

DICOM Correction Item

Correction Number		CP- 173	
Log Summary: Presentation LUT Parameters: Basic Film Box versus Basic Film Session			
Type of Modification		Name of Standard	
Clarification		PS 3,3, 3.4 - 1999	
<p>Rationale for Correction</p> <p>1. - major - Supplement 22 Final Text states that Illumination and Reflected Ambient Light are attributes of Basic Film Box, which was incorporated correctly into Part 3, but in Part 4 they are stated as attributes of Basic Film Session. See Table H.4-2 and Section H.4.1.2.1.1. According to Supplement 22, they should be in Tables H.4-6, H.4-7, and Section H.4.2.2.1.1.</p> <p>These two attributes make more sense to belong in Basic Film Box, where all the other attributes related to image quality/consistency/appearance are, so Part 4 should be updated: see Table H.4-6.</p> <p>2. - major – to be consistent with item 1, the reference to the Presentation LUT should be removed from the Film Session level also, and remain at the Film Box and Image Box level.</p> <p>3. - minor - In the 1999 Standard and Supplement 22 Final Text, the name of attribute (2010,0160) is Reflected Ambient Light in most places, but Reflective Ambient Light in one: Part 4, Table H.4-2. This is a typographic error.</p> <p>4. - minor - In the 1999 Standard and Supplement 22 Final Text, the names of attributes (0008,1150) and (0008,1155) under Referenced Presentation LUT Sequence (2050,0500) are SOP Class UID and SOP Instance UID, respectively. This occurs in Part 4, Tables H.4-2, H.4-6, H.4-7, H.4-10, H.4-12. According to Part 6, the attribute names are Referenced SOP Class UID and Referenced SOP Instance UID, respectively. The same applies to Referenced Overlay Sequence (0008,1130) in Tables H.4-10 and H.4-11. This is a typographic error.</p>			
Sections of documents affected			
<p>In PS 3.4, Section H.4.1.2.1.1, H.4.2.2.1.1, H.4.2.2.2.1, H.4.3.1.2.1.1, H.4.3.2.2.1.1, H.4.3.3.2.1.1</p> <p>In PS 3.3, Section C.13.2</p>			
Correction Wording:			

Amend PS 3.4 Annex H as follows:

H.4.1.2.1 N-CREATE

The N-CREATE is used to create an instance of the Basic Film Session SOP Class.

H.4.1.2.1.1 Attributes

The Attribute list of the N-CREATE is defined as shown in Table H.4-2.

**Table H.4-2
N-CREATE ATTRIBUTE LIST**

Attribute Name	Tag	Usage SCU/SCP
Number of Copies	(2000,0010)	U/M
Print Priority	(2000,0020)	U/M
Medium Type	(2000,0030)	U/M
Film Destination	(2000,0040)	U/M
Referenced Presentation LUT Sequence	(2050,0500)	U/MC (Required if Presentation LUT is supported)
➤SOP Class UID	(0008,1150)	U/MC (Required if sequence is present)
➤SOP Instance UID	(0008,1155)	U/MC (Required if sequence is present)
Film Session Label	(2000,0050)	U/U
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- Notes:
1. The memory allocation Attribute allows the SCU to reserve sufficient memory to store the "working" film session hierarchy as well the "copied" film session hierarchy in the Print Job in order to prevent deadlock situations.
 2. Owner ID (2100,0160) is a user option for the Basic Film Session. However, SCUs that also implement the Print Queue Management Service Class are required to supply Owner ID to successfully delete or re-prioritize Print Jobs in the printer queue (see section L.4.2.3.1).
 3. Proposed Study Sequence (2130,0040) may be used to identify Stored Print Storage and Hardcopy Image SOP Instances created to store this Film Session
 4. To meet requirements specified in PS 3.3, the Study Instance UID of the Stored Print Storage SOP Instance should be the same as the Study Instance UID in Proposed Study Sequence (2130,0040). New Series Instance and Image Instance UIDs will be supplied by the device that creates the Stored Print Storage SOP Instance.

The meaning of the Usage SCU/SCP is described in Section H.2.4.

Within the film session, the allocated memory is consumed as SOP Instances are created and is freed for reuse as SOP Instances are deleted. All the allocated memory shall be released following termination of the Association or deletion of the Film Session SOP Instance.

If the Illumination (2010,015E) and Reflected Ambient Light (2010,0160) values, respectively termed L_0 and L_a , are not created, the following default values are recommended:

For transmissive film: $L_0 = 2000 \text{ cd/m}^2$.
 $L_a = 10 \text{ cd/m}^2$.

For reflective media: $L_0 = 150 \text{ cd/m}^2$.

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H.4.1.2.2 N-SET

The N-SET may be used to update an instance of the Basic Film Session SOP Class.

