	109070	End Systole			
0041		LA D	TSBus	03010007	Left Atrium Depth	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				DCM	109070	End Systole			
0043		HR	LN	8867-4	Heart rate	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode									
0045		EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125207	Method of Disks, Biplane
0047		ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125207	Method of Disks, Biplane
0049		SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125207	Method of Disks, Biplane

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0051		CO	SRT	F-32100	Cardiac Output	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125207	Method of Disks, Biplane
0053		EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125207	Method of Disks, Biplane
0055		SI	SRT	F-00078	Stroke Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125207	Method of Disks, Biplane
0057		CI	SRT	F-32110	Cardiac Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125207	Method of Disks, Biplane
0059		SV4	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane
0061		CO4	SRT	F-32100	Cardiac Output	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane
0063		EF4	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber				DCM	125208	Method of Disks, Single Plane
0065		SI4	SRT	F-00078	Stroke Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane
0067		CI4	SRT	F-32110	Cardiac Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane
0069		SV2	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane
0071		CO2	SRT	F-32100	Cardiac Output	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane
0073		EF2	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber				DCM	125208	Method of Disks, Single Plane
0075		SI2	SRT	F-00078	Stroke Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane
0077		CI2	SRT	F-32110	Cardiac Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
1263		SV3	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane
1264		CO3	SRT	F-32100	Cardiac Output	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane
1265		EF3	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis				DCM	125208	Method of Disks, Single Plane
1266		SI3	SRT	F-00078	Stroke Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane
1267		CI3	SRT	F-32110	Cardiac Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane
0079		LVLD Diff	TSBus	03010000	LV_Ldiff_d_BP MOD	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole			
0080		LVLs Diff	TSBus	03010001	LV_Ldiff_s_BP MOD	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole			
0083		LAV	TSBus	0301000B	Left Atrium Volume Biplane Method of Disks.	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125207	Method of Disks, Biplane
0085		LAVI	TSBus	0301000C	Left Atrium Volume Index	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				DCM	109070	End Systole			
0087		LAVI2	TSBus	0301000C	Left Atrium Volume Index	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane
0089		LAVI4	TSBus	0301000C	Left Atrium Volume Index	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane
0091		LA_Vol	TSBus	0301000F	Left Atrium Volume 3 axis method	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				DCM	109070	End Systole			
0093		LA_VI	TSBus	0301000A	Left Atrium Volume Index 3 axis method	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				DCM	109070	End Systole			

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0095		LAV(AL)	TSBus	03010010	Left Atrium Volume Biplane Area-Length	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125204	Area-Length Biplane
0097		LAVI(AL)	TSBus	0301000C	Left Atrium Volume Index	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125204	Area-Length Biplane
1167		GLS4 (MOD)	TSBus	03010012	Left Ventricular Global Longitudinal Strain	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber						
1168		GLS2 (MOD)	TSBus	03010012	Left Ventricular Global Longitudinal Strain	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber						
1268		GLS3 (MOD)	TSBus	03010012	Left Ventricular Global Longitudinal Strain	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis						
1169		GLS (MOD)	TSBus	03010012	Left Ventricular Global Longitudinal Strain	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode									

**Table 8.1-28**  
**Cardiac 2D-Mode LV measurement (Teichholz method)**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0150	4 Section	RVD	LN	20304-2	Right Ventricular Internal Diastolic Dimension	SRT	T-32500	Right Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0155		IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0161		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125209	Teichholz
0167		LVPWTD	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0154	3 Section	IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0160		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125209	Teichholz
0166		LVPWTD	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0172		IVSTS	LN	18158-6	Interventricular Septum Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125209	Teichholz
0176		LVIDs	LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125209	Teichholz
0180		LVPWTs	LN	18156-0	Left Ventricle Posterior Wall Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125209	Teichholz

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0099		HR	LN	8867-4	Heart rate	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125209	Teichholz
0149	1Section	RVD	LN	20304-2	Right Ventricular Internal Diastolic Dimension	SRT	T-32500	Right Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0153		IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0159		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125209	Teichholz
0165		LVPWTD	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0171		IVSTS	LN	18158-6	Interventricular Septum Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125209	Teichholz
0175		LVIDs	LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125209	Teichholz
0179		LVPWTs	LN	18156-0	Left Ventricle Posterior Wall Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125209	Teichholz
0101		EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125209	Teichholz
0103		ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125209	Teichholz
0105		SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125209	Teichholz
0107		CO	SRT	F-32100	Cardiac Output	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125209	Teichholz
0109		EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125209	Teichholz

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0111		FS	LN	18051-3	Left Ventricular Fractional Shortening	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode									
0113		SI	SRT	F-00078	Stroke Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125209	Teichholz
0115		CI	SRT	F-32110	Cardiac Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125209	Teichholz
0117		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030002	Mass ASECube with Teichholz
0119		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030003	Mass PennCube with Teichholz
0121		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030004	Mass Teichholz with Teichholz
0123		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030005	Mass AVCube with Teichholz
0125		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030002	Mass ASECube with Teichholz
0127		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030003	Mass PennCube with Teichholz
0129		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030004	Mass Teichholz with Teichholz
0131		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030005	Mass AVCube with Teichholz
0133		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030002	Mass ASECube with Teichholz
0135		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030003	Mass PennCube with Teichholz

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0137		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030004	Mass Teichholz with Teichholz
0139		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030005	Mass AVCube with Teichholz
0141		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030002	Mass ASECube with Teichholz
0143		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030003	Mass PennCube with Teichholz
0145		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030004	Mass Teichholz with Teichholz
0147		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030005	Mass AVCube with Teichholz

**Table 8.1-29**  
**Cardiac 2D-Mode LV measurement (Cube method)**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0234	4Section	RVD	LN	20304-2	Right Ventricular Internal Diastolic Dimension	SRT	T-32500	Right Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0239		IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0245		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125206	Cube Method
0251		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0256	3Section	IVSTS	LN	18158-6	Interventricular Septum Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125206	Cube Method
0260		LVIDs	LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125206	Cube Method
0264		LVPWTs	LN	18156-0	Left Ventricle Posterior Wall Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125206	Cube Method
0238		IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0244		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125206	Cube Method
0250		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0183		HR	LN	8867-4	Heart rate	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125206	Cube Method
0233	1Section	RVD	LN	20304-2	Right Ventricular Internal Diastolic Dimension	SRT	T-32500	Right Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0237		IVSTD	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0243		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125206	Cube Method
0249		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0255		IVSTS	LN	18158-6	Interventricular Septum Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125206	Cube Method
0259		LVIDs	LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125206	Cube Method
0263		LVPWTs	LN	18156-0	Left Ventricle Posterior Wall Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125206	Cube Method
0185		EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125206	Cube Method
0187		ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125206	Cube Method
0189		SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125206	Cube Method
0191		CO	SRT	F-32100	Cardiac Output	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125206	Cube Method

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0193		EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125206	Cube Method
0195		FS	LN	18051-3	Left Ventricular Fractional Shortening	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode									
0197		SI	SRT	F-00078	Stroke Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125206	Cube Method
0199		CI	SRT	F-32110	Cardiac Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125206	Cube Method
0201		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030006	Mass ASECube with Cube
0203		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030007	Mass PennCube with Cube
0205		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030008	Mass Teichholz with Cube
0207		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030009	Mass AVCube with Cube
0209		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030006	Mass ASECube with Cube
0211		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030007	Mass PennCube with Cube
0213		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030008	Mass Teichholz with Cube
0215		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030009	Mass AVCube with Cube
0217		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030006	Mass ASECube with Cube

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0219		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030007	Mass PennCube with Cube
0221		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030008	Mass Teichholz with Cube
0223		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	03030009	Mass AVCube with Cube
0225		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030006	Mass ASECube with Cube
0227		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030007	Mass PennCube with Cube
0229		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030008	Mass Teichholz with Cube
0231		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	03030009	Mass AVCube with Cube

**Table 8.1-30**  
**Cardiac 2D-Mode LV measurement (Gibson method)**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0318	4Section	RVD	LN	20304-2	Right Ventricular Internal Diastolic Dimension	SRT	T-32500	Right Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0323		IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0329		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							TSBus	0317000A	Gibson Method
0335		LVPWTD	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0340	3Section	IVSTS	LN	18158-6	Interventricular Septum Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0317000A	Gibson Method
0344		LVIDs	LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0317000A	Gibson Method
0348		LVPWTs	LN	18156-0	Left Ventricle Posterior Wall Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0317000A	Gibson Method
0322		IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0328		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							TSBus	0317000A	Gibson Method

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0334		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0267		HR	LN	8867-4	Heart rate	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							TSBus	0317000A	Gibson Method
0317	1Section	RVD	LN	20304-2	Right Ventricular Internal Diastolic Dimension	SRT	T-32500	Right Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0321		IVSTD	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0327		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							TSBus	0317000A	Gibson Method
0333		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0339		IVSTS	LN	18158-6	Interventricular Septum Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0317000A	Gibson Method
0343		LVIDs	LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0317000A	Gibson Method
0347		LVPWTs	LN	18156-0	Left Ventricle Posterior Wall Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0317000A	Gibson Method
0269		EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							TSBus	0317000A	Gibson Method
0271		ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							TSBus	0317000A	Gibson Method

