

DICOM Correction Item

Correction Number CP-485	
Log Summary: RT Brachytherapy Thickness and Transmission	
Type of Modification	Name of Standard
Omission	PS 3.3 2004
<p>Rationale for Correction:</p> <p>The items Source Encapsulation Nominal Thickness (300A,0222), Brachy Accessory Device Nominal Thickness (300A,026A), Source Applicator Wall Nominal Thickness (300A,029C), Channel Shield Nominal Thickness (300A,02B8), Source Encapsulation Nominal Transmission (300A,0224), Brachy Accessory Device Nominal Transmission (300A,026C), Source Applicator Wall Nominal Transmission (300A,029E), and Channel Shield Nominal Transmission (300A,02BA), assume a uniform thickness of the object they are referring to.</p> <p>This may not always be the case. The interpretation of the Nominal Thickness and Nominal Transmission values – if provided – should be stated explicitly in the standard.</p>	
<p>Sections of documents affected</p> <p>PS 3.3, C.8.8 (Radiotherapy modules)</p>	
Correction Wording:	

In PS 3.3, C.8-51 (RT Brachy Application Setups Module Attributes) modify the following attribute descriptions by adding the text indicated in bold, and add the corresponding note:

Attribute Name	Tag	Type	Attribute Description
>Source Encapsulation Nominal Thickness	(300A,0222)	3	Nominal thickness of wall of encapsulation (mm). See C.8.8.15.12.
>Source Encapsulation Nominal Transmission	(300A,0224)	3	Nominal transmission through wall of encapsulation (between 0 and 1). See C.8.8.15.12.
...			
>> Brachy Accessory Device Nominal Thickness	(300A,026A)	3	Nominal thickness of Brachy Accessory Device (mm). See C.8.8.15.12.
>> Brachy Accessory Device Nominal Transmission	(300A,026C)	3	Nominal Transmission through Brachy Accessory Device (between 0 and 1). See C.8.8.15.12.
...			
>> Source Applicator Wall Nominal Thickness	(300A,029C)	3	Nominal Thickness of Source Applicator wall (mm). See C.8.8.15.12.
>> Source Applicator Wall Nominal Transmission	(300A,029E)	3	Nominal Transmission through Source Applicator wall (between 0 and 1). See C.8.8.15.12.
...			
>>>Channel Shield Nominal Thickness	(300A,02B8)	3	Nominal Thickness of Channel Shield (mm). See C.8.8.15.12.

>>>Channel Shield Nominal Transmission	(300A,02BA)	3	Nominal Transmission of Channel Shield (between 0 and 1). <u>See C.8.8.15.12.</u>
...			

C.8.8.15.12 Nominal Thickness and Nominal Transmission

If provided, Source Encapsulation Nominal Thickness (300A,0222), Brachy Accessory Device Nominal Thickness (300A,026A), Source Applicator Wall Nominal Thickness (300A,029C), and Channel Shield Nominal Thickness (300A,02B8) shall indicate that the related objects are of uniform thickness with the specified value. If this is not the case, these attributes shall not be provided.

If provided, Source Encapsulation Nominal Transmission (300A,0224), Brachy Accessory Device Nominal Transmission (300A,026C), Source Applicator Wall Nominal Transmission (300A,029E), and Channel Shield Nominal Transmission (300A,02BA) shall indicate that the related objects are of uniform transmission with the specified value. If this is not the case, these attributes shall not be provided.

No assumptions are made about the source characteristics beyond the parameters specified here.