

## **AU480, AU680, AU5800, AU400, AU640, AU2700, and AU5400 Maximum Sample Volume Limits in Sample Tubes and Cups in Racks**

Maximum sample volume limits are provided to prevent sample from spilling when the rack moves from the rack input area to the rack output area on the analyzer. If sample spills onto the rack belt and lane surfaces, rack jams and rack transfer errors may occur. Determine the maximum sample volume limits for the validated sample tubes and cups used in your laboratory by referring to the dimensions and volumes specified in the following diagrams. The diagrams are not drawn to scale and they are not intended to be physically compared to the sample tubes or cups.

Use the following instructions to confirm that the sample levels in the tubes and cups do not exceed the maximum sample volume limits in the diagrams below before placing the tubes or cups in racks for analysis.

### **Maximum Sample Volume Limits in Tubes and Cups**

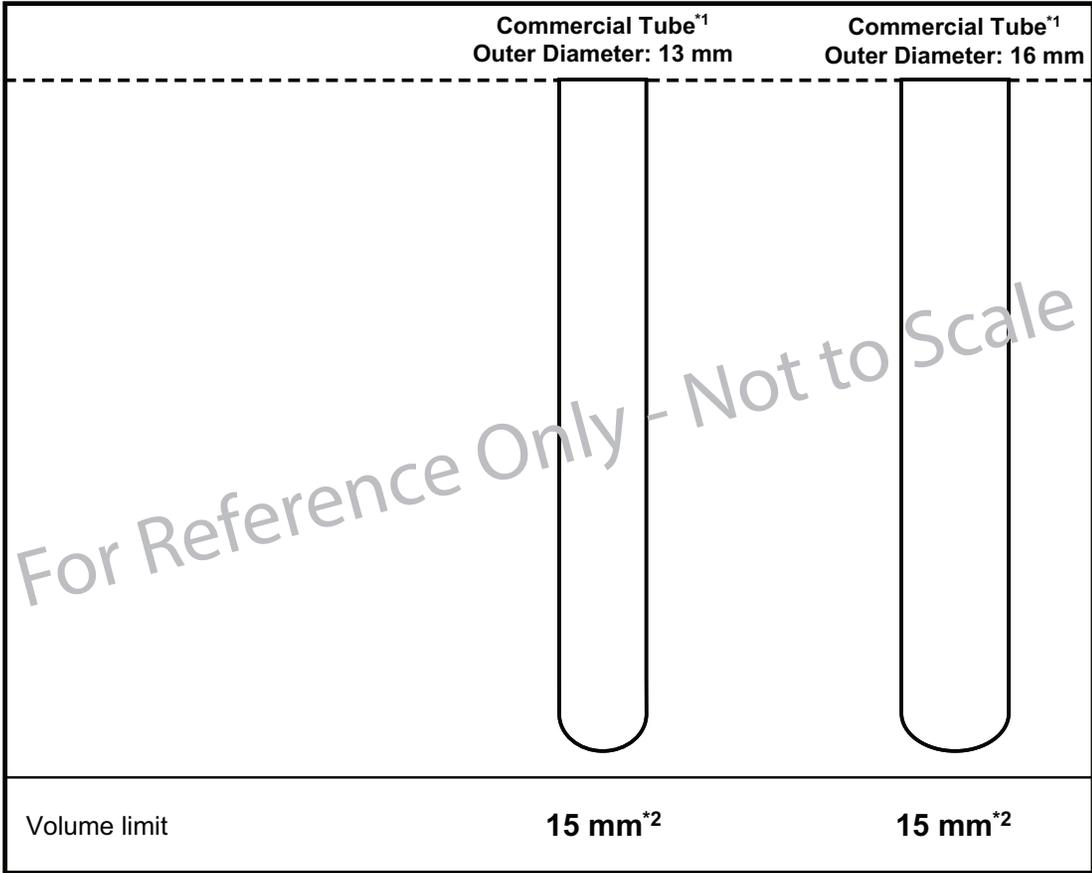
Refer to the applicable tube diagrams below while performing the following steps.

1. Confirm the sample tubes and cups that are being used in your laboratory.
2. Confirm the maximum sample volume limit of the tube or cup by using the applicable dimensions or volumes specified in the following diagrams.

