



---



## Technical Summary Report

### CoolPod Series – CPF005 Insulated Shipping System

**Below -20°C**

### Universal Configuration

---

CPF005-Deep Frozen Temperature-Technical Summary Report		REV NO
		00
AUTHOR	APPROVED BY	
Quality Assurance Technician	Quality Engineer	
Name: Cherelle Hau	Name: Muhammad Ismail	
Signature: 	Signature: 	
Date: 28 <sup>th</sup> -Mar-2024		

CPF005	Test Number:	Rev No
Below -20°C	503DFU72D - 2	00

## **System Specification**

External System Dimensions (±10mm)	310mm(L) x 265mm(W) x 370mm(H)
------------------------------------	--------------------------------

## **Payload**

Available Product Load (±10mm)	180mm(L) x 130mm(W) x 45mm(H)
Available Volume (±0.5L)	1L
Test Load (Minimum Load)	6 units of 10mL water-filled vials

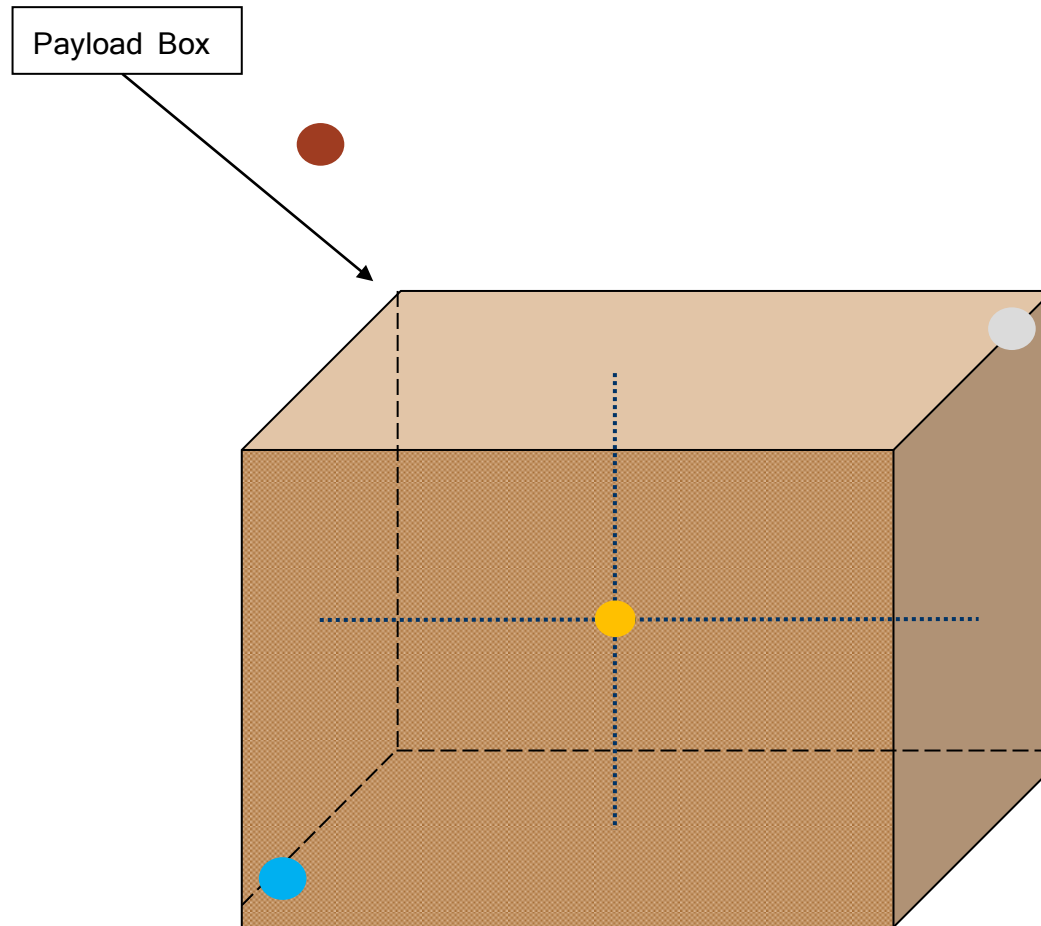
## **System Weight**





Dry Ice Weight	4.5kg
Volumetric Weight (±1kg)	5kg
Total System Weight (±1kg)	6kg

## **Thermal Performance**

Test No.	Low / High Ambient Temperature	Packing Configuration	Validated Duration
503DFU72D - 2	22°C/35°C (ISTA-7D Summer)	Universal	>72 Hours