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0273		SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	TSBus	0317000A	Gibson Method
0275		CO	SRT	F-32100	Cardiac Output	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	TSBus	0317000A	Gibson Method
0277		EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							TSBus	0317000A	Gibson Method
0279		FS	LN	18051-3	Left Ventricular Fractional Shortening	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode									
0281		SI	SRT	F-00078	Stroke Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	TSBus	0317000A	Gibson Method
0283		CI	SRT	F-32110	Cardiac Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	TSBus	0317000A	Gibson Method
0285		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0303000A	Mass ASECube with Gibson
0287		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0303000B	Mass PennCube with Gibson
0289		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0303000C	Mass Teichholz with Gibson
0291		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0303000D	Mass AVCube with Gibson
0293		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0303000A	Mass ASECube with Gibson
0295		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0303000B	Mass PennCube with Gibson
0297		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0303000C	Mass Teichholz with Gibson
0299		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0303000D	Mass AVCube with Gibson

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0301		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0303000A	Mass ASECube with Gibson
0303		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0303000B	Mass PennCube with Gibson
0305		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0303000C	Mass Teichholz with Gibson
0307		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	TSBus	0303000D	Mass AVCube with Gibson
0309		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0303000A	Mass ASECube with Gibson
0311		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0303000B	Mass PennCube with Gibson
0313		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0303000C	Mass Teichholz with Gibson
0315		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	TSBus	0303000D	Mass AVCube with Gibson

**Table 8.1-31**  
**Cardiac 2D-Mode LV measurement (Single plane method)**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0351		LVALd	SRT	G-0375	Left Ventricular Diastolic Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32011	End Diastole	DCM	125205	Area-Length Single Plane
0353		LVALs	SRT	G-0374	Left Ventricular Systolic Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	DCM	109070	End Systole	DCM	125205	Area-Length Single Plane
0355		LVLd	LN	18077-8	Left Ventricle diastolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32011	End Diastole	DCM	125205	Area-Length Single Plane
0357		LVLs	LN	18076-0	Left Ventricle systolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				DCM	109070	End Systole	DCM	125205	Area-Length Single Plane
0359		HR	LN	8867-4	Heart rate	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125205	Area-Length Single Plane
0361		EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125205	Area-Length Single Plane
0363		ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125205	Area-Length Single Plane
0365		SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125205	Area-Length Single Plane
0367		CO	SRT	F-32100	Cardiac Output	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125205	Area-Length Single Plane
0369		EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125205	Area-Length Single Plane
0371		SI	SRT	F-00078	Stroke Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125205	Area-Length Single Plane
0373		CI	SRT	F-32110	Cardiac Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125205	Area-Length Single Plane

**Table 8.1-32**  
**Cardiac 2D-Mode LV measurement (Biplane method)**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0375		LVALd	LN	G-0375	Left Ventricular Diastolic Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32011	End Diastole	DCM	125204	Area-Length Biplane
0377		LVAMd	LN	G-0375	Left Ventricular Diastolic Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-039A	Parasternal short axis at the Mitral Valve level	SRT	F-32011	End Diastole	DCM	125204	Area-Length Biplane
0379		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis				DCM	125204	Area-Length Biplane
0381		LVALs	SRT	G-0374	Left Ventricular Systolic Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	DCM	109070	End Systole	DCM	125204	Area-Length Biplane
0383		LVAMs	SRT	G-0374	Left Ventricular Systolic Area	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-039A	Parasternal short axis at the Mitral Valve level	DCM	109070	End Systole	DCM	125204	Area-Length Biplane
0385		LVIDs	LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	DCM	109070	End Systole	DCM	125204	Area-Length Biplane
0387		HR	LN	8867-4	Heart rate	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125204	Area-Length Biplane
0389		EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125204	Area-Length Biplane
0391		ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125204	Area-Length Biplane
0393		SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125204	Area-Length Biplane
0395		CO	SRT	F-32100	Cardiac Output	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125204	Area-Length Biplane
0397		EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							DCM	125204	Area-Length Biplane
0399		SI	SRT	F-00078	Stroke Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125204	Area-Length Biplane

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0401		CI	SRT	F-32110	Cardiac Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	DCM	125204	Area-Length Biplane

**Table 8.1-33**  
**Cardiac 2D-Mode LV measurement (Bullet method)**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0403		LVAMd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-039A	Parasternal short axis at the Mitral Valve level				TSBus	03500000	Bullet Method
0405		LVLd	LN	18077-8	Left Ventricle diastolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32011	End Diastole	TSBus	03500000	Bullet Method
0407		LVAMs	LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-039A	Parasternal short axis at the Mitral Valve level	DCM	109070	End Systole	TSBus	03500000	Bullet Method
0409		LVLs	LN	18076-0	Left Ventricle systolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	DCM	109070	End Systole	TSBus	03500000	Bullet Method
0411		HR	LN	8867-4	Heart rate	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							TSBus	03500000	Bullet Method
0413		EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							TSBus	03500000	Bullet Method
0415		ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							TSBus	03500000	Bullet Method
0417		SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	TSBus	03500000	Bullet Method
0419		CO	SRT	F-32100	Cardiac Output	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	TSBus	03500000	Bullet Method
0421		EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode							TSBus	03500000	Bullet Method
0423		SI	SRT	F-00078	Stroke Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	TSBus	03500000	Bullet Method
0425		CI	SRT	F-32110	Cardiac Index	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode				SRT	F-32020	Systole	TSBus	03500000	Bullet Method

**Table 8.1-34**  
**Cardiac 2D-Mode LA Volume measurement**

Meas. No.	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method			Derivation		Index			
		CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
1175	LAA4 max	SRT	G-A166	Area	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	R-FAB5B	End Systole				DCM	125208	Method of Disks, Single Plane						
1176	LAL4 max	SRT	G-A193	Major axis	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	R-FAB5B	End Systole				DCM	125208	Method of Disks, Single Plane						
1269	LAD4 max	TSBus	03400008	Left Atrium Diameter	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	R-FAB5B	End Systole				DCM	125208	Method of Disks, Single Plane						
1177	LACL4 max	SRT	M-02560	Circumference	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	R-FAB5B	End Systole				DCM	125208	Method of Disks, Single Plane						
1178	LAA2 max	SRT	G-A166	Area	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	R-FAB5B	End Systole				DCM	125208	Method of Disks, Single Plane						
1179	LAL2 max	SRT	G-A193	Major axis	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	R-FAB5B	End Systole				DCM	125208	Method of Disks, Single Plane						
1270	LAD2 max	TSBus	03400008	Left Atrium Diameter	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	R-FAB5B	End Systole				DCM	125208	Method of Disks, Single Plane						
1180	LACL2 max	SRT	M-02560	Circumference	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	R-FAB5B	End Systole				DCM	125208	Method of Disks, Single Plane						
1181	LAV4 max	DCM	122408	Left Atrial End Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	R-FAB5B	End Systole				DCM	125208	Method of Disks, Single Plane						
1182	LAV2 max	DCM	122408	Left Atrial End Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	R-FAB5B	End Systole				DCM	125208	Method of Disks, Single Plane						
1183	LAV max(MOD)	DCM	122408	Left Atrial End Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	R-FAB5B	End Systole				DCM	125207	Method of Disks, Biplane						
1184	LAVI max(MOD)	DCM	122408	Left Atrial End Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	R-FAB5B	End Systole				DCM	125207	Method of Disks, Biplane	DCM	125313	Index	LN	8277-6	BSA

Meas. No.	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method			Derivation			Index		
		CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
1185	LAVI2 max	DCM	122408	Left Atrial End Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	R-FAB5B	End Systole				DCM	125208	Method of Disks, Single Plane	DCM	125313	Index	LN	8277-6	BSA
1186	LAVI4 max	DCM	122408	Left Atrial End Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	R-FAB5B	End Systole				DCM	125208	Method of Disks, Single Plane	DCM	125313	Index	LN	8277-6	BSA
1187	LAL max diff	LN	59132-1	Fractional Shortering	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	R-FAB5B	End Systole				DCM	125207	Method of Disks, Biplane						
1188	LAV max(AL)	DCM	122408	Left Atrial End Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	R-FAB5B	End Systole				DCM	125204	Area-Length Biplane						
1189	LAVI max(AL)	DCM	122408	Left Atrial End Systolic Volume	SRT	T-32300	Left Atrium							SRT	R-FAB5B	End Systole				DCM	125204	Area-Length Biplane	DCM	125313	Index	LN	8277-6	BSA
1190	LAA4 min	SRT	G-A166	Area	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	R-FAB5C	End Diastole				DCM	125208	Method of Disks, Single Plane						
1191	LAL4 min	SRT	G-A193	Major axis	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	R-FAB5C	End Diastole				DCM	125208	Method of Disks, Single Plane						
1192	LACL4 min	SRT	M-02560	Circumference	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	R-FAB5C	End Diastole				DCM	125208	Method of Disks, Single Plane						
1193	LAA2 min	SRT	G-A166	Area	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	R-FAB5C	End Diastole				DCM	125208	Method of Disks, Single Plane						
1194	LAL2 min	SRT	G-A193	Major axis	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	R-FAB5C	End Diastole				DCM	125208	Method of Disks, Single Plane						
1195	LACL4 min	SRT	M-02560	Circumference	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	R-FAB5C	End Diastole				DCM	125208	Method of Disks, Single Plane						
1196	LAV4 min	DCM	122407	Left Atrial End Diastolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	R-FAB5C	End Diastole				DCM	125208	Method of Disks, Single Plane						
1197	LAV2 min	DCM	122407	Left Atrial End Diastolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	R-FAB5C	End Diastole				DCM	125208	Method of Disks, Single Plane						