H.4.1.2.2.1 Attributes

All Attributes and usage in Table H.4-2 apply to N-SET.

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H.4.2 Basic Film Box SOP Class

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H.4.2.2.1 N-CREATE

The N-CREATE is used to create an instance of the Basic Film Box SOP Class.

H.4.2.2.1.1 Attributes

The Attribute list of the N-CREATE is shown in Table H.4-6.

**Table H.4-6
 N-CREATE ATTRIBUTE LIST**

Attribute Name	Tag	Usage SCU/SCP
Image Display Format	(2010,0010)	M/M
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Configuration Information	(2010,0150)	U/M
Referenced Presentation LUT Sequence	(2050,0500)	U/MC (Required if Presentation LUT is supported)
> <u>Referenced</u> SOP Class UID	(0008,1150)	U/MC (Required if sequence is present)
> <u>Referenced</u> SOP Instance UID	(0008,1155)	U/MC (Required if sequence is present)
Annotation Display Format ID	(2010,0030)	U/U
Smoothing Type	(2010,0080)	U/U
Border Density	(2010,0100)	U/U
Empty Image Density	(2010,0110)	U/U
Min Density	(2010,0120)	U/U
Trim	(2010,0140)	U/U
<u>Illumination</u>	<u>(2010,015E)</u>	<u>U/MC</u> <u>(Required if Presentation LUT is supported)</u>
<u>Reflective Ambient Light</u>	<u>(2010,0160)</u>	<u>U/MC</u> <u>(Required if Presentation LUT is supported)</u>
Requested Resolution ID	(2020,0050)	U/U

The meaning of the Usage SCU/SCP is described in Section H.2.4.

~~Values for Referenced Presentation LUT Sequence override any Presentation LUT that may have been set at the Basic Film Session.~~

H.4.2.2.1.2 Status

The status values which are specific for this SOP Class are defined as follows:

Status	Meaning	Code
Success	Film Box successfully created	0000
Warning	Requested Min Density or Max Density outside of printer's operating range. The printer will use its respective minimum or maximum density value instead.	B605
Failure	There is an existing Film Box that has not been printed and N-ACTION at the Film Session level is not supported. A new Film Box will not be created when a previous Film Box has not been printed.	C616

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H.4.2.2.2 N-SET

The N-SET may be used to update the last created instance of the Basic Film Box SOP Class.

H.4.2.2.2.1 Attributes

The Attributes which may be updated are shown in Table H.4-7.

**Table H.4-7
 N-SET ATTRIBUTES**

Attribute Name	Tag	Usage SCU/SCP
Magnification Type	(2010,0060)	U/M
Max Density	(2010,0130)	U/M
Configuration Information	(2010,0150)	U/M
Referenced Presentation LUT Sequence	(2050,0500)	U/MC (Required if Presentation LUT is supported)
> <u>Referenced</u> SOP Class UID	(0008,1150)	U/MC (Required if sequence is present)
> <u>Referenced</u> SOP Instance UID	(0008,1155)	U/MC (Required if sequence is present)
Smoothing Type	(2010,0080)	U/U
Border Density	(2010,0100)	U/U

Empty Image Density	(2010,0110)	U/U
Min Density	(2010,0120)	U/U
Illumination	(2010,015E)	U/MC (Required if Presentation LUT is supported)
Reflective Ambient Light	(2010,0160)	U/MC (Required if Presentation LUT is supported)
Trim	(2010,0140)	U/U

The meaning of the Usage SCU/SCP is described in Section H.2.4.

~~Values for Referenced Presentation LUT Sequence override any Presentation LUT that may have been set at the Basic Film Session.~~

Amend PS 3.3-1998 Annex C as follows:

C.13.2 Basic Film Session Relationship Module

Table C.13-2
BASIC FILM SESSION RELATIONSHIP MODULE ATTRIBUTES

Attribute Name	Tag	Attribute Description
Referenced Film Box Sequence	(2000,0500)	A Sequence which provides references to a set of Film Box SOP Class/Instance pairs. Zero or more Items may be included in this Sequence.
>Referenced SOP Class UID	(0008,1150)	Uniquely identifies the referenced SOP Class.
>Referenced SOP Instance UID	(0008,1155)	Uniquely identifies the referenced SOP Instance.
Referenced Presentation LUT Sequence	(2050,0500)	A sequence that provides references to a Presentation LUT related SOP Class/Instance pairs. Only a single Item shall be included in this sequence.
>Referenced SOP Class UID	(0008,1150)	Uniquely identifies the referenced SOP Class.
>Referenced SOP Instance UID	(0008,1155)	Uniquely identifies the referenced SOP Instance.
Proposed Study Sequence	(2130,00A0)	Attributes that may be used to identify Stored Print Storage and Hardcopy Image SOP Instances created to store this Film Session.