

## DICOM Correction Proposal

Status	Letter Ballot
Date of Last Update	2023/09/02
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Correction Number	CP 2300
Log Summary:	Extend 1st Gen to 2nd Gen Tolerance Value Mapping
Name of Standard	PS3.3
Rationale for Correction:	Section C.8.8.14.17 "Enhanced RT Beam Limiting Device Sequence and Enhanced RT Beam Limiting Opening Sequence" defines the applicability of Tolerance Value defined in a 1 <sup>st</sup> Generation RT Plan IOD to certain parameters of 2 <sup>nd</sup> Generation Beam Limiting Device Opening specifications. Some mappings were missing in this table and are added.
Correction Wording:	

*In PS3.3, modify C.8.8.14.17 Enhanced RT Beam Limiting Device Sequence and Enhanced RT Beam Limiting Opening Sequence*

### **C.8.8.14.17 Enhanced RT Beam Limiting Device Sequence and Enhanced RT Beam Limiting Opening Sequence**

When the value of Enhanced RT Beam Limiting Device Definition Flag (3008,00A3) has the value YES, the following applies to the content of Enhanced RT Beam Limiting Device Sequence (3008,00A1) and Enhanced RT Beam Limiting Opening Sequence (3008,00A2):

- For the Beam Modifier Definition Coordinate System used the following applies:

The Base Beam Modifier Definition Coordinate System is the [IEC 61217] GANTRY coordinate system.

The RT Device Distance Reference Location is (130358, DCM, "Nominal Radiation Source Location").

The value of the RT Beam Modifier Definition Distance (300A,0688) equals the value of Source-Axis Distance (300A,00B4).

The value of the Beam Modifier Orientation Angle (300A,0645) is 0 for IEC X direction and 90 for IEC Y direction.

Note: The values of boundaries and openings are therefore the same as if comparable parameters would be expressed in the Beam Limiting Device Sequence (300A,00B6).

- Values of Attributes of the Module RT Tolerance Tables C.8.8.11 apply to the Enhanced RT Beam Limiting Device Openings as follows:

<b>Tolerance Module C.8.8.11</b>	<b>RT Beam Limiting Device Type (300A,00B8)</b>	<b>Enhanced RT Beam Limiting Opening Sequence (3008,00A2)</b>	<b>Device Type Code Sequence (3010,002E) and Beam Modifier Orientation Angle (300A,0645)</b>
Beam Limiting Device Position Tolerance (300A,004A)	X, ASYMX	Parallel RT Beam Delimiter Positions (300A,064A)	(130330, DCM, "Jaw Pair") Beam Modifier Orientation Angle (300A,0645) = 0
Beam Limiting Device Position Tolerance (300A,004A)	Y, ASYMY	Parallel RT Beam Delimiter Positions (300A,064A)	(130330, DCM, "Jaw Pair") Beam Modifier Orientation Angle (300A,0645) = 90
<b><u>Beam Limiting Device Position Tolerance (300A,004A)</u></b>	<b><u>MLCX</u></b>	<b><u>Parallel RT Beam Delimiter Positions (300A,064A)</u></b>	<b><u>(130331, DCM, "Leaf Pair") or (130333, DCM, "Single Leaves")</u></b> <b><u>Beam Modifier Orientation Angle (300A,0645) = 0</u></b>
<b><u>Beam Limiting Device Position Tolerance (300A,004A)</u></b>	<b><u>MLCY</u></b>	<b><u>Parallel RT Beam Delimiter Positions (300A,064A)</u></b>	<b><u>(130331, DCM, "Leaf Pair") or (130333, DCM, "Single Leaves")</u></b> <b><u>Beam Modifier Orientation Angle (300A,0645) = 90</u></b>
Beam Limiting Device Position Tolerance (300A,004A)	MLCX	RT Beam Limiting Device Offset (300A,064B)	<b><u>(130330, DCM, "Jaw Pair")</u></b> , (130331, DCM, "Leaf Pair") or (130333, DCM, "Single Leaves") Beam Modifier Orientation Angle (300A,0645) = 0
Beam Limiting Device Position Tolerance (300A,004A)	MLCY	RT Beam Limiting Device Offset (300A,064B)	<b><u>(130330, DCM, "Jaw Pair")</u></b> , (130331, DCM, "Leaf Pair") or (130333, DCM, "Single Leaves") Beam Modifier Orientation Angle (300A,0645) = 90