Meas. No.	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method			Derivation			Index			
		CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	
1198	LAV min(MOD)	DCM	122407	Left Atrial End Diastolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	R-FAB5C	End Diastole				DCM	125207		Method of Disks, Biplane						
1199	LAVI min(MOD)	DCM	122407	Left Atrial End Diastolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	R-FAB5C	End Diastole				DCM	125207		Method of Disks, Biplane	DCM	125313	Index	LN	8277-6	BSA
1200	LAVI2 min	DCM	122407	Left Atrial End Diastolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	R-FAB5C	End Diastole				DCM	125208		Method of Disks, Single Plane	DCM	125313	Index	LN	8277-6	BSA
1201	LAVI4 min	DCM	122407	Left Atrial End Diastolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	R-FAB5C	End Diastole				DCM	125208		Method of Disks, Single Plane	DCM	125313	Index	LN	8277-6	BSA
1202	LAL min diff	LN	59132-1	Fractional Shortering	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	R-FAB5C	End Diastole				DCM	125207		Method of Disks, Biplane						
1203	LAV min(AL)	DCM	122407	Left Atrial End Diastolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	R-FAB5C	End Diastole				DCM	125204		Area-Length Biplane						
1204	LAVI min(AL)	DCM	122407	Left Atrial End Diastolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	R-FAB5C	End Diastole				DCM	125204		Area-Length Biplane	DCM	125313	Index	LN	8277-6	BSA
1205	LAA4 preA	SRT	G-A166	Area	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32030	Artial Systole				DCM	125208		Method of Disks, Single Plane						
1206	LAL4 preA	SRT	G-A193	Major axis	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32030	Artial Systole				DCM	125208		Method of Disks, Single Plane						
1207	LACL4 preA	SRT	M-02560	Circumference	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32030	Artial Systole				DCM	125208		Method of Disks, Single Plane						
1208	LAA2 preA	SRT	G-A166	Area	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32030	Artial Systole				DCM	125208		Method of Disks, Single Plane						
1209	LAL2 preA	SRT	G-A193	Major axis	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32030	Artial Systole				DCM	125208		Method of Disks, Single Plane						
1210	LACL2 preA	SRT	M-02560	Circumference	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32030	Artial Systole				DCM	125208		Method of Disks, Single Plane						

Meas. No.	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method			Derivation			Index						
		CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM				
1211	LAV4 preA	SRT	G-0383	Left Atrium Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32030	Artial Systole				DCM	125208	Method of Disks, Single Plane										
1212	LAV2 preA	SRT	G-0383	Left Atrium Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32030	Artial Systole				DCM	125208	Method of Disks, Single Plane										
1213	LAV preA	SRT	G-0383	Left Atrium Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	F-32030	Artial Systole				DCM	125207	Method of Disks, Biplane										
1214	LAVI preA	SRT 1	G-0383	Left Atrium Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	F-32030	Artial Systole				DCM	125207	Method of Disks, Biplane	DCM	125313	Index	LN	8277-6	BSA				
1215	LAVI2 preA	SRT	G-0383	Left Atrium Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32030	Artial Systole				DCM	125208	Method of Disks, Single Plane	DCM	125313	Index	LN	8277-6	BSA				
1216	LAVI4 preA	SRT	G-0383	Left Atrium Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32030	Artial Systole				DCM	125208	Method of Disks, Single Plane	DCM	125313	Index	LN	8277-6	BSA				
1217	LAL preA diff	LN	59132-1	Fractional Shortering	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	F-32030	Artial Systole				DCM	125207	Method of Disks, Biplane										
1218	LAV preA(AL)	SRT	G-0383	Left Atrium Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	F-32030	Artial Systole				DCM	125204	Area-Length Biplane										
1219	LAVI preA(AL)	SRT	G-0383	Left Atrium Systolic Volume	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	F-32030	Artial Systole				DCM	125204	Area-Length Biplane	DCM	125313	Index	LN	8277-6	BSA				
1271	LAEF (MOD)	TSBus	03400009	Left Atrium Emptying Fraction	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode										DCM	125207	Method of Disks, Biplane										
1272	LAEF4	TSBus	03400009	Left Atrium Emptying Fraction	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber							DCM	125208	Method of Disks, Single Plane										
1273	LAFE2	TSBus	03400009	Left Atrium Emptying Fraction	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber							DCM	125208	Method of Disks, Single Plane										
1274	LAGLss	TSBus	0340000A	Left Atrium Global Longitudinal Strain	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode				SRT	R-FAB5B	End Systole																

Meas. No.	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method			Derivation			Index				
		CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM		
1275	LAGLSS4	TsBus	0340000A	Left Atrium Global Longitudinal Strain	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	R-FAB5B	End Systole														
1276	LAGLSS2	TsBus	0340000A	Left Atrium Global Longitudinal Strain	SRT	T-32300	Left Atrium	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	R-FAB5B	End Systole														

**Table 8.1-35**  
**Cardiac M-Mode Aortic Valve measurement**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0427		Ao Diam	LN	18015-8	Aortic Root Diameter	SRT	T-35400	Aortic Valve							DCM	109070	End Systole			
0429		LA Diam	TSBus	030D0001	Left atrial diameter	SRT	T-35400	Aortic Valve							SRT	F-32011	End Diastole			
0431		ET	LN	18041-4	Aortic Valve Ejection Time	SRT	T-35400	Aortic Valve	SRT	G-0394	M mode				SRT	F-32020	Systole			
0433		AoV Diam	LN	17996-0	Aortic Valve Cusp Separation	SRT	T-35400	Aortic Valve	SRT	G-0394	M mode				DCM	109070	End Systole			
0435		LA/Ao	LN	17985-3	Left Atrium to Aortic Root Ratio	SRT	T-35400	Aortic Valve	SRT	G-0394	M mode									

**Table 8.1-36**  
**Cardiac M-Mode Mitral Valve measurement**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0437		EPSS	LN	18036-4	Mitral Valve EPSS, E wave	SRT	T-35300	Mitral Valve	SRT	G-0394	M mode									
0439		EF Slope	LN	18040-6	Mitral Valve E-F Slope by M-Mode	SRT	T-35300	Mitral Valve	SRT	G-0394	M mode									
0441		CE Amp	TSBus	030F0002	E-wave amplitude	SRT	T-35300	Mitral Valve	SRT	G-0394	M mode									
0443		CA Amp	TSBus	030F0003	A-wave amplitude	SRT	T-35300	Mitral Valve	SRT	G-0394	M mode									
0445		DE Amp	TSBus	030F0001	DE-wave amplitude	SRT	T-35300	Mitral Valve	SRT	G-0394	M mode									
0447		DE Slope	TSBus	030F0000	Mitral valve opening rate	SRT	T-35300	Mitral Valve	SRT	G-0394	M mode									
0449		CA/CE	LN	18038-0	Mitral Valve E to A Ratio	SRT	T-35300	Mitral Valve	SRT	G-0394	M mode									
1170		MAPSE	TSBus	030F0004	Mitral annular plane systolic excursion	SRT	T-35300	Mitral Valve	SRT	G-0394	M mode									

**Table 8.1-37**  
**Cardiac M-Mode LV measurement (Teichholz method)**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0506	4Section	RVD	LN	20304-2	Right Ventricular Internal Diastolic Dimension	SRT	T-32500	Right Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0511		IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0517		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							DCM	125209	Teichholz
0523		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0510	3Section	IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0516		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							DCM	125209	Teichholz
0522		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0528		IVSTS	LN	18158-6	Interventricular Septum Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	DCM	125209	Teichholz
0532		LVIDs	LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	DCM	125209	Teichholz
0536		LVPWTs	LN	18156-0	Left Ventricle Posterior Wall Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	DCM	125209	Teichholz
0453	1Section	HR	LN	8867-4	Heart rate	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							DCM	125209	Teichholz
0451		ET	DCM	122211	Left Ventricular ejection time	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32020	Systole	DCM	125209	Teichholz
0509		IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0505		RVD	LN	20304-2	Right Ventricular Internal Diastolic Dimension	SRT	T-32500	Right Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz
0515		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							DCM	125209	Teichholz
0521		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125209	Teichholz

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method			
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	
0527	IVSTs	LN	18158-6	Interventricular Septum Systolic Thickness	SRT T-32600	Left Ventricle	SRT	G-0394	M mode			DCM	109070	End Systole	DCM	125209	Teichholz				
0531		LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT T-32600	Left Ventricle	SRT	G-0394	M mode			DCM	109070	End Systole	DCM	125209	Teichholz				
0535		LVPWTs	LN	18156-0	Left Ventricle Posterior Wall Systolic Thickness	SRT T-32600	Left Ventricle	SRT	G-0394	M mode			DCM	109070	End Systole	DCM	125209	Teichholz			
0455		EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT T-32600	Left Ventricle	SRT	G-0394	M mode								DCM	125209	Teichholz	
0457		ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT T-32600	Left Ventricle	SRT	G-0394	M mode								DCM	125209	Teichholz	
0459		SV	SRT	F-32120	Stroke Volume	SRT T-32600	Left Ventricle	SRT	G-0394	M mode			SRT	F-32020	Systole	DCM	125209	Teichholz			
0461		CO	SRT	F-32100	Cardiac Output	SRT T-32600	Left Ventricle	SRT	G-0394	M mode			SRT	F-32020	Systole	DCM	125209	Teichholz			
0463		EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT T-32600	Left Ventricle	SRT	G-0394	M mode							DCM	125209	Teichholz		
0465		FS	LN	18051-3	Left Ventricular Fractional Shortening	SRT T-32600	Left Ventricle	SRT	G-0394	M mode											
0467		SI	SRT	F-00078	Stroke Index	SRT T-32600	Left Ventricle	SRT	G-0394	M mode			SRT	F-32020	Systole	DCM	125209	Teichholz			
0469		CI	SRT	F-32110	Cardiac Index	SRT T-32600	Left Ventricle	SRT	G-0394	M mode			SRT	F-32020	Systole	DCM	125209	Teichholz			
0471		MVCF	TSBus	031B0000	M_LV_MVCFS	SRT T-32600	Left Ventricle	SRT	G-0394	M mode											
0473		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT T-32600	Left Ventricle	SRT	G-0394	M mode			SRT	F-32011	End Diastole	TSBus	03030002	Mass ASECube with Teichholz			
0475		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT T-32600	Left Ventricle	SRT	G-0394	M mode			SRT	F-32011	End Diastole	TSBus	03030003	Mass PennCube with Teichholz			
0477		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT T-32600	Left Ventricle	SRT	G-0394	M mode			SRT	F-32011	End Diastole	TSBus	03030004	Mass Teichholz with Teichholz			
0479		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT T-32600	Left Ventricle	SRT	G-0394	M mode			SRT	F-32011	End Diastole	TSBus	03030005	Mass AVCube with Teichholz			