### **Important Notes**

- If the sample level is above the maximum sample volume limit, Beckman Coulter recommends removing sample until the sample level in the tube or cup is at or below the recommended level. If a sample exceeding the maximum sample volume limit was not removed before analysis, inspect the rack transfer lanes on the analyzer after analysis to determine whether any sample spilled onto the rack transfer lanes. If any sample spilled onto the rack transfer lanes or racks, clean the area by wiping with an alcohol prep pad (70% isopropyl alcohol) or lint-free absorbent tissue moistened with hot water.
- Confirm that all tubes and cups are pushed completely down into the rack.

# AU480 Maximum Sample Volume Limits for Tubes in Racks



## Commercial Tubes\*1

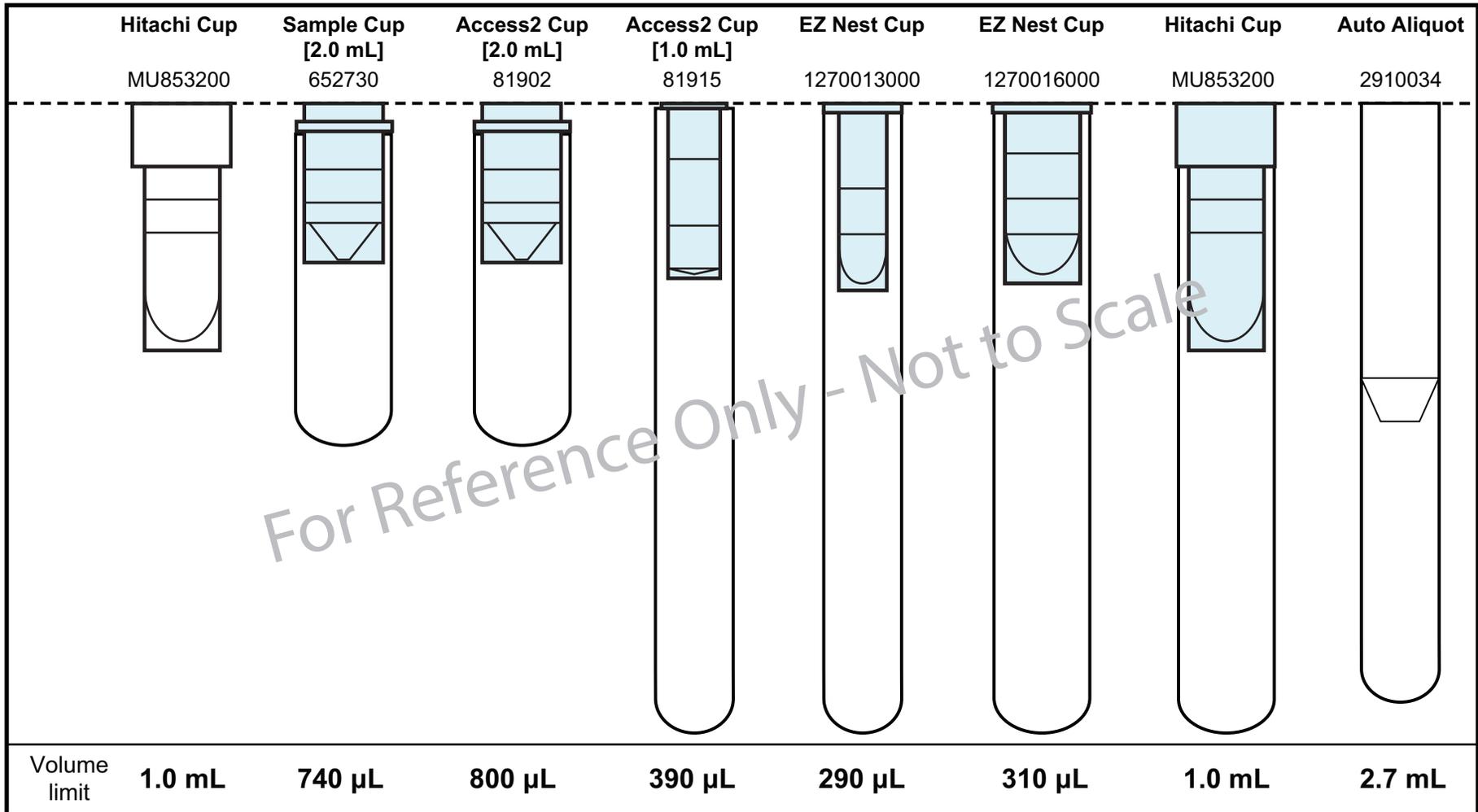
These two tubes are examples of commercial tubes. Commercial tube sizes that can be used on the AU480 are 13 x 75 mm, 13 x 100 mm, and 16 x 100 mm.