## Data Acquisition Positions

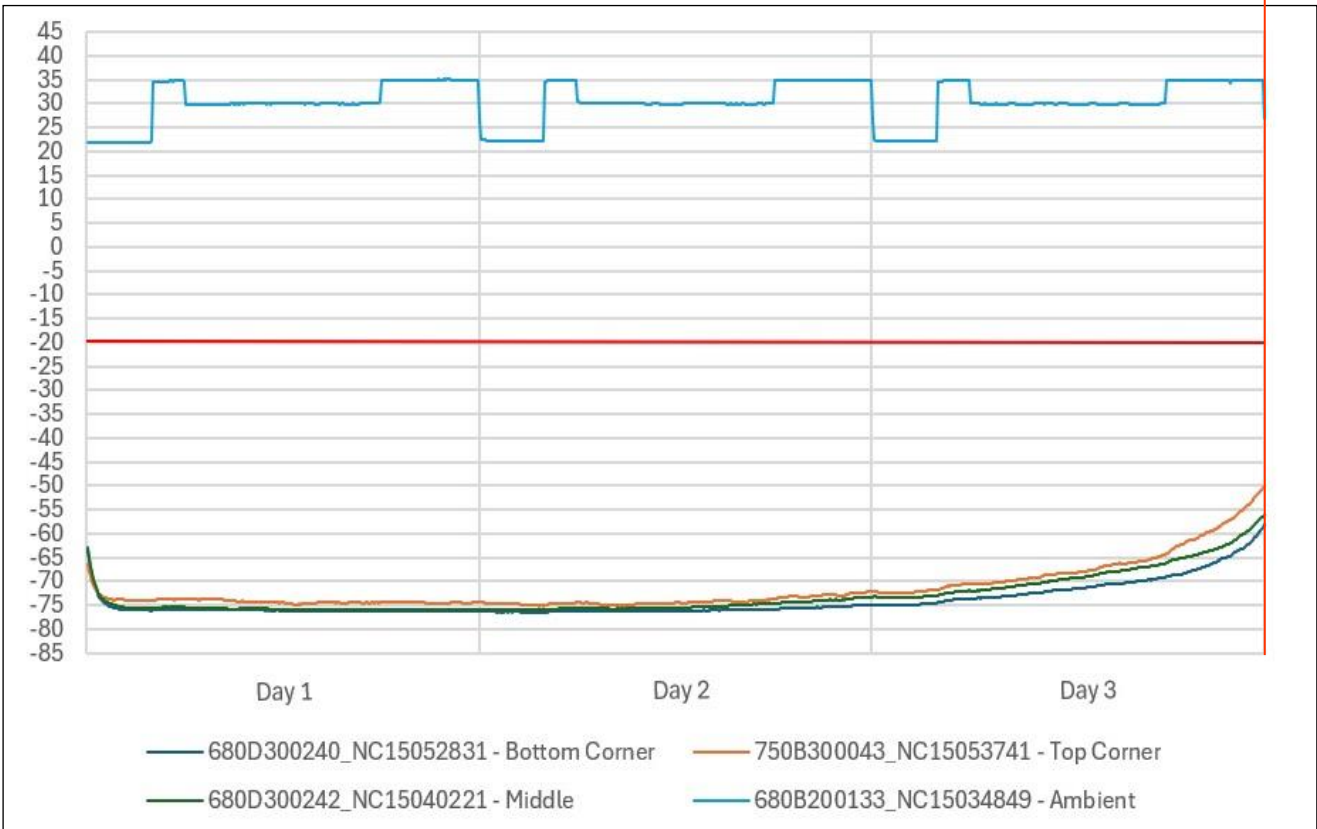


Legend:			
	: Bottom Corner		: Top Corner
	: Middle		: Ambient

Graphical Results

Test No: 503DFU72D - 2

72 Hours



CPF005	Test Number:	Rev No
<i>Below -20°C</i>	503DFU72D - 2	00

## Test Protocol

- a. Prepare 1 unit of CPF005 and store in a 22°C±2°C ambient-controlled environment.
- b. Prepare 4.5kg of Dry ice pellets.
- c. Pour 0.5kg of Dry ice into the foam box and spread it evenly.
- d. Load the payload carton into CPF005.
- e. Fill the remaining 4kg of Dry ice into the box before closure.
- f. 6 units of 10mL water-filled vials were used as the payload for the test.
- g. 3 Tempod 100X/100XB loggers were attached to the payload carton with 1 Tempod 50XB logger used to measure the external ambient temperature.
- h. After closing the CPF005, the whole system was tested in the Climatic Chamber and subjected to the ISTA 7D-Summer ambient profile.

## Packing Diagram

<b>Step 1:</b> Pour 0.5kg of Dry ice and spread it evenly.	<b>Step 2:</b> Load the payload carton.
	
<b>Step 3:</b> Fill the remaining 4kg of Dry ice	<b>Step 4:</b> Close the lid tightly.
	

CPF005	Test Number:	Rev No
Below -20°C	503DFU72D - 2	00

## Revision History Log

Rev	Date of Release	Description of Changes	
		Amended Section	Nature of Revision
00	28 <sup>th</sup> -Mar-2024	-	Initial Release

*The expressed results in this report are given based on actual testing criteria depicted in this report and represent the test as carried out. Aeris Dynamics has no control over the use of this solution and hence their liability is restricted to the replacement of the faulty product only. The customer is asked to thoroughly check the results to verify the suitability of this solution for their own use. Customers are advised to ensure that their product will not be affected by condensation that will occur in this or any other type of cold chain distribution system.*