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0481		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	03030002	Mass ASECube with Teichholz
0483		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	03030003	Mass PennCube with Teichholz
0485		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	03030004	Mass Teichholz with Teichholz
0487		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	03030005	Mass AVCube with Teichholz
0489		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030002	Mass ASECube with Teichholz
0491		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030003	Mass PennCube with Teichholz
0493		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030004	Mass Teichholz with Teichholz
0495		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030005	Mass AVCube with Teichholz
0497		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030002	Mass ASECube with Teichholz
0499		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030003	Mass PennCube with Teichholz
0501		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030004	Mass Teichholz with Teichholz
0503		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030005	Mass AVCube with Teichholz
1298		RWT	TSBus	0340000B	Relative wall thickness	SRT	T-32600	Left Ventricle										SRT	G-D750	Ratio

**Table 8.1-38**  
**Cardiac M-Mode LV measurement (Cube method)**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0594	4Section	RVD	LN	20304-2	Right Ventricular Internal Diastolic Dimension	SRT	T-32500	Right Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0599		IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0605		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							DCM	125206	Cube Method
0611		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0598	3Section	IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0604		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							DCM	125206	Cube Method
0610		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0616		IVSTS	LN	18158-6	Interventricular Septum Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	DCM	125206	Cube Method
0620		LVIDs	LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	DCM	125206	Cube Method
0624		LVPWTs	LN	18156-0	Left Ventricle Posterior Wall Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	DCM	125206	Cube Method
0541	1Section	HR	LN	8867-4	Heart rate	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							DCM	125206	Cube Method
0539		ET	DCM	122211	Left Ventricular ejection time	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32020	Systole	DCM	125206	Cube Method
0593		RVD	LN	20304-2	Right Ventricular Internal Diastolic Dimension	SRT	T-32500	Right Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0597		IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method
0603		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							DCM	125206	Cube Method
0609		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	DCM	125206	Cube Method

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0615	IVSTs	LN	18158-6	Interventricular Septum Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	DCM	125206	Cube Method	
0619		LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	DCM	125206	Cube Method	
0623		LN	18156-0	Left Ventricle Posterior Wall Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	DCM	125206	Cube Method	
0543	EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							DCM	125206	Cube Method	
0545	ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							DCM	125206	Cube Method	
0547	SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32020	Systole	DCM	125206	Cube Method	
0549	CO	SRT	F-32100	Cardiac Output	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32020	Systole	DCM	125206	Cube Method	
0551	EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							DCM	125206	Cube Method	
0553	FS	LN	18051-3	Left Ventricular Fractional Shortening	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode										
0555	SI	SRT	F-00078	Stroke Index	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32020	Systole	DCM	125206	Cube Method	
0557	CI	SRT	F-32110	Cardiac Index	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32020	Systole	DCM	125206	Cube Method	
0559	MVCF	TSBus	031B0000	M_LV_MVCFS	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode										
0561	LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	03030006	Mass ASECube with Cube	
0563	LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	03030007	Mass PennCube with Cube	
0565	LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	03030008	Mass Teichholz with Cube	
0567	LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	03030009	Mass AVCube with Cube	

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0569		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	03030006	Mass ASECube with Cube
0571		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	03030007	Mass PennCube with Cube
0573		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	03030008	Mass Teichholz with Cube
0575		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	03030009	Mass AVCube with Cube
0577		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030006	Mass ASECube with Cube
0579		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030007	Mass PennCube with Cube
0581		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030008	Mass Teichholz with Cube
0583		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030009	Mass AVCube with Cube
0585		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030006	Mass ASECube with Cube
0587		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030007	Mass PennCube with Cube
0589		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030008	Mass Teichholz with Cube
0591		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	03030009	Mass AVCube with Cube
1298		RWT	TSBus	0340000B	Relative wall thickness	SRT	T-32600	Left Ventricle										SRT	G-D750	Ratio

**Table 8.1-39**  
**Cardiac M-Mode LV measurement (Gibson method)**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0682	4Section	RVD	LN	20304-2	Right Ventricular Internal Diastolic Dimension	SRT	T-32500	Right Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0687		IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0693		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							TSBus	0317000A	Gibson Method
0699		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0686	3Section	IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0692		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							TSBus	0317000A	Gibson Method
0698		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0704		IVSTS	LN	18158-6	Interventricular Septum Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0317000A	Gibson Method
0708		LVIDs	LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0317000A	Gibson Method
0712		LVPWTs	LN	18156-0	Left Ventricle Posterior Wall Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0317000A	Gibson Method
0629	1Section	HR	LN	8867-4	Heart rate	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							TSBus	0317000A	Gibson Method
0681		RVD	LN	20304-2	Right Ventricular Internal Diastolic Dimension	SRT	T-32500	Right Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0627		ET	DCM	122211	Left Ventricular ejection time	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32020	Systole	TSBus	0317000A	Gibson Method
0685		IVSTd	LN	18154-5	Interventricular Septum Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method
0691		LVIDd	LN	29436-3	Left Ventricle Internal End Diastolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							TSBus	0317000A	Gibson Method
0697		LVPWTd	LN	18152-9	Left Ventricle Posterior Wall Diastolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0317000A	Gibson Method

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0703		IVSTs	LN	18158-6	Interventricular Septum Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0317000A	Gibson Method
0707		LVIDs	LN	29438-9	Left Ventricle Internal Systolic Dimension	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0317000A	Gibson Method
0711		LVPWTs	LN	18156-0	Left Ventricle Posterior Wall Systolic Thickness	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0317000A	Gibson Method
0631		EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							TSBus	0317000A	Gibson Method
0633		ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							TSBus	0317000A	Gibson Method
0635		SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32020	Systole	TSBus	0317000A	Gibson Method
0637		CO	SRT	F-32100	Cardiac Output	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32020	Systole	TSBus	0317000A	Gibson Method
0639		EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode							TSBus	0317000A	Gibson Method
0641		FS	LN	18051-3	Left Ventricular Fractional Shortening	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode									
0643		SI	SRT	F-00078	Stroke Index	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32020	Systole	TSBus	0317000A	Gibson Method
0645		CI	SRT	F-32110	Cardiac Index	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32020	Systole	TSBus	0317000A	Gibson Method
0647		MVCF	TSBus	031B0000	M_LV_MVCFS	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode									
0649		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0303000A	Mass ASECube with Gibson
0651		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0303000B	Mass PennCube with Gibson
0653		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0303000C	Mass Teichholz with Gibson
0655		LV MASSd	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0303000D	Mass AVCube with Gibson
0657		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0303000A	Mass ASECube with Gibson

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0659		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0303000B	Mass PennCube with Gibson
0661		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0303000C	Mass Teichholz with Gibson
0663		LV MASSd Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				SRT	F-32011	End Diastole	TSBus	0303000D	Mass AVCube with Gibson
0665		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0303000A	Mass ASECube with Gibson
0667		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0303000B	Mass PennCube with Gibson
0669		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0303000C	Mass Teichholz with Gibson
0671		LV MASSs	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0303000D	Mass AVCube with Gibson
0673		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0303000A	Mass ASECube with Gibson
0675		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0303000B	Mass PennCube with Gibson
0677		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0303000C	Mass Teichholz with Gibson
0679		LV MASSs Index	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle	SRT	G-0394	M mode				DCM	109070	End Systole	TSBus	0303000D	Mass AVCube with Gibson
1298		RWT	TSBus	0340000B	Relative wall thickness	SRT	T-32600	Left Ventricle										SRT	G-D750	Ratio

**Table 8.1-40**  
**Cardiac M-Mode Tricuspid Valve measurement**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
1172		TAPSE	TSBus	03290000	Tricuspid annular plane systolic excursion	SRT	T-35100	Tricuspid Valve	SRT	G-0394	M mode									