## Sample Volume Limits\*2

The maximum sample volume limit is defined as 15 mm from the top of the tube to the sample level in the tube due to the volume differences in various commercial tubes.

## AU480 Maximum Sample Volume Limits for Tubes and Other Cups

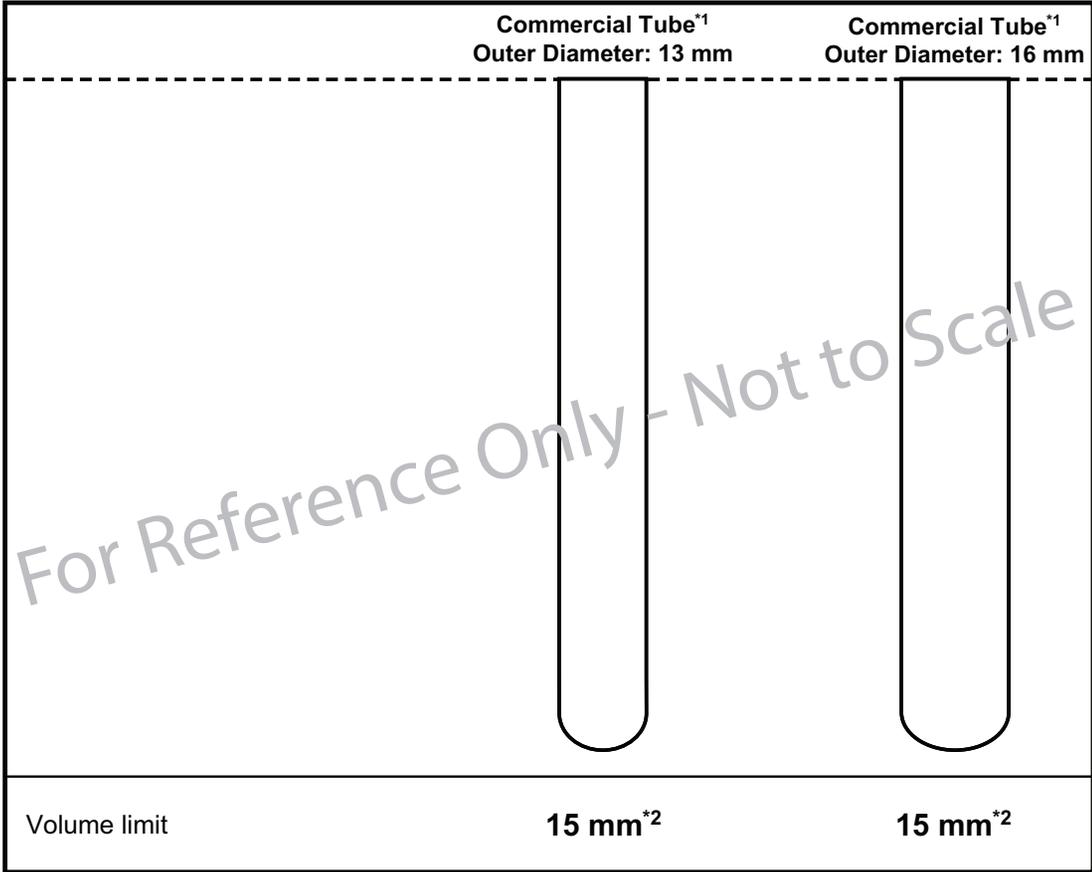
**⚠ CAUTION:** Due to the small sample volume available for analysis, use caution with the Access2 Cup 81915, EZ Nest Cup 1270013000 and EZ Nest Cup 1270016000. The Access2 Cup 81915 has 250  $\mu\text{L}$ \*, the EZ Nest Cup 1270013000 has 230  $\mu\text{L}$ \*, and the EZ Nest Cup 1270016000 has 260  $\mu\text{L}$ \* of sample available for analysis considering the volume limit. Beckman Coulter recommends using other validated cups if more sample volume is needed for analysis.



