

Public test session report

MatterHackers NylonX PA12 CF Black

MaterialID MAT0019



3DPiceland Labs

Generated with 3DPiceland Engineering Platform v60.0.6

WORKFLOW-RELIABILITY - Bug Fixes and Workflow

Reliability

2026-08-25 19:04:35

Traceability boundary: canonical per-module measured dates are shown below. Session identifier, time of day, operator, printer/slicer profile and environmental conditions are Not recorded and are never inferred.

Measurement provenance

Canonical SQLite measured dates use ISO format; missing dates remain Not recorded.

Module	Measured date
Tensile	Not recorded
Impact	Not recorded
Stiffness	Not recorded

Status
Complete

Result modules
3/3

Specimen/result
records
39

Public details
Approved

Specimen and result quality

Module	Orientation	Average	Std. dev.	CV	Specimens	Confidence	Validation
Tensile	Upright	12,735 MPa	2,373 MPa	0,186%	10	10/10	OK
Tensile	Flat	38,175 MPa	4,81 MPa	0,126%	10	10/10	OK

Module	Orientation	Average	Std. dev.	CV	Specimens	Confidence	Validation
Impact	Upright	33,336 kJ/m ²	13,673 kJ/m ²	0,41%	10	10/10	OK
Impact	Flat	410,531 kJ/m ²	169,697 kJ/m ²	0,413%	8	8/10	OK
Stiffness	Three-point bend	1512,395 MPa	n/a	n/a	1	Complete	OK

Recorded native inputs

Module	Input set	Recorded values
Tensile	Upright force inputs (N)	86, 95, 72, 88, 93, 85, 44, 79, 92, 94
Tensile	Flat force inputs (N)	211, 266, 271, 257, 262, 257, 268, 245, 270, 175
Impact	Upright needle inputs (%)	1,00, 2,00, 1,50, 2,00, 3,00, 2,50, 1,50, 1,00, 3,50, 2,00
Impact	Flat needle inputs (%)	18,00, 18,00, 20,00, 23,00, 19,00, 26,00, 50,00, 21,00, ,
Stiffness	Revolutions / degrees	3 / 140

Approved test notes

Method and equipment context

Purpose-built tensile, pendulum impact and three-point bend apparatus are used with the governed Settings Manager constants consumed by ResultsService. Results are comparative and do not claim accredited-laboratory equipment.

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