**Table 8.1-41**  
**Cardiac Doppler-Mode Aortic Valve measurement**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0715		AoV VTI	LN	20354-7	Velocity Time Integral	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow			
0716		AoV VM	LN	20352-1	Mean Velocity	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow			
0717		AoV VP	LN	11726-7	Peak Velocity	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow			
0718		AoV MPG	DCM	122197	Gradient pressure, average	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow	DCM	125218	Simplified Bernoulli
0719		AoV PPG	DCM	122198	Gradient pressure, peak	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow	DCM	125218	Simplified Bernoulli
0725		LVOT VTI	LN	20354-7	Velocity Time Integral	SRT	T-32600	Left Ventricle	TSBus	03210001	Doppler mode	SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow			
0726		LVOT VM	LN	20352-1	Mean Velocity	SRT	T-32600	Left Ventricle	TSBus	03210001	Doppler mode	SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow			
0727		LVOT VP	LN	11726-7	Peak Velocity	SRT	T-32600	Left Ventricle	TSBus	03210001	Doppler mode	SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow			
0728		LVOT MPG	DCM	122197	Gradient pressure, average	SRT	T-32600	Left Ventricle	TSBus	03210001	Doppler mode	SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow	DCM	125218	Simplified Bernoulli
0729		LVOT PPG	DCM	122198	Gradient pressure, peak	SRT	T-32600	Left Ventricle	TSBus	03210001	Doppler mode	SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow	DCM	125218	Simplified Bernoulli
0735		LVOT Diam	SRT	G-038F	Cardiovascular Orifice Diameter	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	DCM	109070	End Systole						
0737		AcT	LN	20168-1	Acceleration Time	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode									
0739		ET	LN	18041-4	Aortic Valve Ejection Time	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32020	Systole						
0741		AoV Vel	LN	11653-3	End Diastolic Velocity	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode				SRT	R-42047	Antegrade Flow			
0742		AoV PG	LN	20247-3	Peak Gradient	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow	DCM	125218	Simplified Bernoulli
0745		LVOT Vel	LN	11653-3	End Diastolic Velocity	SRT	T-32600	Left Ventricle	TSBus	03210001	Doppler mode				SRT	R-42047	Antegrade Flow			

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0746		LVOT PG	LN	20247-3	Peak Gradient	SRT	T-32600	Left Ventricle	TSBus	03210001	Doppler mode	SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow	DCM	125218	Simplified Bernoulli
0749		AR VM	LN	20352-1	Mean Velocity	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow			
0750		AR VP	LN	11726-7	Peak Velocity	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow			
0751		AR MPG	DCM	122197	Gradient pressure, average	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow	DCM	125218	Simplified Bernoulli
0752		AR PPG	DCM	122198	Gradient pressure, peak	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow	DCM	125218	Simplified Bernoulli
1171		AR VTI	LN	20354-7	Velocity Time Integral	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow			
0757		AR Vmax	TSBus	03070006	AR Vmax	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow			
0758		AR Ved	TSBus	03070007	AR Ved	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow			
0759		Time	LN	20217-6	Deceleration Time	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow			
0760		DecelRate	LN	20216-8	Deceleration Slope	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow			
0761		AR PGmax	TSBus	03070008	AR PGmax	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow			
0762		AR PGed	TSBus	03070009	AR PGed	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow			
0769		Ao Diam	LN	18015-8	Aortic Root Diameter	SRT	T-35400	Aortic Valve	SRT	G-03A2	2D mode	DCM	109070	End Systole						
0771		LA Diam	TSBus	030D0001	Left atrial diameter	SRT	T-35400	Aortic Valve	SRT	G-03A2	2D mode	SRT	F-32011	End Diastole						
0773		HR	LN	8867-4	Heart rate	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode									
0775		LVOT SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	TSBus	03210001	Doppler mode	SRT	F-32020	Systole						
0777		LVOT CO	SRT	F-32100	Cardiac Output	SRT	T-32600	Left Ventricle	TSBus	03210001	Doppler mode	SRT	F-32020	Systole						

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0779		LVOT SI	SRT	F-00078	Stroke Index	SRT	T-32600	Left Ventricle	TSBus	03210001	Doppler mode	SRT	F-32020	Systole						
0781		LVOT CI	SRT	F-32110	Cardiac Index	SRT	T-32600	Left Ventricle	TSBus	03210001	Doppler mode	SRT	F-32020	Systole						
0783		AoV Area	SRT	F-0231F	Aortic Valve Area	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32020	Systole				DCM	125215	Continuity Equation by Velocity Time Integral
0785		AoV Area Index	TSBus	03070000	AoV Area Index	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32020	Systole				DCM	125215	Continuity Equation by Velocity Time Integral
0787		LA/Ao	LN	17985-3	Left Atrium to Aortic Root Ratio	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode									
0789		PHT	LN	20280-4	Pressure Half-Time	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode									
0791		Qp/Qs (SV)	LN	29462-9	Pulmonary-to-Systemic Shunt Flow Ratio	SRT	P5-30031	Cardiac Shunt Study	TSBus	03210001	Doppler mode							TSBus	0307000B	Equation by Stroke volume
0793		Qp/Qs (CO)	LN	29462-9	Pulmonary-to-Systemic Shunt Flow Ratio	SRT	P5-30031	Cardiac Shunt Study	TSBus	03210001	Doppler mode							TSBus	0307000C	Equation by Cardiac Output
0795		AcT/ET	SRT	G-0382	Ratio of Aortic Valve Acceleration Time to Ejection Time	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode									
0797		RF (AoV)	SRT	G-0390	Regurgitant Fraction	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode				SRT	R-42E61	Regurgitant Flow			
0799		R Vol (AoV)	TSBus	0309000D	Regurgitation volume	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode				SRT	R-42E61	Regurgitant Flow			
0801		LVOT/AoV (VP)	TSBus	03070001	LVOT/AoV (VP)	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32020	Systole						
0803		LVOT/AoV (VTI)	TSBus	03070002	LVOT/AoV (VTI)	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32020	Systole						
0805		LVOT/AoV (Vel)	TSBus	03070003	LVOT/AoV (Vel)	SRT	T-35400	Aortic Valve	TSBus	03210001	Doppler mode	SRT	F-32020	Systole						

**Table 8.1-42**  
**Cardiac Doppler-Mode Mitral Valve measurement**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0807		A' lat	TSBus	03090004	Myocardial Velocity of A' lat	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0809		E' sep	TSBus	0309000E	Myocardial Velocity of E' sep	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0811		A' sep	TSBus	0309000F	Myocardial Velocity of A' sep	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0813		E Dur	TSBus	03090001	Mitral Valve E-wave duration	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow			
0815		A Dur	SRT	G-0385	Mitral Valve A-Wave Duration	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow			
0817		IVRT	TSBus	03090002	Isovelocity relaxation time	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode												
0819		MV VTI	LN	20354-7	Velocity Time Integral	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow			
0820		MV VP	LN	11726-7	Peak Velocity	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow			
0821		MV VM	LN	20352-1	Mean Velocity	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow			
0822		MV PPG	DCM	122198	Gradient pressure, peak	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow	DCM	125218	Simplified Bernoulli
0823		MV MPG	DCM	122197	Gradient pressure, average	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow	DCM	125218	Simplified Bernoulli
0829		MV Dista	SRT	G-038F	Cardiovascular Orifice Diameter	SRT	T-35300	Mitral Valve	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32010	Diastole						
0831		MV DistB	SRT	G-038F	Cardiovascular Orifice Diameter	SRT	T-35300	Mitral Valve	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32010	Diastole						
0833		MV Area (2D)	SRT	F-02320	Mitral Valve Area	SRT	T-35300	Mitral Valve	SRT	G-03A2	2D mode				SRT	F-32010	Diastole				DCM	125220	Planimetry

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0835		HR	LN	8867-4	Heart rate	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode												
0837		E/A	LN	18038-0	Mitral Valve E to A Ratio	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0839		A/E	TSBus	03090000	Mitral Valve A to E Ratio	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0843		MV SV	SRT	F-32120	Stroke Volume	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0845		MV CO	SRT	F-32100	Cardiac Output	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0847		MV SI	SRT	F-00078	Stroke Index	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0849		MV CI	SRT	F-32110	Cardiac Index	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0851		MVArea PHT	SRT	F-02320	Mitral Valve Area	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole				DCM	125210	Area by Pressure Half-Time
0884		dP/dt	LN	18035-6	Mitral Regurgitation dP/dt derived from Mitral Reg. velocity	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42E61	Regurgitant Flow			
0855		RF (MV)	SRT	G-0390	Regurgitant Fraction	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode							SRT	R-42E61	Regurgitant Flow			
0857		R Vol (MV)	TSBus	0309000D	Regurgitation volume	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode							SRT	R-42E61	Regurgitant Flow			
0859		Diff A Dur	TSBus	0309000C	Diff A Dur	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode												
0861		E' Vel	TSBus	03090010	Mean Myocardial Velocity of E' sep and E' lat	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0863		A' Vel	TSBus	03090011	Mean Myocardial Velocity of A' sep and A' lat	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0865		E/E' sep	TSBus	03090012	Ratio of Mitral Valve E to E' sep	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0867		E/E' lat	TSBus	03090014	Ratio of Mitral Valve E to E' lat	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0869		E/E'	TSBus	03090013	Ratio of Mitral Valve E to E'	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0871		E Vel	LN	18037-2	Mitral Valve E-Wave Peak Velocity	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow			
0872		E Vel (EPeakVmax_D CT)	LN	18037-2	Mitral Valve E-Wave Peak Velocity	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow			
0873		E Vel (EPeakVmax_D CTPHT)	LN	18037-2	Mitral Valve E-Wave Peak Velocity	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow			
0875		A Vel	LN	17978-8	Mitral Valve A-Wave Peak Velocity	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow			
0877		E' lat	TSBus	03090003	Myocardial Velocity of E' lat	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0878		DcT	SRT	G-0384	Mitral Valve E-Wave Deceleration Time	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0879		DcT (EPeakVmax_D CT)	SRT	G-0384	Mitral Valve E-Wave Deceleration Time	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0880		DcT (EPeakVmax_D CTPHT)	SRT	G-0384	Mitral Valve E-Wave Deceleration Time	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0882		PHT	LN	20280-4	Pressure Half-Time	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0883		PHT (EPeakVmax_D CTPHT)	LN	20280-4	Pressure Half-Time	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0885		dP/dt (DPDTM1M3)	LN	18035-6	Mitral Regurgitation dP/dt derived from Mitral Reg. velocity	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42E61	Regurgitant Flow			
0886		Vel1	TSBus	03090009	D_MV_DPDTM_1M3_s_MCR_VELOCITY_1	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0887		Vel1 (DPDTM1M3)	TSBus	03090009	D_MV_DPDTM_1M3_s_MCR_VELOCITY_1	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0888		Vel2	TSBus	0309000A	D_MV_DPDTM_1M3_s_MCR_VELOCITY_2	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0889		Vel2 (DPDTM1M3)	TSBus	0309000A	D_MV_DPDTM_1M3_s_MCR_VELOCITY_2	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0890		dt	TSBus	03090008	D_MV_DPDTM_1M3_s_MCR_TIME	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0891		dt(DPDTM1M3)	TSBus	03090008	D_MV_DPDTM_1M3_s_MCR_TIME	SRT	T-35300	Mitral Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						

