

Tensile Test Report

Test Information

Sample ID:	PLA Bambulab
Material:	PLA
Grade:	Bambulab
Standard:	ISO 527 - Plastics
Date:	2025-12-08
Operator:	N/A
Customer:	N/A

Specimen Dimensions

Specimen Type:	Type 1A
Gauge Length:	50.0 mm
Thickness:	4.0 mm
Width:	10.0 mm
Cross-Section Area:	40.0 mm ²
Grip Distance:	115.0 mm

Mechanical Properties

Property	Symbol	Value	Unit
Ultimate Tensile Strength	σ_{UTS}	6.40	MPa
Yield Strength (Rp0.2)	σ_y	0.00	MPa
Young's Modulus	E	37.9	MPa
Elongation at Break	ε_b	50.00	%
Maximum Force	F_max	80.49	N
Force at Yield	F_y	0.00	N
Energy to Break	U_b	1.4525	J

Test Conditions

Control Mode: Displacement Control
Test Speed: 10.0 mm/min
Temperature: 23.0 °C
Humidity: 50.0 % RH
Data Points: 129
Test Duration: 2.6 s

Tested by

Approved by