The blue highlight shown in the sample containers is used as an indication that the containers are insert cups nested inside other tubes.

\* This volume is the sample available for analysis except for the dead volume.

# AU680 Maximum Sample Volume Limits for Tubes in Racks



## Commercial Tubes\*1

These two tubes are examples of commercial tubes. Commercial tube sizes that can be used on the AU680 are 13 x 75 mm, 13 x 100 mm, and 16 x 100 mm.

## Sample Volume Limits\*2

The maximum sample volume limit is defined as 15 mm from the top of the tube to the sample level in the tube due to the volume differences in various commercial tubes.

## AU680 Maximum Sample Volume Limits for Tubes and Other Cups

	Hitachi Cup	Sample Cup [2.0 mL]	Access2 Cup [2.0 mL]	Access2 Cup [1.0 mL]	EZ Nest Cup	EZ Nest Cup	Hitachi Cup	Auto Aliquot
	MU853200	652730	81902	81915	1270013000	1270016000	MU853200	2910034
Volume limit	<b>1.0 mL</b>	<b>970 µL</b>	<b>1.0 mL</b>	<b>840 µL</b>	<b>560 µL</b>	<b>800 µL</b>	<b>1.0 mL</b>	<b>2.7 mL</b>

The blue highlight shown in the sample containers is used as an indication that the containers are insert cups nested inside other tubes.

## AU5800 Maximum Sample Volume Limits for Tubes in Racks

	Commercial Tube <sup>*1</sup> Outer Diameter: 13 mm	Commercial Tube <sup>*1</sup> Outer Diameter: 16 mm
		
Volume limit	15 mm <sup>*2</sup>	15 mm <sup>*2</sup>

### Commercial Tubes\*1

These two tubes are examples of commercial tubes. Commercial tube sizes that can be used on the AU5800 are 13 x 75 mm, 13 x 100 mm, and 16 x 100 mm.

### Sample Volume Limits\*2

The maximum sample volume limit is defined as 15 mm from the top of the tube to the sample level in the tube due to the volume differences in various commercial tubes.

## AU5800 Maximum Sample Volume Limits for Tubes and Other Cups

	Hitachi Cup	Sample Cup [2.0 mL]	Access2 Cup [2.0 mL]	Access2 Cup [1.0 mL]	EZ Nest Cup	EZ Nest Cup	Hitachi Cup	Auto Aliquot
	MU853200	652730	81902	81915	1270013000	1270016000	MU853200	2910034
Volume limit	<b>1.0 mL</b>	<b>970 <math>\mu</math>L</b>	<b>1.0 mL</b>	<b>840 <math>\mu</math>L</b>	<b>470 <math>\mu</math>L</b>	<b>640 <math>\mu</math>L</b>	<b>1.0 mL</b>	<b>2.7 mL</b>

The blue highlight shown in the sample containers is used as an indication that the containers are insert cups nested inside other tubes.

## AU400, AU640, AU2700 and AU5400 Maximum Sample Volume Limits for Tubes in Racks

	Hitachi Cup MU853200	Commercial Tube*1 Outer Diameter: 13 mm	Commercial Tube*1 Outer Diameter: 16 mm
			
Volume limit	<b>1.0 mL</b>	<b>15 mm*2</b>	<b>15 mm*2</b>

### Commercial Tubes\*1

These two tubes are examples of commercial tubes. Commercial tubes that can be used on the AU series have the following specifications:

- Outer Diameter: 11.5 to 16 mm
- Inner Diameter: 9 to 15 mm
- Length: 55 to 102 mm

### Sample Volume Limits\*2

The maximum sample volume limit is defined as 15 mm from the top of the tube to the sample level in the tube due to the volume differences in various commercial tubes.





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