**Table 8.1-43**  
**Cardiac Doppler-Mode Pulmonary vein blood flow waveform measurement**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0913		S1 Vel	TSBus	03130001	S1-wave velocity	SRT	T-48581	Pulmonary Venous Structure	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0915		S2 Vel	LN	29450-4	Pulmonary Vein Systolic Peak Velocity	SRT	T-48581	Pulmonary Venous Structure	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0917		D Vel	LN	29451-2	Pulmonary Vein Diastolic Peak Velocity	SRT	T-48581	Pulmonary Venous Structure	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0919		DcT	LN	20217-6	Deceleration Time	SRT	T-48581	Pulmonary Venous Structure	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0921		PVA Vel	TSBus	03130002	AR-wave velocity	SRT	T-48581	Pulmonary Venous Structure	TSBus	03210001	Doppler mode												
0923		PVA Dur	SRT	G-038B	Pulmonary Vein A-Wave Duration	SRT	T-48581	Pulmonary Venous Structure	TSBus	03210001	Doppler mode												
0925		S VTI	SRT	G-038C	Pulmonary Vein S-Wave Velocity Time Integral	SRT	T-48581	Pulmonary Venous Structure	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0927		D VTI	SRT	G-038D	Pulmonary Vein D-Wave Velocity Time Integral	SRT	T-48581	Pulmonary Venous Structure	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0929		S/D	LN	29452-0	Pulmonary Vein Systolic to Diastolic Ratio	SRT	T-48581	Pulmonary Venous Structure	TSBus	03210001	Doppler mode												
0931		Sys.Fract	TSBus	03130000	PVein_SF	SRT	T-48581	Pulmonary Venous Structure	TSBus	03210001	Doppler mode												

**Table 8.1-44**  
**Cardiac Doppler-Mode Tricuspid Valve measurement**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0935		TV E Vel	LN	18031-5	Tricuspid Valve E Wave Peak Velocity	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0937		TV A Vel	LN	18030-7	Tricuspid Valve A Wave Peak Velocity	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0939		TV DcT	LN	20217-6	Deceleration Time	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole						
0941		TV VTI d	LN	20354-7	Velocity Time Integral	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow			
0942		TV VP d	LN	11726-7	Peak Velocity	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow			
0943		TV VM d	LN	20352-1	Mean Velocity	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow			
0944		TV PPG d	DCM	122198	Gradient pressure, peak	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow	DCM	125218	Simplified Bernoulli
0945		TV MPG d	DCM	122197	Gradient pressure, average	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42047	Antegrade Flow	DCM	125218	Simplified Bernoulli
0951		TR VTI s	LN	20354-7	Velocity Time Integral	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42E61	Regurgitant Flow			
0952		TR VP s	LN	11726-7	Peak Velocity	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42E61	Regurgitant Flow			
0953		TR VM s	LN	20352-1	Mean Velocity	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42E61	Regurgitant Flow			
0954		TR PPG s	DCM	122198	Gradient pressure, peak	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42E61	Regurgitant Flow	DCM	125218	Simplified Bernoulli
0955		TR MPG s	DCM	122197	Gradient pressure, average	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42E61	Regurgitant Flow	DCM	125218	Simplified Bernoulli
0961		TR Vmax	TSBus	03150001	Maximum Tricuspid Valve regurgitation velocity	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42E61	Regurgitant Flow			
0962		TR PGmax	TSBus	03150002	Maximum Tricuspid Valve regurgitation pressure gradient	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42E61	Regurgitant Flow			
0965		RA Press	SRT	F-03DE9	Right Atrial Pressure	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode												

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0967		RVs Press	SRT	F-03DFE	Right Ventricular Systolic Pressure	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode												
0969		E/A	LN	18039-8	Tricuspid Valve E to A Ratio	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode												
0971		A/E	TSBus	03150000	Tricuspid Valve A to E ratio	SRT	T-35100	Tricuspid Valve	TSBus	03210001	Doppler mode												

**Table 8.1-45**  
**Cardiac Doppler-Mode Pulmonary Valve measurement**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
0973		PV VTI	LN	20354-7	Velocity Time Integral	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow			
0974		PV VP	LN	11726-7	Peak Velocity	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow			
0975		PV VM	LN	20352-1	Mean Velocity	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow			
0976		PV PPG	DCM	122198	Gradient pressure, peak	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow	DCM	125218	Simplified Bernoulli
0977		PV MPG	DCM	122197	Gradient pressure, average	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow	DCM	125218	Simplified Bernoulli
0983		PV Diam	SRT	M-02550	Diameter	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0985		HR	LN	8867-4	Heart rate	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode												
0987		RV PEP	TSBus	030B0002	Doppler-mode time measurement	SRT	T-32500	Right Ventricle	TSBus	03210001	Doppler mode												
0989		RV AcT	LN	20168-1	Acceleration Time	SRT	T-32500	Right Ventricle	TSBus	03210001	Doppler mode												
0991		RV ET	DCM	122213	Right Ventricular Ejection Time	SRT	T-32500	Right Ventricle	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
0993		PR VTI	LN	20354-7	Velocity Time Integral	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow			
0994		PR VP	LN	11726-7	Peak Velocity	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow			
0995		PR VM	LN	20352-1	Mean Velocity	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow			
0996		PR PPG	DCM	122198	Gradient pressure, peak	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow	DCM	125218	Simplified Bernoulli
0997		PR MPG	DCM	122197	Gradient pressure, average	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32010	Diastole	SRT	R-42E61	Regurgitant Flow	DCM	125218	Simplified Bernoulli
1003		PR Ved	LN	11653-3	End Diastolic Velocity	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode							SRT	R-42E61	Regurgitant Flow			

Meas.No	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
1004		PR PGed	TSBus	030B0003	Pressure gradient on PV regurgitation waveform	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32011	End Diastole	SRT	R-42E61	Regurgitant Flow			
1007		PV Vmax	TSBus	030B0006	PV Vmax	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Diastole	SRT	R-42047	Antegrade Flow			
1008		PV PGmax	TSBus	030B0007	PV PGmax	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole	SRT	R-42047	Antegrade Flow	DCM	125218	Simplified Bernoulli
1011		RA Press	SRT	F-03DE9	Right Atrial Pressure	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode												
1013		AcT/ET	SRT	G-0388	Ratio of Pulmonic Valve Acceleration Time to Ejection Time	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode												
1015		STI	TSBus	030B0000	P_HT_STI	SRT	T-32500	Right Ventricle	TSBus	03210001	Doppler mode												
1017		PV SV	SRT	F-32120	Stroke Volume	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
1019		PV CO	SRT	F-32100	Cardiac Output	SRT	T-32500	Right Ventricle	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
1021		PV SI	SRT	F-00078	Stroke Index	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
1023		PV CI	SRT	F-32110	Cardiac Index	SRT	T-32500	Right Ventricle	TSBus	03210001	Doppler mode				SRT	F-32020	Systole						
1029		PAs Press	TSBus	030B0001	P_HT_PAPed	SRT	T-35200	Pulmonic Valve	TSBus	03210001	Doppler mode												
1279		IVC insp	LN	18006-7	Inferior Vena Cava Diameter	SRT	T-48710	Inferior vena cava	SRT	G-03A2	2D mode				SRT	F-20010	Inpiration						
1278		IVC exp	LN	18006-7	Inferior Vena Cava Diameter	SRT	T-48710	Inferior vena cava	SRT	G-03A2	2D mode				SRT	F-20020	Expiration						
1280		RAP	SRT	F-03DE9	Right Atrial Pressure	SRT	T-32200	Right Atrium	SRT	G-03A2	2D mode										DCM	125315	Calculated
1281		RVSP	SRT	F-03DFE	Right Ventricular Systolic Pressure	SRT	T-32500	Right Ventricle	SRT	P0-02241	Power Doppler										DCM	125315	Calculated

**Table 8.1-46**  
**Extra Measurements LV Mass AL (Area-Length)**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method			
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	
1031		A epi	TSBus	03400006	Epicardium area	SRT	T-32600	Left Ventricle								SRT	F-32011	End Diastole						
1033		A endo	TSBus	03400007	Endocardium area	SRT	T-32600	Left Ventricle								SRT	F-32011	End Diastole						
1035		LVL	LN	18077-8	Left Ventricle diastolic major axis	SRT	T-32600	Left Ventricle								SRT	F-32011	End Diastole						
1037		t	TSBus	03400001	myocardial thickness	SRT	T-32600	Left Ventricle								SRT	F-32011	End Diastole						
1039		LV Mass	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle								SRT	F-32011	End Diastole						
1041		MassIdx	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle								SRT	F-32011	End Diastole						

**Table 8.1-47**  
**Extra Measurements LV Mass TE (Truncated Ellipsoid)**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
1043		A epi	TSBus	03400006	Epicardium area	SRT	T-32600	Left Ventricle							SRT	F-32011	End Diastole						
1045		A endo	TSBus	03400007	Endocardium area	SRT	T-32600	Left Ventricle							SRT	F-32011	End Diastole						
1047		a	TSBus	03230000	B_LV_LenSMA_d	SRT	T-32600	Left Ventricle							SRT	F-32011	End Diastole						
1049		d	TSBus	03230003	B_LV_LenTSMA_d	SRT	T-32600	Left Ventricle							SRT	F-32011	End Diastole						
1051		t	TSBus	03400001	myocardial thickness	SRT	T-32600	Left Ventricle							SRT	F-32011	End Diastole				DCM	125222	Left Ventricle Mass by Truncated Ellipse
1053		LV Mass	LN	18087-7	Left Ventricle Mass	SRT	T-32600	Left Ventricle							SRT	F-32011	End Diastole				DCM	125222	Left Ventricle Mass by Truncated Ellipse
1055		MassIdx	TSBus	03030001	Left Ventricular Mass divided by Body Surface Area	SRT	T-32600	Left Ventricle							SRT	F-32011	End Diastole						

**Table 8.1-48**  
**Extra Measurements PISA**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method				
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM		
1057		Radius	TSBus	03250001	Radius	SRT	T-32600	Left Ventricle																	
1059		Alias Vel	TSBus	03250002	Alias Velocity	SRT	T-32600	Left Ventricle																	
1061		VP	LN	11726-7	Peak Velocity	SRT	T-32600	Left Ventricle												SRT	R-42E61	Regurgitant Flow			
1062		VTI	LN	20354-7	Velocity Time Integral	SRT	T-32600	Left Ventricle												SRT	R-42E61	Regurgitant Flow			
1063		PPG	DCM	122198	Gradient pressure, peak	SRT	T-32600	Left Ventricle												SRT	R-42E61	Regurgitant Flow	DCM	125218	Simplified Bernoulli
1064		MPG	DCM	122197	Gradient pressure, average	SRT	T-32600	Left Ventricle												SRT	R-42E61	Regurgitant Flow	DCM	125218	Simplified Bernoulli
1069		Flow Rate	LN	34141-2	Peak Instantaneous Flow Rate	SRT	T-32600	Left Ventricle												SRT	R-42E61	Regurgitant Flow			
1071		EOArea	TSBus	03250003	Effective Opening area	SRT	T-32600	Left Ventricle												SRT	R-42E61	Regurgitant Flow	DCM	125216	Proximal Isovelocity Surface Area
1073		FlowVol	LN	33878-0	Volume flow	SRT	T-32600	Left Ventricle												SRT	R-42E61	Regurgitant Flow			

**Table 8.1-49**  
**Extra Measurements Coronary**

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method				
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM		
1075		RCA Base Vel	TSBus	0327000B	Flow velocity before loading	TSBus	3270000	Right Coronary Artery																	
1077		RCA Hyper Vel	TSBus	0327000C	Flow velocity after loading	TSBus	3270000	Right Coronary Artery															TSBus	03270011	Coronary Vasodilation
1079		(RCA) VP base	LN	11726-7	Peak Velocity	TSBus	3270000	Right Coronary Artery																	
1080		(RCA) VM base	LN	20352-1	Mean Velocity	TSBus	3270000	Right Coronary Artery																	
1081		(RCA) DcT (base)	LN	20217-6	Deceleration Time	TSBus	3270000	Right Coronary Artery																	
1082		(RCA) PHT (base)	LN	20280-4	Pressure Half-Time	TSBus	3270000	Right Coronary Artery																	
1087		(RCA) VP Hyper	LN	11726-7	Peak Velocity	TSBus	3270000	Right Coronary Artery															TSBus	03270011	Coronary Vasodilation
1088		(RCA) VM Hyper	LN	20352-1	Mean Velocity	TSBus	3270000	Right Coronary Artery															TSBus	03270011	Coronary Vasodilation
1089		(RCA) DcT (Hyper)	LN	20217-6	Deceleration Time	TSBus	3270000	Right Coronary Artery															TSBus	03270011	Coronary Vasodilation
1090		(RCA) PHT (Hyper)	LN	20280-4	Pressure Half-Time	TSBus	3270000	Right Coronary Artery															TSBus	03270011	Coronary Vasodilation
1095		(RCA) CFR Vel Ratio	TSBus	0327000D	Vel hyper/Vel base	TSBus	3270000	Right Coronary Artery																	
1097		(RCA) CFR VP Ratio	TSBus	0327000E	VP hyper/VP base	TSBus	3270000	Right Coronary Artery																	
1099		(RCA) CFR VM Ratio	TSBus	0327000F	VM hyper/VM base	TSBus	3270000	Right Coronary Artery																	
1101		(LAD) Vel Base	TSBus	0327000B	Flow velocity before loading	TSBus	3270001	Left Anterior Descending Coronary Artery																	
1103		(LAD) Vel Hyper	TSBus	0327000C	Flow velocity after loading	TSBus	3270001	Left Anterior Descending Coronary Artery															TSBus	03270011	Coronary Vasodilation
1105		(LAD) VP base	LN	11726-7	Peak Velocity	TSBus	3270001	Left Anterior Descending Coronary Artery																	

Meas.No.	LV Parallel	Meas. Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Cycle Point			TID (5203) Echo Measurement Flow Direction			DTID (300) Measurement Measurement Method			
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	
1106		(LAD) VM base	LN	20352-1	Mean Velocity	TSBus	3270001	Left Anterior Descending Coronary Artery																
1107		(LAD) DcT (base)	LN	20217-6	Deceleration Time	TSBus	3270001	Left Anterior Descending Coronary Artery																
1108		(LAD) PHT (base)	LN	20280-4	Pressure Half-Time	TSBus	3270001	Left Anterior Descending Coronary Artery																
1113		(LAD) VP Hyper	LN	11726-7	Peak Velocity	TSBus	3270001	Left Anterior Descending Coronary Artery														TSBus	03270011	Coronary Vasodilation
1114		(LAD) VM Hyper	LN	20352-1	Mean Velocity	TSBus	3270001	Left Anterior Descending Coronary Artery														TSBus	03270011	Coronary Vasodilation
1115		(LAD) DcT (Hyper)	LN	20217-6	Deceleration Time	TSBus	3270001	Left Anterior Descending Coronary Artery														TSBus	03270011	Coronary Vasodilation
1116		(LAD) PHT (Hyper)	LN	20280-4	Pressure Half-Time	TSBus	3270001	Left Anterior Descending Coronary Artery														TSBus	03270011	Coronary Vasodilation
1121		(LAD) CFR Vel Ratio	TSBus	0327000D	Vel hyper/Vel base	TSBus	3270001	Left Anterior Descending Coronary Artery																
1123		(LAD) CFR VP Ratio	TSBus	0327000E	VP hyper/VP base	TSBus	3270001	Left Anterior Descending Coronary Artery																
1125		(LAD) CFR VM Ratio	TSBus	0327000F	VM hyper/VM base	TSBus	3270001	Left Anterior Descending Coronary Artery																

**Table 8.1-50**  
**2D WMT LV**

Meas. No.	LV Paral- el	Meas .Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Phase			DTID (300) Measurement Measurement Method			Target Site			Trace Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
1225	EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT T-32600	Left Ventricle	SRT G-03A2	2D mode				SRT F-32011	End Diastole	DCM 125207	Method of Disks, Biplane							TSBus	03500002		2D Wall Motion Tracking	
1226	ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT T-32600	Left Ventricle	SRT G-03A2	2D mode				DCM 109070	End Systole	DCM 125207	Method of Disks, Biplane							TSBus	03500002		2D Wall Motion Tracking	
1227	EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT T-32600	Left Ventricle	SRT G-03A2	2D mode						DCM 125207	Method of Disks, Biplane							TSBus	03500002		2D Wall Motion Tracking	
1228	SV	SRT F-32120	Stroke Volume	SRT T-32600	Left Ventricle	SRT G-03A2	2D mode				SRT F-32020	Systole	DCM 125207	Method of Disks, Biplane							TSBus	03500002		2D Wall Motion Tracking		
1229	LVLd Diff	TSBus 03010000	LV_Ldiff_d_BP MOD	SRT T-32600	Left Ventricle	SRT G-03A2	2D mode				SRT F-32011	End Diastole	DCM 125207	Method of Disks, Biplane							TSBus	03500002		2D Wall Motion Tracking		
1230	LVLs Diff	TSBus 03010001	LV_Ldiff_s_BP MOD	SRT T-32600	Left Ventricle	SRT G-03A2	2D mode				DCM 109070	End Systole	DCM 125207	Method of Disks, Biplane							TSBus	03500002		2D Wall Motion Tracking		
1231	EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT T-32600	Left Ventricle	SRT G-03A2	2D mode	SRT G-A19C	Apical four chamber	SRT F-32011	End Diastole	DCM 125205	Area-Length Single Plane							TSBus	03500002		2D Wall Motion Tracking		
1282	EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT T-32600	Left Ventricle	SRT G-03A2	2D mode	SRT G-A19C	Apical four chamber	SRT F-32011	End Diastole	DCM 125208	Method of Disks, Single Plane							TSBus	03500002		2D Wall Motion Tracking		
1232	ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT T-32600	Left Ventricle	SRT G-03A2	2D mode	SRT G-A19C	Apical four chamber	DCM 109070	End Systole	DCM 125205	Area-Length Single Plane							TSBus	03500002		2D Wall Motion Tracking		
1283	ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT T-32600	Left Ventricle	SRT G-03A2	2D mode	SRT G-A19C	Apical four chamber	DCM 109070	End Diastole	DCM 125208	Method of Disks, Single Plane							TSBus	03500002		2D Wall Motion Tracking		
1233	EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT T-32600	Left Ventricle	SRT G-03A2	2D mode	SRT G-A19C	Apical four chamber				DCM 125205	Area-Length Single Plane							TSBus	03500002		2D Wall Motion Tracking	

Meas. No.	LV Paral lel	Meas .Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Phase			DTID (300) Measurement Measurement Method			Target Site			Trace Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
1284	EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber				DCM	125208	Method of Disks, Single Plane				TSBus	03500002	2D Wall Motion Tracking	
1234	SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32020	Systole	DCM	125205	Area-Length Single Plane				TSBus	03500002	2D Wall Motion Tracking	
1285	SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane				TSBus	03500002	2D Wall Motion Tracking	
1235	LVLd	LN	18077-8	Left Ventricle diastolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32011	End Diastole	DCM	125205	Area-Length Single Plane				TSBus	03500002	2D Wall Motion Tracking	
1286	LVLd	LN	18077-8	Left Ventricle diastolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	SRT	F-32011	End Diastole	DCM	125208	Method of Disks, Single Plane				TSBus	03500002	2D Wall Motion Tracking	
1236	LVLs	LN	18076-0	Left Ventricle systolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	DCM	109070	End Systole	DCM	125205	Area-Length Single Plane				TSBus	03500002	2D Wall Motion Tracking	
1287	LVLs	LN	18076-0	Left Ventricle systolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19C	Apical four chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane				TSBus	03500002	2D Wall Motion Tracking	
1237	EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32011	End Diastole	DCM	125205	Area-Length Single Plane				TSBus	03500002	2D Wall Motion Tracking	
1288	EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32011	End Diastole	DCM	125208	Method of Disks, Single Plane				TSBus	03500002	2D Wall Motion Tracking	
1238	ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	DCM	109070	End Systole	DCM	125205	Area-Length Single Plane				TSBus	03500002	2D Wall Motion Tracking	

Meas. No.	LV Paral lel	Meas .Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Phase			DTID (300) Measurement Measurement Method			Target Site			Trace Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
1289	ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane					TSBus	03500002	2D Wall Motion Tracking
1239	EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber				DCM	125205	Area-Length Single Plane					TSBus	03500002	2D Wall Motion Tracking
1290	EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber				DCM	125208	Method of Disks, Single Plane					TSBus	03500002	2D Wall Motion Tracking
1240	SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32020	Systole	DCM	125205	Area-Length Single Plane					TSBus	03500002	2D Wall Motion Tracking
1291	SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane					TSBus	03500002	2D Wall Motion Tracking
1241	LVLd	LN	18077-8	Left Ventricle diastolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32011	End Diastole	DCM	125205	Area-Length Single Plane					TSBus	03500002	2D Wall Motion Tracking
1292	LVLd	LN	18077-8	Left Ventricle diastolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	SRT	F-32011	End Diastole	DCM	125208	Method of Disks, Single Plane					TSBus	03500002	2D Wall Motion Tracking
1242	LVLs	LN	18076-0	Left Ventricle systolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	DCM	109070	End Systole	DCM	125205	Area-Length Single Plane					TSBus	03500002	2D Wall Motion Tracking
1293	LVLs	LN	18076-0	Left Ventricle systolic major axis	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-A19B	Apical two chamber	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane					TSBus	03500002	2D Wall Motion Tracking
1243	EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32011	End Diastole	DCM	125205	Area-Length Single Plane					TSBus	03500002	2D Wall Motion Tracking

Meas. No.	LV Paral el	Meas .Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Phase			DTID (300) Measurement Measurement Method			Target Site			Trace Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
1294	EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32011	End Diastole	DCM	125208	Method of Disks, Single Plane					TSBus	03500002	2D Wall Motion Tracking
1244	ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	DCM	109070	End Systole	DCM	125205	Area-Length Single Plane					TSBus	03500002	2D Wall Motion Tracking
1295	ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	DCM	109070	End Systole	DCM	125208	Method of Disks, Single Plane					TSBus	03500002	2D Wall Motion Tracking
1245	EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis				DCM	125205	Area-Length Single Plane					TSBus	03500002	2D Wall Motion Tracking
1296	EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis				DCM	125208	Method of Disks, Single Plane					TSBus	03500002	2D Wall Motion Tracking
1246	SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32020	Systole	DCM	125205	Area-Length Single Plane					TSBus	03500002	2D Wall Motion Tracking
1297	SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0395	Apical long axis	SRT	F-32020	Systole	DCM	125208	Method of Disks, Single Plane					TSBus	03500002	2D Wall Motion Tracking
1247	EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0397	Parasternal short axis	SRT	F-32011	End Diastole	DCM	125209	Teichholz	SRT	R-4081A	Middle	TSBus	03500002	2D Wall Motion Tracking	
1248	ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0397	Parasternal short axis	DCM	109070	End Systole	DCM	125209	Teichholz	SRT	R-4081A	Middle	TSBus	03500002	2D Wall Motion Tracking	
1249	EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0397	Parasternal short axis				DCM	125209	Teichholz	SRT	R-4081A	Middle	TSBus	03500002	2D Wall Motion Tracking	
1250	SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0397	Parasternal short axis				DCM	125209	Teichholz	SRT	R-4081A	Middle	TSBus	03500002	2D Wall Motion Tracking	

Meas. No.	LV Paral lel	Meas .Label	TID (5203) Echo Measurement \$Measurement			TID (5202) Echo Section Finding Site			TID (5202) Echo Section Image Mode			TID (5203) Echo Measurement Image View			TID (5203) Echo Measurement Cardiac Phase			DTID (300) Measurement Measurement Method			Target Site			Trace Method		
			CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM	CSD	CV	CM
1251	EDV	LN	18026-5	Left Ventricular End Diastolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0397	Parasternal short axis	SRT	F-32011	End Diastole	DCM	125209	Teichholz	SRT	G-A123	Basal	TSBus	03500002	2D Wall Motion Tracking	
1252	ESV	LN	18148-7	Left Ventricular End Systolic Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0397	Parasternal short axis	DCM	109070	End Systole	DCM	125209	Teichholz	SRT	G-A123	Basal	TSBus	03500002	2D Wall Motion Tracking	
1253	EF	LN	18043-0	Left Ventricular Ejection Fraction	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0397	Parasternal short axis				DCM	125209	Teichholz	SRT	G-A123	Basal	TSBus	03500002	2D Wall Motion Tracking	
1254	SV	SRT	F-32120	Stroke Volume	SRT	T-32600	Left Ventricle	SRT	G-03A2	2D mode	SRT	G-0397	Parasternal short axis	SRT	F-32020	Systole	DCM	125209	Teichholz	SRT	G-A123	Basal	TSBus	03500002	2D Wall Motion Tracking	

### **8.1.1.11 Other Modules**

Not applicable.

### **8.1.2 Usage of Attributes from received IOD's**

Not applicable.

### **8.1.3 Attribute Mapping**

Not applicable.

### **8.1.4 Coerced/Modified Fields**

Not applicable.

## 8.2 DATA DICTIONARY OF PRIVATE ATTRIBUTES

Not applicable.

## 8.3 CODED TERMINOLOGY AND TEMPLATES

Not applicable.

## 8.4 GRayscale IMAGE CONSISTENCY

Not applicable.

## 8.5 STANDARD EXTENDED/SPECIALIZED/PRIVATE SOP CLASSES

### 8.5.1 Standard Extended SOP Classes - US Image Storage and US Multi-frame Image Storage

**Table 8.5-1  
US IMAGE EXTENDED ATTRIBUTES**

Attribute Name	Tag	VR	Value	Presence of Value	Source
Pixel Spacing	(0028,0030)	DS	Pixel Spacing is only added if the user has configured this attribute to be included and the ultrasound image contains a 2D region. Pixel Spacing will enable measurements on DICOM viewers that do not support Ultrasound Region Calibration.	ANAP	AUTO

## 8.6 PRIVATE TRANSFER SYNTAXES

Not applicable.

## 8.7 STANDARD EXTENDED AND PRIVATE TEMPLATES

Not applicable.

## 8.8 DICOM Security Profile Details

Not applicable.